Application

04774 - 2016 Roadway Modernization

05073 - Brooklyn Boulevard Reconstruction/Modernization from 0.04 miles north of Bass Lake Road to I-94

Regional Solicitation - Roadways Including Multimodal Elements

Status:	Submitted
Submitted Date:	07/15/2016 12:28 PM

Primary Contact

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*	Brooklyn Center	Minnesota	55430	
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What Grant Programs are you most interested in?	Regional Solicitation - Roadways Including Multimodal Elements			

Organization Information

Name:	BROOKLYN CENTER, CITY OF

Jurisdictional Agency (if different):	
Organization Type:	City
Organization Website:	
Address:	6301 SHINGLE CREEK PKWY

*	BROOKLYN CENTER	Minnesota	55430
	City	State/Province	Postal Code/Zip

County:	Hennepin
Phone:*	763-569-3320 Ext.
Fax:	
PeopleSoft Vendor Number	0000026811A1

Project Information

Project Name	Brooklyn Boulevard Reconstruction/Modernization from 0.04 miles north of Bass Lake Road to I-94
Primary County where the Project is Located	Hennepin
Jurisdictional Agency (If Different than the Applicant):	Hennepin County

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

The proposed Brooklyn Boulevard (CSAH 152) reconstruction/modernization project will improve roadway safety, enhance traffic operations, reduce access points, and provide improved bicycle pedestrian facilities for a one mile segment of the corridor in Brooklyn Center between Interstate (I) - 94/694 and Bass Lake Road (CSAH 10). The project will enhance bicycle and pedestrian travel by adding a trail and improving sidewalk connections. Additional improvements will include streetscaping and landscaping, and improving traffic operations at key intersections. These improvements will complete the last phase of transportation needs for the corridor stretching from I-94/694 to the City of Minneapolis.

Brooklyn Boulevard is an "A" Minor Arterial roadway, which serves as a reliever route for Trunk Highway (TH) 100 and serves as an important freight route between TH 100 and I-94/694. The proposed project also provides regional connections to the Shingle Creek Crossing development, which is identified as a job concentration center, as well as providing links to a major manufacturing and distribution center.

Brooklyn Boulevard plays an important role in the community's quality of life by providing access to key destinations. For example, the project is located within the one mile threshold for an educational institution. The project is also located within a "Concentrated Area of Poverty" and will provide improvements that support a range of mode choices to enable low-income populations and people of color to access jobs. Furthermore, the project will improve corridor access to the Brooklyn Center Transit Center (BCTC), which provides transit connections to downtown Minneapolis and throughout the Twins Cities.

The project's trail will tie into the Brooklyn Boulevard trail south of Bass Lake Road, which connects to the Twin Lakes Regional Trail and bicycle lanes on Osseo Road (CSAH 152). This corridor is a Regional Bicycle Transportation Network (RBTN) Tier 1 Alignment.

The project will capitalize on recent and anticipated future investments within and adjacent to the project corridor (see Figure 1) including:

- Programmed improvements (2018) to Brooklyn Boulevard between Bass Lake Road and 49th Avenue North. These improvements include the reconstruction of the corridor to improve roadway safety, enhance traffic operations, reduce access points, and provide improved bicycle/pedestrian/transit amenities.

- The resurfacing of Osseo Road in Minneapolis from 44th Avenue North to 49th Avenue North.

- New bike lanes on Osseo Road from 44th Avenue North to 49th Avenue North, connecting to Victory Memorial Parkway.

- Redevelopment efforts at the Shingle Creek Crossing and surrounding land uses.

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

TIP Description Guidance (will be used in TIP if the project is selected for funding)	CSAH 152, Brooklyn Park, from .04 MI North of Bass Lake Road to I-94/694, One mile, reconstruction
Project Length (Miles)	1.0

Project Funding

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

If yes, please identify the source(s)

Federal Amount	$6,616,000.00
Match Amount	$1,654,000.00

Minimum of 20% of project total

Project Total	$8,270,000.00
Match Percentage	20.0%

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

Source of Match Funds	City of Brooklyn Center

A minimum of 20% of the total project cost must come from non-federal sources; additional match funds over the 20% minimum can come from other federal sources

Preferred Program Year

Select one:	2021

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

Additional Program Years:

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

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	$260,000.00
Removals (approx. 5% of total cost)	$230,000.00
Roadway (grading, borrow, etc.)	$1,320,000.00
Roadway (aggregates and paving)	$1,370,000.00
Subgrade Correction (muck)	$100,000.00
Storm Sewer	$560,000.00
Ponds	$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	$630,000.00
Traffic Control	$410,000.00
Striping	$10,000.00
Signing	$40,000.00
Lighting	$200,000.00
Turf - Erosion & Landscaping	$450,000.00
Bridge	$0.00
Retaining Walls	$0.00
Noise Wall (do not include in cost effectiveness measure)	$0.00
Traffic Signals	$200,000.00

Wetland Mitigation	$0.00
Other Natural and Cultural Resource Protection	$0.00
RR Crossing	$0.00
Roadway Contingencies	$1,800,000.00
Other Roadway Elements	$0.00
Totals	**$7,580,000.00**

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	$80,000.00
Sidewalk Construction	$0.00
On-Street Bicycle Facility Construction	$0.00
Right-of-Way	$0.00
Pedestrian Curb Ramps (ADA)	$0.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	$0.00
Pedestrian-scale Lighting	$0.00
Streetscaping	$590,000.00
Wayfinding	$0.00
Bicycle and Pedestrian Contingencies	$0.00
Other Bicycle and Pedestrian Elements	$0.00
Totals	**$670,000.00**

Specific Transit and TDM Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Fixed Guideway Elements	$0.00
Stations, Stops, and Terminals	$20,000.00
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	**$20,000.00**

Transit Operating Costs

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

Totals

Total Cost	$8,270,000.00
Construction Cost Total	$8,270,000.00
Transit Operating Cost Total	$0.00

Requirements - All Projects

All Projects

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

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

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

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

Goal A. Transportation System Stewardship: Sustainable investments in the transportation system are protected by strategically preserving, maintaining, and operating system assets.

Objective: Preserve and maintain regional transportation in state of good repair, efficiently and cost-effectively connect people and freight to destinations.

Strategies: A1, A2 (pg. 2.6)

Goal B. Safety and Security: The regional transportation system is safe and secure for all users.

Objective: Reduce crashes and improve safety and security for all modes of passenger travel and freight transport.
Objective: Reduce the transportation system's vulnerability to natural and manmade incidents and threats.
Strategy: B1 (pg. 2.7)

Goal C. Access to Destinations: People and businesses prosper by using a reliable, affordable, and efficient multimodal transportation system that connects them to destinations throughout the region and beyond.

Objective: Increase the availability of multimodal travel options, especially in congested highway corridors. Increase transit ridership and the share of trips taken using transit, bicycling and walking.

Objective: Improve multimodal travel options for people of all ages and abilities to connect to jobs

and other opportunities, particularly for historically underrepresented populations.
Strategies: C2, C9 (pg. 2.8, 2.9)

Goal D. Competitive Economy: The regional transportation system supports the economic competitiveness, vitality, and prosperity of the region and state.

Objective: Invest in a multimodal transportation system to attract and retain businesses and residents.

Objective: Support the region's economic competitiveness through the efficient movement of freight.
Strategies: D1, D3, (pg. 2.11)

Goal E. Healthy Environment: The regional transportation system advances equity and contributes to communities' livability and sustainability while protecting the natural, cultural, and developed environments.
Objective: Increase the availability and attractiveness of transit, bicycling, and walking to encourage healthy communities and active car-free lifestyles.
Strategy: E3 (pg. 2.12)

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 Boulevard Corridor Study, 2013 (all pages)

List the applicable documents and pages:

City of Brooklyn Center Comprehensive Plan, 2010 (pages 2-7; 3-11 to 3-13)

City of Brooklyn Center 2016 Capital Improvement Program (pages 7, 58)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Roadways Including Multimodal Elements

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

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

Roadway Expansion and Reconstruction/Modernization projects only:

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

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

Bridge Rehabilitation/Replacement projects only:

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

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

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

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

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

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

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

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

Requirements - Roadways Including Multimodal Elements

Project Information-Roadways

County, City, or Lead Agency	City of Brooklyn Center
Functional Class of Road	"A" Minor Arterial
Road System	CSAH
TH, CSAH, MSAS, CO. RD., TWP. RD., CITY STREET	
Road/Route No.	152

i.e., 53 for CSAH 53

Name of Road	Brooklyn Boulevard
Example; 1st ST., MAIN AVE	
Zip Code where Majority of Work is Being Performed	55429
(Approximate) Begin Construction Date	06/01/2021
(Approximate) End Construction Date	09/01/2022

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

From: **(Intersection or Address)**	0.04 Miles north of Bass Lake Road
To: **(Intersection or Address)**	Interstate 94/694
DO NOT INCLUDE LEGAL DESCRIPTION	
Or At	
Primary Types of Work	roadway (grading, aggregates, paving), curb & gutter, sidewalks, traffic control, landscaping, streetscaping, trail, storm sewer, utilities

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

BRIDGE/CULVERT PROJECTS (IF APPLICABLE)

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

Expander/Augmentor/Connector/Non-Freeway Principal Arterial

Select one:	
Area	0
Project Length	0
Average Distance	0
Upload Map	

Reliever: Relieves a Principal Arterial that is a Freeway Facility

Facility being relieved	TH 100
Number of hours per day volume exceeds capacity (based on the Congestion Report)	2.0

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

Facility being relieved

Number of hours per day volume exceeds capacity (based on the table below) 0

Non-Freeway Facility Volume/Capacity Table

Hour	NB/EB Volume	SB/WB Volume	Capacity	Volume exceeds capacity
12:00am - 1:00am			0	
1:00am - 2:00am			0	
2:00am - 3:00am			0	
3:00am - 4:00am			0	
4:00am - 5:00am			0	
5:00am - 6:00am			0	
6:00am - 7:00am			0	
7:00am - 8:00am			0	
8:00am - 9:00am			0	
9:00am - 10:00am			0	
10:00am - 11:00am			0	
11:00am - 12:00pm			0	
12:00pm - 1:00pm			0	
1:00pm - 2:00pm			0	
2:00pm - 3:00pm			0	
3:00pm - 4:00pm			0	
4:00pm - 5:00pm			0	
5:00pm - 6:00pm			0	
6:00pm - 7:00pm			0	
7:00pm - 8:00pm			0	
8:00pm - 9:00pm			0	
9:00pm - 10:00pm			0	
10:00pm - 11:00pm			0	
11:00pm - 12:00am			0	

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

Existing Employment within 1 Mile:	11031
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	2876
Existing Students:	2359
Upload Map	1468515400343_Regional Economy- Brooklyn Blvd Reconstruction-Modernization from Bass Lake Rd to I-94.pdf

Measure C: Current Heavy Commercial Traffic

Location:	North of Bass Lake Road
Current daily heavy commercial traffic volume:	500
Date heavy commercial count taken:	2015

Measure D: Freight Elements

Response (Limit 1,400 characters; approximately 200 words)	The corridor has attracted a mix of land uses, given its access to the regional transportation network. In fact, the project is located in a regionally defined area of "Manufacturing and Distribution Centers". This mix of land uses generate significant volumes of heavy commercial vehicles traveling along the corridor to access TH 100 and I-94/694. A large portion of these volumes are associated with the Humboldt Industrial Rail Yard (operated by Canadian Pacific Railway), which is located south of the project area in Minneapolis. The railyard operates as a transload facility, generating large volumes of heavy commercial vehicles transporting goods between TH 100, I-94, and I-94/694. Heavy commercial vehicles from the railyard destined for TH 100 or I-94/694 access the Brooklyn Boulevard corridor at 49th Avenue North. Brooklyn Boulevard from 49th Avenue to Bass Lake Road will be reconstructed in 2018 and tie into the proposed project. This project will finalize the last phase of freight improvements between TH 100 and I-94/694. Freight improvements include the appropriate turning radiuses at key intersections and preserving the corridor as a ten-ton route by rebuilding its structural integrity. Some of the major manufacturing and distribution centers located along the corridor include the Humboldt Industrial Park, General Mills Grain Facility, and trucking industries.

Measure A: Current Daily Person Throughput

Location	South of 63rd Avenue North
Current AADT Volume	23400
Existing Transit Routes on the Project *For New Roadways only, list transit routes that will be moved to the new roadway*	723, 724, 760, 767
Upload Transit Map	1468515508828_Transit Connections- Brooklyn Blvd Reconstruction-Modernization from Bass Lake Rd to I-94.pdf

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	0
Current Daily Person Throughput	30420.0

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	Hennepin County Travel Demand Model
Forecast (2040) ADT volume	26800

Measure A: Project Location and Impact to Disadvantaged Populations

Select one:

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

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

The Brooklyn Boulevard corridor is located in areas of concentrated poverty, and areas of concentrated of poverty with 50 percent or more of residents are people of color. The Metropolitan Council's Choice, Place and Opportunity (An Equity Assessment of the Twin Cities Region) report has recognized these areas of being at risk of expansion. In that respect, the proposed project is a critical element to minimizing the expansion of populations in poverty by improving access to the report's five opportunity areas. The project's relationship to these five areas are discussed below:

Proximity to Jobs: The corridor is relied on as a major transit corridor that links these populations to jobs centers throughout the Twin Cities. Today, there are ten transit lines, a park-and-ride facility, and the Brooklyn Center Transit Center (BCTC) located in the project area. Future transit options include Bus Rapid Transit (C Line) from downtown Minneapolis to the BCTC. These transit lines are very important to those in the community who do not have access to a car to access jobs, public services, and post-secondary education. The project will increase mobility for busses and increase their reliability to these destinations.

Quality Education: The proposed project will provide better access to four-post secondary schools and Garden Elementary. Sidewalks and trail improvements will foster "Safe Routes to Schools" for students walking or biking to school.

Access to Social Services and Basic Necessities: The corridor provides access to a variety of social services and basic necessities, such as the US Social Security Office, grocery stores, and pharmacies.

Safety: Safety improvements along the corridor will encourage active living and connect residents to local and regional parks. The project will improve safety and comfort for children, the elderly, and people with disabilities by widening sidewalks and trails, and including lighting throughout the corridor. Unnecessary driveway accesses have been eliminated to reduce potential conflicts between vehicles and sidewalk and trail users.

Environmentally Healthy Neighborhoods: The proposed project will benefit neighborhoods located along the corridor. The neighborhoods represent a mix of affordable housing options, which are closely tied to the communities parks and natural amenities (Crystal Mac Wildlife Area) that support active lifestyles.

Overall, the proposed project will provide a wealth of improvements that will benefit a diverse community and those in poverty. The improvements will improve transit reliability and create safer pedestrian/bicycle routes to job opportunities in downtown Minneapolis and throughout the Twin Cities.

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

Upload Map

1468523730906_Socio-Economic Conditions- Brooklyn Blvd Reconstruction-Modernization from Bass Lake Rd to I-94.pdf

Measure B: Affordable Housing

City/Township	Segment Length in Miles (Population)
City of Brooklyn Center	1.038
	1

Total Project Length

Total Project Length (Total Population)	1.0

Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

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

Affordable Housing Scoring - To Be Completed By Metropolitan Council Staff

Total Project Length (Miles)	1.038
Total Housing Score	0

Measure A: Year of Roadway Construction

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
1984	1.038	2059.392	1984.0
	1	**2059**	**1984**

Average Construction Year

Weighted Year	1984

Total Segment Length (Miles)

Total Segment Length	1.038

Measure B: Geometric, Structural, or Infrastructure Improvements

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

Response (Limit 700 characters; approximately 100 words)

Improved clear zones or sight lines:	Yes

Response (Limit 700 characters; approximately 100 words)	Access modifications and intersection improvements are being designed in a manner to minimize any sight line concerns. There are no major clear zones or sight line issues that need to be addressed as part of this project.
Improved roadway geometrics:	Yes
Response (Limit 700 characters; approximately 100 words)	The geometrics of the roadway will be improved. The existing opposing left turn lanes will be replaced with a center median island. Dedicated turn lanes at critical intersections are being added and designed to provide better sight lines. The roadway will be designed to current state aid standards.
Access management enhancements:	Yes
Response (Limit 700 characters; approximately 100 words)	A center median is being installed to limit access to properties located along the roadway. This improvement will help reduce conflict points in certain areas of the corridor. The median will prevent left turns to and from 28 commercial and residential driveways reducing potential conflicts with pedestrian and bicyclists.
Vertical/horizontal alignments improvements:	Yes
Response (Limit 700 characters; approximately 100 words)	There are no vertical or horizontal alignment issues that require significant improvements.
Improved stormwater mitigation:	Yes
Response (Limit 700 characters; approximately 100 words)	The storm sewers will be replaced and upgraded to meet current state aid drainage standards. Additional storm water mitigation is incorporated in the design of the proposed center median.
Signals/lighting upgrades:	Yes
Response (Limit 700 characters; approximately 100 words)	A signal at the Intersection of Brooklyn Boulevard and 63rd Avenue North will be upgraded as part of the project. Signal timing will improve traffic flow and turning operations. The project will also install lighting along the corridor at intersections and along the street. The lighting will be coordinated with other streetscape elements to help create a brand in the area.

Other Improvements	Yes
Response (Limit 700 characters; approximately 100 words)	The project will also include enhanced bus stops (trash receptacles, lighting, benches), a multi-use trail, streetscape elements, and widened sidewalks. It addresses ADA issues at intersections and along the corridor. Improvements include the installation of curb ramps and widened sidewalks. A boulevard will be installed to separate the trail from the roadway.

Measure A: Congestion Reduction/Air Quality

Total Peak Hour Delay Per Vehicle Without The Project	Total Peak Hour Delay Per Vehicle With The Project	Total Peak Hour Delay Per Vehicle Reduced by Project	Volume (Vehicles per hour)	Total Peak Hour Delay Reduced by the Project:	EXPLANATION of methodology used to calculate railroad crossing delay, if applicable.	Synchro or HCM Reports
60.0	41.0	19.0	4772	90668.0		1468520857187_HCM-Brooklyn Blvd Reconstruction-Modernization from Bass Lake Rd to I-94.pdf

Total Delay

Total Peak Hour Delay Reduced	90668.0

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

Total (CO, NOX, and VOC) Peak Hour Emissions Per Vehicle without the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions Per Vehicle with the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions Reduced Per Vehicle by the Project (Kilograms):	Volume (Vehicles Per Hour):	Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):
11.66	10.63	1.03	4772.0	4915.16
12	**11**		**4772**	**4915**

Total

Total Emissions Reduced: 4915.16

Upload Synchro Report 1468521026640_HCM- Brooklyn Blvd Reconstruction-Modernization from Bass Lake Rd to I-94.pdf

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

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

Total Parallel Roadways

Emissions Reduced on Parallel Roadways 0

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New Roadway Portion:

Cruise speed in miles per hour with the project: 0

Vehicle miles traveled with the project: 0

Total delay in hours with the project: 0

Total stops in vehicles per hour with the project: 0

Fuel consumption in gallons: 0

Total (CO, NOX, and VOC) Peak Hour Emissions Reduced or Produced on New Roadway (Kilograms):	0
EXPLANATION of methodology and assumptions used:(Limit 1,400 characters; approximately 200 words)	
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):	0.0

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

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

Transit Projects Not Requiring Construction

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

Check Here if Your Transit Project Does Not Require Construction

Measure A: Risk Assessment

1)Project Scope (5 Percent of Points)

Meetings or contacts with stakeholders have occurred	Yes

100%

Stakeholders have been identified

40%

Stakeholders have not been identified or contacted

0%

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

Layout or Preliminary Plan completed Yes

100%

Layout or Preliminary Plan started

50%

Layout or Preliminary Plan has not been started

0%

Anticipated date or date of completion

3)Environmental Documentation (5 Percent of Points)

EIS

EA

PM Yes

Document Status:

Document approved (include copy of signed cover sheet)

100%

Document submitted to State Aid for review

75% date submitted

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

50%

Document not started Yes

0%

Anticipated date or date of completion/approval 12/01/2019

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

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

100%

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

80%

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

40%

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

0%

Anticipated date or date of completion of historic/archeological review: 05/15/2013

Project is located on an identified historic bridge

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

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

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

100%

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

100%

Section 4f resources present within the project area, but no known adverse effects

80%

Project impacts to Section 4f/6f resources likely coordination/documentation has begun

50%

Project impacts to Section 4f/6f resources likely coordination/documentation has not begun

30%

Unsure if there are any impacts to Section 4f/6f resources in the project area

0%

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

Right-of-way, permanent or temporary easements not required

100%

Right-of-way, permanent or temporary easements has/have been acquired

100%

Right-of-way, permanent or temporary easements required, offers made Yes

75%

Right-of-way, permanent or temporary easements required, appraisals made

50%

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

25%

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

0%

Right-of-way, permanent or temporary easements identification has not been completed

0%

Anticipated date or date of acquisition 12/01/2020

7)Railroad Involvement (25 Percent of Points)

No railroad involvement on project Yes

100%

Railroad Right-of-Way Agreement is executed (include signature page) 100%

Railroad Right-of-Way Agreement required; Agreement has been initiated

60%

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

40%

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

0%

Anticipated date or date of executed Agreement

8)Interchange Approval (15 Percent of Points)*

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

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

100%

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

100%

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

0%

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

Construction plans completed/approved (include signed title sheet)

100%

Construction plans submitted to State Aid for review

75%

Construction plans in progress; at least 30% completion

50%

Construction plans have not been started	Yes
0%	
Anticipated date or date of completion	01/01/2021

10)Letting

Anticipated Letting Date	03/01/2021

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

Crash Modification Factor Used:	0.91
	Other crash modification factors used include:
	0.83, 0.78, 0.73, 0.71, 0.67, 0.56, 0.46, 0.43, 0.41 0.28, 0.24
	Improvements include:
	Installation of a north bound right turn lane and pavement improvement at 65th Avenue North
Rationale for Crash Modification Selected:	Installation of a northbound, southbound, and westbound right-turn lanes and pavement improvements at 63rd Avenue North
	Installation of a median and pavement improvements throughout the corridor. Note median improvements for right-angle and left-turn will reduce crashes 100% because these moves are no longer permitted.
	Reconstruction from a 4 to 3 lane facility and pavement improvement.
	Please see Crash Analysis attachment for additional explanation.

(Limit 1400 Characters; approximately 200 words)

Project Benefit ($) from B/C Ratio	$12,837,133.00
Worksheet Attachment	1468521257828_Crash Analysis- Brooklyn Blvd Reconstruction-Modernization from Bass Lake Rd to I-94.pdf

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 project provides an improved travel experience by enhancing safety for pedestrians, bicyclists, and transit riders. The project location, at the heart of Brooklyn Center, makes it a critical regional connection to employment opportunities, retail, schools, and recreation. Located along a RBTN Tier 1 Alignment, the project will fill a trail gap, enhance transit operations, and provide ADA improvements. These improvements support the surrounding neighborhoods and businesses by providing safe and reliable alternative transportation options. This is important for disadvantaged populations that utilize transit or walk/bike to jobs, businesses, and recreational opportunities.

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

The project will include six-foot wide sidewalks to accommodate the disabled and elderly, as well as a multiuse trail. Crossing improvements will ensure ADA compatibility and safe passage for all user groups. Furthermore, access will be limited through the installation of a center median, which will reduce the conflict between turning vehicles and bicycles and pedestrians on the trail and sidewalk. The project will also include enhanced bus stops (benches, trash receptacles, etc.) to support the transit lines that run through the project area.

The project will improve transit reliability and access to the Brooklyn Center Transit Center (BCTC), which provides transit users the opportunity to connect to various destinations throughout the Twin Cities. Future Bus Rapid Transit (C Line) is planned to connect to the BCTC in 2018, providing additional regional connectivity. The proposed project will enhance the future BRT line.

Furthermore, the project's proposed trail components will address a gap between existing

trails located in the project area. This connection will allow users to travel by multi-use trail from the northern most part of Brooklyn Center to the southern boundary. The trail connects with several regional trails and bicycle facilities, including:

An on-street bike lane on 49th Avenue in Minneapolis.

A paved shoulder on Osseo Road in Minneapolis.

The Twin Lakes Regional Trail, which connects Crystal Lake to the Mississippi River.

The Shingle Creek Regional Trail, which connects to recreation destinations and the Rush Creek Regional Trail.

The pedestrian and bicycle improvements will tie together the residential neighborhoods to Shingle Creek Crossing, a major destination identified as a mixed-use area in the Brooklyn Center 2030 Comprehensive Plan. This redevelopment area includes retail and service business which serve both regional and neighborhood customers.

Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form):	$8,270,000.00
Enter Amount of the Noise Walls:	$0.00
Total Project Cost subtract the amount of the noise walls:	$8,270,000.00
Points Awarded in Previous Criteria	
Cost Effectiveness	$0.00

Other Attachments

File Name	Description	File Size
Crash Analysis- Brooklyn Blvd Reconstruction-Modernization from Bass Lake Rd to I-94.pdf	Completed crash analysis.	351 KB
HCM- Brooklyn Blvd Reconstruction-Modernization from Bass Lake Rd to I-94.pdf	Emissions and congestion report.	44 KB
Hennepin County Letter- Brooklyn Blvd Reconstruction-Modernization from Bass Lake Rd to I-94.pdf	Letter of Support from Hennepin County.	322 KB
Issues Map- Brooklyn Blvd Reconstruction-Modernization from Bass Lake Rd to I-94.pdf	Figure 1 - Issues Map	2.9 MB
Layout- Brooklyn Blvd Reconstruction-Modernization from Bass Lake Rd to I-94.pdf	Preliminary layout for the proposed project.	7.3 MB
Met Council Maps- Brooklyn Blvd Reconstruction-Modernization from Bass Lake Rd to I-94.pdf	Metropolitan Council generated maps from application.	1.2 MB
Photos- Brooklyn Blvd Reconstruction-Modernization from Bass Lake Rd to I-94.pdf	Photos of the corridor.	17.8 MB

Regional Economy

Roadway Reconstruction/Modernization Project: Brooklyn Boulevard Reconstruction/Modernization from 0.04 mi | Map ID: 1466026520

Results

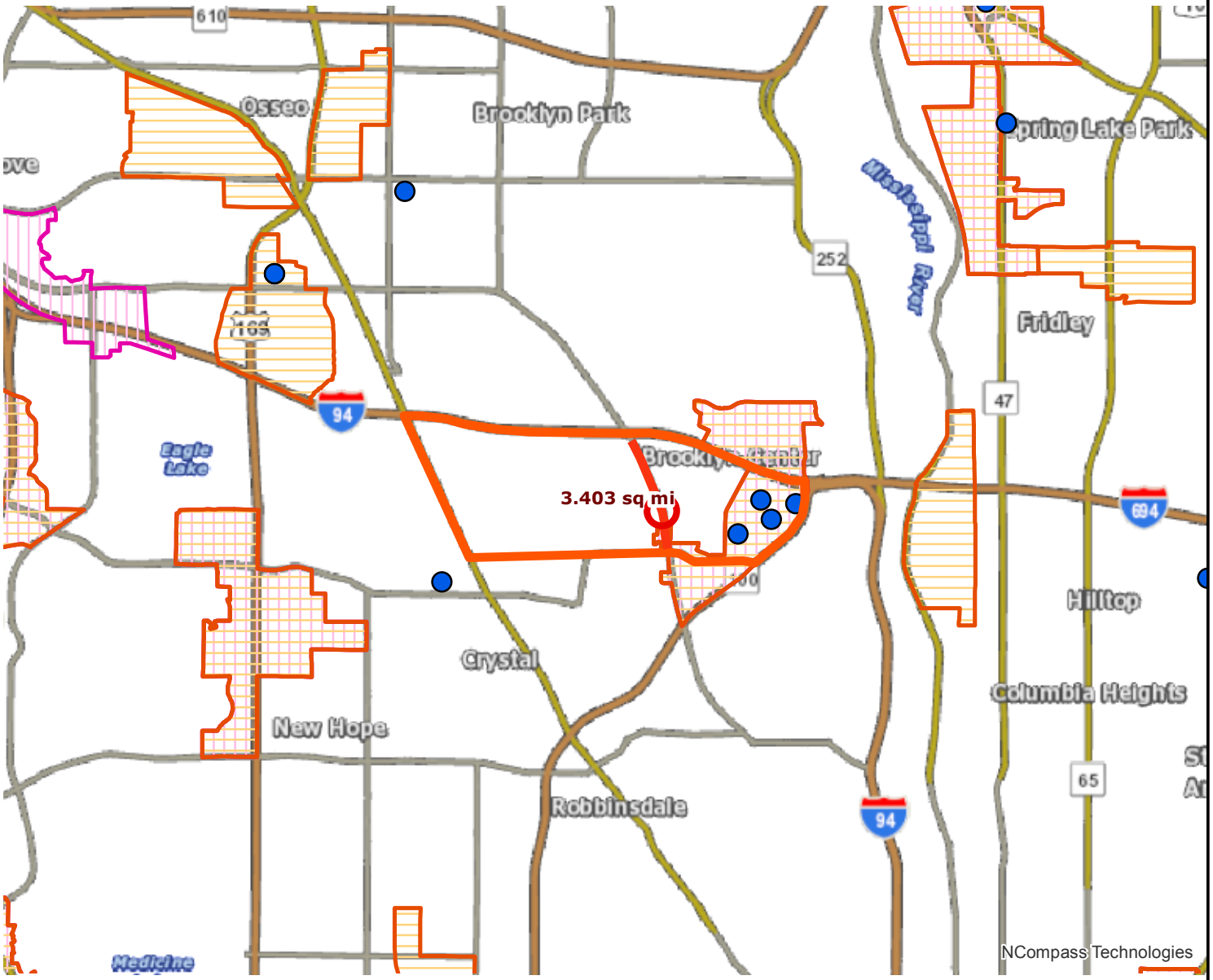
WITHIN ONE MI of project:

Totals by City:

Brooklyn Center
Population: 21073
Employment: 10673
Mfg and Dist Employment: 2799

Crystal
Population: 3791
Employment: 358
Mfg and Dist Employment: 77

Postsecondary Students:
2359



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

0 0.75 1.5 3 4.5 6 Miles

Created: 6/15/2016
LandscapeRSA5

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

METROPOLITAN COUNCIL

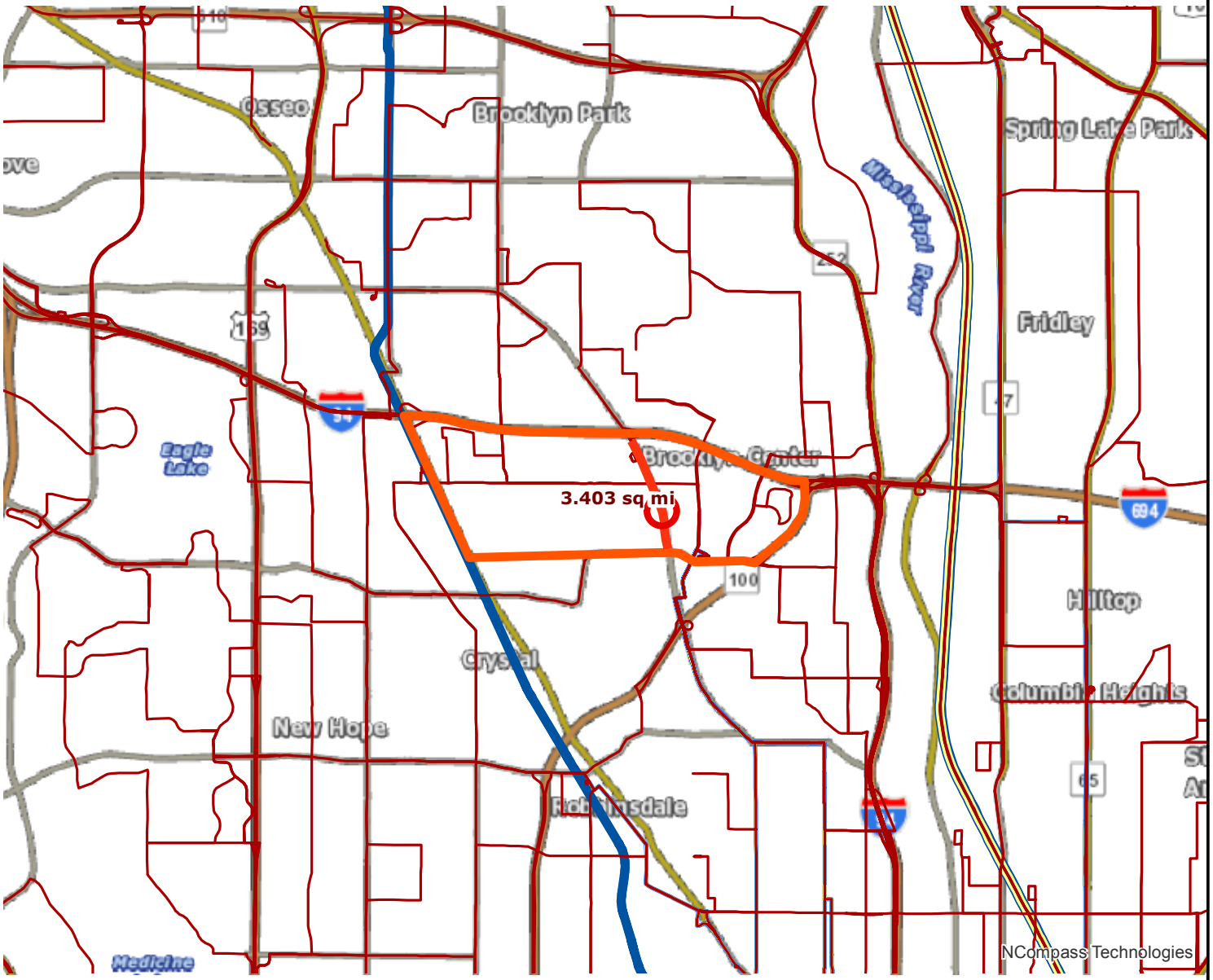
Transit Connections

Roadway Reconstruction/Modernization Project: Brooklyn Boulevard Reconstruction/Modernization from 0.04 mi | Map ID: 1466026520204

Results

Transit with a Direct Connection to project:
721 723 724 760 767 780 781 782 783 785

**indicates Planned Alignments*



Project Points
Project
Project Area
Transit Routes

Transitway
Northstar Line

Planned Alignments
Arterial BRT

Light Rail, Blue Line Extension

0 0.75 1.5 3 4.5 6 Miles

Created: 6/15/2016
LandscapeRSA3

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

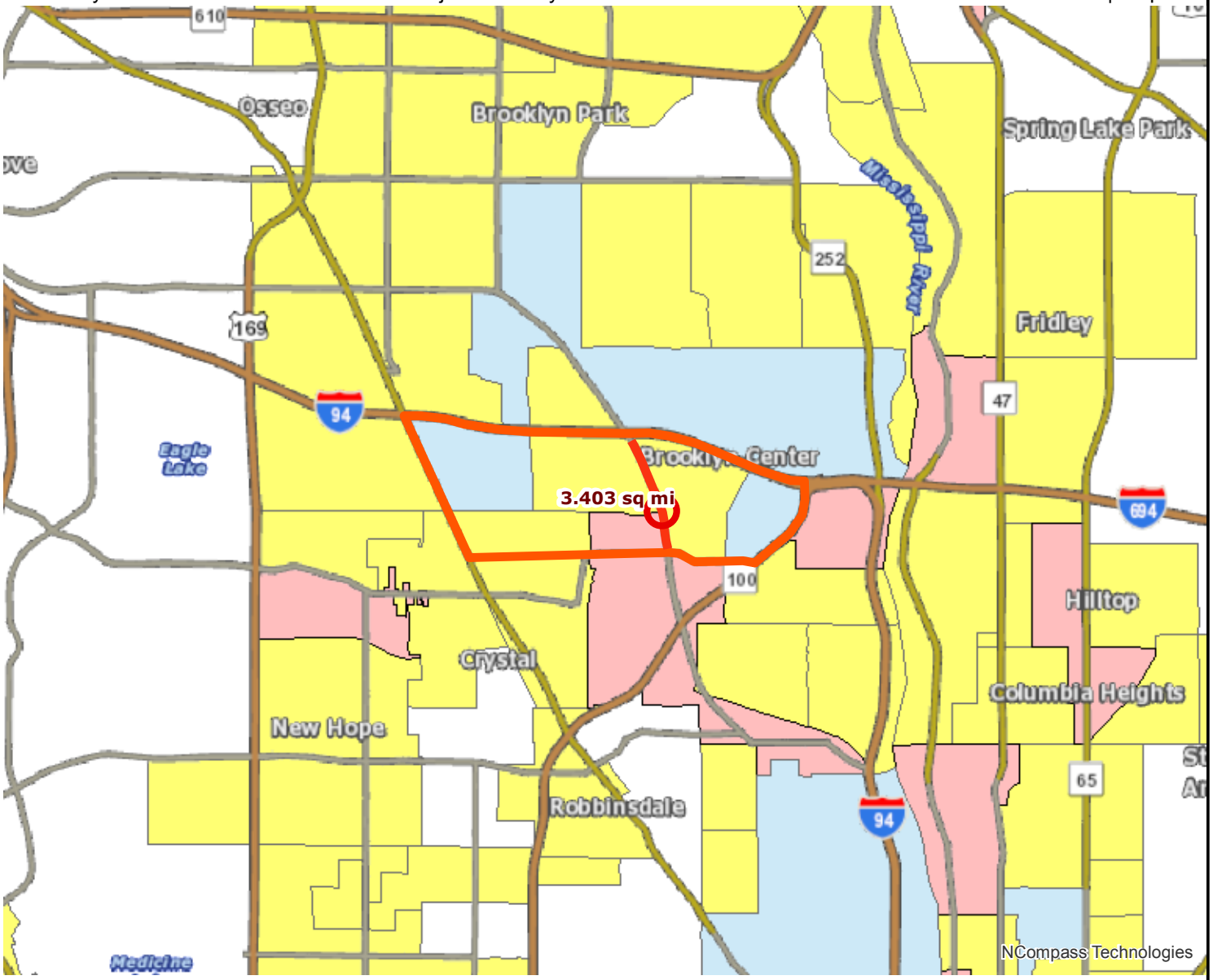
METROPOLITAN COUNCIL

Socio-Economic Conditions

Roadway Reconstruction/Modernization Project: Brooklyn Boulevard Reconstruction/Modernization from 0.04 mi | Map ID: 1466

Results

Project located **IN**
Area of Concentrated Poverty:
(0 to 24 Points)



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

0 0.75 1.5 3 4.5 6 Miles

Created: 6/15/2016
LandscapeRSA2

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METROPOLITAN COUNCIL

1: Brooklyn Blvd & 63rd Ave N

Direction	All
Future Volume (vph)	2312
Total Delay / Veh (s/v)	46
CO Emissions (kg)	5.20
NOx Emissions (kg)	1.01
VOC Emissions (kg)	1.21

21: Brooklyn Blvd & 65th Ave

Direction	All
Future Volume (vph)	2460
Total Delay / Veh (s/v)	14
CO Emissions (kg)	2.97
NOx Emissions (kg)	0.58
VOC Emissions (kg)	0.69

1: Brooklyn Blvd & 63rd Ave N

Direction	All
Future Volume (vph)	2312
Total Delay / Veh (s/v)	28
CO Emissions (kg)	4.49
NOx Emissions (kg)	0.87
VOC Emissions (kg)	1.04

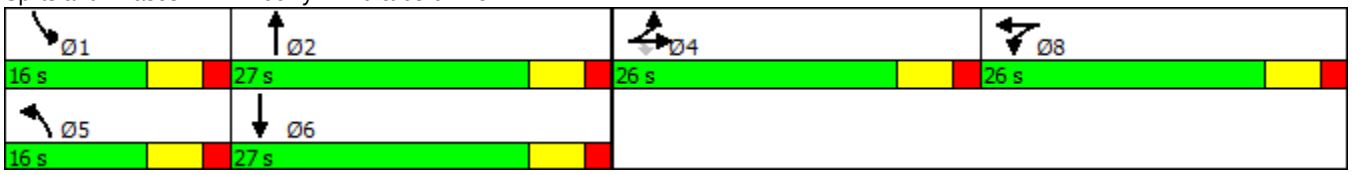
21: Brooklyn Blvd & 65th Ave

Direction	All
Future Volume (vph)	2460
Total Delay / Veh (s/v)	13
CO Emissions (kg)	2.96
NOx Emissions (kg)	0.58
VOC Emissions (kg)	0.69

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	16	27	26	16	27	26
Maximum Split (%)	16.8%	28.4%	27.4%	16.8%	28.4%	27.4%
Minimum Split (s)	16	26	26	16	26	26
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2
Minimum Initial (s)	10	20	15	10	20	15
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		13	13		13	13
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	16	43	0	16	69
End Time (s)	16	43	69	16	43	0
Yield/Force Off (s)	10	37	63	10	37	89
Yield/Force Off 170(s)	10	24	50	10	24	76
Local Start Time (s)	79	0	27	79	0	53
Local Yield (s)	89	21	47	89	21	73
Local Yield 170(s)	89	8	34	89	8	60

Intersection Summary	
Cycle Length	95
Control Type	Actuated-Uncoordinated
Natural Cycle	95

Splits and Phases: 1: Brooklyn Blvd & 63rd Ave N



Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	13	26	21	13	26	21
Maximum Split (%)	21.7%	43.3%	35.0%	21.7%	43.3%	35.0%
Minimum Split (s)	13	21	21	13	21	21
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		5	5		5	5
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	13	39	0	13	39
End Time (s)	13	39	0	13	39	0
Yield/Force Off (s)	8	34	55	8	34	55
Yield/Force Off 170(s)	8	34	44	8	34	44
Local Start Time (s)	47	0	26	47	0	26
Local Yield (s)	55	21	42	55	21	42
Local Yield 170(s)	55	21	31	55	21	31

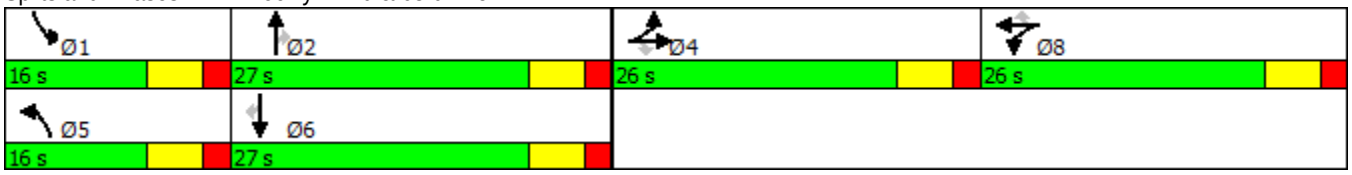
Intersection Summary	
Cycle Length	60
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 21: Brooklyn Blvd & 65th Ave

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	16	27	26	16	27	26
Maximum Split (%)	16.8%	28.4%	27.4%	16.8%	28.4%	27.4%
Minimum Split (s)	16	26	26	16	26	26
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2
Minimum Initial (s)	10	20	15	10	20	15
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		13	13		13	13
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	16	43	0	16	69
End Time (s)	16	43	69	16	43	0
Yield/Force Off (s)	10	37	63	10	37	89
Yield/Force Off 170(s)	10	24	50	10	24	76
Local Start Time (s)	79	0	27	79	0	53
Local Yield (s)	89	21	47	89	21	73
Local Yield 170(s)	89	8	34	89	8	60

Intersection Summary		
Cycle Length		95
Control Type	Actuated-Uncoordinated	
Natural Cycle		95

Splits and Phases: 1: Brooklyn Blvd & 63rd Ave N



Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	13	26	21	13	26	21
Maximum Split (%)	21.7%	43.3%	35.0%	21.7%	43.3%	35.0%
Minimum Split (s)	13	21	21	13	21	21
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		5	5		5	5
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	13	39	0	13	39
End Time (s)	13	39	0	13	39	0
Yield/Force Off (s)	8	34	55	8	34	55
Yield/Force Off 170(s)	8	34	44	8	34	44
Local Start Time (s)	47	0	26	47	0	26
Local Yield (s)	55	21	42	55	21	42
Local Yield 170(s)	55	21	31	55	21	31

Intersection Summary	
Cycle Length	60
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 21: Brooklyn Blvd & 65th Ave

1: Brooklyn Blvd & 63rd Ave N

Direction	All
Future Volume (vph)	2312
Total Delay / Veh (s/v)	46
CO Emissions (kg)	5.20
NOx Emissions (kg)	1.01
VOC Emissions (kg)	1.21

21: Brooklyn Blvd & 65th Ave

Direction	All
Future Volume (vph)	2460
Total Delay / Veh (s/v)	14
CO Emissions (kg)	2.97
NOx Emissions (kg)	0.58
VOC Emissions (kg)	0.69

1: Brooklyn Blvd & 63rd Ave N

Direction	All
Future Volume (vph)	2312
Total Delay / Veh (s/v)	28
CO Emissions (kg)	4.49
NOx Emissions (kg)	0.87
VOC Emissions (kg)	1.04

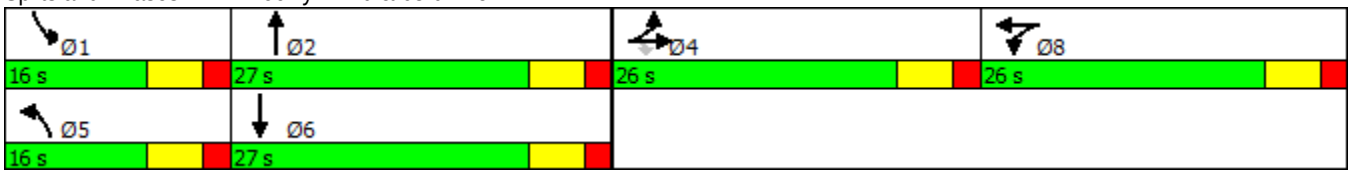
21: Brooklyn Blvd & 65th Ave

Direction	All
Future Volume (vph)	2460
Total Delay / Veh (s/v)	13
CO Emissions (kg)	2.96
NOx Emissions (kg)	0.58
VOC Emissions (kg)	0.69

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	16	27	26	16	27	26
Maximum Split (%)	16.8%	28.4%	27.4%	16.8%	28.4%	27.4%
Minimum Split (s)	16	26	26	16	26	26
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2
Minimum Initial (s)	10	20	15	10	20	15
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		13	13		13	13
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	16	43	0	16	69
End Time (s)	16	43	69	16	43	0
Yield/Force Off (s)	10	37	63	10	37	89
Yield/Force Off 170(s)	10	24	50	10	24	76
Local Start Time (s)	79	0	27	79	0	53
Local Yield (s)	89	21	47	89	21	73
Local Yield 170(s)	89	8	34	89	8	60

Intersection Summary	
Cycle Length	95
Control Type	Actuated-Uncoordinated
Natural Cycle	95

Splits and Phases: 1: Brooklyn Blvd & 63rd Ave N



Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	13	26	21	13	26	21
Maximum Split (%)	21.7%	43.3%	35.0%	21.7%	43.3%	35.0%
Minimum Split (s)	13	21	21	13	21	21
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		5	5		5	5
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	13	39	0	13	39
End Time (s)	13	39	0	13	39	0
Yield/Force Off (s)	8	34	55	8	34	55
Yield/Force Off 170(s)	8	34	44	8	34	44
Local Start Time (s)	47	0	26	47	0	26
Local Yield (s)	55	21	42	55	21	42
Local Yield 170(s)	55	21	31	55	21	31

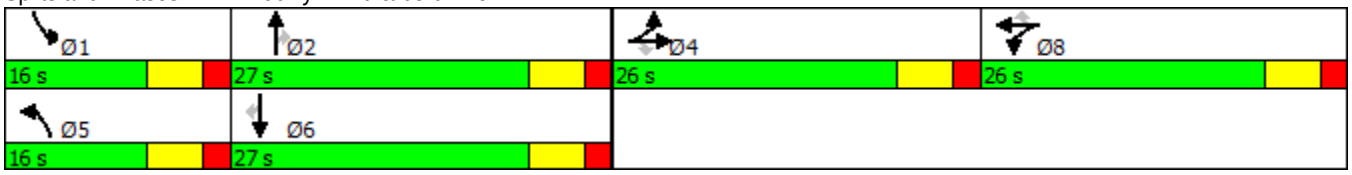
Intersection Summary	
Cycle Length	60
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 21: Brooklyn Blvd & 65th Ave

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	16	27	26	16	27	26
Maximum Split (%)	16.8%	28.4%	27.4%	16.8%	28.4%	27.4%
Minimum Split (s)	16	26	26	16	26	26
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2
Minimum Initial (s)	10	20	15	10	20	15
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		13	13		13	13
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	16	43	0	16	69
End Time (s)	16	43	69	16	43	0
Yield/Force Off (s)	10	37	63	10	37	89
Yield/Force Off 170(s)	10	24	50	10	24	76
Local Start Time (s)	79	0	27	79	0	53
Local Yield (s)	89	21	47	89	21	73
Local Yield 170(s)	89	8	34	89	8	60

Intersection Summary		
Cycle Length		95
Control Type	Actuated-Uncoordinated	
Natural Cycle		95

Splits and Phases: 1: Brooklyn Blvd & 63rd Ave N



Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	13	26	21	13	26	21
Maximum Split (%)	21.7%	43.3%	35.0%	21.7%	43.3%	35.0%
Minimum Split (s)	13	21	21	13	21	21
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		5	5		5	5
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	13	39	0	13	39
End Time (s)	13	39	0	13	39	0
Yield/Force Off (s)	8	34	55	8	34	55
Yield/Force Off 170(s)	8	34	44	8	34	44
Local Start Time (s)	47	0	26	47	0	26
Local Yield (s)	55	21	42	55	21	42
Local Yield 170(s)	55	21	31	55	21	31

Intersection Summary	
Cycle Length	60
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 21: Brooklyn Blvd & 65th Ave

1: Brooklyn Blvd & 63rd Ave N

Direction	All
Future Volume (vph)	2312
Total Delay / Veh (s/v)	46
CO Emissions (kg)	5.20
NOx Emissions (kg)	1.01
VOC Emissions (kg)	1.21

21: Brooklyn Blvd & 65th Ave

Direction	All
Future Volume (vph)	2460
Total Delay / Veh (s/v)	14
CO Emissions (kg)	2.97
NOx Emissions (kg)	0.58
VOC Emissions (kg)	0.69

1: Brooklyn Blvd & 63rd Ave N

Direction	All
Future Volume (vph)	2312
Total Delay / Veh (s/v)	28
CO Emissions (kg)	4.49
NOx Emissions (kg)	0.87
VOC Emissions (kg)	1.04

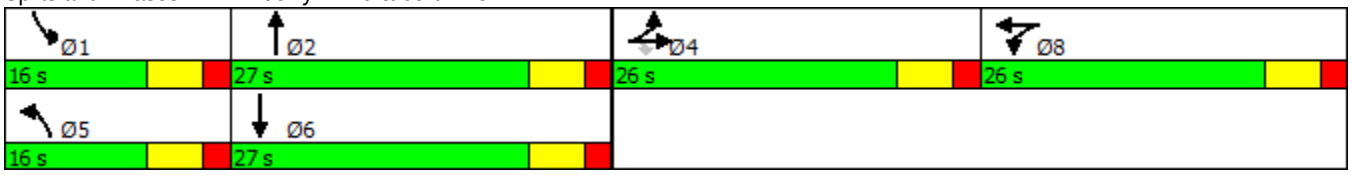
21: Brooklyn Blvd & 65th Ave

Direction	All
Future Volume (vph)	2460
Total Delay / Veh (s/v)	13
CO Emissions (kg)	2.96
NOx Emissions (kg)	0.58
VOC Emissions (kg)	0.69

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	16	27	26	16	27	26
Maximum Split (%)	16.8%	28.4%	27.4%	16.8%	28.4%	27.4%
Minimum Split (s)	16	26	26	16	26	26
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2
Minimum Initial (s)	10	20	15	10	20	15
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		13	13		13	13
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	16	43	0	16	69
End Time (s)	16	43	69	16	43	0
Yield/Force Off (s)	10	37	63	10	37	89
Yield/Force Off 170(s)	10	24	50	10	24	76
Local Start Time (s)	79	0	27	79	0	53
Local Yield (s)	89	21	47	89	21	73
Local Yield 170(s)	89	8	34	89	8	60

Intersection Summary	
Cycle Length	95
Control Type	Actuated-Uncoordinated
Natural Cycle	95

Splits and Phases: 1: Brooklyn Blvd & 63rd Ave N



Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	13	26	21	13	26	21
Maximum Split (%)	21.7%	43.3%	35.0%	21.7%	43.3%	35.0%
Minimum Split (s)	13	21	21	13	21	21
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		5	5		5	5
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	13	39	0	13	39
End Time (s)	13	39	0	13	39	0
Yield/Force Off (s)	8	34	55	8	34	55
Yield/Force Off 170(s)	8	34	44	8	34	44
Local Start Time (s)	47	0	26	47	0	26
Local Yield (s)	55	21	42	55	21	42
Local Yield 170(s)	55	21	31	55	21	31

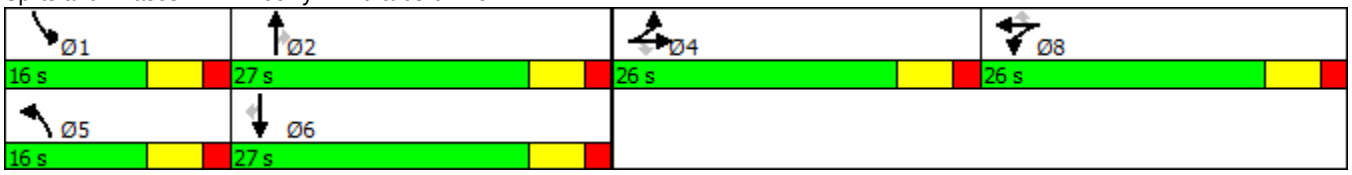
Intersection Summary	
Cycle Length	60
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 21: Brooklyn Blvd & 65th Ave

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	16	27	26	16	27	26
Maximum Split (%)	16.8%	28.4%	27.4%	16.8%	28.4%	27.4%
Minimum Split (s)	16	26	26	16	26	26
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2
Minimum Initial (s)	10	20	15	10	20	15
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		13	13		13	13
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	16	43	0	16	69
End Time (s)	16	43	69	16	43	0
Yield/Force Off (s)	10	37	63	10	37	89
Yield/Force Off 170(s)	10	24	50	10	24	76
Local Start Time (s)	79	0	27	79	0	53
Local Yield (s)	89	21	47	89	21	73
Local Yield 170(s)	89	8	34	89	8	60

Intersection Summary		
Cycle Length		95
Control Type	Actuated-Uncoordinated	
Natural Cycle		95

Splits and Phases: 1: Brooklyn Blvd & 63rd Ave N



Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	13	26	21	13	26	21
Maximum Split (%)	21.7%	43.3%	35.0%	21.7%	43.3%	35.0%
Minimum Split (s)	13	21	21	13	21	21
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		5	5		5	5
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	13	39	0	13	39
End Time (s)	13	39	0	13	39	0
Yield/Force Off (s)	8	34	55	8	34	55
Yield/Force Off 170(s)	8	34	44	8	34	44
Local Start Time (s)	47	0	26	47	0	26
Local Yield (s)	55	21	42	55	21	42
Local Yield 170(s)	55	21	31	55	21	31

Intersection Summary	
Cycle Length	60
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 21: Brooklyn Blvd & 65th Ave

HSIP worksheet

Control Section	T.H. / Roadway	Location	Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends
	Brooklyn Blvd	From north of Bass Lake Rd to South of 65th Ave			Brooklyn Center	1/1/2013	12/31/2015

Description of Proposed Work: Install a Median and pavement improvement

Accident Diagram Codes		1 Rear End	2 Sideswipe Same Direction	3 Left Turn Main Line	5 Right Angle	4,7 Ran off Road	8, 9 Head On/ Sideswipe - Opposite Direction	Pedestrian	6, 90, 99 Other	Total
Study Period: Number of Crashes	Fatal **F**									
	Personal Injury (PI) **A**							1		**1**
	Personal Injury (PI) **B**	1		1	1				1	**4**
	Personal Injury (PI) **C**	2								**2**
	Property Damage **PD**	7	2	3	2	1	1		3	**19**
% Change in Crashes *Use Crash Modification Factors Clearinghouse	Fatal **F**									
	PI **A**							-67%		
	PI **B**	-83%		-100%	-100%				-67%	
	PI **C**	-83%								
	Property Damage **PD**	-91%	-83%	-100%	-100%	-83%	-83%		-83%	
Change in Crashes = No. of crashes **X** % change in crashes	Fatal **F**									
	PI **A**							**-0.67**		**-0.67**
	PI **B**	**-0.83**		**-1.00**	**-1.00**				**-0.67**	**-3.50**
	PI **C**	**-1.66**								**-1.66**
	Property Damage **PD**	**-6.37**	**-1.66**	**-3.00**	**-2.00**	**-0.83**	**-0.83**		**-2.49**	**-17.18**

Year (Safety Improvement Construction): **2018**

Project Cost (exclude Right of Way): **$ 8,270,000**

Right of Way Costs (optional)

Traffic Growth Factor: **3%**

Capital Recovery

1. **Discount Rate**: **4.5%**
2. **Project Service Life (n)**: **20**

Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit
F			$ 1,400,000	
A	-0.67	-0.22	$ 570,000	$ 127,416
B	-3.50	-1.17	$ 170,000	$ 198,515
C	-1.66	-0.55	$ 83,000	$ 45,969
PD	-17.18	-5.73	$ 7,600	$ 43,562
Total				$ 415,462

B/C= 0.88

Using present worth values,

B= $ 7,268,060

C= $ 8,270,000

See "Calculations" sheet for amortization.

Office of Traffic, Safety and Technology **September 2014**

HSIP worksheet

Control Section	T.H. / Roadway	Location	Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends
	Brooklyn Blvd	At 63rd Avenue			Brooklyn Center	1/1/2013	12/31/2015

Description of Proposed Work: Install a Northbound, southbound, westbound right-turn lanes and pavement improvement

Accident Diagram Codes		1 Rear End	2 Sideswipe Same Direction	3 Left Turn Main Line	5 Right Angle	4,7 Ran off Road	8, 9 Head On/ Sideswipe - Opposite Direction	Pedestrian	6, 90, 99 Other	Total
Study Period: Number of Crashes	Fatal **F**									
	Personal Injury (PI) **A**									
	Personal Injury (PI) **B**	1				1		1		**3**
	Personal Injury (PI) **C**	6			1				1	**8**
	Property Damage **PD**	1		1	2		2		3	**9**
% Change in Crashes *Use Crash Modification Factors Clearinghouse	Fatal **F**									
	PI **A**									
	PI **B**	-73%				-46%		-46%		
	PI **C**	-73%			-28%				-46%	
	Property Damage **PD**	-71%		-43%	-24%		-43%		-43%	
Change in Crashes = No. of crashes **X** % change in crashes	Fatal **F**									
	PI **A**									
	PI **B**	**-0.73**				**-0.46**		**-0.46**		**-1.65**
	PI **C**	**-4.38**			**-0.28**				**-0.46**	**-5.12**
	Property Damage **PD**	**-0.71**		**-0.43**	**-0.48**		**-0.86**		**-1.29**	**-3.77**

Year (Safety Improvement Construction): **2018**

Project Cost (exclude Right of Way): **$ 8,270,000**

Right of Way Costs (optional)

Traffic Growth Factor: **3%**

Capital Recovery

1. **Discount Rate**: **4.5%**
2. **Project Service Life (n)**: **20**

Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit
F			$ 1,400,000	
A			$ 570,000	
B	-1.65	-0.55	$ 170,000	$ 93,585
C	-5.12	-1.71	$ 83,000	$ 141,783
PD	-3.77	-1.26	$ 7,600	$ 9,559
Total				$ 244,928

B/C= 0.52

Using present worth values,

B= $ 4,284,745

C= $ 8,270,000

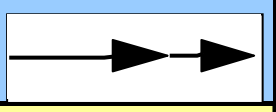
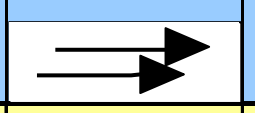
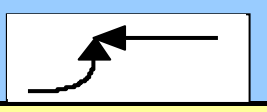
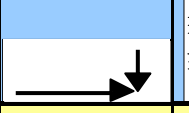
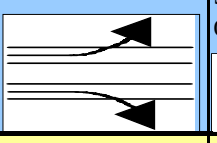
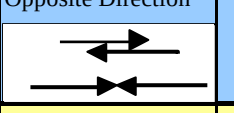
See "Calculations" sheet for amortization.

Office of Traffic, Safety and Technology **September 2014**

HSIP worksheet

Control Section	T.H. / Roadway	Location	Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends
	Brooklyn Blvd	At 65th Avenue			Brooklyn Center	1/1/2013	12/31/2015

Description of Proposed Work: Install a Northbound right-turn lane and pavement improvement

Accident Diagram Codes			1 Rear End 	2 Sideswipe Same Direction 	3 Left Turn Main Line 	5 Right Angle 	4,7 Ran off Road 	8, 9 Head On/ Sideswipe - Opposite Direction 	Pedestrian	6, 90, 99 Other	Total
Study Period: Number of Crashes	Fatal	**F**									
	Personal Injury (PI)	**A**									
		B			1						**1**
		C	1		1	1					**3**
	Property Damage	**PD**	3			2					**5**
% Change in Crashes *Use Crash Modification Factors Clearinghouse	Fatal	**F**									
	PI	**A**									
		B			-46%						
		C	-73%		-46%	-28%					
	Property Damage	**PD**	-71%			-24%					
Change in Crashes = No. of crashes **X** % change in crashes	Fatal	**F**									
	PI	**A**									
		B			**-0.46**						**-0.46**
		C	**-0.73**		**-0.46**	**-0.28**					**-1.47**
	Property Damage	**PD**	**-2.13**			**-0.48**					**-2.61**

Year (Safety Improvement Construction): **2018**

Project Cost (exclude Right of Way): **$ 8,270,000**

Right of Way Costs (optional)

Traffic Growth Factor: **3%**

Capital Recovery

1. **Discount Rate**: **4.5%**
2. **Project Service Life (n)**: **20**

Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit
F			**$ 1,400,000**	
A			**$ 570,000**	
B	**-0.46**	**-0.15**	**$ 170,000**	**$ 26,090**
C	**-1.47**	**-0.49**	**$ 83,000**	**$ 40,707**
PD	**-2.61**	**-0.87**	**$ 7,600**	**$ 6,618**
Total				**$ 73,416**

B/C= 0.16

Using present worth values,

B= $ 1,284,328

C= $ 8,270,000

See "Calculations" sheet for amortization.

Office of Traffic, Safety and Technology **September 2014**

65th Ave 150' E. and W of Brooklyn Blvd (2013 - 2015) - created on 06-07-2016 by rile

Crash data is managed by the Mn/DOT Office of Traffic, Safety, and Operations.

SYS	NUM	REF_POINT	GIS_ROUTE	GIS_TM	RD_DIR	ELEM	RELY	INV	R_U
10	04600095	000+00.999	1004600095	0.999	Z		1	3	U
10	04600095	001+00.014	1004600095	1.014	N		1	3	U
04	27000152	003+00.379	0427000152	3.379	Z		1	3	U
04	27000152	003+00.379	0427000152	3.379	Z		1	1	U
04	27000152	003+00.379	0427000152	3.379	Z		1	3	U
04	27000152	003+00.379	0427000152	3.379	N		1	3	U
04	27000152	003+00.379	0427000152	3.379	N		1	3	U
04	27000152	003+00.379	0427000152	3.379	E		1	3	U
04	27000152	003+00.379	0427000152	3.379	S	—	1	3	U
04	27000152	003+00.379	0427000152	3.379	Z	—	1	3	U
04	27000152	003+00.379	0427000152	3.379	Z	—	1	3	U
04	27000152	003+00.379	0427000152	3.379	W	—	1	3	U
04	27000152	003+00.379	0427000152	3.379	Z		1	3	U
04	27000152	003+00.379	0427000152	3.379	N	—	1	3	U

1che

ATP	CO	CITY	DOW	MONTH	DAY	YEAR	TIME	SEV	NUM_KILLED
#1 MADE CONTACT WITH #2 AT THE INTERSECTION OF BROOKLYN BLVD AND 65TH AVENUE NORTH. #1 STATED THAT	27	0460	3-Tue	10	29	2013	1630	C	0
V1 WAS MAKING A U-TURN FROM SB BB TO NB BB ON A GREEN LIGHT, BUT MUST YIELD TO NB TRAFFIC BB. V2 WA	27	0460	7-Sat	10	31	2015	1302	C	0
UNIT 2 MADE U-TURN FROM NB BROOKLYN BLVD AT 65TH TO SB BROOKLYN BLVD. UNIT 1 WAS TRAVELING SB BROO	27	0460	6-Fri	8	2	2013	1509	N	0
V1 MAKING LEFT TURN FROM SB BROOKLYN BLVD TO EB 65TH AVE. V1 IN THE EAST PORTION OF THE INTERESECT	27	0460	4-Wed	7	17	2013	1120	B	0
#1 REAR ENDED #2 CAUSING SLIGHT DAMGE TO BOTH VEHICLES. #1 WAS CITED FOR DAS AND NO INSURANCE.	27	0460	7-Sat	3	8	2014	1135	N	0
CALLED TO PD ACCIDENT BROOKLYN BLVD/65TH/ ON ARRIVAL, BOTH VEHICLES WERE BLOCKING TRAFFIC IN INTERS	27	0460	5-Thu	11	13	2014	1734	N	0
VEH #2 WAS NORTHBOUND BROOKLYN BLVD AT 65TH AV N. VEH#1 WAS OCCUPIED BY 3/B/M. IT APPEARED THE DRIV	27	0460	1-Sun	3	15	2015	1025	N	0
UNIT #1 WAS NORTH BOUND ON BROOKLYN BLVD UNIT #2 WAS TRAVELLING SOUTH BOUND ON BROOKLYN BLVD MAKING	27	0460	7-Sat	5	2	2015	1513	N	0
~~UNIT 1 TRAVELING SOUTH ON BROOKLYN BLVD APPROACHING 65TH AVE N IN UNK LANE. UNIT 2 TRAVELING SOUTH~~	~~27~~	~~0460~~	~~3-Tue~~	~~6~~	~~2~~	~~2015~~	~~0950~~	~~N~~	~~0~~
~~UNIT 1 TURNED NORTHBOUND ON BROOKLYN BLVD WHEN IT COLLIDED WITH A BICYCLIST. MINOR INJURIES.~~	~~27~~	~~0460~~	~~6-Fri~~	~~7~~	~~17~~	~~2015~~	~~1436~~	~~C~~	~~0~~
~~VEHICLE 1 WAS TRAVELING SOUTH ON BROOKLYN BLVD AND REAR-ENDED VEH 2 WAITING AT THE RED LIGHT AT BRO~~	~~27~~	~~0460~~	~~3-Tue~~	~~7~~	~~28~~	~~2015~~	~~1124~~	~~N~~	~~0~~
~~ON 7/31/15 I OFFICER DEERING WAS DISPATCHED TO A 3 CAR PD ACCIDENT AT 65TH AND BROOKLYN BLVD, BROOK~~	~~27~~	~~0460~~	~~6-Fri~~	~~7~~	~~31~~	~~2015~~	~~2051~~	~~N~~	~~0~~
UNIT 1 REAR ENDED UNIT 2. UNIT 1 STATED SHE TRIED TO BRAKE BUT ENDED UP HITTING UNIT 2. MINOR INJUR	27	0460	2-Mon	10	5	2015	1855	C	0
~~DRIVER #1 STATED THAT ON 11/09/2015 AT 1820 HOURS HE WAS IN THE LEFT TURN LANE AT 65TH AVE NORTH AN~~	~~27~~	~~0460~~	~~2-Mon~~	~~11~~	~~9~~	~~2015~~	~~1820~~	~~C~~	~~0~~

														PERSON1						
NUM_VEH	JUNC	SL	TYPE	DIAG	LOC1	TCD	LIT	WTHR1	WTHR2	SURF	CHAR	DESGN	ACC_NUM	VTYPE	DIR	ACT	FAC1	FAC2	POSN	INJ
2	4	30	1	5	1	1	1	2	0	2	1	5	133020180	1	1	1	1	0	1	C
2	4	40	1	3	1	1	1	3	3	2	1	5	153040100	1	1	1	90	90	1	C
2	4	40	1	5	1	1	1	1	0	1	1	3	132190061	1	1	7	2	0	1	N
2	4	45	1	3	1	1	1	1	0	1	1	5	132240179	1	3	6	2	0	1	B
2	4	35	1	1	1	1	1	1	0	2	1	5	140670059	4	1	1	4	0	1	N
2	4	40	1	5	1	1	4	2	7	5	1	5	143170254	1	1	1	1	1	1	N
2	4	40	1	1	1	1	1	2	0	1	1	5	150740043	1	1	1	15	0	1	N
2	4	40	1	1	1	1	1	1	1	1	1	7	151220100	1	3	54	99	99	1	N
~~5~~	~~1~~	~~40~~	~~1~~	~~90~~	~~1~~	~~98~~	~~1~~	~~1~~	~~0~~	~~1~~	~~1~~	~~90~~	~~151530084~~	~~1~~	~~5~~	~~1~~	~~16~~	~~13~~	~~1~~	~~N~~
~~1~~	~~2~~	~~30~~	~~6~~	~~5~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~5~~	~~151980098~~	~~1~~	~~2~~	~~3~~	~~15~~	~~0~~	~~1~~	~~C~~
~~2~~	~~4~~	~~35~~	~~1~~	~~98~~	~~1~~	~~1~~	~~1~~	~~2~~	~~2~~	~~1~~	~~1~~	~~4~~	~~152090139~~	~~1~~	~~5~~	~~1~~	~~15~~	~~15~~	~~1~~	~~N~~
~~3~~	~~4~~	~~40~~	~~1~~	~~3~~	~~1~~	~~1~~	~~3~~	~~1~~	~~1~~	~~1~~	~~2~~	~~5~~	~~152130005~~	~~1~~	~~8~~	~~6~~	~~2~~	~~2~~	~~1~~	~~N~~
2	1	40	1	1	1	1	4	1	1	1	1	5	152790172	3	1	1	4	15	1	C
~~2~~	~~7~~	~~40~~	~~1~~	~~98~~	~~1~~	~~1~~	~~4~~	~~1~~	~~1~~	~~1~~	~~1~~	~~6~~	~~153140018~~	~~3~~	~~7~~	~~6~~	~~10~~	~~2~~	~~1~~	~~C~~

				PERSON2											PERSON3					
EQP	PHYS	AGE	SEX	VTYPE2	DIR3	ACT4	FAC15	FAC26	POSN7	INJ8	EQP9	PHYS10	AGE11	SEX12	VTYPE13	DIR14	ACT15	FAC116	FAC217	POSN18
1	98	24	F	38	7	1	1	0	1	N	4	98	51	M						
4	1	25	F	1	1	7	90	90	1	C	4	1	20	M						
99	1	18	M	2	5	1	1	0	1	N	99	1	67	M						
4	1	24	F	1	1	1	1	0	1	B	4	1	24	F						
4	1	28	M	3	1	1	1	0	1	N	4	1	902	Z						
4	98	36	F	1	5	6	2	2	1	N	4	98	36	F						
99	99	903	Z	3	1	6	1	0	1	N	4	1	45	F						
4	1	27	M	1	1	1	1	0	1	N	7	1	17	F						
~~4~~	~~1~~	~~66~~	~~F~~	~~1~~	~~5~~	~~1~~	~~1~~	~~0~~	~~1~~	~~N~~	~~99~~	~~1~~	~~48~~	~~F~~	~~1~~	~~98~~				
~~4~~	~~1~~	~~46~~	~~M~~	~~53~~	~~5~~	~~1~~	~~15~~	~~0~~	~~21~~	~~C~~	~~98~~	~~1~~	~~22~~	~~M~~						
~~4~~	~~3~~	~~28~~	~~M~~	~~1~~	~~5~~	~~11~~	~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~1~~	~~29~~	~~F~~						
~~4~~	~~1~~	~~31~~	~~M~~	~~1~~	~~5~~	~~1~~	~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~1~~	~~68~~	~~F~~	~~3~~	~~3~~				
4	1	67	F	3	1	1	1	1	1	C	4	1	24	M						
~~4~~	~~98~~	~~27~~	~~M~~	~~1~~	~~5~~	~~1~~	~~2~~	~~2~~	~~1~~	~~C~~	~~4~~	~~98~~	~~32~~	~~F~~						


PERSON4
INJ19
EQP20
PHYS21
AGE22
SEX23
VTYPE24
DIR25
ACT26
FAC127
FAC228
POSN29
INJ30
EQP31
PHYS32
AGE33
SEX34

63rd Ave 150' E. and W. of Brooklyn Blvd (2013 -2015) - created on 06-07-2016 by rile

Crash data is managed by the Mn/DOT Office of Traffic, Safety, and Operations.

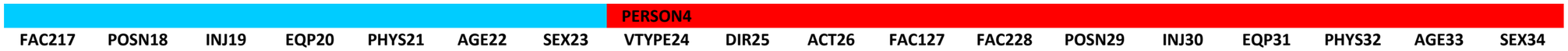
SYS	NUM	REF_POINT	GIS_ROUTE	GIS_TM	RD_DIR	ELEM	RELY	INV	R_U
04	27000152	003+00.621	0427000152	3.621	Z		1	3	U
04	27000152	003+00.621	0427000152	3.621	Z		1	3	U
04	27000152	003+00.623	0427000152	3.623	N		1	3	U
04	27000152	003+00.623	0427000152	3.623	N		1	3	U
04	27000152	003+00.624	0427000152	3.624	Z		1	0	U
04	27000152	003+00.621	0427000152	3.621	Z		1	3	U
04	27000152	003+00.621	0427000152	3.621	S		1	3	U
04	27000152	003+00.621	0427000152	3.621	Z		1	3	U
04	27000152	003+00.621	0427000152	3.621	Z		1	3	U
04	27000152	003+00.622	0427000152	3.622	S		1	3	U
04	27000152	003+00.621	0427000152	3.621	W		1	3	U
05	04600101	001+00.090	0504600101	1.090	W		1	3	U
04	27000152	003+00.621	0427000152	3.621	S		1	3	U
04	27000152	003+00.622	0427000152	3.622	Z		1	3	U
05	04600101	001+00.092	0504600101	1.092	Z		1	0	U
04	27000152	003+00.621	0427000152	3.621	Z		1	0	U
05	04600101	001+00.090	0504600101	1.090	E		1	3	U
05	04600101	001+00.090	0504600101	1.090	Z		1	3	U
04	27000152	003+00.621	0427000152	3.621	Z		1	3	U
04	27000152	003+00.621	0427000152	3.621	N		1	3	U

e1che

ATP	CO	CITY	DOW	MONTH	DAY	YEAR	TIME	SEV
VEHICLE #1 WAS STOPPED IN TRAFFIC, IN THE LEFT TURN LANE, ON (S/B) BROOKLYN BOULEVARD WAITING TO TU	27	0460	4-Wed	1	1	2014	1150	B
ON 04/27/2015 AT 1836 HOURS, I, OFFICER JORDAN LUND, WAS DISPATCHED TO A PROPERTY DAMAGE ACCIDENT A	27	0460	2-Mon	4	27	2015	1836	C
ON 06/21/2013 AT AROUND 2045 HOURS, OFFICERS FOUND TWO VEHICLE ON THE SIDE OF THE ROAD WITH HAZARD	27	0460	6-Fri	6	21	2013	2045	C
UNIT 1 DRIVER STATES HE HAD BEEN TRAVELING NORTHBOUND IN THE OUTERMOST LANE OF BROOKLYN BLVD AS HE	27	0460	6-Fri	7	26	2013	1435	C
	27	0460	5-Thu	5	23	2013	1730	C
ON 3/3/2015 AT 2100 HOURS, I, OFFICER JORDAN LUND, WAS DISPATCHED TO AN ACCIDENT AT 63RD AVENUE N A	27	0460	3-Tue	3	3	2015	2100	N
VEHICLE #1 WAS TRAVELLING SOUTHBOUND BROOKLYN BLVD PAST 63RD AVE WHEN IT LEFT THE ROADWAY AND STRUC	27	0460	5-Thu	2	14	2013	2338	B
NO DIAGRAM, VEHICLES MOVED PRIOR TO POLICE ARRIVAL. VEHICLE #1 WAS TURNING RIGHT FROM A STOPPED PO	27	0460	2-Mon	8	31	2015	1246	C
UNIT 1 WAS TRAVELING NORTHBOUND ON BROOKLYN BLVD AT THE INTERSECTION AT 63RD AVE N WITH A GREEN LIG	27	0460	1-Sun	10	26	2014	1459	N
V1 WAS WB ON 63RD AVE N AND COLLIDED WITH V2 WHICH WAS SB BROOKLYN BLVD IN THE INTERSECTION. DRIVE	27	0460	6-Fri	5	15	2015	0042	N
UNIT 1 WAS TRAVELING SOUTH BOUND ON BROOKLYN BLVD AND MADE A RIGHT TURN ONTO 63RD AVE N TO GO WEST	27	0460	2-Mon	10	7	2013	1449	N
ON 12/18/2013 AT 1211 HOURS, I, OFFICER KOTECKI WAS DISPATCHED TO A PROPERTY DAMAGE ACCIDENT AT 63R	27	0460	4-Wed	12	18	2013	1210	N
ON 9/6/2014 AT APPROXIMATELY 2224 HOURS, OFFICERS WERE CALLED TO BROOKLYN BLVD AND 63RD AVE N ON A	27	0460	7-Sat	9	6	2014	2224	C
VEHICLE #1 WAS STOPPED IN TRAFFIC N/B BROOKLYN BOULEVARD IN THE 6300 BLOCK. VEHICLE #2 WAS ALSO STO	27	0460	7-Sat	10	31	2015	1340	C
	27	0460	6-Fri	9	20	2013	0930	N
	27	0460	2-Mon	10	20	2014	1330	N
CALLED TO A HIT AND RUN. DRIVER OF VEHICLE 2 WAS DRIVING EAST ON 63RD AVE N AND TURNING LEFT TO GO	27	0460	1-Sun	3	17	2013	2034	N
UNIT 1 MAKING TURN TO GO NORTH ON BROOKLYN BLVD FROM EASTBOUND 63RD AVE N. UNIT 2, A WHITE VOLKSWAG	27	0460	2-Mon	10	6	2014	1615	N
UNIT 1 GOING SOUTHBOUND COLLIDED WITH UNIT 2. MINOR INJURIES AND DAMAGE. PATIENTS WERE CHECKED BY N	27	0460	3-Tue	5	5	2015	1712	C
V1 WAS TRAVELING NB BB WHEN A PEDESTRIAN RAN INTO TRAFFIC. V1 STRUCK THE PEDESTRIAN HEAD ON. THE PE	27	0460	4-Wed	5	8	2013	1340	B

															PERSON1				
NUM_KILLED	NUM_VEH	JUNC	SL	TYPE	DIAG	LOC1	TCD	LIT	WTHR1	WTHR2	SURF	CHAR	DESGN	ACC_NUM	VTYPE	DIR	ACT	FAC1	FAC2
0	2	4	40	1	1	1	1	1	2	2	5	1	5	140010093	1	5	1	15	8
0	3	4	40	1	1	1	1	1	1	1	1	1	90	151240023	1	1	10	15	15
0	3	4	40	1	1	1	98	3	8	3	2	1	5	131730026	1	0	1	1	1
0	2	4	40	1	1	1	1	1	1	1	1	1	3	132070127	1	1	5	0	0
0	2	0	40	1	1	0	1	1	1	0	1	0	0	131760044	1	1	11	0	0
0	2	4	40	1	3	1	1	4	1	1	1	1	90	150990003	1	7	1	1	1
0	2	4	40	2	4	4	99	4	1	1	1	1	5	130460017	1	5	99	0	0
0	2	4	40	1	5	1	1	1	2	2	1	1	5	152430090	1	1	1	99	99
0	2	4	40	1	5	1	1	1	1	1	1	1	5	142990102	1	1	1	1	1
0	2	4	40	1	5	1	1	4	2	0	2	1	90	151350006	1	7	1	1	0
0	2	4	40	1	8	1	1	1	1	1	1	1	5	132810165	1	6	5	1	1
0	2	7	30	1	90	1	1	1	1	0	2	1	8	133520140	1	7	13	1	0
0	3	7	40	1	98	1	1	4	1	0	1	1	3	142490150	1	5	1	99	0
0	3	1	40	1	1	1	98	1	2	3	2	1	5	153040110	2	1	1	15	8
0	2	0	30	1	9	0	1	1	1	0	1	0	0	132940091	2	5	1	0	0
0	2	0	40	1	1	0	1	1	1	0	1	0	0	143280106	3	1	1	0	0
0	2	4	30	1	98	1	1	4	99	99	99	1	5	130820017	3	1	1	1	1
0	2	7	30	1	98	1	1	1	1	1	1	1	5	142790151	4	3	6	1	1
0	2	2	40	1	1	1	1	1	1	2	1	1	5	151250158	38	5	1	4	0
0	1	1	40	7	8	1	98	1	1	1	1	1	5	131280080	51	3	36	21	21

						PERSON2											PERSON3			
POSN	INJ	EQP	PHYS	AGE	SEX	VTYPE2	DIR3	ACT4	FAC15	FAC26	POSN7	INJ8	EQP9	PHYS10	AGE11	SEX12	VTYPE13	DIR14	ACT15	FAC116
1	B	4	1	71	M	3	5	11	1	1	1	B	4	1	53	F				
1	C	4	1	63	F	1	1	9	1	1	1	N	4	1	44	M	1	1		
1	C	4	1	39	M	1	0	1	1	1	1	N	4	1	23	M	1	0		
1	N	4	1	50	M	4	1	1	4	1	1	N	4	1	47	M				
1	N	4	0	19	F	1	8	1	0	0	1	C	4	0	25	F				
1	N	4	1	41	M	3	1	4	99	99	1	N	99	99	903	Z				
1	B	99	2	21	F															
1	N	4	99	35	M	1	7	5	1	1	1	C	4	1	25	M				
1	N	4	1	56	F	3	1	3	2	2	1	N	4	1	49	M				
1	N	99	1	22	M	4	5	1	1	0	1	N	99	1	32	M				
1	N	4	1	30	F	7	7	1	1	1	1	N	4	1	31	M				
1	N	4	1	22	F	2	7	17	1	0	1	N	4	1	52	M				
1	C	4	1	27	F	3	7	6	99	18	1	C	4	2	41	M	1	3		
1	N	4	1	58	M	2	1	11	1	1	1	N	4	1	31	M	1	1		
1	N	4	0	40	F	3	3	3	0	0	1	N	4	0	23	F				
1	N	0	0	32	F	99	0	1	0	0	1	N	98	0	26	F				
1	N	99	98	33	M	2	1	1	18	18	1	N	99	2	56	M				
1	N	4	1	40	M	1	1	5	1	1	1	N	99	99	902	Z				
1	C	4	1	51	F	3	5	1	1	1	1	C	4	1	41	M				
25	B	98	1	78	M	11	1	1	1	1	1	C	98	1	60	M				


PERSON4
FAC217
POSN18
INJ19
EQP20
PHYS21
AGE22
SEX23
VTYPE24
DIR25
ACT26
FAC127
FAC228
POSN29
INJ30
EQP31
PHYS32
AGE33
SEX34

Brooklyn Blvd (CSAH 152) from Bass Lake Road to 65th Ave (2013 -2015) - created on 06-07-2

Crash data is managed by the Mn/DOT Office of Traffic, Safety, and Operations.

SYS	NUM	REF_POINT	GIS_ROUTE	GIS_TM	RD_DIR	ELEM	RELY	INV	R_U
10	04600141	000+00.000	1004600141	0.000	Z		1	3	U
04	27000152	003+00.384	0427000152	3.384	N		1	3	U
04	27000152	003+00.385	0427000152	3.385	Z		1	0	U
04	27000152	003+00.440	0427000152	3.440	Z		2	0	U
04	27000152	003+00.444	0427000152	3.444	Z		1	0	U
04	27000152	003+00.530	0427000152	3.530	Z		1	0	U
04	27000152	003+00.601	0427000152	3.601	S		1	3	U
04	27000152	003+00.619	0427000152	3.619	S		1	3	U
04	27000152	003+00.630	0427000152	3.630	N		1	3	U
04	27000152	003+00.635	0427000152	3.635	Z		1	0	U
04	27000152	003+00.668	0427000152	3.668	Z		1	0	U
04	27000152	003+00.761	0427000152	3.761	Z		1	3	U
04	27000152	003+00.762	0427000152	3.762	S		1	3	U
04	27000152	003+00.762	0427000152	3.762	S		1	2	U
04	27000152	003+00.762	0427000152	3.762	Z		1	0	U
04	27000152	003+00.893	0427000152	3.893	Z		1	3	U
04	27000152	003+00.893	0427000152	3.893	Z		1	3	U
04	27000152	003+00.893	0427000152	3.893	Z		1	3	U
04	27000152	003+00.893	0427000152	3.893	Z		1	3	U
04	27000152	003+00.918	0427000152	3.918	Z		1	0	U
04	27000152	004+00.014	0427000152	4.014	W		1	3	U
04	27000152	004+00.018	0427000152	4.018	Z		2	3	U
04	27000152	004+00.046	0427000152	4.046	Z		1	3	U
04	27000152	004+00.151	0427000152	4.151	Z		1	3	U
04	27000152	004+00.156	0427000152	4.156	Z		1	0	U
04	27000152	004+00.160	0427000152	4.160	Z		2	3	U
~~04~~	~~27000152~~	~~004+00.266~~	~~0427000152~~	~~4.266~~	~~W~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.270~~	~~0427000152~~	~~4.270~~	~~N~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.270~~	~~0427000152~~	~~4.270~~	~~N~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.270~~	~~0427000152~~	~~4.270~~	~~Z~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.270~~	~~0427000152~~	~~4.270~~	~~S~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.271~~	~~0427000152~~	~~4.271~~	~~N~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~Z~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~S~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~Z~~	—	~~1~~	~~0~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~S~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~S~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~S~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~S~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~N~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~N~~	—	~~1~~	~~3~~	~~U~~

2016 by rile1che

ATP	CO	CITY	DOW	MONTH	DAY	YEAR	TIME	SEV
ON 4/7/15 AT 1724 HOURS I, OFFICER JOSHUA WHITTENBURG, RESPONDED TO THE ABOVE LOCATION FOR A ROLLOV	27	0460	3-Tue	4	7	2015	1724	N
ON 3/5/15 AT 1240 I, OFFICER PETERSON, WAS DISPATCHED TO A PROPERTY DAMAGE ACCIDENT AT BROOKLYN BLV	27	0460	5-Thu	3	5	2015	1240	N
	27	0460	6-Fri	1	16	2015	1455	N
	27	0460	2-Mon	6	3	2013	1530	N
	27	0460	2-Mon	1	21	2013	1600	N
	27	0460	1-Sun	5	26	2013	1249	N
DRIVERS LICENSE AND NOT SHOWING AN ADEQUATE INSURANCE DOCUMENT THAT COULD BE VARIFIED (NO PROOF).'	27	0460	2-Mon	4	29	2013	1535	N
UNIT 1,2,3 WERE ALL TRAVELING SOUTH BOUND ON BROOKLYN BLVD. THEY WERE TRAVELING IN THE LEFT LANE. U	27	0460	6-Fri	9	27	2013	1622	C
SEE REPORT	27	0460	7-Sat	2	2	2013	0126	N
	27	0460	4-Wed	3	5	2014	1040	N
	27	0460	3-Tue	2	12	2013	1200	N
ON 9/28/13 AT 0011 HOURS I, OFFICER IVERSON, WAS DISPATCHED TO 62ND AVE AND BROOKLYN BLVD TO A REPO	27	0460	6-Fri	9	27	2013	0011	B
DRIVER OF UNIT 1 STATED HE WAS TRAVELING SB IN THE RIGHT HAND LANE ON BROOKLYN BLVD. DRIVER OF UNIT	27	0460	3-Tue	12	24	2013	1958	N
ON 020714, AT 1211 HOURS, I, DEPUTY WEINZIERL WAS TRAVELLING SOUTH ON BROOKLYN BLVD FROM 63RD AVENU	27	0460	6-Fri	2	7	2014	1211	N
	27	0460	6-Fri	8	16	2013	1700	N
UNIT 1 TRAVELING NB ON BROOKLYN BLVD AS UNIT 2 WAS PULLING OUT OF THE BP GAS STATION TO GO SB ON BR	27	0460	7-Sat	2	28	2015	0205	B
SEE ICR	27	0460	1-Sun	8	9	2015	1210	B
UNIT 1 WAS TRAVELING NORTH BOUND ON THE 6100 BLOCK OF BROOKLYN BLVD IN THE FAR RIGHT LANE. UNIT 2	27	0460	7-Sat	3	29	2014	1343	C
UNIT 1 WAS TURNING INTO THE BUSINESS AT 6044 BROOKLYN BLVD. UNIT 2 WAS EXITING THE SAME BUSINESS.	27	0460	2-Mon	1	12	2015	0745	N
	27	0460	5-Thu	7	9	2015	1430	B
UNIT 1 WAS AT THE INTERSECTION OF WB 60TH AVE N AND BROOKLYN BLVD. AFTER MAKING A COMPLETE STOP, U	27	0460	4-Wed	9	2	2015	1418	A
... UNIT 2 DRIVER WOULD LATER CONTACT OFFICER TO REPORT THAT INSURANCE CO LISTED FOR UNIT 1 REPORTS	27	0460	7-Sat	10	5	2013	1551	N
ON 9/29/15 0224 HOURS, OFFICERS WERE DISPATCHED TO AN ACCIDENT AT BROOKLYN BOULEVARD AND ADMIRAL LA	27	0460	3-Tue	9	29	2015	0224	N
UNIT 1 TRAVELLING SOUTHBOUND BROOKLYN BLVD AT 59TH AVE N. UNIT 2 STRUCK UNIT 1 IN REAR. UNIT 2 FL	27	0460	1-Sun	9	20	2015	1625	N
	27	0460	2-Mon	4	1	2013	2115	N
VEHICLE 1 WAS TRAVELING N/B ON BROOKLYN BOULEVARD, IN THE FAR LEFT LANE, AT CUB FOODS. THE OWNER O	27	0460	3-Tue	8	4	2015	1800	N
~~VEH#1 TRAVELING SB TH100 RAMP TO WB CO RD 10. VEH#1 STOPPED AT YIELD SIGN. VEH#2 WAS TRAVELING SB10~~	~~27~~	~~0460~~	~~3-Tue~~	~~11~~	~~11~~	~~2014~~	~~1658~~	~~C~~
~~VEH #1 N/B BROOKLYN BLVD LOST CONTROL HIT RIGHT MEDIAN THEN HIT ANOTHER CURB THAT STOPPED HIS VEHIC~~	~~27~~	~~0460~~	~~7 Sat~~	~~3~~	~~16~~	~~2013~~	~~0628~~	~~B~~
~~VEH #2 WAS W/B BASS LAKE RD MAKING A RIGHT TURN TO GO N/B BROOKLYN BLVD. VEH #1 HIT REAR OF VEH #2.~~	~~27~~	~~0460~~	~~3 Tue~~	~~11~~	~~4~~	~~2014~~	~~0955~~	~~N~~
~~UNITS 1 AND 2 WERE BOTH BACKING FORM A PARKED POSITION IN THE LOT OF 3245 CO RD 10. VEHICLES STRUC~~	~~27~~	~~0460~~	~~2-Mon~~	~~1~~	~~26~~	~~2015~~	~~1625~~	~~N~~
~~VEHICLE 2 WAS WAITING AT STOP LIGHT, SOUTH BOUND BROOKLYN BLVD/COUNTY 10. VEHICLE 1 THEN REAR ENDED~~	~~27~~	~~0460~~	~~2-Mon~~	~~1~~	~~26~~	~~2015~~	~~0724~~	~~C~~
~~ON 06/25/2015 AT 2058 HOURS I OFFICER WILKINS #170 RESPONDED TO BROOKLYN BLVD & CO 10 FOR A PROPERT~~	~~27~~	~~0460~~	~~5 Thu~~	~~6~~	~~25~~	~~2015~~	~~2058~~	~~N~~
~~DRIVER 2 OF VEH 2 STATED HE WAS DRIVING SB ON BROOKLYN BLVD AND WAS IN THE LEFT TURN LANE. DRIVER 2~~	~~27~~	~~0460~~	~~1 Sun~~	~~2~~	~~17~~	~~2013~~	~~1001~~	~~C~~
~~VEH #1 WAS SOUTHBOUND BROOKLYN BLVD, SHE BELIEVED SHE WAS IN THE LEFT LANE LOOKED UP AND HAD A YELL~~	~~27~~	~~0460~~	~~4-Wed~~	~~6~~	~~26~~	~~2013~~	~~1345~~	~~C~~
	~~27~~	~~0460~~	~~1-Sun~~	~~6~~	~~23~~	~~2013~~	~~1334~~	~~N~~
~~V1 REAR ENDED V2 STOPPED AT A RED LIGHT. D1 DIDNT REMEMBER THE ACCIDENT AND APPEARED TO HAVE INJUR'~~	~~27~~	~~0460~~	~~2 Mon~~	~~11~~	~~25~~	~~2013~~	~~1711~~	~~C~~
~~ON 12/19/2013 AT 1320 HOURS, I, OFFICER KOTECKI WAS DISPATCHED TO THE AREA OF 3245 CO RD 10 AND BRO~~	~~27~~	~~0460~~	~~5 Thu~~	~~12~~	~~19~~	~~2013~~	~~1320~~	~~C~~
~~ON 09/12/2014 AT 2339 HOURS OFFICERS WERE DISPATCHED TO CO RD 10 AND BROOKLYN BLVD ON A ACCIDENT. O~~	~~27~~	~~0460~~	~~6 Fri~~	~~9~~	~~12~~	~~2014~~	~~2339~~	~~N~~
~~UNIT 1 TRAVELING SOUTH ON BROOKLYN BLVD IN LEFT TURN LANE APPROACHING 58TH AVE N. UNIT 2 TRAVELING~~	~~27~~	~~0460~~	~~2-Mon~~	~~7~~	~~13~~	~~2015~~	~~1505~~	~~B~~
~~V1 WAS TRAV NB BB WHEN A WITNESS CALLED IN ALL OVER THE ROAD. WITNESS THEN STATES V1 REAR ENDED V2~~	~~27~~	~~0460~~	~~1 Sun~~	~~9~~	~~6~~	~~2015~~	~~0935~~	~~N~~
~~AND LEFT. UNIT 1 BELIEVED UNIT 2 TO BE INTOXICATED. ATTEMPT TO LOCATE SUBMITTED FOR UNIT 2. AT~~	~~27~~	~~0460~~	~~7 Sat~~	~~11~~	~~14~~	~~2015~~	~~1852~~	~~N~~

															PERSON1		
NUM_KILLED	NUM_VEH	JUNC	SL	TYPE	DIAG	LOC1	TCD	LIT	WTHR1	WTHR2	SURF	CHAR	DESGN	ACC_NUM	VTYPE	DIR	ACT
0	2	2	40	1	2	1	98	1	2	0	1	1	5	150980016	3	1	5
0	2	4	40	1	5	1	1	1	1	0	1	1	3	150640145	1	7	1
0	2	0	45	1	5	0	1	1	2	0	1	0	0	150440119	3	0	0
0	2	0	30	1	0	0	98	1	1	0	1	0	0	131900129	4	1	14
0	2	0	35	1	2	0	1	1	1	0	1	0	0	130560029	1	1	1
0	2	0	35	1	3	0	98	1	2	0	1	0	0	131770043	3	1	6
0	2	1	40	1	1	1	98	1	1	1	1	1	5	131200025	1	5	1
0	3	4	40	1	1	1	1	1	1	1	1	1	5	132710114	1	5	1
0	2	4	40	1	1	1	1	4	4	4	3	2	5	130330060	1	1	1
0	2	0	40	1	1	0	1	1	1	0	1	0	0	140980072	1	8	11
0	3	0	35	1	1	0	98	1	1	0	1	0	0	130740061	3	1	1
0	1	7	40	90	98	1	98	4	1	0	1	1	5	132700019	13	5	99
0	2	7	40	1	1	1	98	4	4	4	5	1	5	140210389	3	5	5
0	2	7	45	1	3	1	90	1	1	1	1	1	5	140380165	1	7	6
0	2	0	40	1	3	0	98	1	1	0	1	0	0	132610070	1	5	1
0	2	1	40	1	3	1	98	4	1	1	1	1	5	150590011	1	1	1
0	2	2	35	1	5	1	4	1	1	1	1	1	5	152210086	1	5	1
0	2	1	40	1	1	1	98	1	1	1	1	1	5	140880073	1	1	1
0	2	8	10	1	9	1	98	1	1	1	1	1	10	150120163	1	98	57
0	2	0	0	1	1	0	98	1	1	0	1	0	0	152180087	2	7	11
0	1	3	40	6	90	1	4	1	1	1	1	1	5	152450130	53	5	38
0	2	1	40	1	90	1	98	1	2	2	1	1	5	133070080	1	1	1
0	1	1	40	25	98	8	98	4	1	1	1	1	5	152780020	3	1	1
0	2	4	40	1	1	1	1	1	1	1	1	1	5	152630114	4	5	1
0	2	0	40	1	4	0	4	4	1	0	1	0	0	131230045	1	7	6
0	2	1	40	1	98	1	98	1	1	1	1	1	5	152160138	1	1	1
~~0~~	~~2~~	~~2~~	~~30~~	~~1~~	~~1~~	~~1~~	~~5~~	~~3~~	~~4~~	~~4~~	~~5~~	~~2~~	~~1~~	~~143180036~~	~~1~~	~~7~~	~~5~~
~~0~~	~~1~~	~~5~~	~~40~~	~~32~~	~~7~~	~~1~~	~~1~~	~~4~~	~~2~~	~~0~~	~~5~~	~~1~~	~~5~~	~~130750096~~	~~1~~	~~1~~	~~1~~
~~0~~	~~2~~	~~4~~	~~40~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~0~~	~~1~~	~~1~~	~~5~~	~~143080063~~	~~1~~	~~1~~	~~5~~
~~0~~	~~2~~	~~90~~	~~10~~	~~1~~	~~1~~	~~6~~	~~98~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~90~~	~~150260144~~	~~1~~	~~98~~	~~17~~
~~0~~	~~2~~	~~4~~	~~35~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~2~~	~~2~~	~~1~~	~~1~~	~~5~~	~~150300029~~	~~3~~	~~5~~	~~1~~
~~0~~	~~2~~	~~4~~	~~35~~	~~1~~	~~3~~	~~1~~	~~1~~	~~3~~	~~1~~	~~1~~	~~1~~	~~1~~	~~3~~	~~151760197~~	~~1~~	~~5~~	~~1~~
~~0~~	~~2~~	~~4~~	~~40~~	~~1~~	~~3~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~90~~	~~130480047~~	~~2~~	~~1~~	~~1~~
~~0~~	~~3~~	~~5~~	~~40~~	~~1~~	~~5~~	~~1~~	~~1~~	~~1~~	~~1~~	~~0~~	~~1~~	~~1~~	~~5~~	~~131770133~~	~~4~~	~~5~~	~~1~~
~~0~~	~~2~~	~~0~~	~~35~~	~~1~~	~~90~~	~~0~~	~~1~~	~~1~~	~~1~~	~~0~~	~~1~~	~~0~~	~~0~~	~~132060045~~	~~1~~	~~5~~	~~9~~
~~0~~	~~2~~	~~4~~	~~40~~	~~1~~	~~1~~	~~1~~	~~1~~	~~4~~	~~1~~	~~1~~	~~1~~	~~1~~	~~5~~	~~133290138~~	~~1~~	~~5~~	~~11~~
~~0~~	~~2~~	~~7~~	~~40~~	~~1~~	~~98~~	~~1~~	~~98~~	~~1~~	~~2~~	~~0~~	~~1~~	~~1~~	~~3~~	~~133530158~~	~~1~~	~~5~~	~~1~~
~~0~~	~~2~~	~~1~~	~~40~~	~~1~~	~~1~~	~~1~~	~~98~~	~~4~~	~~1~~	~~1~~	~~1~~	~~1~~	~~5~~	~~142560002~~	~~1~~	~~5~~	~~1~~
~~0~~	~~2~~	~~4~~	~~40~~	~~1~~	~~90~~	~~1~~	~~1~~	~~1~~	~~1~~	~~0~~	~~1~~	~~1~~	~~90~~	~~151940101~~	~~11~~	~~5~~	~~6~~
~~0~~	~~2~~	~~4~~	~~40~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~2~~	~~3~~	~~2~~	~~1~~	~~5~~	~~152490041~~	~~4~~	~~1~~	~~11~~
~~0~~	~~2~~	~~4~~	~~40~~	~~1~~	~~1~~	~~1~~	~~1~~	~~4~~	~~1~~	~~1~~	~~1~~	~~1~~	~~5~~	~~153180122~~	~~1~~	~~1~~	~~6~~

								PERSON2											PERSON3
FAC1	FAC2	POSN	INJ	EQP	PHYS	AGE	SEX	VTYPE	DIR	ACT	FAC1	FAC2	POSN	INJ	EQP	PHYS	AGE	SEX	VTYPE
15	0	1	N	4	1	18	M	1	1	1	1	0	1	N	4	1	39	F	
1	0	1	N	4	1	72	M	4	1	1	5	0	1	N	4	1	39	M	
0	0	1	N	4	0	54	M	1	0	0	0	0	1	N	0	0	65	F	
0	0	1	N	3	0	61	M	1	1	1	0	0	1	N	0	0	24	M	
0	0	1	N	4	0	42	M	3	1	14	0	0	1	N	0	0	43	M	
0	0	1	N	4	0	60	M	1	5	1	0	0	1	N	0	0	19	M	
1	1	1	N	4	1	34	M	1	5	1	4	4	1	N	4	1	25	M	
1	1	1	N	4	1	38	M	1	5	1	99	99	1	N	4	1	16	M	3
4	4	1	N	99	99	44	M	1	1	1	1	1	1	N	4	1	53	M	
0	0	1	N	0	0	32	M	1	8	1	0	0	1	N	0	0	78	M	
0	0	1	N	4	0	72	F	32	1	1	0	0	1	N	0	0	37	M	1
1	1	1	B	11	2	42	M												
1	1	1	N	4	1	41	M	1	5	1	15	15	1	N	4	1	19	M	
2	10	1	N	4	1	21	F	4	5	1	1	1	1	N	4	1	59	F	
0	0	1	N	4	0	24	M	1	1	6	0	0	1	N	0	0	24	F	
18	18	1	B	4	2	26	M	4	90	6	1	1	1	N	4	1	21	M	
1	1	1	B	4	1	49	M	1	3	6	2	2	1	N	4	1	22	F	
1	1	1	C	4	1	47	M	3	1	14	15	2	1	N	4	1	40	F	
1	1	1	N	4	1	53	M	3	98	57	1	1	1	N	99	99	54	M	
0	0	1	B	4	0	34	F	31	7	17	0	0	1	N	0	0	903	Z	
33	7	30	A	11	1	58	M	1	7	53	90	99	1	N	99	1	55	M	
1	1	1	N	4	1	66	F	1	1	14	8	8	1	N	4	1	18	F	
18	99	1	N	99	2	28	Z												
1	1	1	N	4	1	90	M	3	5	1	99	99	1	N	99	99	903	Z	
0	0	1	N	0	0	61	M	2	5	1	0	0	1	N	4	0	36	M	
1	1	1	N	4	1	23	M	4	1	14	2	15	1	N	99	99	903	X	
~~4~~	~~61~~	~~1~~	~~N~~	~~4~~	~~1~~	~~41~~	~~M~~	~~1~~	~~7~~	~~5~~	~~1~~	~~1~~	~~1~~	~~C~~	~~4~~	~~1~~	~~30~~	~~M~~	
~~46~~	~~0~~	~~1~~	~~B~~	~~4~~	~~1~~	~~25~~	~~M~~												
~~1~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~77~~	~~F~~	~~3~~	~~1~~	~~5~~	~~4~~	~~0~~	~~1~~	~~N~~	~~99~~	~~99~~	~~902~~	~~Z~~	
~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~1~~	~~48~~	~~F~~	~~1~~	~~98~~	~~17~~	~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~1~~	~~55~~	~~M~~	
~~9~~	~~9~~	~~1~~	~~N~~	~~99~~	~~98~~	~~37~~	~~F~~	~~1~~	~~5~~	~~1~~	~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~98~~	~~36~~	~~F~~	
~~1~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~23~~	~~M~~	~~1~~	~~1~~	~~6~~	~~1~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~84~~	~~F~~	
~~5~~	~~5~~	~~1~~	~~C~~	~~4~~	~~1~~	~~59~~	~~M~~	~~2~~	~~3~~	~~6~~	~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~1~~	~~54~~	~~M~~	
~~5~~	~~0~~	~~1~~	~~N~~	~~3~~	~~1~~	~~37~~	~~F~~	~~1~~	~~3~~	~~1~~	~~1~~	~~0~~	~~1~~	~~C~~	~~4~~	~~1~~	~~26~~	~~F~~	~~1~~
~~0~~	~~0~~	~~1~~	~~N~~	~~4~~	~~0~~	~~26~~	~~M~~	~~3~~	~~3~~	~~9~~	~~0~~	~~0~~	~~1~~	~~N~~	~~0~~	~~0~~	~~54~~	~~M~~	
~~1~~	~~1~~	~~1~~	~~C~~	~~4~~	~~1~~	~~36~~	~~M~~	~~1~~	~~5~~	~~1~~	~~15~~	~~15~~	~~1~~	~~C~~	~~4~~	~~1~~	~~85~~	~~M~~	
~~1~~	~~0~~	~~1~~	~~C~~	~~4~~	~~1~~	~~60~~	~~F~~	~~3~~	~~5~~	~~1~~	~~15~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~26~~	~~M~~	
~~1~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~38~~	~~M~~	~~1~~	~~5~~	~~1~~	~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~1~~	~~26~~	~~M~~	
~~16~~	~~46~~	~~1~~	~~B~~	~~11~~	~~1~~	~~31~~	~~M~~	~~1~~	~~1~~	~~6~~	~~1~~	~~0~~	~~1~~	~~N~~	~~98~~	~~1~~	~~35~~	~~F~~	
~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~1~~	~~72~~	~~M~~	~~1~~	~~1~~	~~1~~	~~15~~	~~15~~	~~1~~	~~N~~	~~99~~	~~99~~	~~903~~	~~Z~~	
~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~1~~	~~43~~	~~F~~	~~1~~	~~1~~	~~6~~	~~99~~	~~99~~	~~1~~	~~N~~	~~99~~	~~99~~	~~55~~	~~M~~	

										PERSON4									
DIR	ACT	FAC1	FAC2	POSN	INJ	EQP	PHYS	AGE	SEX	VTYPE	DIR	ACT	FAC1	FAC2	POSN	INJ	EQP	PHYS	AGE	SEX
5																				
1																				
~~1~~																				

- Countermeasure: Install raised median

CMF	CRF(%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
0.61	39	★★★★☆	All	All		Schultz et al., 2011	

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CMF	CRF(%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
0.56	44	★★★★☆	All	Fatal,Serious injury		Schultz et al., 2011	

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CMF	CRF(%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
0.29	70.77	★★★☆☆	All	All	Urban	Schultz et al., 2008	

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CMF	CRF(%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
0.45	55.43	★★★☆☆	Angle	All	Urban	Schultz et al., 2008	

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CMF	CRF(%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
0.86	14	★★★☆☆	All	All	Urban	Yanmaz-Tuzel and Ozbay, 2010	

- Countermeasure: Improve pavement friction (increase skid resistance)

CMF	CRF(%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
0.799	20.1	★★★★☆	All	All	All	Lyon and Persaud, 2008	
0.667	33.3	★★★★☆	All	All	All	Lyon and Persaud, 2008	
0.819	18.1	★★★★☆	All	All	All	Lyon and Persaud, 2008	
0.797	20.3	★★★★☆	All	All	All	Lyon and Persaud, 2008	
1.271	-27.1	★★★★☆	All	All	All	Lyon and Persaud, 2008	
0.426	57.4	★★★★☆	Wet road	All	All	Lyon and Persaud, 2008	
0.372	62.8	★★★★☆	Wet road	All	All	Lyon and Persaud,	

0.575	42.5	★★★★☆	Rear end,Wet road	All		Lyon and Persaud, 2008
0.59	41	★★★☆☆	All	All	All	Lyon and Persaud, 2008
0.589	41.1	★★★☆☆	All	All	All	Lyon and Persaud, 2008
0.361	63.9	★★★☆☆	Wet road	All	All	Lyon and Persaud, 2008
0.304	69.6	★★★☆☆	Rear end	All	All	Lyon and Persaud, 2008
0.943	5.7	★★★☆☆	Rear end	All	All	Lyon and Persaud, 2008
0.504	49.6	★★★☆☆	Rear end	All	All	Lyon and Persaud, 2008

0.221	77.9	★★★☆☆	Rear end,Wet road	All	All	Lyon and Persaud, 2008
0.787	21.3	★★★☆☆	Angle	All	All	Lyon and Persaud, 2008
0.828	17.2	★★★☆☆	Angle	All	All	Lyon and Persaud, 2008
0.898	10.2	★★★☆☆	Angle	All	All	Lyon and Persaud, 2008
0.799	20.1	★★★☆☆	Angle,Wet road	All	All	Lyon and Persaud, 2008
0.47	53	★★★☆☆	Angle,Wet road	All	All	Lyon and Persaud, 2008
0.828	17.2	★★★☆☆	Angle,Wet road	All	All	Lyon and Persaud, 2008

Countermeasure(s)	Crash Type	Crash Severity	Area Type	Config	Control	Major Daily Traffic Volume (veh/day)	Minor Daily Traffic Volume (veh/day)	Ref	Obs	Effectiveness: Crash Reduction Factor / Function	Effectiveness: Std Error	Effectiveness: Range Low	Effectiveness: Range High	Study Type
Remove left-turn lane (cont'd)	All	All	Urban	4-Leg (2 app)	Stop			6		-88				
	All	Fatal/Injury	Rural	3-Leg	Signal			6		-16				
	All	Fatal/Injury	Rural	4-Leg (1 app)	Signal			6		-21				
	All	Fatal/Injury	Rural	4-Leg (2 app)	Signal			6		-45				
	All	Fatal/Injury	Urban	3-Leg	Signal			6		-6				
	All	Fatal/Injury	Urban	3-Leg	Stop			6		-53				
	All	Fatal/Injury	Urban	4-Leg (1 app)	Signal			6		-10				
	All	Fatal/Injury	Urban	4-Leg (1 app)	Stop			6		-41				
	All	Fatal/Injury	Urban	4-Leg (2 app)	Signal			6		-21				
	All	Fatal/Injury	Urban	4-Leg (2 app)	Stop			6		-98				
RIGHT-TURN COUNTERMEASURES														
Increase length of right-turn lane	All	Fatal/Injury	All	All	All			58		15				
Install right-turn lane	All	All	All	4-Leg (1 app)	Signal	4,200-55,100	100-26,000	22		**4**	2			EB Before-After
	All	All	All	4-Leg (1 app)	Stop	1,100-40,600	25-11,800	22		**14**	5			EB Before-After
	All	All	All	4-Leg (2 app)	Signal	4,200-55,100	100-26,000	22		**8**	3			EB Before-After
	All	All	All	4-Leg (2 app)	Stop	1,100-40,600	25-11,800	22		**26**	7			EB Before-After
	All	All	All	All	All			58		35				
	All	All	All					1		25				
	All	All	Rural	4-Leg (1 app)	No signal			28		14				
	All	All	Rural	4-Leg (1 app)	No signal			28		21		14	27	

Countermeasure(s)	Crash Type	Crash Severity	Area Type	Config	Control	Major Daily Traffic Volume (veh/day)	Minor Daily Traffic Volume (veh/day)	Ref	Obs	Effectiveness: Crash Reduction Factor / Function	Effectiveness: Std Error	Effectiveness: Range Low	Effectiveness: Range High	Study Type
Install right-turn lane (cont'd)	All	All		All	No signal			28		27		24	30	
	All	All						15		25				
	All	All						15		25				Cross-section
	All	All						15		25				Simple Before-After
	All	All						15		25				Simple Before-After
	All	Fatal/Injury	All	4-Leg (1 app)	Signal	4,200-55,100	100-26,000	22		**9**	3			EB Before-After
	All	Fatal/Injury	All	4-Leg (1 app)	Stop	1,100-40,600	25-11,800	22		**23**	7			EB Before-After
	All	Fatal/Injury	All	All	No signal			58		35				
	All	Fatal/Injury	All	All	Signal			58		35				
	All	Fatal/Injury	All	All				51		40				
	All	Fatal/Injury	Rural	All	All			58		35				
	All	Fatal/Injury	Urban	All	All			58		30				
	Rear-end	All						15		65				Simple Before-After
	Right-angle	All						15		50				Simple Before-After
	Right-turn	All						15		53				
	Right-turn	All						15		56				Simple Before-After
	Right-turn	All						15		50				Cross-section
	Sideswipe	All						15		20				Simple Before-After
Install right-turn lane (painted separation)	All	Fatal/Injury	All	All	All			58		30				
Install right-turn lane (physical channelization)	All	Fatal/Injury	All	All	All			58		35				

Dual CRF for Brooklyn Blvd at 65th Avenue

Improvements include the installation of a northbound right-turn lane and pavement improvement.

CR1=Install right-turn lane
CR2=Pavement improvement

CR=1 – (1-CR1)*(1-CR2)

Rear-End Property Damage Crash: CR=1 – (1-.04)*(1-.70) = .71
Rear-End Injury Crash: CR=1 – (1-.09)*(1-.70) = .73
Head-On, Left-Turn and Ran Off Road Injury Crash: CR=1 – (1-.09)*(1-.41) = .46
Right-Angle Injury Crash: CR=1 – (1-.09)*(1-.21) = .28
Right-Angle Property Damage Crash: CR=1 – (1-.04)*(1-.21) = .24

Dual CRF for Brooklyn Blvd at 63rd Avenue

Improvements include the installation of a northbound, southbound and westbound right-turn lanes and pavement improvement.

CR1=Install right-turn lane
CR2=Pavement improvement

CR=1 – (1-CR1)*(1-CR2)

Rear-End Property Damage Crash: CR=1 – (1-.04)*(1-.70) = .71
Rear-End Injury Crash: CR=1 – (1-.09)*(1-.70) = .73
Head-On, Left-Turn and Ran Off Road Injury Crash: CR=1 – (1-.09)*(1-.41) = .46
Head-On, Left-Turn and Ran Off Road PDO Crash: CR=1 – (1-.04)*(1-.41) = .43
Right-Angle Injury Crash: CR=1 – (1-.09)*(1-.21) = .28
Right-Angle Property Damage Crash: CR=1 – (1-.04)*(1-.21) = .24
Sideswipe and Other Injury Crash: CR=1 – (1-.09)*(1-.41) = .46
Sideswipe and Other Property Damage Crash: CR=1 – (1-.04)*(1-.41) = .43

Dual CRF for Brooklyn Blvd (not main intersections)

Improvements include the installation of a median and pavement improvement.

Note Median improvements for right-angle and left-turn will reduce crashes 100% because these moves are no longer permitted.

CR1=Install median
CR2=Pavement improvement

CR=1 – (1-CR1)*(1-CR2)

Rear End (PDO): CR=1 – (1-.71)*(1-.70) = .91
Rear End (injury): CR=1 – (1-.44)*(1-.70) = .83
Other (PDO): CR=1 – (1-.71)*(1-.41) = .83
Other (injury): CR=1 – (1-.44)*(1-.41) = .67

Dual CRF for Brooklyn Blvd between 51st Avenue to 49th Avenue

Improvements include the reconstruction from a 4 to 3 lane facility and pavement improvement.

CR1=4 to 3 lane reconstruction
CR2=Pavement improvement

CR=1 – (1-CR1)*(1-CR2)

Rear-End Crash: CR=1 – (1-.25)*(1-.70) = .78
Right-Angle Crash: CR=1 – (1-.25)*(1-.21) = .41
Left-Turn, Sideswipe, Ran Off Road and Head On Crash: CR=1 – (1-.25)*(1-.41) = .56

HSIP worksheet

Control Section	T.H. / Roadway	Location	Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends
	Brooklyn Blvd	From north of Bass Lake Rd to South of 65th Ave			Brooklyn Center	1/1/2013	12/31/2015

Description of Proposed Work: Install a Median and pavement improvement

Accident Diagram Codes		1 Rear End	2 Sideswipe Same Direction	3 Left Turn Main Line	5 Right Angle	4,7 Ran off Road	8, 9 Head On/ Sideswipe - Opposite Direction	Pedestrian	6, 90, 99 Other	Total
Study Period: Number of Crashes	Fatal **F**									
	Personal Injury (PI) **A**							1		**1**
	Personal Injury (PI) **B**	1		1	1				1	**4**
	Personal Injury (PI) **C**	2								**2**
	Property Damage **PD**	7	2	3	2	1	1		3	**19**
% Change in Crashes *Use Crash Modification Factors Clearinghouse	Fatal **F**									
	PI **A**							-67%		
	PI **B**	-83%		-100%	-100%				-67%	
	PI **C**	-83%								
	Property Damage **PD**	-91%	-83%	-100%	-100%	-83%	-83%		-83%	
Change in Crashes = No. of crashes **X** % change in crashes	Fatal **F**									
	PI **A**							**-0.67**		**-0.67**
	PI **B**	**-0.83**		**-1.00**	**-1.00**				**-0.67**	**-3.50**
	PI **C**	**-1.66**								**-1.66**
	Property Damage **PD**	**-6.37**	**-1.66**	**-3.00**	**-2.00**	**-0.83**	**-0.83**		**-2.49**	**-17.18**

Year (Safety Improvement Construction): **2018**

Project Cost (exclude Right of Way): **$ 8,270,000**

Right of Way Costs (optional)

Traffic Growth Factor: **3%**

Capital Recovery

1. **Discount Rate**: **4.5%**
2. **Project Service Life (n)**: **20**

Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit
F			$ 1,400,000	
A	-0.67	-0.22	$ 570,000	$ 127,416
B	-3.50	-1.17	$ 170,000	$ 198,515
C	-1.66	-0.55	$ 83,000	$ 45,969
PD	-17.18	-5.73	$ 7,600	$ 43,562
Total				$ 415,462

B/C= 0.88

Using present worth values,

B= $ 7,268,060

C= $ 8,270,000

See "Calculations" sheet for amortization.

Office of Traffic, Safety and Technology **September 2014**

HSIP worksheet

Control Section	T.H. / Roadway	Location	Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends
	Brooklyn Blvd	At 63rd Avenue			Brooklyn Center	1/1/2013	12/31/2015

Description of Proposed Work: Install a Northbound, southbound, westbound right-turn lanes and pavement improvement

Accident Diagram Codes		1 Rear End	2 Sideswipe Same Direction	3 Left Turn Main Line	5 Right Angle	4,7 Ran off Road	8, 9 Head On/ Sideswipe - Opposite Direction	Pedestrian	6, 90, 99 Other	Total
Study Period: Number of Crashes	Fatal **F**									
	Personal Injury (PI) **A**									
	Personal Injury (PI) **B**	1				1		1		**3**
	Personal Injury (PI) **C**	6			1				1	**8**
	Property Damage **PD**	1		1	2		2		3	**9**
% Change in Crashes *Use Crash Modification Factors Clearinghouse	Fatal **F**									
	PI **A**									
	PI **B**	-73%				-46%		-46%		
	PI **C**	-73%			-28%				-46%	
	Property Damage **PD**	-71%		-43%	-24%		-43%		-43%	
Change in Crashes = No. of crashes **X** % change in crashes	Fatal **F**									
	PI **A**									
	PI **B**	**-0.73**				**-0.46**		**-0.46**		**-1.65**
	PI **C**	**-4.38**			**-0.28**				**-0.46**	**-5.12**
	Property Damage **PD**	**-0.71**		**-0.43**	**-0.48**		**-0.86**		**-1.29**	**-3.77**

Year (Safety Improvement Construction): **2018**

Project Cost (exclude Right of Way): **$ 8,270,000**

Right of Way Costs (optional)

Traffic Growth Factor: **3%**

Capital Recovery

1. **Discount Rate**: **4.5%**
2. **Project Service Life (n)**: **20**

Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit
F			$ 1,400,000	
A			$ 570,000	
B	-1.65	-0.55	$ 170,000	$ 93,585
C	-5.12	-1.71	$ 83,000	$ 141,783
PD	-3.77	-1.26	$ 7,600	$ 9,559
Total				$ 244,928

B/C= 0.52

Using present worth values,

B= $ 4,284,745

C= $ 8,270,000

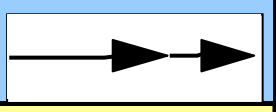
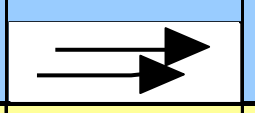
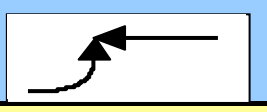
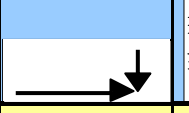
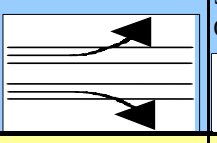
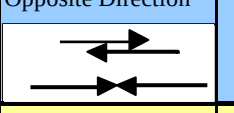
See "Calculations" sheet for amortization.

Office of Traffic, Safety and Technology **September 2014**

HSIP worksheet

Control Section	T.H. / Roadway	Location	Beginning Ref. Pt.	Ending Ref. Pt.	State, County, City or Township	Study Period Begins	Study Period Ends
	Brooklyn Blvd	At 65th Avenue			Brooklyn Center	1/1/2013	12/31/2015

Description of Proposed Work: Install a Northbound right-turn lane and pavement improvement

Accident Diagram Codes			1 Rear End 	2 Sideswipe Same Direction 	3 Left Turn Main Line 	5 Right Angle 	4,7 Ran off Road 	8, 9 Head On/ Sideswipe - Opposite Direction 	Pedestrian	6, 90, 99 Other	Total
Study Period: Number of Crashes	Fatal	**F**									
	Personal Injury (PI)	**A**									
		B			1						**1**
		C	1		1	1					**3**
	Property Damage	**PD**	3			2					**5**
% Change in Crashes *Use Crash Modification Factors Clearinghouse	Fatal	**F**									
	PI	**A**									
		B			-46%						
		C	-73%		-46%	-28%					
	Property Damage	**PD**	-71%			-24%					
Change in Crashes = No. of crashes **X** % change in crashes	Fatal	**F**									
	PI	**A**									
		B			**-0.46**						**-0.46**
		C	**-0.73**		**-0.46**	**-0.28**					**-1.47**
	Property Damage	**PD**	**-2.13**			**-0.48**					**-2.61**

Year (Safety Improvement Construction): **2018**

Project Cost (exclude Right of Way): **$ 8,270,000**

Right of Way Costs (optional)

Traffic Growth Factor: **3%**

Capital Recovery

1. **Discount Rate**: **4.5%**
2. **Project Service Life (n)**: **20**

Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit
F			**$ 1,400,000**	
A			**$ 570,000**	
B	**-0.46**	**-0.15**	**$ 170,000**	**$ 26,090**
C	**-1.47**	**-0.49**	**$ 83,000**	**$ 40,707**
PD	**-2.61**	**-0.87**	**$ 7,600**	**$ 6,618**
Total				**$ 73,416**

B/C= 0.16

Using present worth values,

B= $ 1,284,328

C= $ 8,270,000

See "Calculations" sheet for amortization.

Office of Traffic, Safety and Technology **September 2014**

65th Ave 150' E. and W of Brooklyn Blvd (2013 - 2015) - created on 06-07-2016 by rile

Crash data is managed by the Mn/DOT Office of Traffic, Safety, and Operations.

SYS	NUM	REF_POINT	GIS_ROUTE	GIS_TM	RD_DIR	ELEM	RELY	INV	R_U
10	04600095	000+00.999	1004600095	0.999	Z		1	3	U
10	04600095	001+00.014	1004600095	1.014	N		1	3	U
04	27000152	003+00.379	0427000152	3.379	Z		1	3	U
04	27000152	003+00.379	0427000152	3.379	Z		1	1	U
04	27000152	003+00.379	0427000152	3.379	Z		1	3	U
04	27000152	003+00.379	0427000152	3.379	N		1	3	U
04	27000152	003+00.379	0427000152	3.379	N		1	3	U
04	27000152	003+00.379	0427000152	3.379	E		1	3	U
04	27000152	003+00.379	0427000152	3.379	S	—	1	3	U
04	27000152	003+00.379	0427000152	3.379	Z	—	1	3	U
04	27000152	003+00.379	0427000152	3.379	Z	—	1	3	U
04	27000152	003+00.379	0427000152	3.379	W	—	1	3	U
04	27000152	003+00.379	0427000152	3.379	Z		1	3	U
04	27000152	003+00.379	0427000152	3.379	N	—	1	3	U

1che

ATP	CO	CITY	DOW	MONTH	DAY	YEAR	TIME	SEV	NUM_KILLED
#1 MADE CONTACT WITH #2 AT THE INTERSECTION OF BROOKLYN BLVD AND 65TH AVENUE NORTH. #1 STATED THAT	27	0460	3-Tue	10	29	2013	1630	C	0
V1 WAS MAKING A U-TURN FROM SB BB TO NB BB ON A GREEN LIGHT, BUT MUST YIELD TO NB TRAFFIC BB. V2 WA	27	0460	7-Sat	10	31	2015	1302	C	0
UNIT 2 MADE U-TURN FROM NB BROOKLYN BLVD AT 65TH TO SB BROOKLYN BLVD. UNIT 1 WAS TRAVELING SB BROO	27	0460	6-Fri	8	2	2013	1509	N	0
V1 MAKING LEFT TURN FROM SB BROOKLYN BLVD TO EB 65TH AVE. V1 IN THE EAST PORTION OF THE INTERESECT	27	0460	4-Wed	7	17	2013	1120	B	0
#1 REAR ENDED #2 CAUSING SLIGHT DAMGE TO BOTH VEHICLES. #1 WAS CITED FOR DAS AND NO INSURANCE.	27	0460	7-Sat	3	8	2014	1135	N	0
CALLED TO PD ACCIDENT BROOKLYN BLVD/65TH/ ON ARRIVAL, BOTH VEHICLES WERE BLOCKING TRAFFIC IN INTERS	27	0460	5-Thu	11	13	2014	1734	N	0
VEH #2 WAS NORTHBOUND BROOKLYN BLVD AT 65TH AV N. VEH#1 WAS OCCUPIED BY 3/B/M. IT APPEARED THE DRIV	27	0460	1-Sun	3	15	2015	1025	N	0
UNIT #1 WAS NORTH BOUND ON BROOKLYN BLVD UNIT #2 WAS TRAVELLING SOUTH BOUND ON BROOKLYN BLVD MAKING	27	0460	7-Sat	5	2	2015	1513	N	0
~~UNIT 1 TRAVELING SOUTH ON BROOKLYN BLVD APPROACHING 65TH AVE N IN UNK LANE. UNIT 2 TRAVELING SOUTH~~	~~27~~	~~0460~~	~~3-Tue~~	~~6~~	~~2~~	~~2015~~	~~0950~~	~~N~~	~~0~~
~~UNIT 1 TURNED NORTHBOUND ON BROOKLYN BLVD WHEN IT COLLIDED WITH A BICYCLIST. MINOR INJURIES.~~	~~27~~	~~0460~~	~~6-Fri~~	~~7~~	~~17~~	~~2015~~	~~1436~~	~~C~~	~~0~~
~~VEHICLE 1 WAS TRAVELING SOUTH ON BROOKLYN BLVD AND REAR-ENDED VEH 2 WAITING AT THE RED LIGHT AT BRO~~	~~27~~	~~0460~~	~~3-Tue~~	~~7~~	~~28~~	~~2015~~	~~1124~~	~~N~~	~~0~~
~~ON 7/31/15 I OFFICER DEERING WAS DISPATCHED TO A 3 CAR PD ACCIDENT AT 65TH AND BROOKLYN BLVD, BROOK~~	~~27~~	~~0460~~	~~6-Fri~~	~~7~~	~~31~~	~~2015~~	~~2051~~	~~N~~	~~0~~
UNIT 1 REAR ENDED UNIT 2. UNIT 1 STATED SHE TRIED TO BRAKE BUT ENDED UP HITTING UNIT 2. MINOR INJUR	27	0460	2-Mon	10	5	2015	1855	C	0
~~DRIVER #1 STATED THAT ON 11/09/2015 AT 1820 HOURS HE WAS IN THE LEFT TURN LANE AT 65TH AVE NORTH AN~~	~~27~~	~~0460~~	~~2-Mon~~	~~11~~	~~9~~	~~2015~~	~~1820~~	~~C~~	~~0~~

														PERSON1						
NUM_VEH	JUNC	SL	TYPE	DIAG	LOC1	TCD	LIT	WTHR1	WTHR2	SURF	CHAR	DESGN	ACC_NUM	VTYPE	DIR	ACT	FAC1	FAC2	POSN	INJ
2	4	30	1	5	1	1	1	2	0	2	1	5	133020180	1	1	1	1	0	1	C
2	4	40	1	3	1	1	1	3	3	2	1	5	153040100	1	1	1	90	90	1	C
2	4	40	1	5	1	1	1	1	0	1	1	3	132190061	1	1	7	2	0	1	N
2	4	45	1	3	1	1	1	1	0	1	1	5	132240179	1	3	6	2	0	1	B
2	4	35	1	1	1	1	1	1	0	2	1	5	140670059	4	1	1	4	0	1	N
2	4	40	1	5	1	1	4	2	7	5	1	5	143170254	1	1	1	1	1	1	N
2	4	40	1	1	1	1	1	2	0	1	1	5	150740043	1	1	1	15	0	1	N
2	4	40	1	1	1	1	1	1	1	1	1	7	151220100	1	3	54	99	99	1	N
~~5~~	~~1~~	~~40~~	~~1~~	~~90~~	~~1~~	~~98~~	~~1~~	~~1~~	~~0~~	~~1~~	~~1~~	~~90~~	~~151530084~~	~~1~~	~~5~~	~~1~~	~~16~~	~~13~~	~~1~~	~~N~~
~~1~~	~~2~~	~~30~~	~~6~~	~~5~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~5~~	~~151980098~~	~~1~~	~~2~~	~~3~~	~~15~~	~~0~~	~~1~~	~~C~~
~~2~~	~~4~~	~~35~~	~~1~~	~~98~~	~~1~~	~~1~~	~~1~~	~~2~~	~~2~~	~~1~~	~~1~~	~~4~~	~~152090139~~	~~1~~	~~5~~	~~1~~	~~15~~	~~15~~	~~1~~	~~N~~
~~3~~	~~4~~	~~40~~	~~1~~	~~3~~	~~1~~	~~1~~	~~3~~	~~1~~	~~1~~	~~1~~	~~2~~	~~5~~	~~152130005~~	~~1~~	~~8~~	~~6~~	~~2~~	~~2~~	~~1~~	~~N~~
2	1	40	1	1	1	1	4	1	1	1	1	5	152790172	3	1	1	4	15	1	C
~~2~~	~~7~~	~~40~~	~~1~~	~~98~~	~~1~~	~~1~~	~~4~~	~~1~~	~~1~~	~~1~~	~~1~~	~~6~~	~~153140018~~	~~3~~	~~7~~	~~6~~	~~10~~	~~2~~	~~1~~	~~C~~

				PERSON2											PERSON3					
EQP	PHYS	AGE	SEX	VTYPE2	DIR3	ACT4	FAC15	FAC26	POSN7	INJ8	EQP9	PHYS10	AGE11	SEX12	VTYPE13	DIR14	ACT15	FAC116	FAC217	POSN18
1	98	24	F	38	7	1	1	0	1	N	4	98	51	M						
4	1	25	F	1	1	7	90	90	1	C	4	1	20	M						
99	1	18	M	2	5	1	1	0	1	N	99	1	67	M						
4	1	24	F	1	1	1	1	0	1	B	4	1	24	F						
4	1	28	M	3	1	1	1	0	1	N	4	1	902	Z						
4	98	36	F	1	5	6	2	2	1	N	4	98	36	F						
99	99	903	Z	3	1	6	1	0	1	N	4	1	45	F						
4	1	27	M	1	1	1	1	0	1	N	7	1	17	F						
~~4~~	~~1~~	~~66~~	~~F~~	~~1~~	~~5~~	~~1~~	~~1~~	~~0~~	~~1~~	~~N~~	~~99~~	~~1~~	~~48~~	~~F~~	~~1~~	~~98~~				
~~4~~	~~1~~	~~46~~	~~M~~	~~53~~	~~5~~	~~1~~	~~15~~	~~0~~	~~21~~	~~C~~	~~98~~	~~1~~	~~22~~	~~M~~						
~~4~~	~~3~~	~~28~~	~~M~~	~~1~~	~~5~~	~~11~~	~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~1~~	~~29~~	~~F~~						
~~4~~	~~1~~	~~31~~	~~M~~	~~1~~	~~5~~	~~1~~	~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~1~~	~~68~~	~~F~~	~~3~~	~~3~~				
4	1	67	F	3	1	1	1	1	1	C	4	1	24	M						
~~4~~	~~98~~	~~27~~	~~M~~	~~1~~	~~5~~	~~1~~	~~2~~	~~2~~	~~1~~	~~C~~	~~4~~	~~98~~	~~32~~	~~F~~						


PERSON4
INJ19
EQP20
PHYS21
AGE22
SEX23
VTYPE24
DIR25
ACT26
FAC127
FAC228
POSN29
INJ30
EQP31
PHYS32
AGE33
SEX34

63rd Ave 150' E. and W. of Brooklyn Blvd (2013 -2015) - created on 06-07-2016 by rile

Crash data is managed by the Mn/DOT Office of Traffic, Safety, and Operations.

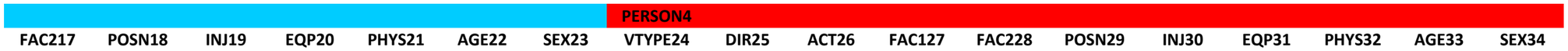
SYS	NUM	REF_POINT	GIS_ROUTE	GIS_TM	RD_DIR	ELEM	RELY	INV	R_U
04	27000152	003+00.621	0427000152	3.621	Z		1	3	U
04	27000152	003+00.621	0427000152	3.621	Z		1	3	U
04	27000152	003+00.623	0427000152	3.623	N		1	3	U
04	27000152	003+00.623	0427000152	3.623	N		1	3	U
04	27000152	003+00.624	0427000152	3.624	Z		1	0	U
04	27000152	003+00.621	0427000152	3.621	Z		1	3	U
04	27000152	003+00.621	0427000152	3.621	S		1	3	U
04	27000152	003+00.621	0427000152	3.621	Z		1	3	U
04	27000152	003+00.621	0427000152	3.621	Z		1	3	U
04	27000152	003+00.622	0427000152	3.622	S		1	3	U
04	27000152	003+00.621	0427000152	3.621	W		1	3	U
05	04600101	001+00.090	0504600101	1.090	W		1	3	U
04	27000152	003+00.621	0427000152	3.621	S		1	3	U
04	27000152	003+00.622	0427000152	3.622	Z		1	3	U
05	04600101	001+00.092	0504600101	1.092	Z		1	0	U
04	27000152	003+00.621	0427000152	3.621	Z		1	0	U
05	04600101	001+00.090	0504600101	1.090	E		1	3	U
05	04600101	001+00.090	0504600101	1.090	Z		1	3	U
04	27000152	003+00.621	0427000152	3.621	Z		1	3	U
04	27000152	003+00.621	0427000152	3.621	N		1	3	U

e1che

ATP	CO	CITY	DOW	MONTH	DAY	YEAR	TIME	SEV
VEHICLE #1 WAS STOPPED IN TRAFFIC, IN THE LEFT TURN LANE, ON (S/B) BROOKLYN BOULEVARD WAITING TO TU	27	0460	4-Wed	1	1	2014	1150	B
ON 04/27/2015 AT 1836 HOURS, I, OFFICER JORDAN LUND, WAS DISPATCHED TO A PROPERTY DAMAGE ACCIDENT A	27	0460	2-Mon	4	27	2015	1836	C
ON 06/21/2013 AT AROUND 2045 HOURS, OFFICERS FOUND TWO VEHICLE ON THE SIDE OF THE ROAD WITH HAZARD	27	0460	6-Fri	6	21	2013	2045	C
UNIT 1 DRIVER STATES HE HAD BEEN TRAVELING NORTHBOUND IN THE OUTERMOST LANE OF BROOKLYN BLVD AS HE	27	0460	6-Fri	7	26	2013	1435	C
	27	0460	5-Thu	5	23	2013	1730	C
ON 3/3/2015 AT 2100 HOURS, I, OFFICER JORDAN LUND, WAS DISPATCHED TO AN ACCIDENT AT 63RD AVENUE N A	27	0460	3-Tue	3	3	2015	2100	N
VEHICLE #1 WAS TRAVELLING SOUTHBOUND BROOKLYN BLVD PAST 63RD AVE WHEN IT LEFT THE ROADWAY AND STRUC	27	0460	5-Thu	2	14	2013	2338	B
NO DIAGRAM, VEHICLES MOVED PRIOR TO POLICE ARRIVAL. VEHICLE #1 WAS TURNING RIGHT FROM A STOPPED PO	27	0460	2-Mon	8	31	2015	1246	C
UNIT 1 WAS TRAVELING NORTHBOUND ON BROOKLYN BLVD AT THE INTERSECTION AT 63RD AVE N WITH A GREEN LIG	27	0460	1-Sun	10	26	2014	1459	N
V1 WAS WB ON 63RD AVE N AND COLLIDED WITH V2 WHICH WAS SB BROOKLYN BLVD IN THE INTERSECTION. DRIVE	27	0460	6-Fri	5	15	2015	0042	N
UNIT 1 WAS TRAVELING SOUTH BOUND ON BROOKLYN BLVD AND MADE A RIGHT TURN ONTO 63RD AVE N TO GO WEST	27	0460	2-Mon	10	7	2013	1449	N
ON 12/18/2013 AT 1211 HOURS, I, OFFICER KOTECKI WAS DISPATCHED TO A PROPERTY DAMAGE ACCIDENT AT 63R	27	0460	4-Wed	12	18	2013	1210	N
ON 9/6/2014 AT APPROXIMATELY 2224 HOURS, OFFICERS WERE CALLED TO BROOKLYN BLVD AND 63RD AVE N ON A	27	0460	7-Sat	9	6	2014	2224	C
VEHICLE #1 WAS STOPPED IN TRAFFIC N/B BROOKLYN BOULEVARD IN THE 6300 BLOCK. VEHICLE #2 WAS ALSO STO	27	0460	7-Sat	10	31	2015	1340	C
	27	0460	6-Fri	9	20	2013	0930	N
	27	0460	2-Mon	10	20	2014	1330	N
CALLED TO A HIT AND RUN. DRIVER OF VEHICLE 2 WAS DRIVING EAST ON 63RD AVE N AND TURNING LEFT TO GO	27	0460	1-Sun	3	17	2013	2034	N
UNIT 1 MAKING TURN TO GO NORTH ON BROOKLYN BLVD FROM EASTBOUND 63RD AVE N. UNIT 2, A WHITE VOLKSWAG	27	0460	2-Mon	10	6	2014	1615	N
UNIT 1 GOING SOUTHBOUND COLLIDED WITH UNIT 2. MINOR INJURIES AND DAMAGE. PATIENTS WERE CHECKED BY N	27	0460	3-Tue	5	5	2015	1712	C
V1 WAS TRAVELING NB BB WHEN A PEDESTRIAN RAN INTO TRAFFIC. V1 STRUCK THE PEDESTRIAN HEAD ON. THE PE	27	0460	4-Wed	5	8	2013	1340	B

															PERSON1				
NUM_KILLED	NUM_VEH	JUNC	SL	TYPE	DIAG	LOC1	TCD	LIT	WTHR1	WTHR2	SURF	CHAR	DESGN	ACC_NUM	VTYPE	DIR	ACT	FAC1	FAC2
0	2	4	40	1	1	1	1	1	2	2	5	1	5	140010093	1	5	1	15	8
0	3	4	40	1	1	1	1	1	1	1	1	1	90	151240023	1	1	10	15	15
0	3	4	40	1	1	1	98	3	8	3	2	1	5	131730026	1	0	1	1	1
0	2	4	40	1	1	1	1	1	1	1	1	1	3	132070127	1	1	5	0	0
0	2	0	40	1	1	0	1	1	1	0	1	0	0	131760044	1	1	11	0	0
0	2	4	40	1	3	1	1	4	1	1	1	1	90	150990003	1	7	1	1	1
0	2	4	40	2	4	4	99	4	1	1	1	1	5	130460017	1	5	99	0	0
0	2	4	40	1	5	1	1	1	2	2	1	1	5	152430090	1	1	1	99	99
0	2	4	40	1	5	1	1	1	1	1	1	1	5	142990102	1	1	1	1	1
0	2	4	40	1	5	1	1	4	2	0	2	1	90	151350006	1	7	1	1	0
0	2	4	40	1	8	1	1	1	1	1	1	1	5	132810165	1	6	5	1	1
0	2	7	30	1	90	1	1	1	1	0	2	1	8	133520140	1	7	13	1	0
0	3	7	40	1	98	1	1	4	1	0	1	1	3	142490150	1	5	1	99	0
0	3	1	40	1	1	1	98	1	2	3	2	1	5	153040110	2	1	1	15	8
0	2	0	30	1	9	0	1	1	1	0	1	0	0	132940091	2	5	1	0	0
0	2	0	40	1	1	0	1	1	1	0	1	0	0	143280106	3	1	1	0	0
0	2	4	30	1	98	1	1	4	99	99	99	1	5	130820017	3	1	1	1	1
0	2	7	30	1	98	1	1	1	1	1	1	1	5	142790151	4	3	6	1	1
0	2	2	40	1	1	1	1	1	1	2	1	1	5	151250158	38	5	1	4	0
0	1	1	40	7	8	1	98	1	1	1	1	1	5	131280080	51	3	36	21	21

						PERSON2											PERSON3			
POSN	INJ	EQP	PHYS	AGE	SEX	VTYPE2	DIR3	ACT4	FAC15	FAC26	POSN7	INJ8	EQP9	PHYS10	AGE11	SEX12	VTYPE13	DIR14	ACT15	FAC116
1	B	4	1	71	M	3	5	11	1	1	1	B	4	1	53	F				
1	C	4	1	63	F	1	1	9	1	1	1	N	4	1	44	M	1	1		
1	C	4	1	39	M	1	0	1	1	1	1	N	4	1	23	M	1	0		
1	N	4	1	50	M	4	1	1	4	1	1	N	4	1	47	M				
1	N	4	0	19	F	1	8	1	0	0	1	C	4	0	25	F				
1	N	4	1	41	M	3	1	4	99	99	1	N	99	99	903	Z				
1	B	99	2	21	F															
1	N	4	99	35	M	1	7	5	1	1	1	C	4	1	25	M				
1	N	4	1	56	F	3	1	3	2	2	1	N	4	1	49	M				
1	N	99	1	22	M	4	5	1	1	0	1	N	99	1	32	M				
1	N	4	1	30	F	7	7	1	1	1	1	N	4	1	31	M				
1	N	4	1	22	F	2	7	17	1	0	1	N	4	1	52	M				
1	C	4	1	27	F	3	7	6	99	18	1	C	4	2	41	M	1	3		
1	N	4	1	58	M	2	1	11	1	1	1	N	4	1	31	M	1	1		
1	N	4	0	40	F	3	3	3	0	0	1	N	4	0	23	F				
1	N	0	0	32	F	99	0	1	0	0	1	N	98	0	26	F				
1	N	99	98	33	M	2	1	1	18	18	1	N	99	2	56	M				
1	N	4	1	40	M	1	1	5	1	1	1	N	99	99	902	Z				
1	C	4	1	51	F	3	5	1	1	1	1	C	4	1	41	M				
25	B	98	1	78	M	11	1	1	1	1	1	C	98	1	60	M				


PERSON4
FAC217
POSN18
INJ19
EQP20
PHYS21
AGE22
SEX23
VTYPE24
DIR25
ACT26
FAC127
FAC228
POSN29
INJ30
EQP31
PHYS32
AGE33
SEX34

Brooklyn Blvd (CSAH 152) from Bass Lake Road to 65th Ave (2013 -2015) - created on 06-07-2

Crash data is managed by the Mn/DOT Office of Traffic, Safety, and Operations.

SYS	NUM	REF_POINT	GIS_ROUTE	GIS_TM	RD_DIR	ELEM	RELY	INV	R_U
10	04600141	000+00.000	1004600141	0.000	Z		1	3	U
04	27000152	003+00.384	0427000152	3.384	N		1	3	U
04	27000152	003+00.385	0427000152	3.385	Z		1	0	U
04	27000152	003+00.440	0427000152	3.440	Z		2	0	U
04	27000152	003+00.444	0427000152	3.444	Z		1	0	U
04	27000152	003+00.530	0427000152	3.530	Z		1	0	U
04	27000152	003+00.601	0427000152	3.601	S		1	3	U
04	27000152	003+00.619	0427000152	3.619	S		1	3	U
04	27000152	003+00.630	0427000152	3.630	N		1	3	U
04	27000152	003+00.635	0427000152	3.635	Z		1	0	U
04	27000152	003+00.668	0427000152	3.668	Z		1	0	U
04	27000152	003+00.761	0427000152	3.761	Z		1	3	U
04	27000152	003+00.762	0427000152	3.762	S		1	3	U
04	27000152	003+00.762	0427000152	3.762	S		1	2	U
04	27000152	003+00.762	0427000152	3.762	Z		1	0	U
04	27000152	003+00.893	0427000152	3.893	Z		1	3	U
04	27000152	003+00.893	0427000152	3.893	Z		1	3	U
04	27000152	003+00.893	0427000152	3.893	Z		1	3	U
04	27000152	003+00.893	0427000152	3.893	Z		1	3	U
04	27000152	003+00.918	0427000152	3.918	Z		1	0	U
04	27000152	004+00.014	0427000152	4.014	W		1	3	U
04	27000152	004+00.018	0427000152	4.018	Z		2	3	U
04	27000152	004+00.046	0427000152	4.046	Z		1	3	U
04	27000152	004+00.151	0427000152	4.151	Z		1	3	U
04	27000152	004+00.156	0427000152	4.156	Z		1	0	U
04	27000152	004+00.160	0427000152	4.160	Z		2	3	U
~~04~~	~~27000152~~	~~004+00.266~~	~~0427000152~~	~~4.266~~	~~W~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.270~~	~~0427000152~~	~~4.270~~	~~N~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.270~~	~~0427000152~~	~~4.270~~	~~N~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.270~~	~~0427000152~~	~~4.270~~	~~Z~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.270~~	~~0427000152~~	~~4.270~~	~~S~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.271~~	~~0427000152~~	~~4.271~~	~~N~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~Z~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~S~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~Z~~	—	~~1~~	~~0~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~S~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~S~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~S~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~S~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~N~~	—	~~1~~	~~3~~	~~U~~
~~04~~	~~27000152~~	~~004+00.282~~	~~0427000152~~	~~4.282~~	~~N~~	—	~~1~~	~~3~~	~~U~~

2016 by rile1che

ATP	CO	CITY	DOW	MONTH	DAY	YEAR	TIME	SEV
ON 4/7/15 AT 1724 HOURS I, OFFICER JOSHUA WHITTENBURG, RESPONDED TO THE ABOVE LOCATION FOR A ROLLOV	27	0460	3-Tue	4	7	2015	1724	N
ON 3/5/15 AT 1240 I, OFFICER PETERSON, WAS DISPATCHED TO A PROPERTY DAMAGE ACCIDENT AT BROOKLYN BLV	27	0460	5-Thu	3	5	2015	1240	N
	27	0460	6-Fri	1	16	2015	1455	N
	27	0460	2-Mon	6	3	2013	1530	N
	27	0460	2-Mon	1	21	2013	1600	N
	27	0460	1-Sun	5	26	2013	1249	N
DRIVERS LICENSE AND NOT SHOWING AN ADEQUATE INSURANCE DOCUMENT THAT COULD BE VARIFIED (NO PROOF).'	27	0460	2-Mon	4	29	2013	1535	N
UNIT 1,2,3 WERE ALL TRAVELING SOUTH BOUND ON BROOKLYN BLVD. THEY WERE TRAVELING IN THE LEFT LANE. U	27	0460	6-Fri	9	27	2013	1622	C
SEE REPORT	27	0460	7-Sat	2	2	2013	0126	N
	27	0460	4-Wed	3	5	2014	1040	N
	27	0460	3-Tue	2	12	2013	1200	N
ON 9/28/13 AT 0011 HOURS I, OFFICER IVERSON, WAS DISPATCHED TO 62ND AVE AND BROOKLYN BLVD TO A REPO	27	0460	6-Fri	9	27	2013	0011	B
DRIVER OF UNIT 1 STATED HE WAS TRAVELING SB IN THE RIGHT HAND LANE ON BROOKLYN BLVD. DRIVER OF UNIT	27	0460	3-Tue	12	24	2013	1958	N
ON 020714, AT 1211 HOURS, I, DEPUTY WEINZIERL WAS TRAVELLING SOUTH ON BROOKLYN BLVD FROM 63RD AVENU	27	0460	6-Fri	2	7	2014	1211	N
	27	0460	6-Fri	8	16	2013	1700	N
UNIT 1 TRAVELING NB ON BROOKLYN BLVD AS UNIT 2 WAS PULLING OUT OF THE BP GAS STATION TO GO SB ON BR	27	0460	7-Sat	2	28	2015	0205	B
SEE ICR	27	0460	1-Sun	8	9	2015	1210	B
UNIT 1 WAS TRAVELING NORTH BOUND ON THE 6100 BLOCK OF BROOKLYN BLVD IN THE FAR RIGHT LANE. UNIT 2	27	0460	7-Sat	3	29	2014	1343	C
UNIT 1 WAS TURNING INTO THE BUSINESS AT 6044 BROOKLYN BLVD. UNIT 2 WAS EXITING THE SAME BUSINESS.	27	0460	2-Mon	1	12	2015	0745	N
	27	0460	5-Thu	7	9	2015	1430	B
UNIT 1 WAS AT THE INTERSECTION OF WB 60TH AVE N AND BROOKLYN BLVD. AFTER MAKING A COMPLETE STOP, U	27	0460	4-Wed	9	2	2015	1418	A
... UNIT 2 DRIVER WOULD LATER CONTACT OFFICER TO REPORT THAT INSURANCE CO LISTED FOR UNIT 1 REPORTS	27	0460	7-Sat	10	5	2013	1551	N
ON 9/29/15 0224 HOURS, OFFICERS WERE DISPATCHED TO AN ACCIDENT AT BROOKLYN BOULEVARD AND ADMIRAL LA	27	0460	3-Tue	9	29	2015	0224	N
UNIT 1 TRAVELLING SOUTHBOUND BROOKLYN BLVD AT 59TH AVE N. UNIT 2 STRUCK UNIT 1 IN REAR. UNIT 2 FL	27	0460	1-Sun	9	20	2015	1625	N
	27	0460	2-Mon	4	1	2013	2115	N
VEHICLE 1 WAS TRAVELING N/B ON BROOKLYN BOULEVARD, IN THE FAR LEFT LANE, AT CUB FOODS. THE OWNER O	27	0460	3-Tue	8	4	2015	1800	N
~~VEH#1 TRAVELING SB TH100 RAMP TO WB CO RD 10. VEH#1 STOPPED AT YIELD SIGN. VEH#2 WAS TRAVELING SB10~~	~~27~~	~~0460~~	~~3-Tue~~	~~11~~	~~11~~	~~2014~~	~~1658~~	~~C~~
~~VEH #1 N/B BROOKLYN BLVD LOST CONTROL HIT RIGHT MEDIAN THEN HIT ANOTHER CURB THAT STOPPED HIS VEHIC~~	~~27~~	~~0460~~	~~7 Sat~~	~~3~~	~~16~~	~~2013~~	~~0628~~	~~B~~
~~VEH #2 WAS W/B BASS LAKE RD MAKING A RIGHT TURN TO GO N/B BROOKLYN BLVD. VEH #1 HIT REAR OF VEH #2.~~	~~27~~	~~0460~~	~~3 Tue~~	~~11~~	~~4~~	~~2014~~	~~0955~~	~~N~~
~~UNITS 1 AND 2 WERE BOTH BACKING FORM A PARKED POSITION IN THE LOT OF 3245 CO RD 10. VEHICLES STRUC~~	~~27~~	~~0460~~	~~2-Mon~~	~~1~~	~~26~~	~~2015~~	~~1625~~	~~N~~
~~VEHICLE 2 WAS WAITING AT STOP LIGHT, SOUTH BOUND BROOKLYN BLVD/COUNTY 10. VEHICLE 1 THEN REAR ENDED~~	~~27~~	~~0460~~	~~2-Mon~~	~~1~~	~~26~~	~~2015~~	~~0724~~	~~C~~
~~ON 06/25/2015 AT 2058 HOURS I OFFICER WILKINS #170 RESPONDED TO BROOKLYN BLVD & CO 10 FOR A PROPERT~~	~~27~~	~~0460~~	~~5 Thu~~	~~6~~	~~25~~	~~2015~~	~~2058~~	~~N~~
~~DRIVER 2 OF VEH 2 STATED HE WAS DRIVING SB ON BROOKLYN BLVD AND WAS IN THE LEFT TURN LANE. DRIVER 2~~	~~27~~	~~0460~~	~~1 Sun~~	~~2~~	~~17~~	~~2013~~	~~1001~~	~~C~~
~~VEH #1 WAS SOUTHBOUND BROOKLYN BLVD, SHE BELIEVED SHE WAS IN THE LEFT LANE LOOKED UP AND HAD A YELL~~	~~27~~	~~0460~~	~~4-Wed~~	~~6~~	~~26~~	~~2013~~	~~1345~~	~~C~~
	~~27~~	~~0460~~	~~1-Sun~~	~~6~~	~~23~~	~~2013~~	~~1334~~	~~N~~
~~V1 REAR ENDED V2 STOPPED AT A RED LIGHT. D1 DIDNT REMEMBER THE ACCIDENT AND APPEARED TO HAVE INJUR'~~	~~27~~	~~0460~~	~~2 Mon~~	~~11~~	~~25~~	~~2013~~	~~1711~~	~~C~~
~~ON 12/19/2013 AT 1320 HOURS, I, OFFICER KOTECKI WAS DISPATCHED TO THE AREA OF 3245 CO RD 10 AND BRO~~	~~27~~	~~0460~~	~~5 Thu~~	~~12~~	~~19~~	~~2013~~	~~1320~~	~~C~~
~~ON 09/12/2014 AT 2339 HOURS OFFICERS WERE DISPATCHED TO CO RD 10 AND BROOKLYN BLVD ON A ACCIDENT. O~~	~~27~~	~~0460~~	~~6 Fri~~	~~9~~	~~12~~	~~2014~~	~~2339~~	~~N~~
~~UNIT 1 TRAVELING SOUTH ON BROOKLYN BLVD IN LEFT TURN LANE APPROACHING 58TH AVE N. UNIT 2 TRAVELING~~	~~27~~	~~0460~~	~~2-Mon~~	~~7~~	~~13~~	~~2015~~	~~1505~~	~~B~~
~~V1 WAS TRAV NB BB WHEN A WITNESS CALLED IN ALL OVER THE ROAD. WITNESS THEN STATES V1 REAR ENDED V2~~	~~27~~	~~0460~~	~~1 Sun~~	~~9~~	~~6~~	~~2015~~	~~0935~~	~~N~~
~~AND LEFT. UNIT 1 BELIEVED UNIT 2 TO BE INTOXICATED. ATTEMPT TO LOCATE SUBMITTED FOR UNIT 2. AT~~	~~27~~	~~0460~~	~~7 Sat~~	~~11~~	~~14~~	~~2015~~	~~1852~~	~~N~~

															PERSON1		
NUM_KILLED	NUM_VEH	JUNC	SL	TYPE	DIAG	LOC1	TCD	LIT	WTHR1	WTHR2	SURF	CHAR	DESGN	ACC_NUM	VTYPE	DIR	ACT
0	2	2	40	1	2	1	98	1	2	0	1	1	5	150980016	3	1	5
0	2	4	40	1	5	1	1	1	1	0	1	1	3	150640145	1	7	1
0	2	0	45	1	5	0	1	1	2	0	1	0	0	150440119	3	0	0
0	2	0	30	1	0	0	98	1	1	0	1	0	0	131900129	4	1	14
0	2	0	35	1	2	0	1	1	1	0	1	0	0	130560029	1	1	1
0	2	0	35	1	3	0	98	1	2	0	1	0	0	131770043	3	1	6
0	2	1	40	1	1	1	98	1	1	1	1	1	5	131200025	1	5	1
0	3	4	40	1	1	1	1	1	1	1	1	1	5	132710114	1	5	1
0	2	4	40	1	1	1	1	4	4	4	3	2	5	130330060	1	1	1
0	2	0	40	1	1	0	1	1	1	0	1	0	0	140980072	1	8	11
0	3	0	35	1	1	0	98	1	1	0	1	0	0	130740061	3	1	1
0	1	7	40	90	98	1	98	4	1	0	1	1	5	132700019	13	5	99
0	2	7	40	1	1	1	98	4	4	4	5	1	5	140210389	3	5	5
0	2	7	45	1	3	1	90	1	1	1	1	1	5	140380165	1	7	6
0	2	0	40	1	3	0	98	1	1	0	1	0	0	132610070	1	5	1
0	2	1	40	1	3	1	98	4	1	1	1	1	5	150590011	1	1	1
0	2	2	35	1	5	1	4	1	1	1	1	1	5	152210086	1	5	1
0	2	1	40	1	1	1	98	1	1	1	1	1	5	140880073	1	1	1
0	2	8	10	1	9	1	98	1	1	1	1	1	10	150120163	1	98	57
0	2	0	0	1	1	0	98	1	1	0	1	0	0	152180087	2	7	11
0	1	3	40	6	90	1	4	1	1	1	1	1	5	152450130	53	5	38
0	2	1	40	1	90	1	98	1	2	2	1	1	5	133070080	1	1	1
0	1	1	40	25	98	8	98	4	1	1	1	1	5	152780020	3	1	1
0	2	4	40	1	1	1	1	1	1	1	1	1	5	152630114	4	5	1
0	2	0	40	1	4	0	4	4	1	0	1	0	0	131230045	1	7	6
0	2	1	40	1	98	1	98	1	1	1	1	1	5	152160138	1	1	1
~~0~~	~~2~~	~~2~~	~~30~~	~~1~~	~~1~~	~~1~~	~~5~~	~~3~~	~~4~~	~~4~~	~~5~~	~~2~~	~~1~~	~~143180036~~	~~1~~	~~7~~	~~5~~
~~0~~	~~1~~	~~5~~	~~40~~	~~32~~	~~7~~	~~1~~	~~1~~	~~4~~	~~2~~	~~0~~	~~5~~	~~1~~	~~5~~	~~130750096~~	~~1~~	~~1~~	~~1~~
~~0~~	~~2~~	~~4~~	~~40~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~0~~	~~1~~	~~1~~	~~5~~	~~143080063~~	~~1~~	~~1~~	~~5~~
~~0~~	~~2~~	~~90~~	~~10~~	~~1~~	~~1~~	~~6~~	~~98~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~90~~	~~150260144~~	~~1~~	~~98~~	~~17~~
~~0~~	~~2~~	~~4~~	~~35~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~2~~	~~2~~	~~1~~	~~1~~	~~5~~	~~150300029~~	~~3~~	~~5~~	~~1~~
~~0~~	~~2~~	~~4~~	~~35~~	~~1~~	~~3~~	~~1~~	~~1~~	~~3~~	~~1~~	~~1~~	~~1~~	~~1~~	~~3~~	~~151760197~~	~~1~~	~~5~~	~~1~~
~~0~~	~~2~~	~~4~~	~~40~~	~~1~~	~~3~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~90~~	~~130480047~~	~~2~~	~~1~~	~~1~~
~~0~~	~~3~~	~~5~~	~~40~~	~~1~~	~~5~~	~~1~~	~~1~~	~~1~~	~~1~~	~~0~~	~~1~~	~~1~~	~~5~~	~~131770133~~	~~4~~	~~5~~	~~1~~
~~0~~	~~2~~	~~0~~	~~35~~	~~1~~	~~90~~	~~0~~	~~1~~	~~1~~	~~1~~	~~0~~	~~1~~	~~0~~	~~0~~	~~132060045~~	~~1~~	~~5~~	~~9~~
~~0~~	~~2~~	~~4~~	~~40~~	~~1~~	~~1~~	~~1~~	~~1~~	~~4~~	~~1~~	~~1~~	~~1~~	~~1~~	~~5~~	~~133290138~~	~~1~~	~~5~~	~~11~~
~~0~~	~~2~~	~~7~~	~~40~~	~~1~~	~~98~~	~~1~~	~~98~~	~~1~~	~~2~~	~~0~~	~~1~~	~~1~~	~~3~~	~~133530158~~	~~1~~	~~5~~	~~1~~
~~0~~	~~2~~	~~1~~	~~40~~	~~1~~	~~1~~	~~1~~	~~98~~	~~4~~	~~1~~	~~1~~	~~1~~	~~1~~	~~5~~	~~142560002~~	~~1~~	~~5~~	~~1~~
~~0~~	~~2~~	~~4~~	~~40~~	~~1~~	~~90~~	~~1~~	~~1~~	~~1~~	~~1~~	~~0~~	~~1~~	~~1~~	~~90~~	~~151940101~~	~~11~~	~~5~~	~~6~~
~~0~~	~~2~~	~~4~~	~~40~~	~~1~~	~~1~~	~~1~~	~~1~~	~~1~~	~~2~~	~~3~~	~~2~~	~~1~~	~~5~~	~~152490041~~	~~4~~	~~1~~	~~11~~
~~0~~	~~2~~	~~4~~	~~40~~	~~1~~	~~1~~	~~1~~	~~1~~	~~4~~	~~1~~	~~1~~	~~1~~	~~1~~	~~5~~	~~153180122~~	~~1~~	~~1~~	~~6~~

								PERSON2											PERSON3
FAC1	FAC2	POSN	INJ	EQP	PHYS	AGE	SEX	VTYPE	DIR	ACT	FAC1	FAC2	POSN	INJ	EQP	PHYS	AGE	SEX	VTYPE
15	0	1	N	4	1	18	M	1	1	1	1	0	1	N	4	1	39	F	
1	0	1	N	4	1	72	M	4	1	1	5	0	1	N	4	1	39	M	
0	0	1	N	4	0	54	M	1	0	0	0	0	1	N	0	0	65	F	
0	0	1	N	3	0	61	M	1	1	1	0	0	1	N	0	0	24	M	
0	0	1	N	4	0	42	M	3	1	14	0	0	1	N	0	0	43	M	
0	0	1	N	4	0	60	M	1	5	1	0	0	1	N	0	0	19	M	
1	1	1	N	4	1	34	M	1	5	1	4	4	1	N	4	1	25	M	
1	1	1	N	4	1	38	M	1	5	1	99	99	1	N	4	1	16	M	3
4	4	1	N	99	99	44	M	1	1	1	1	1	1	N	4	1	53	M	
0	0	1	N	0	0	32	M	1	8	1	0	0	1	N	0	0	78	M	
0	0	1	N	4	0	72	F	32	1	1	0	0	1	N	0	0	37	M	1
1	1	1	B	11	2	42	M												
1	1	1	N	4	1	41	M	1	5	1	15	15	1	N	4	1	19	M	
2	10	1	N	4	1	21	F	4	5	1	1	1	1	N	4	1	59	F	
0	0	1	N	4	0	24	M	1	1	6	0	0	1	N	0	0	24	F	
18	18	1	B	4	2	26	M	4	90	6	1	1	1	N	4	1	21	M	
1	1	1	B	4	1	49	M	1	3	6	2	2	1	N	4	1	22	F	
1	1	1	C	4	1	47	M	3	1	14	15	2	1	N	4	1	40	F	
1	1	1	N	4	1	53	M	3	98	57	1	1	1	N	99	99	54	M	
0	0	1	B	4	0	34	F	31	7	17	0	0	1	N	0	0	903	Z	
33	7	30	A	11	1	58	M	1	7	53	90	99	1	N	99	1	55	M	
1	1	1	N	4	1	66	F	1	1	14	8	8	1	N	4	1	18	F	
18	99	1	N	99	2	28	Z												
1	1	1	N	4	1	90	M	3	5	1	99	99	1	N	99	99	903	Z	
0	0	1	N	0	0	61	M	2	5	1	0	0	1	N	4	0	36	M	
1	1	1	N	4	1	23	M	4	1	14	2	15	1	N	99	99	903	X	
~~4~~	~~61~~	~~1~~	~~N~~	~~4~~	~~1~~	~~41~~	~~M~~	~~1~~	~~7~~	~~5~~	~~1~~	~~1~~	~~1~~	~~C~~	~~4~~	~~1~~	~~30~~	~~M~~	
~~46~~	~~0~~	~~1~~	~~B~~	~~4~~	~~1~~	~~25~~	~~M~~												
~~1~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~77~~	~~F~~	~~3~~	~~1~~	~~5~~	~~4~~	~~0~~	~~1~~	~~N~~	~~99~~	~~99~~	~~902~~	~~Z~~	
~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~1~~	~~48~~	~~F~~	~~1~~	~~98~~	~~17~~	~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~1~~	~~55~~	~~M~~	
~~9~~	~~9~~	~~1~~	~~N~~	~~99~~	~~98~~	~~37~~	~~F~~	~~1~~	~~5~~	~~1~~	~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~98~~	~~36~~	~~F~~	
~~1~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~23~~	~~M~~	~~1~~	~~1~~	~~6~~	~~1~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~84~~	~~F~~	
~~5~~	~~5~~	~~1~~	~~C~~	~~4~~	~~1~~	~~59~~	~~M~~	~~2~~	~~3~~	~~6~~	~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~1~~	~~54~~	~~M~~	
~~5~~	~~0~~	~~1~~	~~N~~	~~3~~	~~1~~	~~37~~	~~F~~	~~1~~	~~3~~	~~1~~	~~1~~	~~0~~	~~1~~	~~C~~	~~4~~	~~1~~	~~26~~	~~F~~	~~1~~
~~0~~	~~0~~	~~1~~	~~N~~	~~4~~	~~0~~	~~26~~	~~M~~	~~3~~	~~3~~	~~9~~	~~0~~	~~0~~	~~1~~	~~N~~	~~0~~	~~0~~	~~54~~	~~M~~	
~~1~~	~~1~~	~~1~~	~~C~~	~~4~~	~~1~~	~~36~~	~~M~~	~~1~~	~~5~~	~~1~~	~~15~~	~~15~~	~~1~~	~~C~~	~~4~~	~~1~~	~~85~~	~~M~~	
~~1~~	~~0~~	~~1~~	~~C~~	~~4~~	~~1~~	~~60~~	~~F~~	~~3~~	~~5~~	~~1~~	~~15~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~26~~	~~M~~	
~~1~~	~~0~~	~~1~~	~~N~~	~~4~~	~~1~~	~~38~~	~~M~~	~~1~~	~~5~~	~~1~~	~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~1~~	~~26~~	~~M~~	
~~16~~	~~46~~	~~1~~	~~B~~	~~11~~	~~1~~	~~31~~	~~M~~	~~1~~	~~1~~	~~6~~	~~1~~	~~0~~	~~1~~	~~N~~	~~98~~	~~1~~	~~35~~	~~F~~	
~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~1~~	~~72~~	~~M~~	~~1~~	~~1~~	~~1~~	~~15~~	~~15~~	~~1~~	~~N~~	~~99~~	~~99~~	~~903~~	~~Z~~	
~~1~~	~~1~~	~~1~~	~~N~~	~~4~~	~~1~~	~~43~~	~~F~~	~~1~~	~~1~~	~~6~~	~~99~~	~~99~~	~~1~~	~~N~~	~~99~~	~~99~~	~~55~~	~~M~~	

										PERSON4									
DIR	ACT	FAC1	FAC2	POSN	INJ	EQP	PHYS	AGE	SEX	VTYPE	DIR	ACT	FAC1	FAC2	POSN	INJ	EQP	PHYS	AGE	SEX
5																				
1																				
~~1~~																				

- Countermeasure: Install raised median

CMF	CRF(%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
0.61	39	★★★★☆	All	All		Schultz et al., 2011	

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CMF	CRF(%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
0.56	44	★★★★☆	All	Fatal,Serious injury		Schultz et al., 2011	

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CMF	CRF(%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
0.29	70.77	★★★☆☆	All	All	Urban	Schultz et al., 2008	

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CMF	CRF(%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
0.45	55.43	★★★☆☆	Angle	All	Urban	Schultz et al., 2008	

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CMF	CRF(%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
0.86	14	★★★☆☆	All	All	Urban	Yanmaz-Tuzel and Ozbay, 2010	

- Countermeasure: Improve pavement friction (increase skid resistance)

CMF	CRF(%)	Quality	Crash Type	Crash Severity	Area Type	Reference	Comments
0.799	20.1	★★★★☆	All	All	All	Lyon and Persaud, 2008	
0.667	33.3	★★★★☆	All	All	All	Lyon and Persaud, 2008	
0.819	18.1	★★★★☆	All	All	All	Lyon and Persaud, 2008	
0.797	20.3	★★★★☆	All	All	All	Lyon and Persaud, 2008	
1.271	-27.1	★★★★☆	All	All	All	Lyon and Persaud, 2008	
0.426	57.4	★★★★☆	Wet road	All	All	Lyon and Persaud, 2008	
0.372	62.8	★★★★☆	Wet road	All	All	Lyon and Persaud,	

0.575	42.5	★★★★☆	Rear end,Wet road	All		Lyon and Persaud, 2008
0.59	41	★★★☆☆	All	All	All	Lyon and Persaud, 2008
0.589	41.1	★★★☆☆	All	All	All	Lyon and Persaud, 2008
0.361	63.9	★★★☆☆	Wet road	All	All	Lyon and Persaud, 2008
0.304	69.6	★★★☆☆	Rear end	All	All	Lyon and Persaud, 2008
0.943	5.7	★★★☆☆	Rear end	All	All	Lyon and Persaud, 2008
0.504	49.6	★★★☆☆	Rear end	All	All	Lyon and Persaud, 2008

0.221	77.9	★★★☆☆	Rear end,Wet road	All	All	Lyon and Persaud, 2008
0.787	21.3	★★★☆☆	Angle	All	All	Lyon and Persaud, 2008
0.828	17.2	★★★☆☆	Angle	All	All	Lyon and Persaud, 2008
0.898	10.2	★★★☆☆	Angle	All	All	Lyon and Persaud, 2008
0.799	20.1	★★★☆☆	Angle,Wet road	All	All	Lyon and Persaud, 2008
0.47	53	★★★☆☆	Angle,Wet road	All	All	Lyon and Persaud, 2008
0.828	17.2	★★★☆☆	Angle,Wet road	All	All	Lyon and Persaud, 2008

Countermeasure(s)	Crash Type	Crash Severity	Area Type	Config	Control	Major Daily Traffic Volume (veh/day)	Minor Daily Traffic Volume (veh/day)	Ref	Obs	Effectiveness: Crash Reduction Factor / Function	Effectiveness: Std Error	Effectiveness: Range Low	Effectiveness: Range High	Study Type
Remove left-turn lane (cont'd)	All	All	Urban	4-Leg (2 app)	Stop			6		-88				
	All	Fatal/Injury	Rural	3-Leg	Signal			6		-16				
	All	Fatal/Injury	Rural	4-Leg (1 app)	Signal			6		-21				
	All	Fatal/Injury	Rural	4-Leg (2 app)	Signal			6		-45				
	All	Fatal/Injury	Urban	3-Leg	Signal			6		-6				
	All	Fatal/Injury	Urban	3-Leg	Stop			6		-53				
	All	Fatal/Injury	Urban	4-Leg (1 app)	Signal			6		-10				
	All	Fatal/Injury	Urban	4-Leg (1 app)	Stop			6		-41				
	All	Fatal/Injury	Urban	4-Leg (2 app)	Signal			6		-21				
	All	Fatal/Injury	Urban	4-Leg (2 app)	Stop			6		-98				
RIGHT-TURN COUNTERMEASURES														
Increase length of right-turn lane	All	Fatal/Injury	All	All	All			58		15				
Install right-turn lane	All	All	All	4-Leg (1 app)	Signal	4,200-55,100	100-26,000	22		**4**	2			EB Before-After
	All	All	All	4-Leg (1 app)	Stop	1,100-40,600	25-11,800	22		**14**	5			EB Before-After
	All	All	All	4-Leg (2 app)	Signal	4,200-55,100	100-26,000	22		**8**	3			EB Before-After
	All	All	All	4-Leg (2 app)	Stop	1,100-40,600	25-11,800	22		**26**	7			EB Before-After
	All	All	All	All	All			58		35				
	All	All	All					1		25				
	All	All	Rural	4-Leg (1 app)	No signal			28		14				
	All	All	Rural	4-Leg (1 app)	No signal			28		21		14	27	

Countermeasure(s)	Crash Type	Crash Severity	Area Type	Config	Control	Major Daily Traffic Volume (veh/day)	Minor Daily Traffic Volume (veh/day)	Ref	Obs	Effectiveness: Crash Reduction Factor / Function	Effectiveness: Std Error	Effectiveness: Range Low	Effectiveness: Range High	Study Type
Install right-turn lane (cont'd)	All	All		All	No signal			28		27		24	30	
	All	All						15		25				
	All	All						15		25				Cross-section
	All	All						15		25				Simple Before-After
	All	All						15		25				Simple Before-After
	All	Fatal/Injury	All	4-Leg (1 app)	Signal	4,200-55,100	100-26,000	22		**9**	3			EB Before-After
	All	Fatal/Injury	All	4-Leg (1 app)	Stop	1,100-40,600	25-11,800	22		**23**	7			EB Before-After
	All	Fatal/Injury	All	All	No signal			58		35				
	All	Fatal/Injury	All	All	Signal			58		35				
	All	Fatal/Injury	All	All				51		40				
	All	Fatal/Injury	Rural	All	All			58		35				
	All	Fatal/Injury	Urban	All	All			58		30				
	Rear-end	All						15		65				Simple Before-After
	Right-angle	All						15		50				Simple Before-After
	Right-turn	All						15		53				
	Right-turn	All						15		56				Simple Before-After
	Right-turn	All						15		50				Cross-section
	Sideswipe	All						15		20				Simple Before-After
Install right-turn lane (painted separation)	All	Fatal/Injury	All	All	All			58		30				
Install right-turn lane (physical channelization)	All	Fatal/Injury	All	All	All			58		35				

Dual CRF for Brooklyn Blvd at 65th Avenue

Improvements include the installation of a northbound right-turn lane and pavement improvement.

CR1=Install right-turn lane
CR2=Pavement improvement

CR=1 – (1-CR1)*(1-CR2)

Rear-End Property Damage Crash: CR=1 – (1-.04)*(1-.70) = .71
Rear-End Injury Crash: CR=1 – (1-.09)*(1-.70) = .73
Head-On, Left-Turn and Ran Off Road Injury Crash: CR=1 – (1-.09)*(1-.41) = .46
Right-Angle Injury Crash: CR=1 – (1-.09)*(1-.21) = .28
Right-Angle Property Damage Crash: CR=1 – (1-.04)*(1-.21) = .24

Dual CRF for Brooklyn Blvd at 63rd Avenue

Improvements include the installation of a northbound, southbound and westbound right-turn lanes and pavement improvement.

CR1=Install right-turn lane
CR2=Pavement improvement

CR=1 – (1-CR1)*(1-CR2)

Rear-End Property Damage Crash: CR=1 – (1-.04)*(1-.70) = .71
Rear-End Injury Crash: CR=1 – (1-.09)*(1-.70) = .73
Head-On, Left-Turn and Ran Off Road Injury Crash: CR=1 – (1-.09)*(1-.41) = .46
Head-On, Left-Turn and Ran Off Road PDO Crash: CR=1 – (1-.04)*(1-.41) = .43
Right-Angle Injury Crash: CR=1 – (1-.09)*(1-.21) = .28
Right-Angle Property Damage Crash: CR=1 – (1-.04)*(1-.21) = .24
Sideswipe and Other Injury Crash: CR=1 – (1-.09)*(1-.41) = .46
Sideswipe and Other Property Damage Crash: CR=1 – (1-.04)*(1-.41) = .43

Dual CRF for Brooklyn Blvd (not main intersections)

Improvements include the installation of a median and pavement improvement.

Note Median improvements for right-angle and left-turn will reduce crashes 100% because these moves are no longer permitted.

CR1=Install median
CR2=Pavement improvement

CR=1 – (1-CR1)*(1-CR2)

Rear End (PDO): CR=1 – (1-.71)*(1-.70) = .91
Rear End (injury): CR=1 – (1-.44)*(1-.70) = .83
Other (PDO): CR=1 – (1-.71)*(1-.41) = .83
Other (injury): CR=1 – (1-.44)*(1-.41) = .67

Dual CRF for Brooklyn Blvd between 51st Avenue to 49th Avenue

Improvements include the reconstruction from a 4 to 3 lane facility and pavement improvement.

CR1=4 to 3 lane reconstruction
CR2=Pavement improvement

CR=1 – (1-CR1)*(1-CR2)

Rear-End Crash: CR=1 – (1-.25)*(1-.70) = .78
Right-Angle Crash: CR=1 – (1-.25)*(1-.21) = .41
Left-Turn, Sideswipe, Ran Off Road and Head On Crash: CR=1 – (1-.25)*(1-.41) = .56

1: Brooklyn Blvd & 63rd Ave N

Direction	All
Future Volume (vph)	2312
Total Delay / Veh (s/v)	46
CO Emissions (kg)	5.20
NOx Emissions (kg)	1.01
VOC Emissions (kg)	1.21

21: Brooklyn Blvd & 65th Ave

Direction	All
Future Volume (vph)	2460
Total Delay / Veh (s/v)	14
CO Emissions (kg)	2.97
NOx Emissions (kg)	0.58
VOC Emissions (kg)	0.69

1: Brooklyn Blvd & 63rd Ave N

Direction	All
Future Volume (vph)	2312
Total Delay / Veh (s/v)	28
CO Emissions (kg)	4.49
NOx Emissions (kg)	0.87
VOC Emissions (kg)	1.04

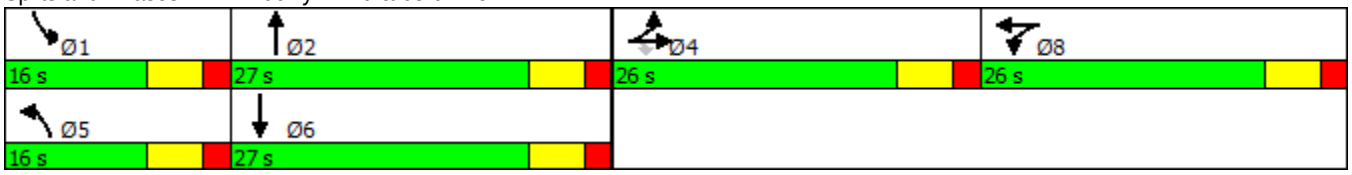
21: Brooklyn Blvd & 65th Ave

Direction	All
Future Volume (vph)	2460
Total Delay / Veh (s/v)	13
CO Emissions (kg)	2.96
NOx Emissions (kg)	0.58
VOC Emissions (kg)	0.69

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	16	27	26	16	27	26
Maximum Split (%)	16.8%	28.4%	27.4%	16.8%	28.4%	27.4%
Minimum Split (s)	16	26	26	16	26	26
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2
Minimum Initial (s)	10	20	15	10	20	15
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		13	13		13	13
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	16	43	0	16	69
End Time (s)	16	43	69	16	43	0
Yield/Force Off (s)	10	37	63	10	37	89
Yield/Force Off 170(s)	10	24	50	10	24	76
Local Start Time (s)	79	0	27	79	0	53
Local Yield (s)	89	21	47	89	21	73
Local Yield 170(s)	89	8	34	89	8	60

Intersection Summary	
Cycle Length	95
Control Type	Actuated-Uncoordinated
Natural Cycle	95

Splits and Phases: 1: Brooklyn Blvd & 63rd Ave N



Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	13	26	21	13	26	21
Maximum Split (%)	21.7%	43.3%	35.0%	21.7%	43.3%	35.0%
Minimum Split (s)	13	21	21	13	21	21
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		5	5		5	5
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	13	39	0	13	39
End Time (s)	13	39	0	13	39	0
Yield/Force Off (s)	8	34	55	8	34	55
Yield/Force Off 170(s)	8	34	44	8	34	44
Local Start Time (s)	47	0	26	47	0	26
Local Yield (s)	55	21	42	55	21	42
Local Yield 170(s)	55	21	31	55	21	31

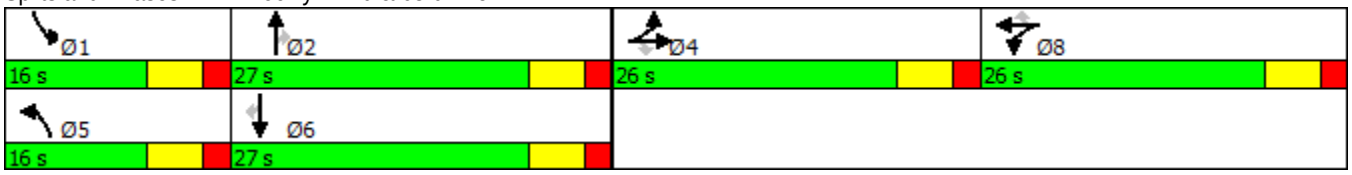
Intersection Summary	
Cycle Length	60
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 21: Brooklyn Blvd & 65th Ave

Phase Number	1	2	4	5	6	8
Movement	SBL	NBT	EBTL	NBL	SBT	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Max	None	None	Max	None
Maximum Split (s)	16	27	26	16	27	26
Maximum Split (%)	16.8%	28.4%	27.4%	16.8%	28.4%	27.4%
Minimum Split (s)	16	26	26	16	26	26
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2
Minimum Initial (s)	10	20	15	10	20	15
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		13	13		13	13
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	16	43	0	16	69
End Time (s)	16	43	69	16	43	0
Yield/Force Off (s)	10	37	63	10	37	89
Yield/Force Off 170(s)	10	24	50	10	24	76
Local Start Time (s)	79	0	27	79	0	53
Local Yield (s)	89	21	47	89	21	73
Local Yield 170(s)	89	8	34	89	8	60

Intersection Summary		
Cycle Length		95
Control Type	Actuated-Uncoordinated	
Natural Cycle		95

Splits and Phases: 1: Brooklyn Blvd & 63rd Ave N



Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	13	26	21	13	26	21
Maximum Split (%)	21.7%	43.3%	35.0%	21.7%	43.3%	35.0%
Minimum Split (s)	13	21	21	13	21	21
Yellow Time (s)	4	4	4	4	4	4
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	8	15	8	8	15	8
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		5	5		5	5
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	13	39	0	13	39
End Time (s)	13	39	0	13	39	0
Yield/Force Off (s)	8	34	55	8	34	55
Yield/Force Off 170(s)	8	34	44	8	34	44
Local Start Time (s)	47	0	26	47	0	26
Local Yield (s)	55	21	42	55	21	42
Local Yield 170(s)	55	21	31	55	21	31

Intersection Summary	
Cycle Length	60
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 21: Brooklyn Blvd & 65th Ave

Hennepin County
Public Works

Transportation Department
James N. Grube P.E., Director
1600 Prairie Drive
Medina, Minnesota 55340

612-596-0300, Phone
612-321-3410, Fax
www.hennepin.us/transportation

July 6, 2016

Elaine Koutsoukos, TAB Coordinator
Metropolitan Council
390 North Robert Street
St. Paul, MN 55101

RE: CSAH 152 (Brooklyn Boulevard) between CSAH 10 (Bass Lake Road) and 65th Avenue
Regional Solicitation Funding Submittal

Dear Ms. Koutsoukos:

Hennepin County has been notified that the City of Brooklyn Center is submitting an application for regional solicitation funding for the proposed CSAH 152 (Brooklyn Boulevard) project. This project includes the reconstruction of CSAH 152 (Brooklyn Boulevard) between CSAH 10 (Bass Lake Road) and 65th Avenue, with streetscaping continuing north to I-94.

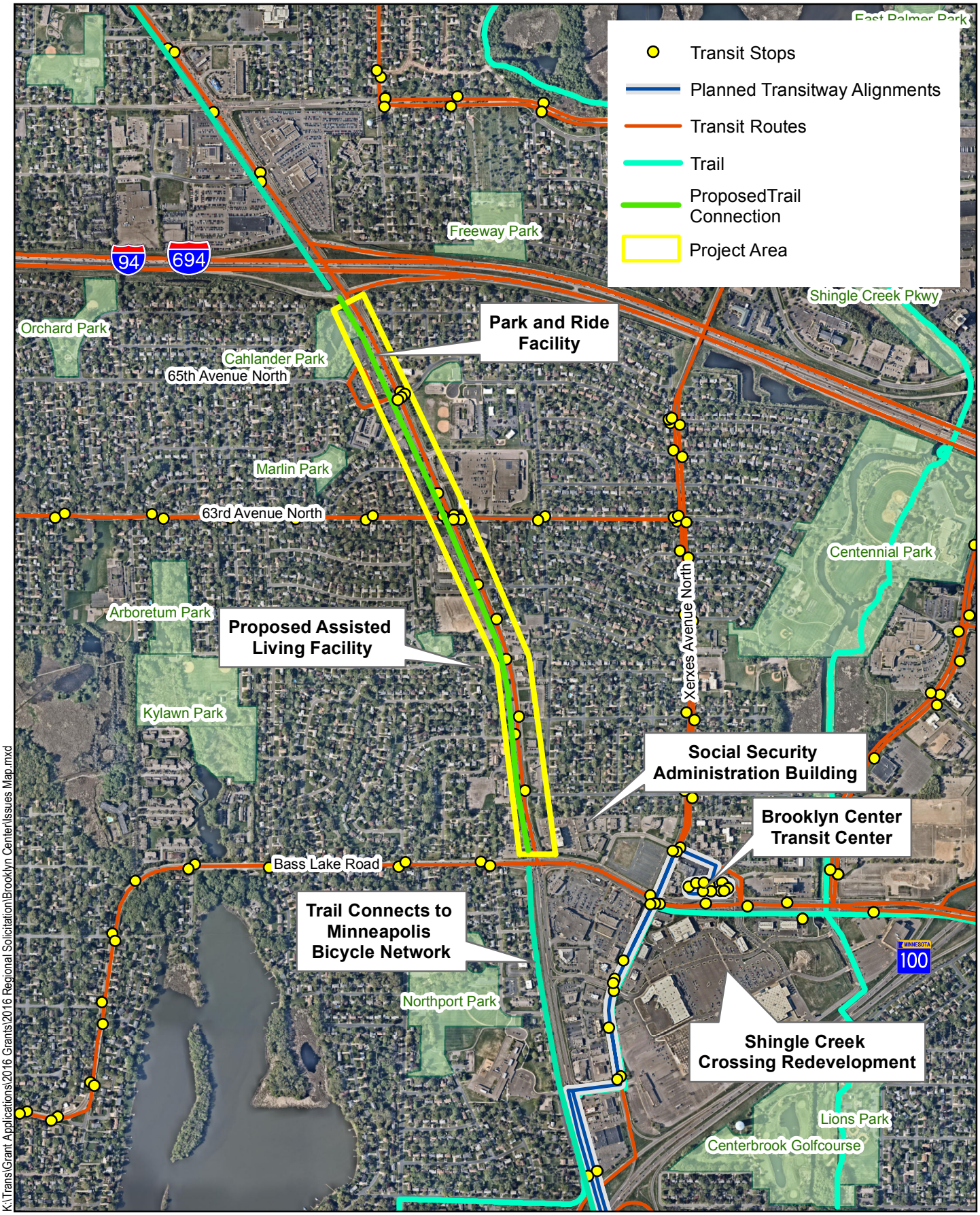
Hennepin County was an active participant with the City of Brooklyn Center and MnDOT during the development of the CSAH 152 (Brooklyn Boulevard) corridor study that was completed in 2013. This study has guided other improvements along the corridor such as MnDOT's TH 100 Bridge Redecking Project in 2015 and the upcoming Highway Safety Improvement Program (HSIP) Project involving the TH-100 south ramps and portions of CSAH 152 (Brooklyn Boulevard) to the south.

Hennepin County supports this funding application and acknowledges that the county has jurisdictional authority over the roadway. Hennepin County will operate and maintain CSAH 152 (Brooklyn Boulevard) for the useful life of the improvement. Hennepin County looks forward to working with the City of Brooklyn Center on this project, if the city is successful in securing regional solicitation funding.

Sincerely,

James N. Grube

James Grube, P.E.
Director of Transportation Project Delivery and County Engineer



K:\Trans\Grant Applications\2016 Grants\2016 Regional Solicitation\Brooklyn Center\Issues Map.mxd

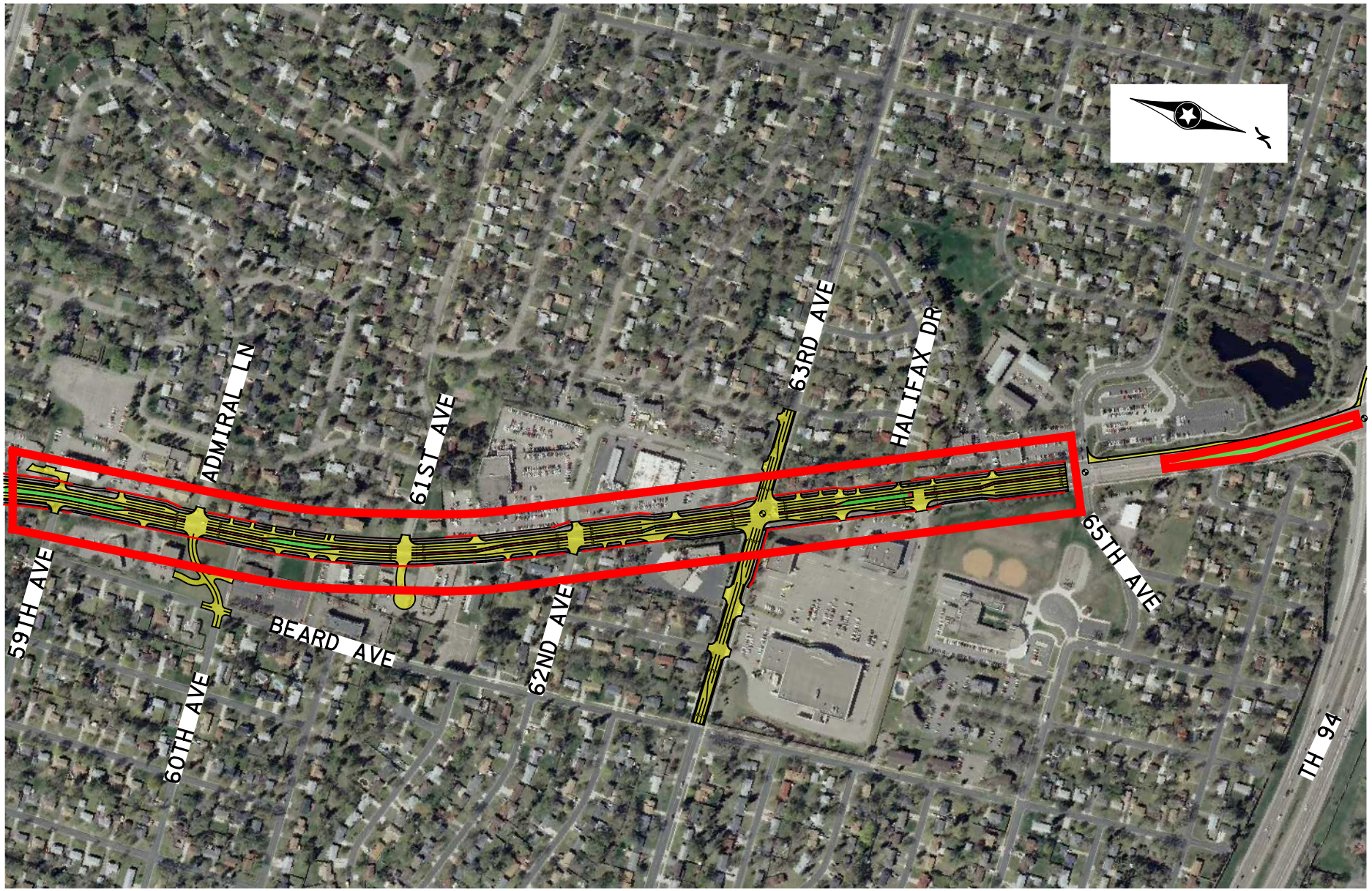
SRF Consulting Group, Inc.

Brooklyn Boulevard Reconstruction/Modernization Issues Map

2016 Regional Solicitation Grant Application

City of Brooklyn Center

Figure 1



H:\Projects\7589\HI-MU\Graphics\7589_Plan Implementation Layout_Individual Project 6.dgn

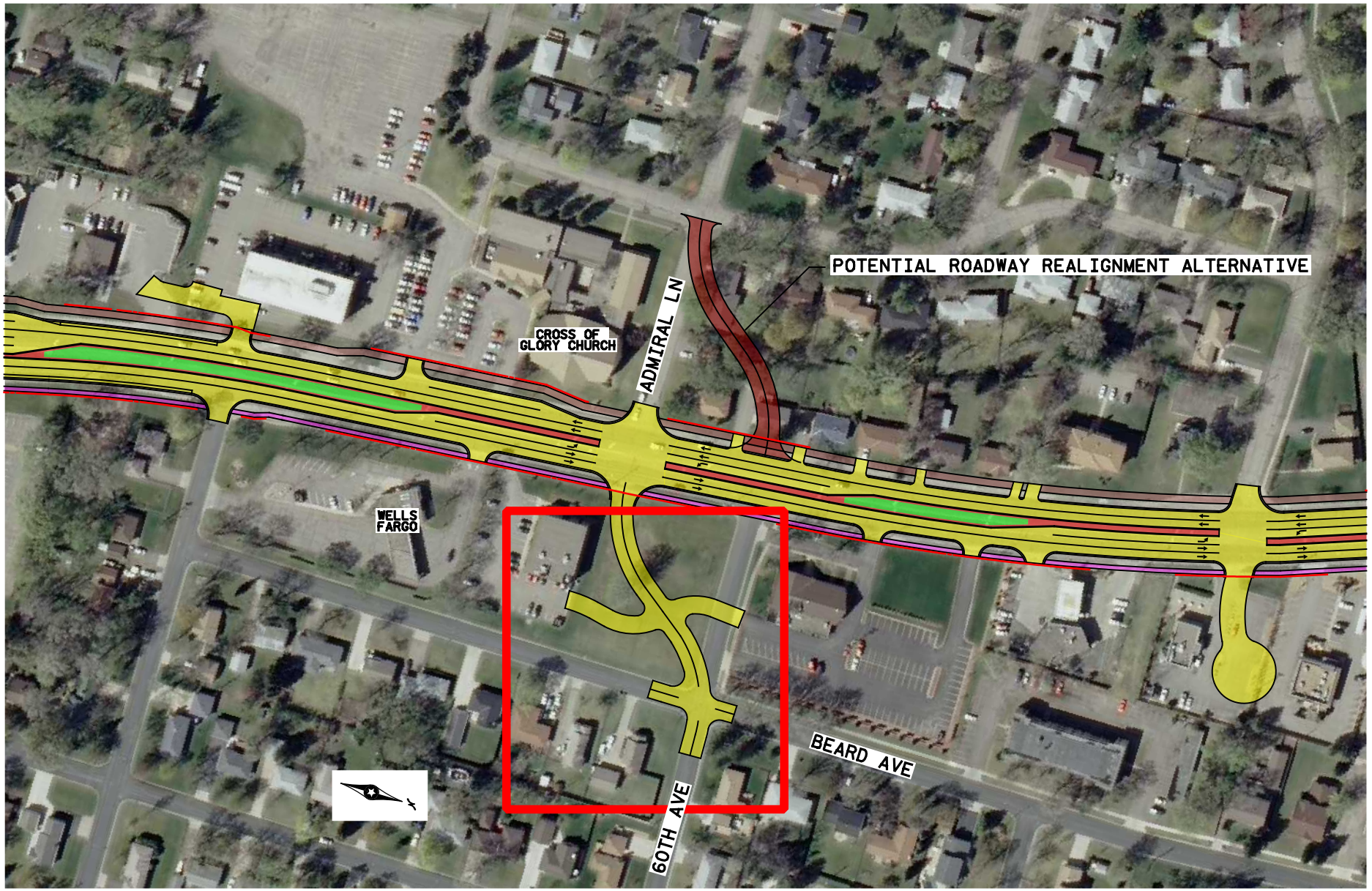
SRF Consulting Group, Inc.

Job #
1/2/2013

Brooklyn Boulevard Concept - Bass Lake Rd to 65th Ave - Project #8

Brooklyn Boulevard Implementation Plan

Brooklyn Center



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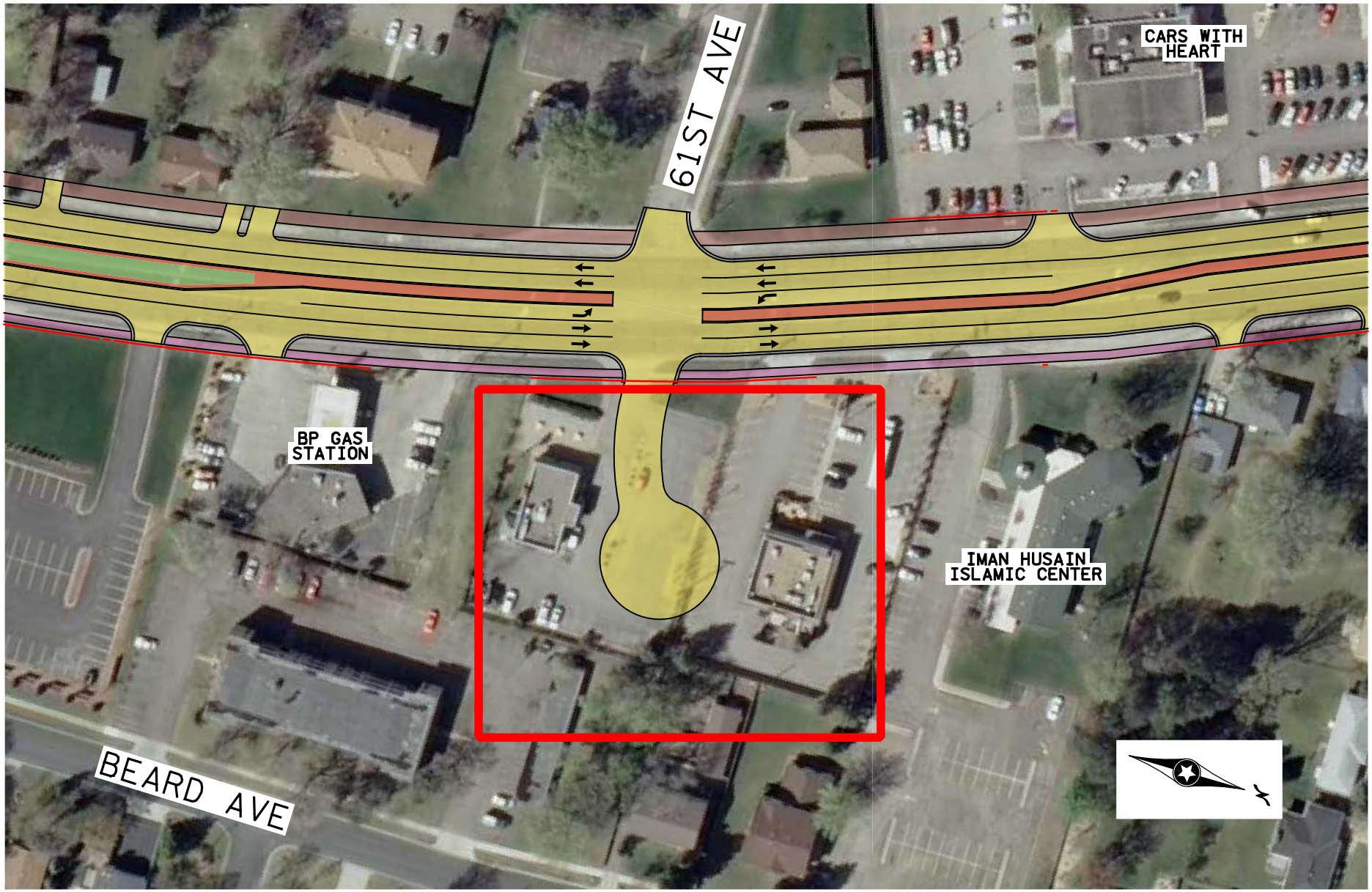
SRF Consulting Group, Inc.

Job #
1/2/2013

Brooklyn Boulevard Concept - 60th Ave - Project #9

Brooklyn Boulevard Implementation Plan

Brooklyn Center



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SRF Consulting Group, Inc.

Job #
1/9/2013

Brooklyn Boulevard Concept - 61st Ave Access Revision - Project #10

Brooklyn Boulevard Implementation Plan

Brooklyn Center

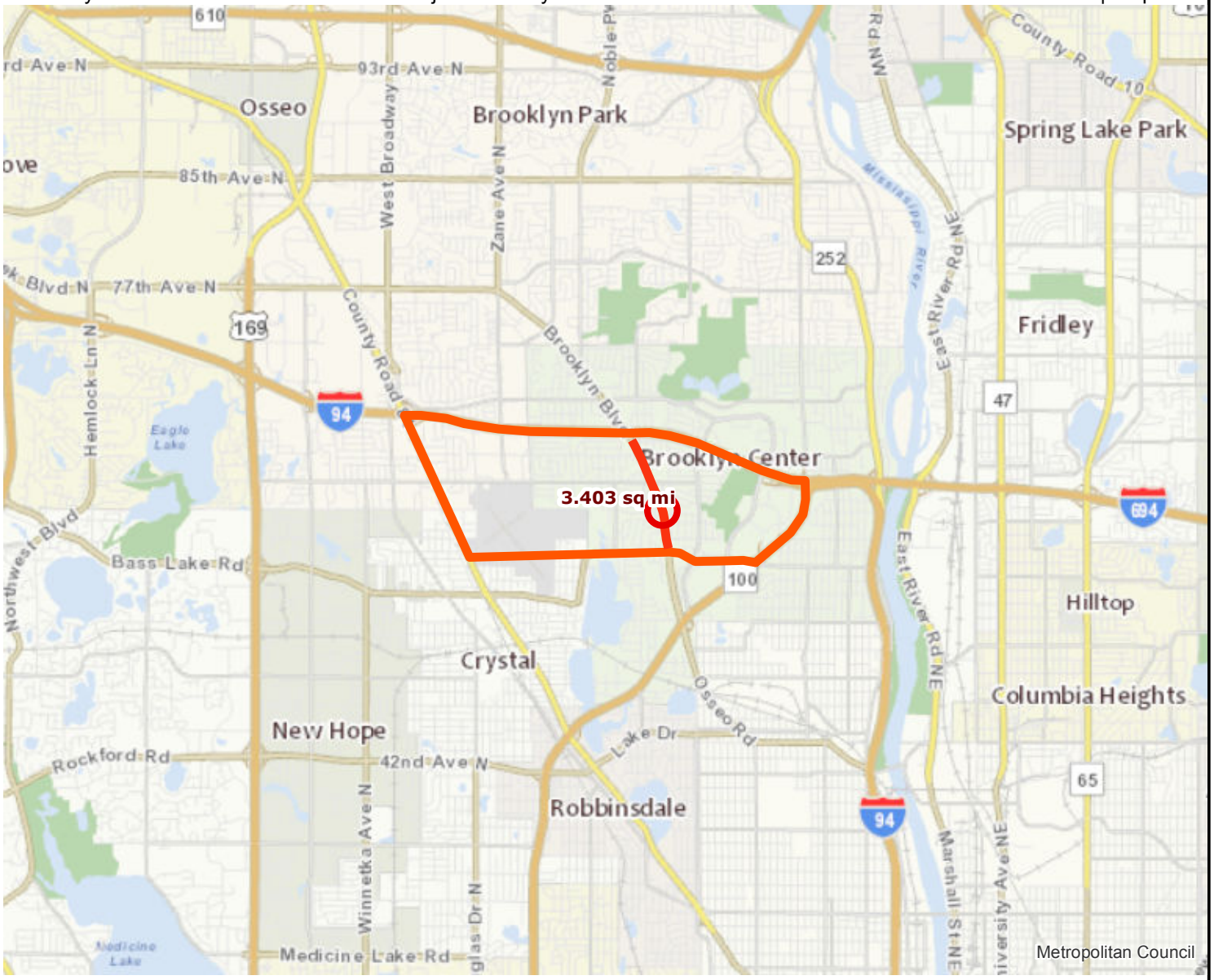
Roadway Area Definition

Roadway Reconstruction/Modernization Project: Brooklyn Boulevard Reconstruction/Modernization from 0.04 mi | Map ID: 14660

Results

Project Length: 1.038 miles

Project Area: 3.403 sq mi



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

0 0.75 1.5 3 4.5 6 Miles

Created: 6/15/2016
LandscapeRSA1

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

METROPOLITAN COUNCIL

Regional Economy

Roadway Reconstruction/Modernization Project: Brooklyn Boulevard Reconstruction/Modernization from 0.04 mi | Map ID: 1466026520

Results

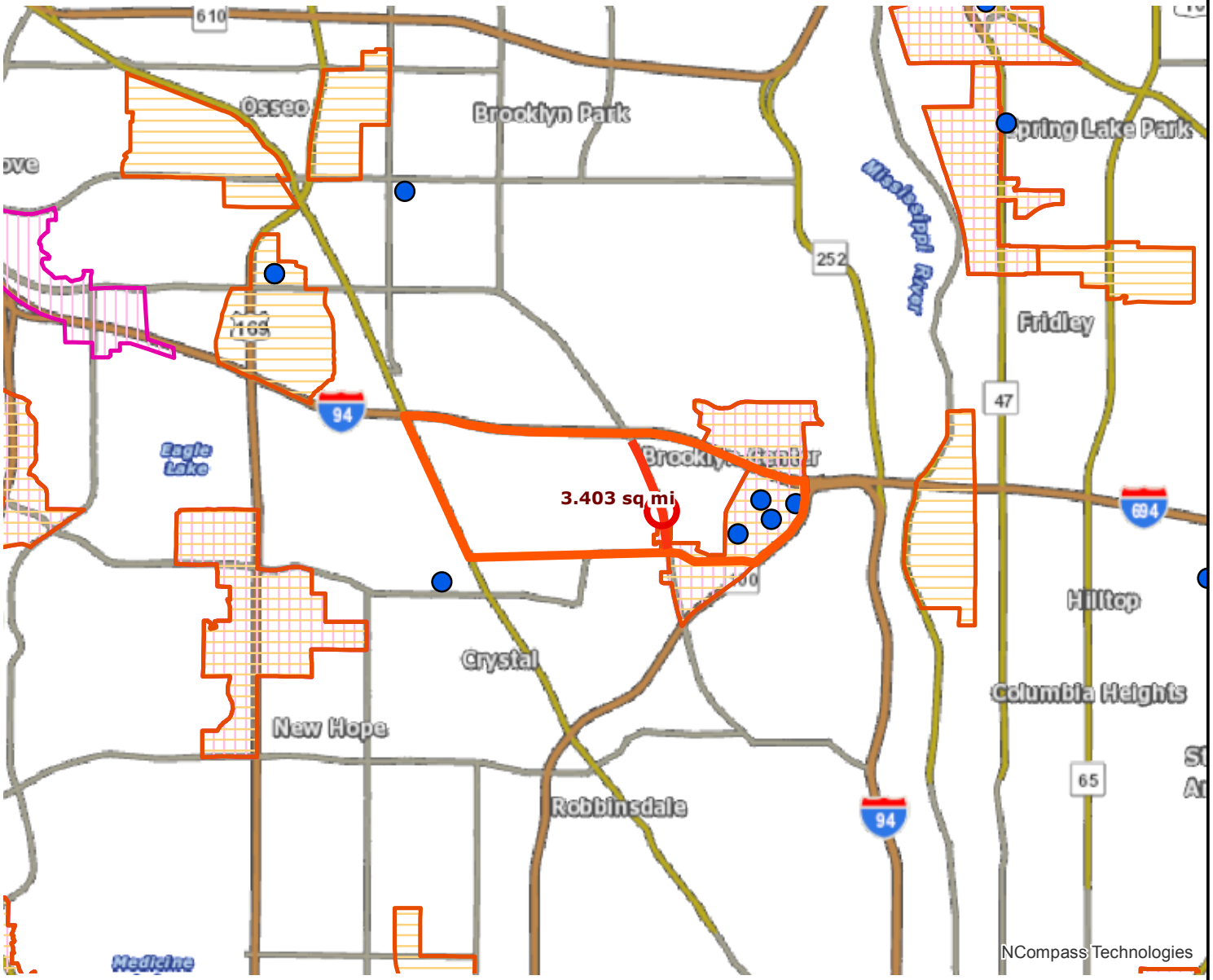
WITHIN ONE MI of project:

Totals by City:

Brooklyn Center
Population: 21073
Employment: 10673
Mfg and Dist Employment: 2799

Crystal
Population: 3791
Employment: 358
Mfg and Dist Employment: 77

Postsecondary Students:
2359



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

0 0.75 1.5 3 4.5 6 Miles

Created: 6/15/2016
LandscapeRSA5

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

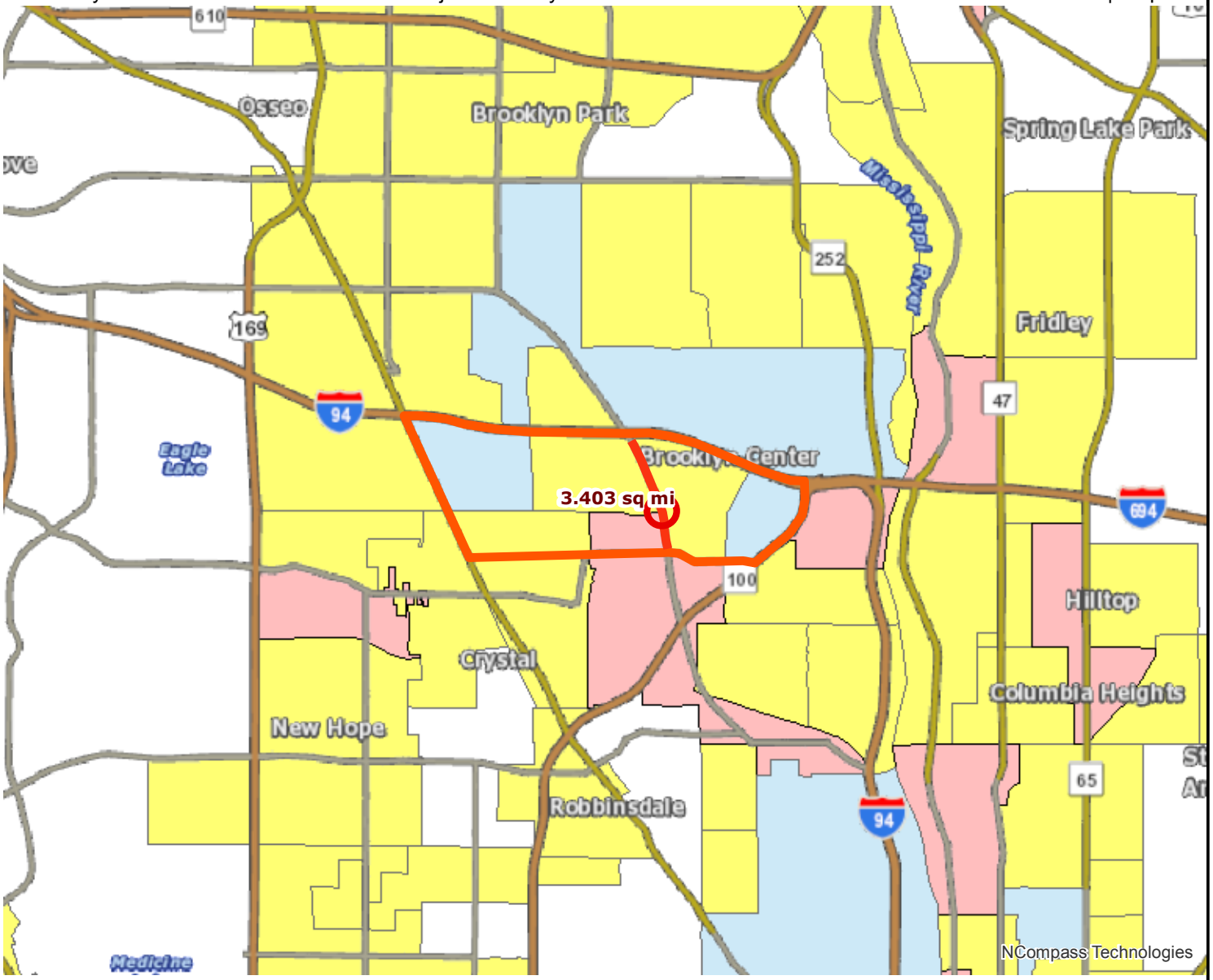
METROPOLITAN COUNCIL

Socio-Economic Conditions

Roadway Reconstruction/Modernization Project: Brooklyn Boulevard Reconstruction/Modernization from 0.04 mi | Map ID: 1466

Results

Project located **IN**
Area of Concentrated Poverty:
(0 to 24 Points)



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

0 0.75 1.5 3 4.5 6 Miles

Created: 6/15/2016
LandscapeRSA2

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

METROPOLITAN COUNCIL

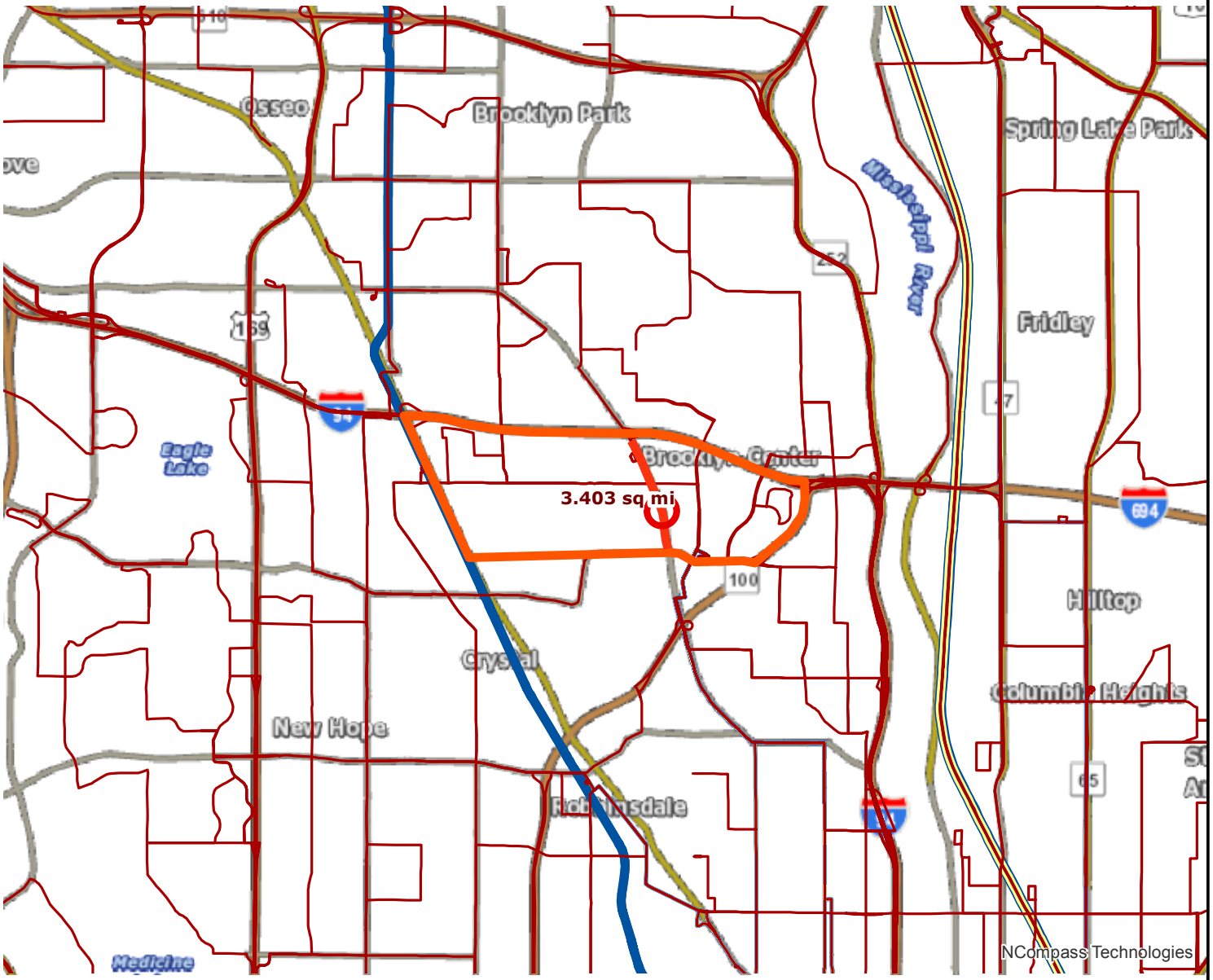
Transit Connections

Roadway Reconstruction/Modernization Project: Brooklyn Boulevard Reconstruction/Modernization from 0.04 mi | Map ID: 1466026520204

Results

Transit with a Direct Connection to project:
721 723 724 760 767 780 781 782 783 785

**indicates Planned Alignments*



Project Points
Project
Project Area
Transit Routes

Transitway
Northstar Line

Planned Alignments
Arterial BRT

Light Rail, Blue Line Extension

0 0.75 1.5 3 4.5 6 Miles

Created: 6/15/2016
LandscapeRSA3

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

METROPOLITAN COUNCIL

Google Maps

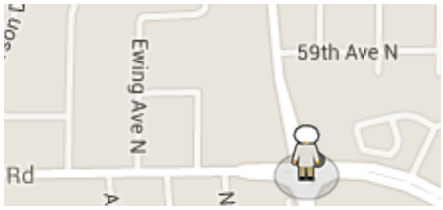
Brooklyn Blvd

Bass Lake Road (CSAH 10) looking north.

Image capture: Sep 2014 © 2016 Google

Brooklyn Center, Minnesota

Street View - Sep 2014



Google Maps

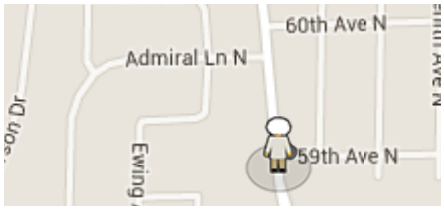
Brooklyn Blvd

59th Avenue North looking north.

Image capture: Aug 2015 © 2016 Google

Brooklyn Center, Minnesota

Street View - Aug 2015



Google Maps

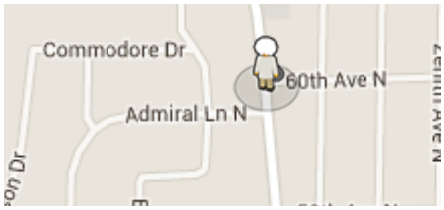
Brooklyn Blvd

60th Avenue North looking north.

Image capture: Aug 2015 © 2016 Google

Brooklyn Center, Minnesota

Street View - Aug 2015



Google Maps

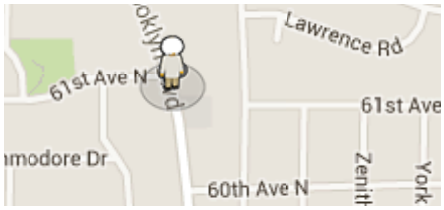
Brooklyn Blvd

61st Avenue North looking north.

Image capture: Aug 2015 © 2016 Google

Brooklyn Center, Minnesota

Street View - Aug 2015



Google Maps

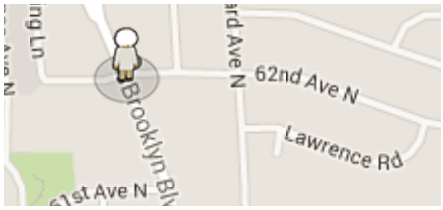
Brooklyn Blvd

62nd Avenue North looking north.

Image capture: Aug 2015 © 2016 Google

Brooklyn Center, Minnesota

Street View - Aug 2015



Google Maps

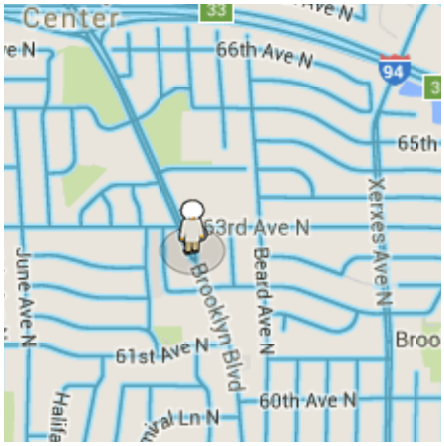
Brooklyn Blvd

63rd Avenue North looking north.

Image capture: Aug 2015 © 2016 Google

Brooklyn Center, Minnesota

Street View - Aug 2015



Google Maps

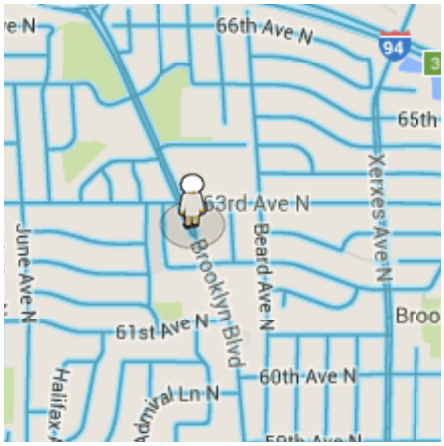
Brooklyn Blvd

65th Avenue North looking north.

Image capture: Aug 2015 © 2016 Google

Brooklyn Center, Minnesota

Street View - Aug 2015



Google Maps

Brooklyn Blvd

Brooklyn Boulevard north of France Avenue North looking north at I-94/694

Image capture: Aug 2015 © 2016 Google

Brooklyn Center, Minnesota

Street View - Aug 2015