Application

04751 - 2016 Roadway Expansion

05374 - Brockton Interchange

Regional Solicitation - Roadways Including Multimodal Elements

Status:	Submitted
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Primary Contact

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What Grant Programs are you most interested in?	Planning Assistance Grants			

Organization Information

Name:	DAYTON, CITY OF
Jurisdictional Agency (if different):	

Organization Type: City

Organization Website:

Address: 12260 S DIAMOND LAKE RD

*	DAYTON	Minnesota	55327
	City	State/Province	Postal Code/Zip

County: Hennepin

Phone:* 612-427-4589 Ext.

Fax:

PeopleSoft Vendor Number 0000004474A1

Project Information

Project Name Brockton Lane Interchange

Primary County where the Project is Located Hennepin

Jurisdictional Agency (If Different than the Applicant):

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

The proposed project is to construct an interchange at Interstate 94 (I-94), approximately one half-mile east of the existing Brockton Lane (CSAH 101) crossing in the City of Dayton. Project components include a full-width bridge and roadway over I-94; partial-width roadway from Brockton Lane to the southwest ramp and from CSAH 81 to the northwest ramp; a southwest ramp and loop at I-94; a northwest ramp and loop at I-94; an eastbound auxiliary lane along I-94 from the southwest loop to Rush Creek; turn lanes at the Brockton Lane, Territorial Road, and Holly Lane North intersections (see Figures 2-3). It is important to recognize that these improvements are the first of two phases of development on this interchange. The first phase includes the improvements noted above, while the second phase includes a full width roadway from Brockton Lane to the southwest ramp and from CSAH 81 to the northwest ramp; southeast and northeast ramps, a westbound auxiliary lane along I-94 from the northwest loop to Rush Creek; and additional turn lane improvements at the Brockton Lane and CSAH 81 intersections.

The project's primary goal is to improve an existing six mile gap along I-94 between the cities of Maple Grove and Rogers, while supporting a regional roadway system for the Brockton Lane area, which has a direct connection to the cities of Rogers, Maple Grove, Corcoran, and Dayton. These four cities combined are expected to increase in population by 54 percent through 2040. Dayton is expected to grow at the highest rate (110 percent through 2040) compared with the other cities in close proximity to the proposed project.

The propose project will provide an important connection to I-94 via the Brockton Lane and CSAH 81 corridor. Currently, 96,000 vehicles utilize I-94

on a daily basis in the vicinity of Brockton Lane North, including 9,800 heavy commercial vehicles. Brockton Lane North experiences 6,300 vehicles south of I-94 and 9,000 vehicles north of I-94 on a daily basis. CSAH 81 southeast of Brockton Lane and north of I-94 experiences 18,200 vehicles per day. There are currently 350 pre-platted lots in Dayton north of the proposed interchange and another 800 lots contemplated in concept plans--these additional residential vehicular trips will benefit from the interchange by relieving pressure on CSAH 81.

The project is "shovelready" and has undergone an extensive alternatives analysis and preliminary engineering. These past planning and design efforts have been funded through the 2010-2013 Metropolitan Council Transportation Improvement Plan. Furthermore, the proposed project received a "negative declaration of need" for an Environmental Impact Statement from MnDOT in early 2013.

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)	I-94/Brockton Lane Interchange
Project Length (Miles)	1.0

Project Funding

Are you applying for funds from another source(s) to implement this project?	Yes
If yes, please identify the source(s)	A bonding request has been made at the State during the 2016 legislative session.
Federal Amount	$7,000,000.00
Match Amount	$6,989,551.00

Minimum of 20% of project total

Project Total	$13,989,551.00
Match Percentage	49.96%

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

Source of Match Funds Local general funds

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

Preferred Program Year

Select one: 2020

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.

Project Information: Roadway Projects

County, City, or Lead Agency City of Dayton

Functional Class of Road Principal Arterial (I-94)

Road System Interstate

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

Road/Route No. 94

i.e., 53 for CSAH 53

Name of Road Interstate 94

Example; 1st ST., MAIN AVE

Zip Code where Majority of Work is Being Performed 55327

(Approximate) Begin Construction Date 06/01/2020

(Approximate) End Construction Date 06/30/2021

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

From:
(Intersection or Address) Intersection of CSAH 81 and Holly Ln. N

To:
(Intersection or Address) Brockton Ln. N approximately 0.9 miles south of its intersection with CSAH 81

DO NOT INCLUDE LEGAL DESCRIPTION

Or At

Primary Types of Work

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):

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	$510,000.00
Removals (approx. 5% of total cost)	$182,796.00
Roadway (grading, borrow, etc.)	$2,419,428.00
Roadway (aggregates and paving)	$3,301,243.00
Subgrade Correction (muck)	$0.00
Storm Sewer	$693,426.00
Ponds	$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	$363,092.00
Traffic Control	$510,000.00
Striping	$0.00
Signing	$366,576.00
Lighting	$0.00
Turf - Erosion & Landscaping	$396,925.00
Bridge	$1,751,420.00
Retaining Walls	$0.00
Noise Wall (do not include in cost effectiveness measure)	$0.00
Traffic Signals	$678,845.00
Wetland Mitigation	$0.00
Other Natural and Cultural Resource Protection	$0.00
RR Crossing	$0.00
Roadway Contingencies	$2,332,000.00
Other Roadway Elements	$429,000.00
Totals	**$13,934,751.00**

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	$54,800.00
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	$0.00
Wayfinding	$0.00
Bicycle and Pedestrian Contingencies	$0.00
Other Bicycle and Pedestrian Elements	$0.00
Totals	**$54,800.00**

Specific Transit and TDM Elements

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

Transit Operating Costs

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

Totals

Total Cost	$13,989,551.00
Construction Cost Total	$13,989,551.00
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 B: Safety and Security (2040 TPP, pg. 2.7) - The regional transportation system is safe and secure for all users.

o Objectives: Reduce crash rates and improve safety and security for all modes of passenger travel and freight transport.

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

B3 - Regional transportation partners should monitor and routinely analyze safety and security data by mode and severity to identify priorities and progress.

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

Goal D: Competitive Economy (2040 TPP, pg. 2.11) - The regional transportation system supports the economic competitiveness, vitality, and prosperity of the regions and state.
o Objectives: Support the region's economic competitiveness through the efficient movement of freight.

Strategies:
D5 - The Council and MnDOT will work with transportation partners to identify the impacts of highway congestion on freight and identify cost-effective mitigation.

Goal F: Leveraging Transportation Investment to Guide Land Use (2040 TPP, pg. 2.14) The region

leverages transportation investments to guide land use and development patterns that advance the regional vision of stewardship, prosperity, livability, equity, and sustainability.

o Objectives: Encourage local land use design that integrates highways, streets, transit, walking, and bicycling.

Strategies:

F7 - Local governments should include bicycle and pedestrian elements in local comprehensive plans.

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.

2030 Hennepin County Transportation Systems Plan (2011) - page 9-9: The plan recognize the expected growth and significant congestions on the CSAH 81 corridor.

List the applicable documents and pages:

City of Dayton Comprehensive Plan (2008): The Plan recognizes the Brockton Interchange throughout the various comprehensive plan elements.

2008 Northwest Hennepin County I-94 Subarea Transportation Study

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

Expander/Augmentor/Non-Freeway Principal Arterial

Select one:	Non-Freeway Principal Arterial
Area	2.178
Project Length	1.006
Average Distance	2.165
Upload Map	1474404947437_RADBrocktonIntDaytonREX.pdf

Reliever: Relieves a Principle Arterial that is a Freeway Facility

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

Reliever: Relives a Principle 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:	2705
Existing Manufacturing/Distribution-Related Employment within 1 Mile:	1113
Existing Students:	0
Upload Map	1467989768146_Map_RE.pdf

Measure C: Current Heavy Commercial Traffic

Location:	CSAH 81 southeast of Brockton Ln.
Current daily heavy commercial traffic volume:	910
Date heavy commercial count taken:	2015

Measure D: Freight Elements

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

Many regional manufacturing, warehousing, industrial and distribution businesses (see Figure 9) are located in proximity to the proposed project. This has added pressure to the transportation network from a freight perspective.

A large number of heavy commercial vehicles are relying on the local/regional system to access I-94. As a result, trucks are traveling greater distances on the local arterial/collector system to reach the Highway 101 or Maple Grove Parkway interchange (both approximately three miles away). These travel patterns have posed a number of safety concerns. Specific areas of concern include the Brockton Lane and CSAH 81 corridors near the proposed interchange. The proposed project will respond to these safety concerns by improving the overall operations with intersection improvements near the interchange. Furthermore, the proposed project will help reduce the number of freight trips occurring on the local roadways by redistributing freight trips between the proposed interchange at the I-94/Highway 101 and I-94/Maple Grove Parkway interchanges. The proposed project will be designed in a manner to handle heavy commercial vehicles and accommodate the appropriate turning radii at intersections. On-ramps and off-ramps will be designed to accommodate the appropriate acceleration/deceleration lengths for heaving commercial vehicles entering/exiting the freeway.

Measure A: Current Daily Person Throughput

Location	CSAH 81 southeast of Brockton Ln.
Current AADT Volume	18200
Existing Transit Routes on the Project	N/A

For New Roadways only, list transit routes that will be moved to the new roadway

Upload Transit Map	1468242747817_Map_TC.pdf

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	0
Current Daily Person Throughput	23660.0

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	Future daily forecasts were made using Met Council's Regional Travel Demand Model that was utilized for the Brockton Lane Preliminary Design Project. Year 2040 values were developed by extrapolating year 2030 volumes from the project.
Forecast (2040) ADT volume	50200

Measure A: Project Location and Impact to Disadvantaged Populations

Select one:

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

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

The proposed project is located in an area above the regional average for population in poverty or population of color. In the City of Dayton, 8.2 percent of the population is Hispanic or Latino, exceeding the regional average of 5.8 percent (Hennepin County: 12.9 percent).

The number of jobs in Dayton, Rogers, Corcoran and Maple Gove is forecasted to increase from 46,357 (2015) to 67,100 in 2040. A key factor in the project area's ability to attract and retain jobs is access to I-94. These concerns have also been expressed by existing businesses (see Figure 9) who depend heavily on I-94 access. This finding demonstrates the increasing need for better access to I-94, which is essential in linking populations below the poverty level with jobs.

It is important to recognize the emergency service barriers that exist without the interchange. Without access to I-94 at Brockton Lane, emergency vehicles must travel along CSAH 81 or to the TH 101 interchange before heading to the Maple Grove Hospital at the I-94/Maple Grove Parkway interchange. The proposed project will improve emergency vehicle response times for the project area by eliminating the six-mile gap between the City of Rogers and Maple Grove. Public health research has shown those who are below the poverty level, in this case seven percent of the population of Dayton, are subject to negative health determinants. These are populations who may require immediate health care or emergency services that are not easily accessed without the proposed project. An interchange at Brockton Lane would effectively cut travel times to the Maple Grove Hospital in half.

The City's Comprehensive Plan identifies the proposed interchange site to include commercial,

industrial, and mixed use development that will provide additional job opportunities to adjacent residents, such as the adjacent mobile home park. Creating new job opportunities is especially important given the city's high unemployment rate (6 percent in 2014) compared to the region (3.8 percent in 2014). In particular, the interchange will promote high-end business park development and the expansion of existing businesses in the vicinity--this achieves a key goal of City's Comprehensive Plan (Economic Development Chapter). Business growth in the project area cannot reach its full potential without the interchange. The Metropolitan Council (Council) has realized the area's growth potential, with an estimate of 1,160 additional jobs in Dayton over the next ten years without an interchange. The Council has indicated they would have to adjust that number up significantly with an interchange.

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

Upload Map 1468242899038_Map_SE.pdf

Measure B: Affordable Housing

City/Township	Segment Length in Miles (Population)
dayton	1.012
	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)	1.012
Total Housing Score	0

Measure A: Infrastructure Age

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
1930.0	0.62	1196.6	1930.0
	1	**1197**	**1930**

Average Construction Year

Weighted Year	1930.0

Total Segment Length (Miles)

Total Segment Length	0.62

Measure A: Vehicle Delay Reduction

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 (Seconds)	EXPLANATION of methodology used to calculate railroad crossing delay, if applicable:	Synchro or HCM Reports
196.0	173.0	23.0	16626.0	382398.0		1468243374793_syncrho_all.pdf

Total Delay

Total Peak Hour Delay Reduced	382398.0

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

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

Total

Total Emissions Reduced:	0
Upload Synchro Report	

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):
32.04	29.76	2	16626.0	33252.0
32	**30**		**16626**	**33252**

Total Parallel Roadways

Emissions Reduced on Parallel Roadways	33252.0
Upload Synchro Report	1468419824352_Brockton_Synchro.pdf

New Roadway Portion:

Cruise speed in miles per hour with the project:	23.0
Vehicle miles traveled with the project:	2130.0
Total delay in hours with the project:	6.0
Total stops in vehicles per hour with the project:	959.0

Fuel consumption in gallons:	1922.397
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced or Produced on New Roadway (Kilograms):	191.663
EXPLANATION of methodology and assumptions used:(Limit 1,400 characters; approximately 200 words)	The TH 101/I-94 and Maple Grove Parkway/I-94 interchanges will both experience reduced congestion and emissions as a result of the proposed Brockton Lane/I-94 Interchange. CSAH 81 is assumed to be the primary parallel roadway benefiting from the proposed project, as regional traffic is assumed to divert to I-94 to reach locations in close proximity to the proposed interchange in the cities of Dayton, Rogers, Corcoran, and Maple Grove. The diversion of vehicles to I-94 and the proposed interchange is assumed to increase as planned development provided in the comprehensive plans in the aforementioned cities comes to fruition in the long term.
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):	33060.337

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

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

Measure A: Benefit of Crash Reduction

Crash Modification Factor Used: *(Limit 700 Characters; approximately 100 words)*	Please see attached document for the crash modification factors and methodology.
Rationale for Crash Modification Selected: *(Limit 1400 Characters; approximately 200 words)*	Please see attached document for the crash modification factors and methodology.
Project Benefit ($) from B/C Ratio:	787360.0
Worksheet Attachment	1468415450169_Brockton Crash Analysis.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

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

An off-road pedestrian and bicycle multiuse trail currently exists connecting CSAH 81 to Holly Lane and Territorial Road, providing access to several businesses in the area that employ the majority of the workforce in the City of Dayton.

The proposed project includes an extension of the existing trail to be constructed along the south side of the interchange, connecting Brockton Lane to CSAH 81. The trail will support planned commercial and mixed use development north and south of the interchange as designated in the comprehensive plans for the cities of Dayton, Rogers, Corcoran, and Maple Grove. This trail connection across I-94 is provided in the City of Dayton Comprehensive Plan's Parks, Trails, and Open Space Plan. The trail will eliminate a six mile gap between existing trail connections located three miles east (I-94/TH 101 interchange) or three miles west (I-94/Maple Grove Parkway interchange). The trail component of the proposed project will connect to regional trail connections as provided in the comprehensive plans for the cities of Dayton, Rogers, Corcoran, and Maple Grove--this includes planned trails along CSAH 81 (east to Maple Grove and west to Rogers) and Brockton Lane (north to locations in Rogers and Dayton and south to Corcoran).

The trail will also allow for the development of a critical portion of a designated regional bicycle transportation network (RTBN) corridor shown along CSAH 81, crossing I-94, and continuing northwest along Territorial Rd. (the RBTN corridor is designated as a tier one priority corridor in the Thrive MSP 2040 Transportation Policy Plan). The trail included in the proposed project will also provide a connection to the Rush Creek Trail Corridor as provided in the Rush Creek Regional Trail Master Plan (Three Rivers Park District). The Rush Creek Trail currenty extends from Coon Rapids to Maple Grove, within two and one half

miles of the proposed project. A trail extension is planned south of the project area, ultimately ending at Crow Hassen Park east of Rogers.

Transit service in the vicinity of the project is provided by the City of Maple Grove. The closest park-and-ride lot is located in Maple Grove at I-94 and Maple Grove Parkway (Parkway Station), which is served by Metro Transit during a.m. and p.m. peak periods. CSAH 81 serves as the major east-west arterial linking the Parkway Station with residents near the proposed project. The vicinity of the project within the City of Dayton is in Transit Market Area IV and was upgraded to this designation in the 2040 Transportation Policy Plan. The Metropolitan Council?s 2014 Highway Transitway Corridor Study looked only as far northwest as Maple Grove along the I-94 corridor and did not include any recommendations for the project area.

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) Yes

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

0%

Anticipated date or date of completion/approval

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:

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 06/03/2019

7)Railroad Involvement (25 Percent of Points)

No railroad involvement on project Yes

100%

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

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

60%

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

40%

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

0%

Anticipated date or date of executed Agreement

8)Interchange Approval (15 Percent of Points)*

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

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

100%

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

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 Yes

50%

Construction plans have not been started

0%

Anticipated date or date of completion	02/03/2020

10)Letting

Anticipated Letting Date	05/01/2020

Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form):	$13,989,551.00
Enter Amount of the Noise Walls:	$0.00
Total Project Cost subtract the amount of the noise walls:	$13,989,551.00
Points Awarded in Previous Criteria	
Cost Effectiveness	$0.00

Other Attachments

File Name	Description	File Size
Brockton-94_MnDOT letter of support.pdf	MnDOT Letter of Support	106 KB
Figure 1_BI_project location map.pdf	Figure 1_Project Location	1.2 MB
Figure 4_BI_Existing Condition Photo.pdf	Figure 4 - Existing Condition Photo_1	648 KB
Figure 5_BI_Existing Condition Photo.pdf	Figure 5 - Existing Condition Photo_2	650 KB
Figure 6_BI_Existing Condition Photo.pdf	Figure 6 - Existing Condition Photo_3	700 KB
Figure 7_BI_Existing Condition Photo.pdf	Figure 7 - Existing Condition Photo_4	977 KB
Figure 8_BI_Existing Condition Photo.pdf	Figure 8 - Existing Condition Photo_5	719 KB
Figure 9_BI_Benefiting Businesses.pdf	Figure 9 - Existing Condition Photo_6	123 KB
Figures 2&3_BI_project graphics_Phases I&II.pdf	Figures 2 & 3 - Project Graphics	751 KB

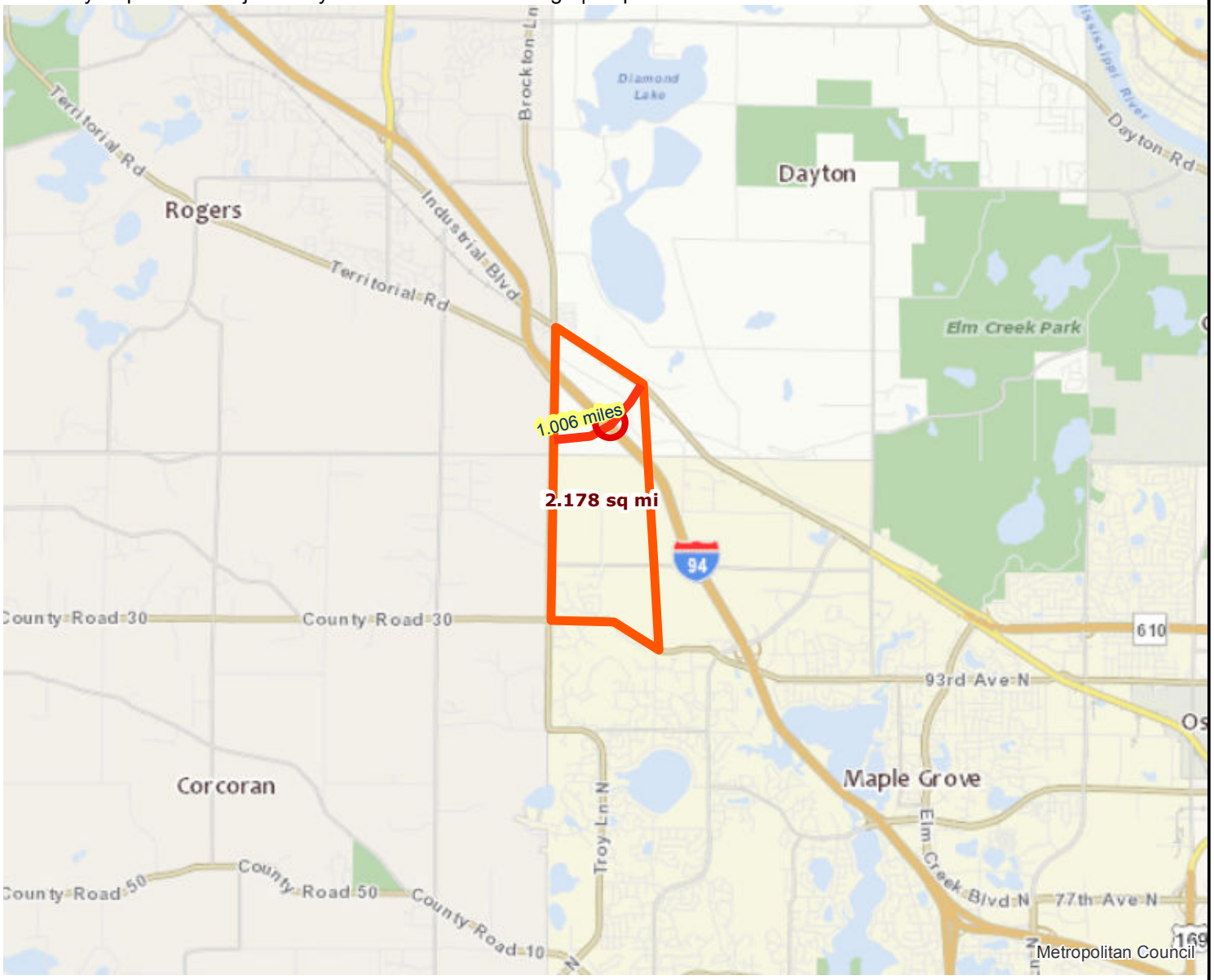
Roadway Area Definition

Roadway Expansion Project: Dayton Brockton Interchange | Map ID: 1471955944279

Results

Project Length: 1.006 miles

Project Area: 2.178 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: 8/23/2016
LandscapeRSA1

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

METROPOLITAN COUNCIL

Regional Economy

Roadway Expansion Project: I-94 and Brockton Lane Interchange | Map ID: 1465500266157

Results

WITHIN ONE MI of project:

Totals by City:

Corcoran
Population: 274
Employment: 34
Mfg and Dist Employment: 0

Dayton
Population: 904
Employment: 730
Mfg and Dist Employment: 489

Maple Grove
Population: 958
Employment: 338
Mfg and Dist Employment: 9

Rogers
Population: 883
Employment: 1603
Mfg and Dist Employment: 615

Postsecondary Students:
0

Project Points
Project Area
Project

0 1.75 3.5 7 10.5 14 Miles

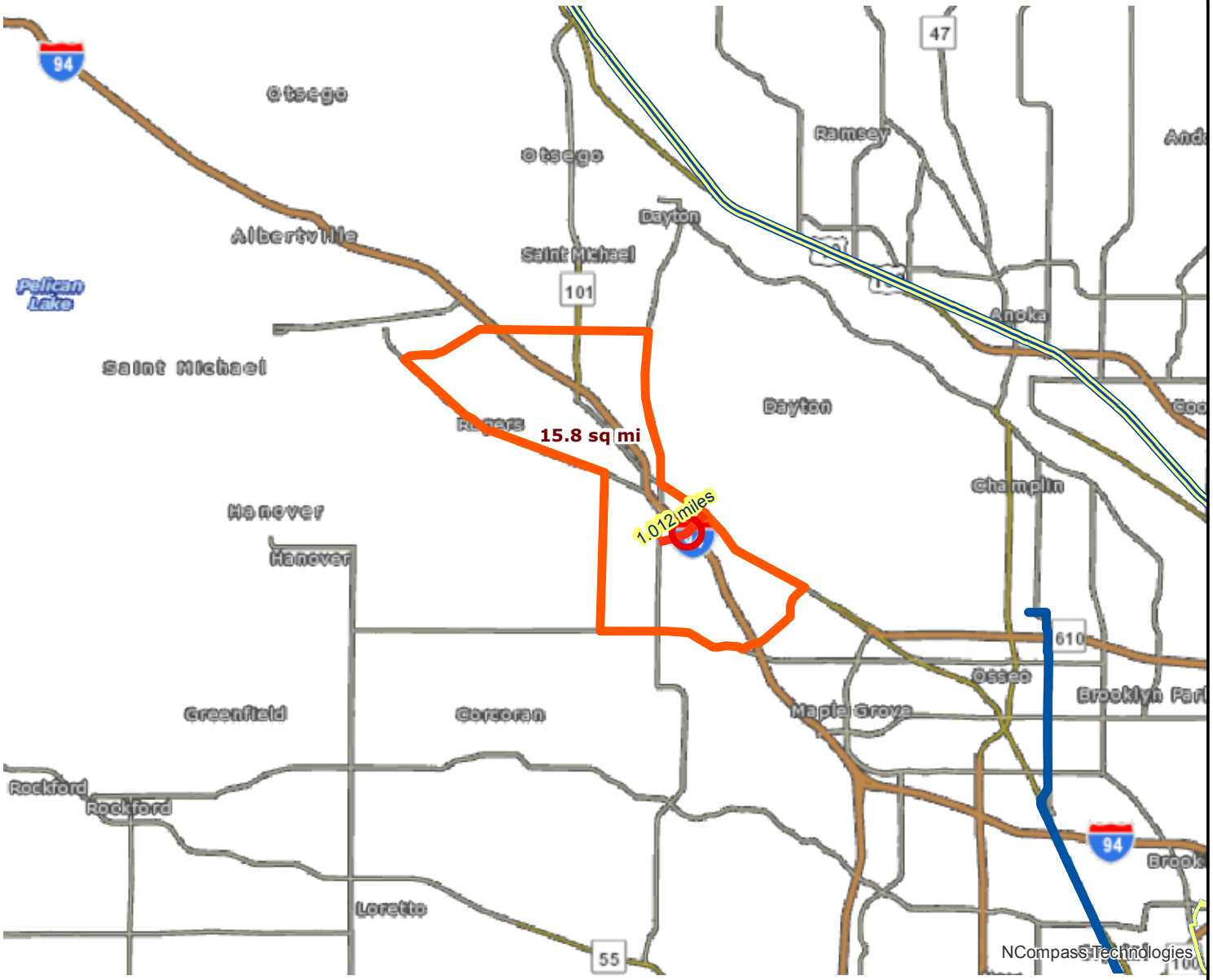
Created: 6/9/2016
LandscapeRSA5

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

METROPOLITAN COUNCIL

Transit Connections

Roadway Expansion Project: I-94 and Brockton Lane Interchange | Map ID: 1465500266157



Results

Transit with a Direct Connection to project:
-- NONE --

**indicates Planned Alignments*

Project Points
Project
Project Area

Transitway
Northstar Line
Light Rail, Blue Line Extension

Planned Alignments
Arterial BRT

0 1.75 3.5 7 10.5 14 Miles

Created: 6/9/2016
LandscapeRSA3

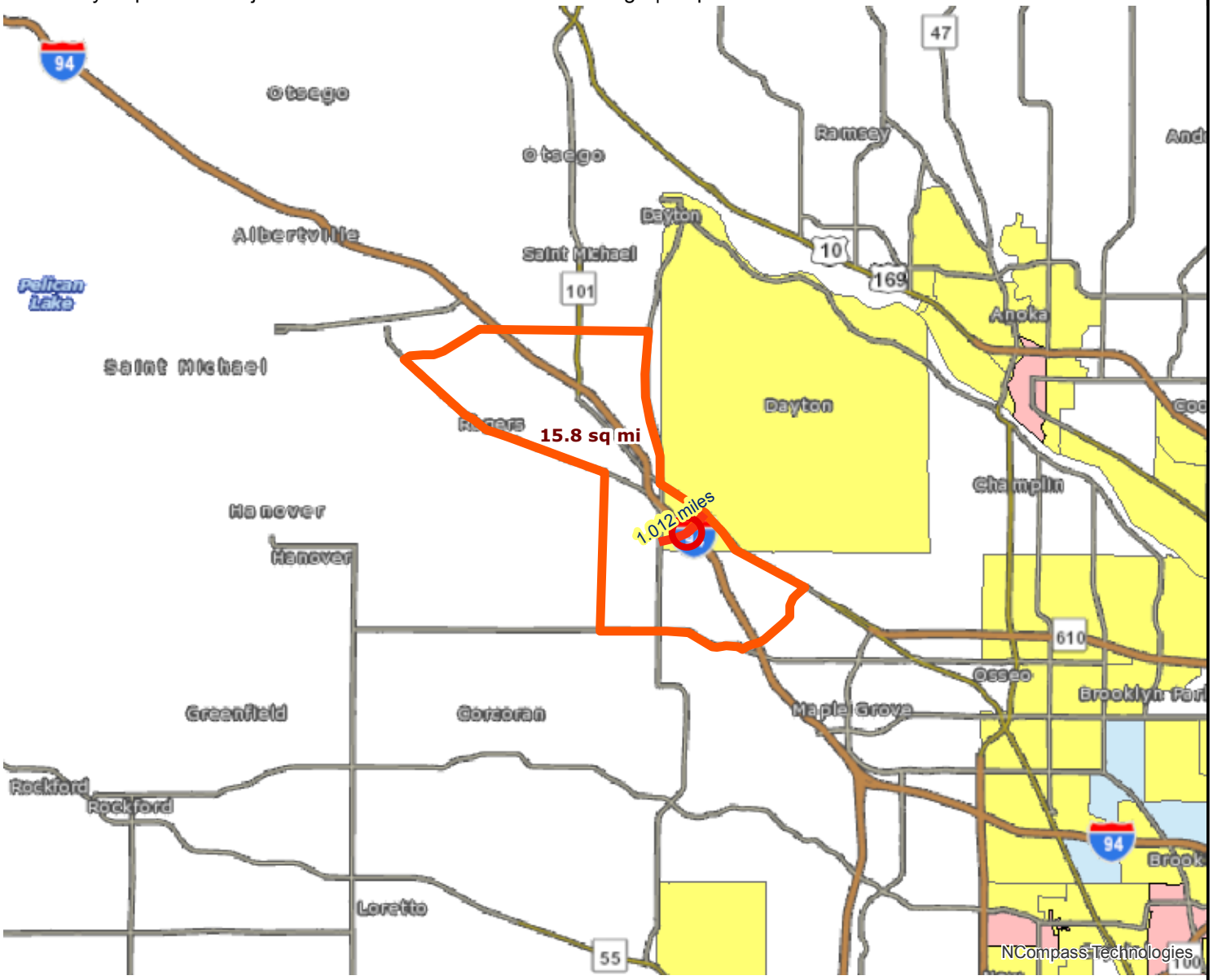
METROPOLITAN COUNCIL

Socio-Economic Conditions

Roadway Expansion Project: I-94 and Brockton Lane Interchange | Map ID: 1465500266157

Results

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



Project Points
Project
Project Area

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

0 1.75 3.5 7 10.5 14 Miles

Created: 6/9/2016
LandscapeRSA2

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

METROPOLITAN COUNCIL

402: West Ramps & Maple Grove Pkwy

Direction	All
Future Volume (vph)	2590
Total Delay / Veh (s/v)	25
CO Emissions (kg)	2.58
NOx Emissions (kg)	0.50
VOC Emissions (kg)	0.60

403: East Ramps & Maple Grove Pkwy

Direction	All
Future Volume (vph)	1765
Total Delay / Veh (s/v)	22
CO Emissions (kg)	1.93
NOx Emissions (kg)	0.38
VOC Emissions (kg)	0.45

910: CSAH 81 & Industrial Blvd/N Jct John Milless Dr

Direction	All
Future Volume (vph)	2136
Total Delay / Veh (s/v)	22
CO Emissions (kg)	2.27
NOx Emissions (kg)	0.44
VOC Emissions (kg)	0.53

920: CSAH 81/TH 101 (109) & I-94 South Ramp

Direction	All
Future Volume (vph)	3780
Total Delay / Veh (s/v)	22
CO Emissions (kg)	3.14
NOx Emissions (kg)	0.61
VOC Emissions (kg)	0.73

940: TH 101 (109) & I-94 North Ramp

Direction	All
Future Volume (vph)	3103
Total Delay / Veh (s/v)	35
CO Emissions (kg)	4.41
NOx Emissions (kg)	0.86
VOC Emissions (kg)	1.02

950: TH 101 (109) & Diamond Lake Rd

Direction	All
Future Volume (vph)	3252
Total Delay / Veh (s/v)	70
CO Emissions (kg)	8.13
NOx Emissions (kg)	1.58
VOC Emissions (kg)	1.88

402: West Ramps & Maple Grove Pkwy

Direction	All
Future Volume (vph)	2390
Total Delay / Veh (s/v)	24
CO Emissions (kg)	2.38
NOx Emissions (kg)	0.46
VOC Emissions (kg)	0.55

403: East Ramps & Maple Grove Pkwy

Direction	All
Future Volume (vph)	1665
Total Delay / Veh (s/v)	24
CO Emissions (kg)	1.89
NOx Emissions (kg)	0.37
VOC Emissions (kg)	0.44

910: CSAH 81 & Industrial Blvd/N Jct John Milless Dr

Direction	All
Future Volume (vph)	2136
Total Delay / Veh (s/v)	22
CO Emissions (kg)	2.27
NOx Emissions (kg)	0.44
VOC Emissions (kg)	0.53

920: CSAH 81/TH 101 (109) & I-94 South Ramp

Direction	All
Future Volume (vph)	3630
Total Delay / Veh (s/v)	13
CO Emissions (kg)	2.56
NOx Emissions (kg)	0.50
VOC Emissions (kg)	0.59

940: TH 101 (109) & I-94 North Ramp

Direction	All
Future Volume (vph)	2929
Total Delay / Veh (s/v)	34
CO Emissions (kg)	4.61
NOx Emissions (kg)	0.90
VOC Emissions (kg)	1.07

950: TH 101 (109) & Diamond Lake Rd

Direction	All
Future Volume (vph)	3078
Total Delay / Veh (s/v)	56
CO Emissions (kg)	7.15
NOx Emissions (kg)	1.39
VOC Emissions (kg)	1.66

5: Brockton & West 94 Ramps

Direction	All
Future Volume (vph)	1335
Total Delay / Veh (s/v)	12
Total Delay (hr)	4
Stops (#)	658
Average Speed (mph)	23
Total Travel Time (hr)	10
Distance Traveled (mi)	225
CO Emissions (kg)	1.30
NOx Emissions (kg)	0.25
VOC Emissions (kg)	0.30

19: Brockton & East 94 Ramps

Direction	All
Future Volume (vph)	795
Total Delay / Veh (s/v)	9
Total Delay (hr)	2
Stops (#)	301
Average Speed (mph)	23
Total Travel Time (hr)	5
Distance Traveled (mi)	111
CO Emissions (kg)	0.60
NOx Emissions (kg)	0.12
VOC Emissions (kg)	0.14

402: West Ramps & Maple Grove Pkwy

Direction	All
Future Volume (vph)	2590
Total Delay / Veh (s/v)	25
CO Emissions (kg)	2.58
NOx Emissions (kg)	0.50
VOC Emissions (kg)	0.60

403: East Ramps & Maple Grove Pkwy

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VOC Emissions (kg)	0.45

910: CSAH 81 & Industrial Blvd/N Jct John Milless Dr

Direction	All
Future Volume (vph)	2136
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920: CSAH 81/TH 101 (109) & I-94 South Ramp

Direction	All
Future Volume (vph)	3780
Total Delay / Veh (s/v)	22
CO Emissions (kg)	3.14
NOx Emissions (kg)	0.61
VOC Emissions (kg)	0.73

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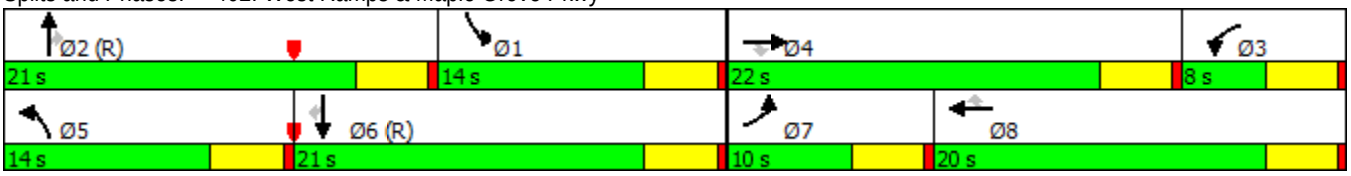
Average Speed (mph)	23
Total Travel Time (hr)	5
Distance Traveled (mi)	111
CO Emissions (kg)	0.60
NOx Emissions (kg)	0.12
VOC Emissions (kg)	0.14

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	14	21	8	22	14	21	10	20
Maximum Split (%)	21.5%	32.3%	12.3%	33.8%	21.5%	32.3%	15.4%	30.8%
Minimum Split (s)	8	20	8	20	8	20	8	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Minimum Initial (s)	4	4	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	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	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	7	51	43	21	51	0	21	31
End Time (s)	21	7	51	43	0	21	31	51
Yield/Force Off (s)	17	3	47	39	61	17	27	47
Yield/Force Off 170(s)	17	57	47	28	61	6	27	36
Local Start Time (s)	7	51	43	21	51	0	21	31
Local Yield (s)	17	3	47	39	61	17	27	47
Local Yield 170(s)	17	57	47	28	61	6	27	36

Intersection Summary	
Cycle Length	65
Control Type	Actuated-Coordinated
Natural Cycle	65
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

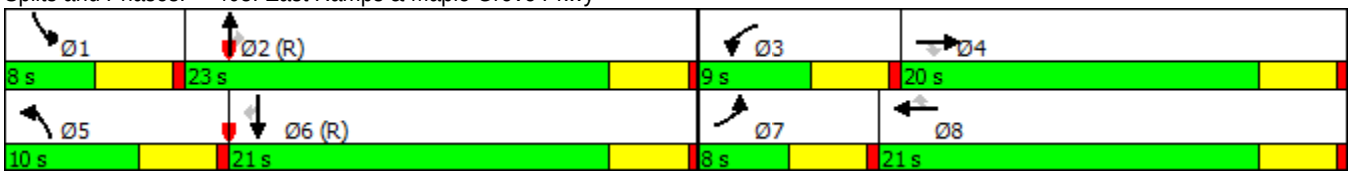
Splits and Phases: 402: West Ramps & Maple Grove Pkwy



Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	8	23	9	20	10	21	8	21
Maximum Split (%)	13.3%	38.3%	15.0%	33.3%	16.7%	35.0%	13.3%	35.0%
Minimum Split (s)	8	20	8	20	8	20	8	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Minimum Initial (s)	4	4	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	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	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	50	58	21	30	50	0	21	29
End Time (s)	58	21	30	50	0	21	29	50
Yield/Force Off (s)	54	17	26	46	56	17	25	46
Yield/Force Off 170(s)	54	6	26	35	56	6	25	35
Local Start Time (s)	50	58	21	30	50	0	21	29
Local Yield (s)	54	17	26	46	56	17	25	46
Local Yield 170(s)	54	6	26	35	56	6	25	35

Intersection Summary	
Cycle Length	60
Control Type	Actuated-Coordinated
Natural Cycle	60
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

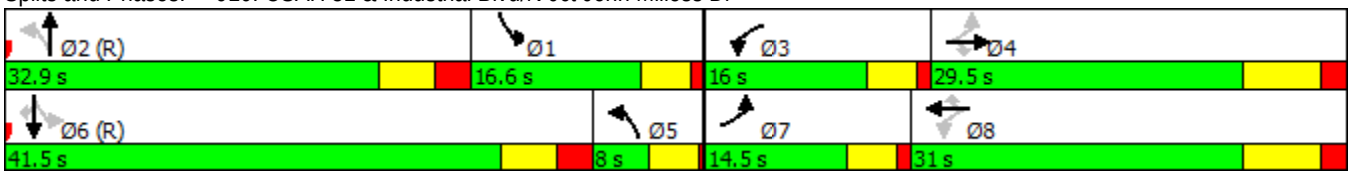
Splits and Phases: 403: East Ramps & Maple Grove Pkwy



Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBTL	NBL	SBTL	EBL	WBTL
Lead/Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Maximum Split (s)	16.6	32.9	16	29.5	8	41.5	14.5	31
Maximum Split (%)	17.5%	34.6%	16.8%	31.1%	8.4%	43.7%	15.3%	32.6%
Minimum Split (s)	16.5	31.5	16	29.5	8	31.5	14.5	20
Yellow Time (s)	3.5	4	3.5	5.5	3.5	4	3.5	5.5
All-Red Time (s)	1	2.5	1	2	0.5	2.5	1	2
Minimum Initial (s)	12	12	10	12	4	12	10	12
Vehicle Extension (s)	3.5	4	3.5	4.5	3	4	3.5	4.5
Minimum Gap (s)	0.2	0.2	0.2	2.5	3	3	0.2	2.5
Time Before Reduce (s)	0	0	0	10	0	14	0	12
Time To Reduce (s)	0	0	0	10	0	14	0	12
Walk Time (s)		7		7		7		
Flash Dont Walk (s)		18		15		18		
Dual Entry	No	Yes	No	No	No	Yes	No	No
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	32.9	0	49.5	65.5	41.5	0	49.5	64
End Time (s)	49.5	32.9	65.5	0	49.5	41.5	64	0
Yield/Force Off (s)	45	26.4	61	87.5	45.5	35	59.5	87.5
Yield/Force Off 170(s)	45	8.4	61	72.5	45.5	17	59.5	87.5
Local Start Time (s)	32.9	0	49.5	65.5	41.5	0	49.5	64
Local Yield (s)	45	26.4	61	87.5	45.5	35	59.5	87.5
Local Yield 170(s)	45	8.4	61	72.5	45.5	17	59.5	87.5

Intersection Summary	
Cycle Length	95
Control Type	Pretimed
Natural Cycle	95
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green	

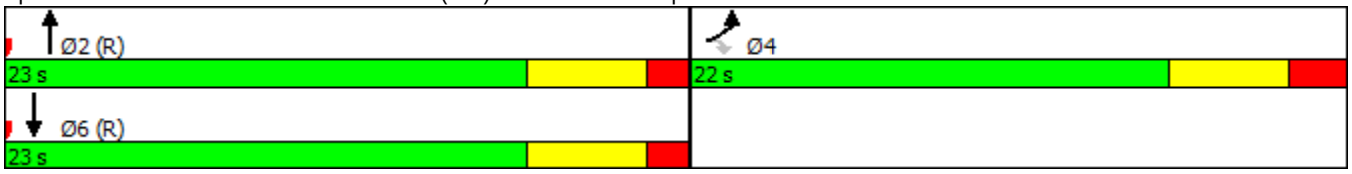
Splits and Phases: 910: CSAH 81 & Industrial Blvd/N Jct John Milless Dr



Phase Number	2	4	6
Movement	NBT	EBL	SBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	Max	Max	Max
Maximum Split (s)	23	22	23
Maximum Split (%)	51.1%	48.9%	51.1%
Minimum Split (s)	21.5	22	21.5
Yellow Time (s)	4	4	4
All-Red Time (s)	1.5	2	1.5
Minimum Initial (s)	15	8	15
Vehicle Extension (s)	4	3	4
Minimum Gap (s)	3	0.2	3
Time Before Reduce (s)	30	0	30
Time To Reduce (s)	20	0	20
Walk Time (s)			
Flash Dont Walk (s)			
Dual Entry	No	No	No
Inhibit Max	Yes	Yes	Yes
Start Time (s)	0	23	0
End Time (s)	23	0	23
Yield/Force Off (s)	17.5	39	17.5
Yield/Force Off 170(s)	17.5	39	17.5
Local Start Time (s)	0	23	0
Local Yield (s)	17.5	39	17.5
Local Yield 170(s)	17.5	39	17.5

Intersection Summary	
Cycle Length	45
Control Type	Pretimed
Natural Cycle	45
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green	

Splits and Phases: 920: CSAH 81/TH 101 (109) & I-94 South Ramp



Phase Number	2	5	6	8
Movement	NBT	NBL	SBT	WBL
Lead/Lag		Lead	Lag	
Lead-Lag Optimize		Yes	Yes	
Recall Mode	Max	Max	Max	Max
Maximum Split (s)	128	12.5	115.5	22
Maximum Split (%)	85.3%	8.3%	77.0%	14.7%
Minimum Split (s)	23.5	12.5	21.5	22
Yellow Time (s)	4	3.5	4	4
All-Red Time (s)	1.5	2	1.5	2
Minimum Initial (s)	15	7	15	8
Vehicle Extension (s)	5.5	4	5.5	3
Minimum Gap (s)	3.5	0.2	3.5	0.2
Time Before Reduce (s)	25	0	25	0
Time To Reduce (s)	20	0	20	0
Walk Time (s)	7			
Flash Dont Walk (s)	10			
Dual Entry	No	No	No	No
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	0	12.5	128
End Time (s)	128	12.5	128	0
Yield/Force Off (s)	122.5	7	122.5	144
Yield/Force Off 170(s)	112.5	7	122.5	144
Local Start Time (s)	0	0	12.5	128
Local Yield (s)	122.5	7	122.5	144
Local Yield 170(s)	112.5	7	122.5	144

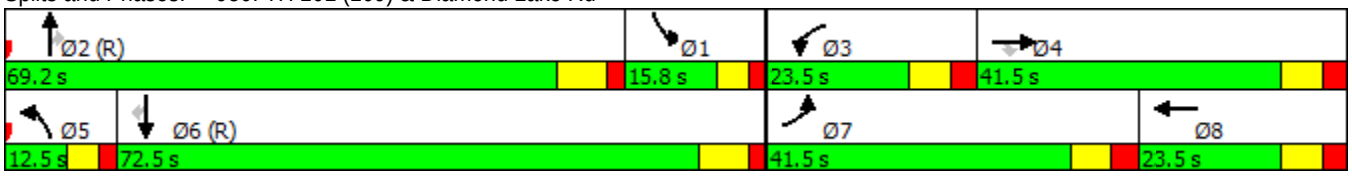
Intersection Summary	
Cycle Length	150
Control Type	Pretimed
Natural Cycle	150
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green	

Splits and Phases: 940: TH 101 (109) & I-94 North Ramp

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Maximum Split (s)	15.8	69.2	23.5	41.5	12.5	72.5	41.5	23.5
Maximum Split (%)	10.5%	46.1%	15.7%	27.7%	8.3%	48.3%	27.7%	15.7%
Minimum Split (s)	12.5	31.5	23.5	41.5	12.5	31.5	41.5	23.5
Yellow Time (s)	3.5	5.5	4.5	4.5	3.5	5.5	4.5	4.5
All-Red Time (s)	2	2	3	3	2	2	3	3
Minimum Initial (s)	7	15	10	7	7	15	7	10
Vehicle Extension (s)	4	8	3	3	3	8	3	3
Minimum Gap (s)	0.2	7.5	0.2	0.2	0.2	7.5	0.2	0.2
Time Before Reduce (s)	0	30	0	0	0	30	0	0
Time To Reduce (s)	0	30	0	0	0	30	0	0
Walk Time (s)		7		19		7	19	
Flash Dont Walk (s)		17		15		17	15	
Dual Entry	No	No	No	No	No	No	No	No
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	69.2	0	85	108.5	0	12.5	85	126.5
End Time (s)	85	69.2	108.5	0	12.5	85	126.5	0
Yield/Force Off (s)	79.5	61.7	101	142.5	7	77.5	119	142.5
Yield/Force Off 170(s)	79.5	44.7	101	127.5	7	60.5	104	142.5
Local Start Time (s)	69.2	0	85	108.5	0	12.5	85	126.5
Local Yield (s)	79.5	61.7	101	142.5	7	77.5	119	142.5
Local Yield 170(s)	79.5	44.7	101	127.5	7	60.5	104	142.5

Intersection Summary	
Cycle Length	150
Control Type	Pretimed
Natural Cycle	150
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green	

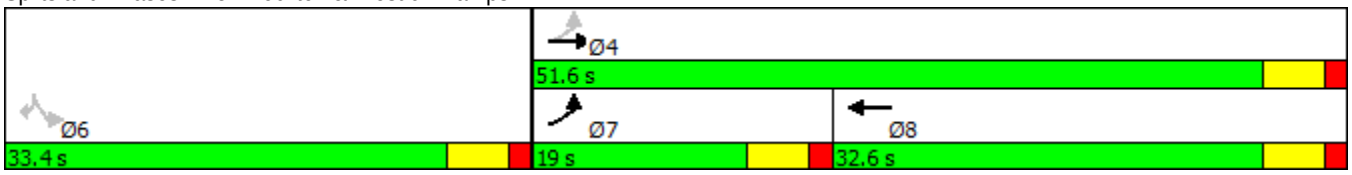
Splits and Phases: 950: TH 101 (109) & Diamond Lake Rd



Phase Number	4	6	7	8
Movement	EBTL	SBL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize			Yes	Yes
Recall Mode	None	None	None	None
Maximum Split (s)	51.6	33.4	19	32.6
Maximum Split (%)	60.7%	39.3%	22.4%	38.4%
Minimum Split (s)	32.5	32.5	15.5	32.5
Yellow Time (s)	4	4	4	4
All-Red Time (s)	1.5	1.5	1.5	1.5
Minimum Initial (s)	20	15	10	20
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7			7
Flash Dont Walk (s)	20			20
Dual Entry	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	33.4	0	33.4	52.4
End Time (s)	0	33.4	52.4	0
Yield/Force Off (s)	79.5	27.9	46.9	79.5
Yield/Force Off 170(s)	59.5	27.9	46.9	59.5
Local Start Time (s)	33.4	0	33.4	52.4
Local Yield (s)	79.5	27.9	46.9	79.5
Local Yield 170(s)	59.5	27.9	46.9	59.5

Intersection Summary		
Cycle Length		85
Control Type	Actuated-Uncoordinated	
Natural Cycle		85

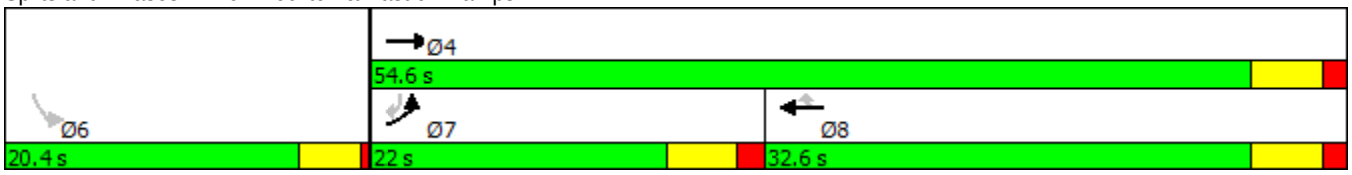
Splits and Phases: 5: Brockton & West 94 Ramps



Phase Number	4	6	7	8
Movement	EBT	SBL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize			Yes	Yes
Recall Mode	None	Min	None	None
Maximum Split (s)	54.6	20.4	22	32.6
Maximum Split (%)	72.8%	27.2%	29.3%	43.5%
Minimum Split (s)	32.5	20	20.5	32.5
Yellow Time (s)	4	3.5	4	4
All-Red Time (s)	1.5	0.5	1.5	1.5
Minimum Initial (s)	20	4	15	20
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)	7	5		7
Flash Dont Walk (s)	20	11		20
Dual Entry	Yes	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	20.4	0	20.4	42.4
End Time (s)	0	20.4	42.4	0
Yield/Force Off (s)	69.5	16.4	36.9	69.5
Yield/Force Off 170(s)	49.5	16.4	36.9	49.5
Local Start Time (s)	20.4	0	20.4	42.4
Local Yield (s)	69.5	16.4	36.9	69.5
Local Yield 170(s)	49.5	16.4	36.9	49.5

Intersection Summary	
Cycle Length	75
Control Type	Actuated-Uncoordinated
Natural Cycle	75

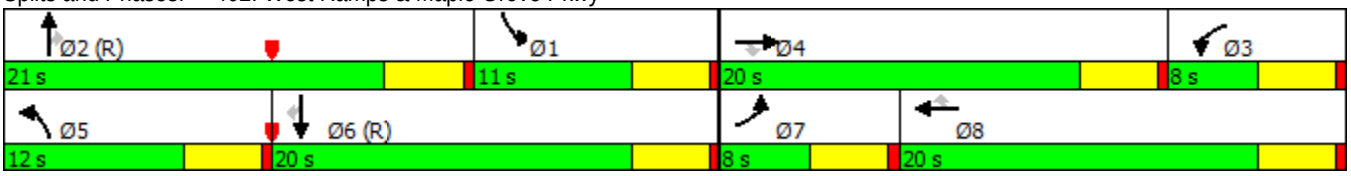
Splits and Phases: 19: Brockton & East 94 Ramps



Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	11	21	8	20	12	20	8	20
Maximum Split (%)	18.3%	35.0%	13.3%	33.3%	20.0%	33.3%	13.3%	33.3%
Minimum Split (s)	8	20	8	20	8	20	8	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Minimum Initial (s)	4	4	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	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	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	9	48	40	20	48	0	20	28
End Time (s)	20	9	48	40	0	20	28	48
Yield/Force Off (s)	16	5	44	36	56	16	24	44
Yield/Force Off 170(s)	16	54	44	25	56	5	24	33
Local Start Time (s)	9	48	40	20	48	0	20	28
Local Yield (s)	16	5	44	36	56	16	24	44
Local Yield 170(s)	16	54	44	25	56	5	24	33

Intersection Summary	
Cycle Length	60
Control Type	Actuated-Coordinated
Natural Cycle	60
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

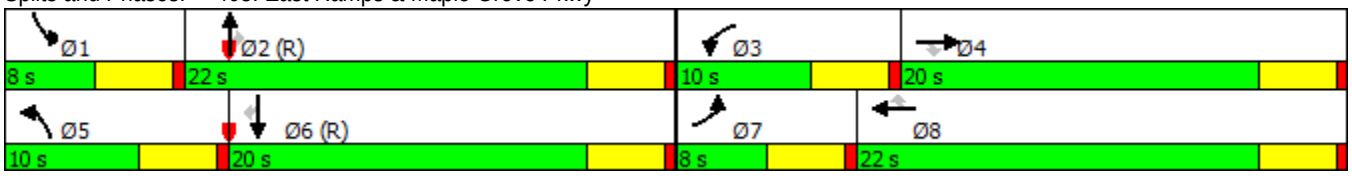
Splits and Phases: 402: West Ramps & Maple Grove Pkwy



Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	8	22	10	20	10	20	8	22
Maximum Split (%)	13.3%	36.7%	16.7%	33.3%	16.7%	33.3%	13.3%	36.7%
Minimum Split (s)	8	20	8	20	8	20	8	20
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Minimum Initial (s)	4	4	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	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	No	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	50	58	20	30	50	0	20	28
End Time (s)	58	20	30	50	0	20	28	50
Yield/Force Off (s)	54	16	26	46	56	16	24	46
Yield/Force Off 170(s)	54	5	26	35	56	5	24	35
Local Start Time (s)	50	58	20	30	50	0	20	28
Local Yield (s)	54	16	26	46	56	16	24	46
Local Yield 170(s)	54	5	26	35	56	5	24	35

Intersection Summary	
Cycle Length	60
Control Type	Actuated-Coordinated
Natural Cycle	60
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

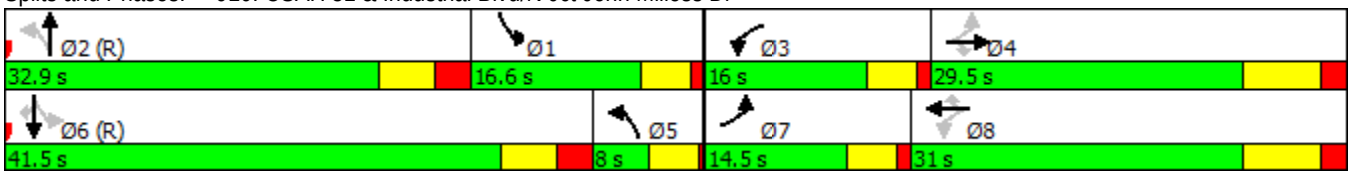
Splits and Phases: 403: East Ramps & Maple Grove Pkwy



Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBTL	NBL	SBTL	EBL	WBTL
Lead/Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Maximum Split (s)	16.6	32.9	16	29.5	8	41.5	14.5	31
Maximum Split (%)	17.5%	34.6%	16.8%	31.1%	8.4%	43.7%	15.3%	32.6%
Minimum Split (s)	16.5	31.5	16	29.5	8	31.5	14.5	20
Yellow Time (s)	3.5	4	3.5	5.5	3.5	4	3.5	5.5
All-Red Time (s)	1	2.5	1	2	0.5	2.5	1	2
Minimum Initial (s)	12	12	10	12	4	12	10	12
Vehicle Extension (s)	3.5	4	3.5	4.5	3	4	3.5	4.5
Minimum Gap (s)	0.2	0.2	0.2	2.5	3	3	0.2	2.5
Time Before Reduce (s)	0	0	0	10	0	14	0	12
Time To Reduce (s)	0	0	0	10	0	14	0	12
Walk Time (s)		7		7		7		
Flash Dont Walk (s)		18		15		18		
Dual Entry	No	Yes	No	No	No	Yes	No	No
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	32.9	0	49.5	65.5	41.5	0	49.5	64
End Time (s)	49.5	32.9	65.5	0	49.5	41.5	64	0
Yield/Force Off (s)	45	26.4	61	87.5	45.5	35	59.5	87.5
Yield/Force Off 170(s)	45	8.4	61	72.5	45.5	17	59.5	87.5
Local Start Time (s)	32.9	0	49.5	65.5	41.5	0	49.5	64
Local Yield (s)	45	26.4	61	87.5	45.5	35	59.5	87.5
Local Yield 170(s)	45	8.4	61	72.5	45.5	17	59.5	87.5

Intersection Summary	
Cycle Length	95
Control Type	Pretimed
Natural Cycle	95
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green	

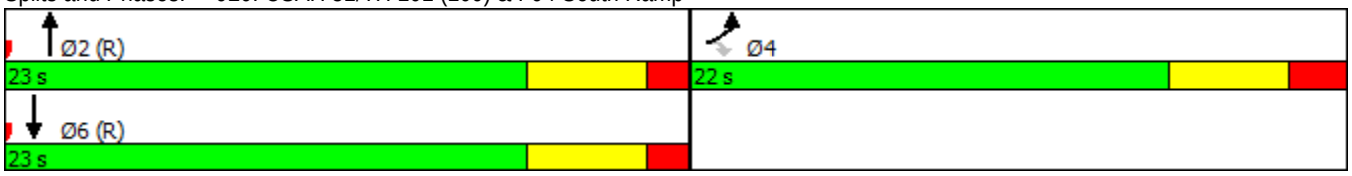
Splits and Phases: 910: CSAH 81 & Industrial Blvd/N Jct John Milless Dr



Phase Number	2	4	6
Movement	NBT	EBL	SBT
Lead/Lag			
Lead-Lag Optimize			
Recall Mode	Max	Max	Max
Maximum Split (s)	23	22	23
Maximum Split (%)	51.1%	48.9%	51.1%
Minimum Split (s)	21.5	22	21.5
Yellow Time (s)	4	4	4
All-Red Time (s)	1.5	2	1.5
Minimum Initial (s)	15	8	15
Vehicle Extension (s)	4	3	4
Minimum Gap (s)	3	0.2	3
Time Before Reduce (s)	30	0	30
Time To Reduce (s)	20	0	20
Walk Time (s)			
Flash Dont Walk (s)			
Dual Entry	No	No	No
Inhibit Max	Yes	Yes	Yes
Start Time (s)	0	23	0
End Time (s)	23	0	23
Yield/Force Off (s)	17.5	39	17.5
Yield/Force Off 170(s)	17.5	39	17.5
Local Start Time (s)	0	23	0
Local Yield (s)	17.5	39	17.5
Local Yield 170(s)	17.5	39	17.5

Intersection Summary	
Cycle Length	45
Control Type	Pretimed
Natural Cycle	45
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green	

Splits and Phases: 920: CSAH 81/TH 101 (109) & I-94 South Ramp



Phase Number	2	5	6	8
Movement	NBT	NBL	SBT	WBL
Lead/Lag		Lead	Lag	
Lead-Lag Optimize		Yes	Yes	
Recall Mode	Max	Max	Max	Max
Maximum Split (s)	118	12.5	105.5	22
Maximum Split (%)	84.3%	8.9%	75.4%	15.7%
Minimum Split (s)	23.5	12.5	21.5	22
Yellow Time (s)	4	3.5	4	4
All-Red Time (s)	1.5	2	1.5	2
Minimum Initial (s)	15	7	15	8
Vehicle Extension (s)	5.5	4	5.5	3
Minimum Gap (s)	3.5	0.2	3.5	0.2
Time Before Reduce (s)	25	0	25	0
Time To Reduce (s)	20	0	20	0
Walk Time (s)	7			
Flash Dont Walk (s)	10			
Dual Entry	No	No	No	No
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	0	12.5	118
End Time (s)	118	12.5	118	0
Yield/Force Off (s)	112.5	7	112.5	134
Yield/Force Off 170(s)	102.5	7	112.5	134
Local Start Time (s)	0	0	12.5	118
Local Yield (s)	112.5	7	112.5	134
Local Yield 170(s)	102.5	7	112.5	134

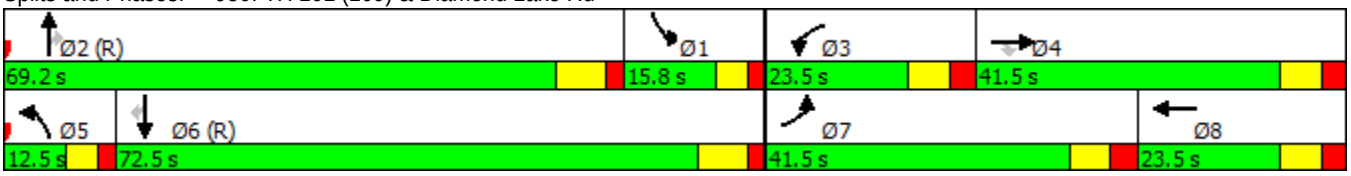
Intersection Summary	
Cycle Length	140
Control Type	Pretimed
Natural Cycle	140
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green	

Splits and Phases: 940: TH 101 (109) & I-94 North Ramp

Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Maximum Split (s)	15.8	69.2	23.5	41.5	12.5	72.5	41.5	23.5
Maximum Split (%)	10.5%	46.1%	15.7%	27.7%	8.3%	48.3%	27.7%	15.7%
Minimum Split (s)	12.5	31.5	23.5	41.5	12.5	31.5	41.5	23.5
Yellow Time (s)	3.5	5.5	4.5	4.5	3.5	5.5	4.5	4.5
All-Red Time (s)	2	2	3	3	2	2	3	3
Minimum Initial (s)	7	15	10	7	7	15	7	10
Vehicle Extension (s)	4	8	3	3	3	8	3	3
Minimum Gap (s)	0.2	7.5	0.2	0.2	0.2	7.5	0.2	0.2
Time Before Reduce (s)	0	30	0	0	0	30	0	0
Time To Reduce (s)	0	30	0	0	0	30	0	0
Walk Time (s)		7		19		7	19	
Flash Dont Walk (s)		17		15		17	15	
Dual Entry	No	No	No	No	No	No	No	No
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	69.2	0	85	108.5	0	12.5	85	126.5
End Time (s)	85	69.2	108.5	0	12.5	85	126.5	0
Yield/Force Off (s)	79.5	61.7	101	142.5	7	77.5	119	142.5
Yield/Force Off 170(s)	79.5	44.7	101	127.5	7	60.5	104	142.5
Local Start Time (s)	69.2	0	85	108.5	0	12.5	85	126.5
Local Yield (s)	79.5	61.7	101	142.5	7	77.5	119	142.5
Local Yield 170(s)	79.5	44.7	101	127.5	7	60.5	104	142.5

Intersection Summary	
Cycle Length	150
Control Type	Pretimed
Natural Cycle	150
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of 1st Green	

Splits and Phases: 950: TH 101 (109) & Diamond Lake Rd



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
	MN 101 and Maple Grove Pkwy	S Diamond Lake Rd intersectinon, MN 101 Ramps, and Maple Grove Pkwy Ramps			Maple Grove/Rogers	1/1/2013	12/31/2015

Description of Proposed Work: New Brockton Interchange

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	1								1
	Personal Injury (PI)	A									
		B	2					1			3
		C	15	1	3	3	1	1	1	1	26
	Property Damage	PD	68	12	4	7	6	1			98
% Change in Crashes	Fatal	F	-2%								
	PI	A									
		B	-2%					-2%			
		C	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	
	Property Damage	PD	-2%	-2%	-2%	-2%	-2%	-2%			
Change in Crashes = No. of crashes **x** % change in crashes	Fatal	F	**-0.02**								**-0.02**
	PI	A									
		B	**-0.04**					**-0.02**			**-0.06**
		C	**-0.30**	**-0.02**	**-0.06**	**-0.06**	**-0.02**	**-0.02**	**-0.02**	**-0.02**	**-0.52**
	Property Damage	PD	**-1.36**	**-0.24**	**-0.08**	**-0.14**	**-0.12**	**-0.02**			**-1.96**

*Use Crash Modification Factors Clearinghouse

Year (Safety Improvement Construction): **2020**

Project Cost (exclude Right of Way): **$ 13,989,551**

Right of Way Costs (optional):

Traffic Growth Factor: **3%**

Capital Recovery

1. **Discount Rate**: **4.5%**
2. **Project Service Life (n)**: **30**

Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit
F	-0.02	-0.01	$ 1,400,000	$ 9,342
A			$ 570,000	
B	-0.06	-0.02	$ 170,000	$ 3,403
C	-0.52	-0.17	$ 83,000	$ 14,400
PD	-1.96	-0.65	$ 7,600	$ 4,970
Total				$ 32,115

B/C= 0.06

Using present worth values,

B= $ 787,360

C= $ 13,989,551

See "Calculations" sheet for amortization.

Office of Traffic, Safety and Technology
September 2014

MN 101 Crash Analysis
Crash Analysis
July 2016

	Intersections	Total Number of Accidents	Years of Data	ADT*	Calculated Crash Rate (Million Entering Vehicles)	Type of Intersection: Vol < 15K ADT; Speed < 45 mph Low Low	Average Crash Rate for Similar Intersections, Ra	Vehicle Exposure During Study Period, m
Existing	MN 101/South Diamond Lake Rd	79	3	60600	**1.20**	Signalized; High Volume, Low Speed	0.68	66.36
Future	MN 101/South Diamond Lake Rd	75	3	57500	**1.20**	Signalized; High Volume, Low Speed	0.68	62.96
Existing	MN 101/North 94 Ramps	13	3	44800	**0.27**	Signalized; High Volume, Low Speed	0.68	49.06
Future	MN 101/North 94 Ramps	11	3	41700	**0.25**	Signalized; High Volume, Low Speed	0.68	45.66
Existing	MN 101/South 94 Ramps	12	3	54750	**0.21**	Signalized; High Volume, Low Speed	0.68	59.95
Future	MN 101/South 94 Ramps	11	3	52250	**0.20**	Signalized; High Volume, Low Speed	0.68	57.21
Existing	Maple Grove Parkway/West 94 Ramp	20	3	20700	**0.89**	Signalized; High Volume, Low Speed	0.68	22.67
Future	Maple Grove Parkway/West 94 Ramp	17	3	17700	**0.88**	Signalized; High Volume, Low Speed	0.68	19.38
Existing	Maple Grove Parkway/East 94 Ramp	12	3	26575	**0.42**	Signalized; High Volume, Low Speed	0.68	29.10
Future	Maple Grove Parkway/East 94 Ramp	10	3	23575	**0.39**	Signalized; High Volume, Low Speed	0.68	25.81
	New Inerchange							
Future	Brockton and West 94 Ramps	5	3	7000	**0.66**	Signalized; High Volume, Low Speed	0.68	7.67
Future	Brockton and East 94 Ramps	4	3	6625	**0.56**	Signalized; High Volume, Low Speed	0.68	7.25

Notes:
* ADT: used the total volume at each leg of the intersection divided by two (to only account for the vehicles entering the intersection)

A total of 12 crashes will be reduced from this project, however, 9 additional crashes will occur along Brockton interchange, thus reducing the crashes reduced to 3 crashes.

Represents the Minnesota Average Crash Rates for the Metro Area similar roadway segments or intersections.

Crash Reduction Methodology

Brockton Interchange – **Methodology in Red**

Question: For the Roadway Expansion application, how do I complete the Safety measure for a project that involves the construction of a new roadway? More specifically, there isn't a crash modification factor that can be used for the construction of a new roadway in the HSIP methodology.
Answer: With the construction of a new roadway, an analysis should be conducted to determine the parallel routes that will be affected by the project. The crash reduction factor can be calculated using the following methodology:

- Identify the parallel roadway(s) that will be affected by the project.
    - **MN 101 Interchange and S Diamond Lake Rd intersection and Maple Grove Pkwy Interchange with I-94**
- Using the crash data for the most recent three years, calculate the existing crash rate for the parallel roadway(s).
    - **Existing crash rates were calculated**
- Identify the daily traffic volume that will be relocated from the parallel roadway(s) to the new roadway.
    - **Approximately 6500 to 7000 vehicles (based on year 2014 volumes)**
- Calculate the number of crashes related to the relocated traffic volume using the existing crash rate for the parallel roadway(s). For instance, if 5,000 vehicles are expected to relocate from the existing parallel roadway to the new roadway, calculate the number of crashes related to the 5,000 vehicles.
    - **It was calculated that 12 crashes will be eliminated by reducing the volume at the study intersections.**
- Identify the average crash rate for the new roadway using MnDOT's crash rates by roadway type. Using the average crash rate for the new roadway, calculate the number of crashes related to the relocated traffic (such as the 5,000 vehicles).
    - **The additional 6500-7000 vpd at the new Brockton Ramps are expected to add 9 crashes to the segment.**
- Calculate the crash reduction factor using the existing number of crashes on the existing parallel roadway compared to the new roadway, due to the relocated traffic volume (such as the 5,000 vehicles).
    - **It is estimated that a total of 12 crashes will be reduced, however 9 new crashes are estimated to occur at the new interchange intersections, thus a reduced crash total of 3 crashes. The crash reduction factor is 3/136 = 2%**
- The calculated crash reduction factor should be used in the HSIP B/C worksheet.

MNTH 101 from approx. 550' north and south of South Diamond Lake Road (2013 - 2015)

SYS	NUM	REF_POINT	GIS_ROUTE	GIS_TM	RD_DIR	ELEM	RELY	INV	R_U	ATP	CO	CITY	DOW	MONTH
03	00000101	039+00.849	0300000101	39.765	S		2	3	U	PROPERTY DAMAGE MOTOR VEHICLE CRASH. NO INJURIES. V1 BEHIND V2, BOTH VEHICLES SOUTHBOUND ON MAIN S	27	3250	6-Fri	6
03	00000101	039+00.864	0300000101	39.780	N		A	3	U	DRIVER 1 STATED SHE WAS NB ON HWY 101 AND WAS UNAB	27	3250	3-Tue	8
03	00000101	039+00.869	0300000101	39.785	S		A	3	U	INSIDE A SILVER POUCH IN KIRSTENS PURSE ON THE P	27	3250	5-Thu	7
03	00000101	039+00.871	0300000101	39.787	N		1	3	U	D1 WAS STOPPED AT RED LIGHT NB IN THE LEFT TURN LANE. D1S FOOT SLIPPED OFF THE BRAKE CAUSING HIM T'	27	3250	5-Thu	9
03	00000101	039+00.872	0300000101	39.788	S		B	3	U	DRIVER V-1 SOUTHBOUND 101 INSIDE LANE MAKING LEFT	27	3250	6-Fri	4
03	00000101	039+00.872	0300000101	39.788	E		A	3	U	DRIVER 2 STATED HE TRAVELING NORTH ON MAIN ST AND	27	3250	5-Thu	4
03	00000101	039+00.872	0300000101	39.788	Z		B	0	U		27	3250	6-Fri	7
03	00000101	039+00.872	0300000101	39.788	Z		A	3	U	VEH #1 WAS MAKING LEFT TURN ON A GREEN ARROW FROM	27	3250	6-Fri	8
03	00000101	039+00.872	0300000101	39.788	Z		A	3	U	VEHICLE # 1 AND VEHICLE # 2 IN OUTSIDE TURN LANE O	27	3250	2-Mon	8
03	00000101	039+00.872	0300000101	39.788	Z		A	3	U	DRIVER OF VEH #1 STATED THE CAR IN FRONT OF HIM WA	27	3250	5-Thu	10
03	00000101	039+00.872	0300000101	39.788	Z		A	3	U	BOTH VEHICLES WERE TRAVELING NORTH ON HWY 101. DRI	27	3250	5-Thu	12
03	00000101	039+00.872	0300000101	39.788	Z		A	3	U	DRIVER VEHICLE-1 WAS NORTHBOUND 101 IN THE 3RD LAN	27	3250	7-Sat	1
03	00000101	039+00.872	0300000101	39.788	N		A	3	U	DRIVER VEHICLE-1 STOPPED IN LEFT LANE OF NORTHBOUN	27	3250	1-Sun	1
03	00000101	039+00.872	0300000101	39.788	N		A	3	U	UNIT 2 AND 1 WERE TRAVELING NB MAIN ST TO GO EB S	27	3250	5-Thu	2
03	00000101	039+00.872	0300000101	39.788	N		A	3	U	UNIT 2 WAS STOPPED FOR RED LIGHT AT INTERSECTION.	27	3250	5-Thu	2
03	00000101	039+00.872	0300000101	39.788	Z		A	3	U	VEH #1 STATED THAT SHE WAS TRAVELING WB ON S. DIAM	27	3250	6-Fri	2
03	00000101	039+00.872	0300000101	39.788	N		A	3	U	UNIT 2 WAS YIELDING FOR TRAFFIC WHEN UNIT 1 REAR-E	27	3250	1-Sun	2
03	00000101	039+00.872	0300000101	39.788	N		A	3	U	DRIVER VEHICLE-1 TAKING A LEFT SB MAIN STREET TO D	27	3250	4-Wed	4
03	00000101	039+00.872	0300000101	39.788	S		A	3	U	OFFICER WAS DISPATCHED TO THE INTERSECTION OF SOUT	27	3250	5-Thu	7
03	00000101	039+00.872	0300000101	39.788	Z		A	3	U	VEHICLE 2 REAR ENDED VEHICLE 1 AT LOW SPEED. THE D	27	3250	6-Fri	7
03	00000101	039+00.872	0300000101	39.788	N		A	3	U	#NAME?	27	3250	3-Tue	9
03	00000101	039+00.872	0300000101	39.788	Z		A	3	U	DRIVER V-1 NB IN THE RIGHT TURN LANE TO GO WB DIAM	27	3250	4-Wed	9
03	00000101	039+00.872	0300000101	39.788	N		B	3	U	UNIT 1 AND 2 WERE TRAVELING NB (GREEN LIGHT FOR NB	27	3250	6-Fri	10
03	00000101	039+00.872	0300000101	39.788	S		A	3	U	VEHICLE 1 WHICH WAS A FORD ESCORT REAR ENDED THE T	27	3250	4-Wed	10
03	00000101	039+00.872	0300000101	39.788	S		A	3	U	OFFICER RESPONDED TO A TWO VEHICLE PROPERTY DAMAGE	27	3250	3-Tue	11
03	00000101	039+00.872	0300000101	39.788	S		A	3	U	S TOW FOR V1 TO REMOVE IT FROM SNOW BANK.	27	3250	6-Fri	11
03	00000101	039+00.872	0300000101	39.788	N		A	3	U	OFFICER RESPONDED TO A CALL OF A PROPERTY DAMAGE A	27	3250	6-Fri	11
03	00000101	039+00.872	0300000101	39.788	E		A	3	U	UNIT 2 AND WITNESS VEHICLE WERE STOPPED FOR A RED	27	3250	1-Sun	11
03	00000101	039+00.872	0300000101	39.788	S		A	3	U	DRIVER OF VEHICLE 2 STATED SHE WAS TRAVELING SB ON	27	3250	4-Wed	12
03	00000101	039+00.872	0300000101	39.788	S		1	3	U	PROPERTY DAMAGE MOTOR VEHICLE CRASH. TWO VEHICLES. NO INJURIES, NO TOWS. V1 NORTHBOUND ON MAIN STRE	27	3250	4-Wed	2
03	00000101	039+00.872	0300000101	39.788	W		1	3	U	VEHICLE 1 WAS STOPPED BEHIND VEHICLE 2 AT A RED LIGHT. DRIVER 1 MISTOOK A GREEN LIGHT FOR A DIFFERE	27	3250	5-Thu	6
03	00000101	039+00.872	0300000101	39.788	Z		1	3	U	DRIVER OF VEHICLE 1 WAS STOPPED IN TRAFFIC FROM RED LIGHT AT SOUTH DIAMOND LAKE ROAD. IT WAS RAINI	27	3250	1-Sun	8
03	00000101	039+00.872	0300000101	39.788	Z		1	3	U	VEHICLE # 2 AND VEHICLE # 1 IN TURN LANE ON SOUTH DIMAOND LAKE ROAD TO MAKE A LEFT TURN ON STATE HI	27	3250	3-Tue	8
03	00000101	039+00.872	0300000101	39.788	W		1	3	U	DRIVER 1 STATED HE WAS TRAVELING WESTBOUND ON 141ST CROSSING OVER THE INTERSECTION OF JAMES ROAD.	27	3250	5-Thu	9
03	00000101	039+00.872	0300000101	39.788	S		1	3	U	UNIT 2 SB MAIN ST/H101 IN TURN LANE TO WB SDLR. UNIT 2 STOPPED IN LANE (YIELD SIGN) AS DRIVER WAS Y	27	3250	1-Sun	11
03	00000101	039+00.876	0300000101	39.792	Z		A	3	U	VEHICLE 1, REAR-ENDED VEHICLE 2 WHILE STOPPED FOR	27	3250	1-Sun	3
03	00000101	039+00.877	0300000101	39.793	S		1	3	U	DISPATCHED TO A PROPERTY DAMAGE MOTOR VEHICLE CRASH. THREE VEHICLES SOUTHBOUND ON MAIN STREET. V3	27	3250	4-Wed	7
03	00000101	039+00.886	0300000101	39.802	S		1	3	U	DRIVER 2 WAS STOPPED ON MAIN STREET AT THE INTERSECTION OF SOUTH DIAMOND LAKE ROAD AT A RED LIGHT.	27	3250	6-Fri	11
03	00000101	039+00.887	0300000101	39.803	Z		A	3	U	DRIVER 2 STATED HE WAS TRAVELING NORTH ON HWY 101	27	3250	7-Sat	1
03	00000101	039+00.887	0300000101	39.803	Z		A	3	U	DRIVER 1 STATED HE WAS MAKING A RIGHT TURN FROM DI	27	3250	6-Fri	2
03	00000101	039+00.887	0300000101	39.803	S		1	3	U	OFFICERS RESPONDED TO A CALL OF A PROPERTY DAMAGE CRASH INVOLVING AN SUV (VEHICLE 1) VS. A SEMI AND	27	3250	6-Fri	2
03	00000101	039+00.887	0300000101	39.803	S		2	3	U	VEHICLE TWO WAS STOPPED IN TRAFFIC ON SOUTHBOUND MAIN STREET NORTH OF DIAMOND LAKE RD SOUTH. VEHICL	27	3250	4-Wed	6
03	00000101	039+00.887	0300000101	39.803	S		1	3	U	DRIVER 2 WAS AT A COMPLETE STOP ON THE SOUTHBOUND LANE OF MAIN STREET WAITING TO CROSS OVER SOUTH D	27	3250	1-Sun	8
03	00000101	039+00.887	0300000101	39.803	S		1	3	U	VEHICLE 2 WAS SOUTH ON MAIN STREET STOPPED AT THE SEMAPHORE AT THE INTERSECTION OF DIAMOND LAKE ROA	27	3250	4-Wed	9
03	00000101	039+00.887	0300000101	39.803	E		1	3	U	TWO VEHICLE PROPERTY DAMAGE ACCIDENT. REAR-END COLLISION. VEHICLE ONE WAS EASTBOUND IN THE FAR RIGH	27	3250	4-Wed	10
03	00000101	039+00.887	0300000101	39.803	Z		1	0	U		27	3250	2-Mon	10
03	00000101	039+00.887	0300000101	39.803	S		1	3	U	VEHICLES 1 AND 2 WERE BOTH TRAVELLING SOUTH ON MAIN STREET AND HAD JUST PASSED THROUGH THE INTERSEC	27	3250	6-Fri	12
03	00000101	039+00.887	0300000101	39.803	E		1	3	U	BOTH VEHICLES WERE EAST ON DIAMOND LAKE ROAD SOUTH IN THE RIGHT TURN LANE AT THE MAIN STREET INTERS	27	3250	5-Thu	12
03	00000101	039+00.887	0300000101	39.803	S		1	3	U	DRIVER 1 STATED HE WAS TRAVELING SOUTH ON HWY 101/MAIN ST APPROACHING S DIAMOND LAKE RD. HE STATED	27	3250	7-Sat	12
03	00000101	039+00.889	0300000101	39.805	W		3	3	U	BOTH VEHICLES WERE DRIVING SOUTHBOUND HIGHWAY TURNING WESTBOUND ONTO DIAMOND LAKE ROAD SOUTH. THEY	27	3250	5-Thu	7
03	00000101	039+00.891	0300000101	39.807	N		1	3	U	DRIVER 1 WAS DRIVING NORTH ON MAIN STREET. DRIVER 2 WAS SOUTH ON MAIN STREET AT A RED LIGHT WAITIN	27	3250	5-Thu	2
03	00000101	039+00.910	0300000101	39.826	N		B	3	U	DRIVER V-1 NB MAIN STREET COMING UP TO OVERPASS WH	27	3250	4-Wed	12
03	00000101	039+00.947	0300000101	39.863	N		B	3	U	DRIVER VEHICLE-1 NB MAIN STREET JUST NORTH OF DIAM	27	3250	6-Fri	8
03	00000101	039+00.948	0300000101	39.864	N		B	3	U	OFFICER RESPONDED TO A TWO VEHICLE PROPERTY DAMAGE	27	3250	2-Mon	10
03	00000101	039+00.977	0300000101	39.893	S		1	3	U	UNIT 1 WAS SB H101 APPROX. 500 FT N OF SDLR CENTER LANE. UNIT 2 TRAVELING SAME DIRECTION R LANE. U1	27	3250	2-Mon	4
03	00000101	040+00.000	0300000101	39.916	S		2	3	U	DRIVER VEHICLE-1 IN LANE ONE TO GO SB 101 STOPPING IN TRAFFIC. DRIVER VEHICLE-2 IN LANE ONE TRIED	27	3250	7-Sat	10

																		PERSON1							
DAY	YEAR	TIME	SEV	NUM_KILLED	NUM_VEH	JUNC	SL	TYPE	DIAG	LOC1	TCD	LIT	WTHR1	WTHR2	SURF	CHAR	DESGN	ACC_NUM	VTYPE	DIR	ACT	FAC1	FAC2	POSN	INJ	EQP
12	2015	1306	N	0	2	1	40	1	1	1	98	1	1	0	1	2	3	151630093	1	5	1	15	0	1	N	4
6	2013	2012	N	0	2	7	40	1	1	1	1	3	3	0	2	1	3	132190007	3	1	1	15	0	1	N	99
31	2014	2047	N	0	2	1	40	1	1	1	98	3	1	1	1	1	5	142120151	1	5	1	4	15	1	N	4
3	2015	1623	N	0	2	4	40	1	1	1	1	1	1	1	1	2	1	152460197	1	1	1	1	1	1	N	4
19	2013	1108	C	0	2	7	40	1	3	1	1	1	1	1	2	1	5	131090141	1	8	6	50	1	1	C	4
25	2013	1757	N	0	2	7	40	1	1	1	1	1	1	0	1	1	5	131150106	1	2	1	15	0	1	N	99
5	2013	2230	N	0	2	7	50	1	3	0	1	4	1	0	1	0	0	132190089	1	1	1	0	0	1	N	4
9	2013	1651	C	0	3	4	35	1	3	1	1	1	1	0	1	1	3	132210116	3	4	6	1	0	1	C	99
19	2013	1624	C	0	2	4	55	1	1	1	1	1	1	0	1	1	3	132310112	3	1	6	2	0	1	N	4
3	2013	1735	N	0	2	7	40	1	1	1	1	1	1	2	1	2	3	132760156	1	1	1	4	0	1	N	4
5	2013	0737	N	0	2	7	40	1	1	1	98	4	1	0	5	2	3	133390054	1	1	1	46	0	1	N	4
11	2014	1247	N	0	2	4	40	10	1	1	1	1	2	2	2	1	5	140110081	4	1	17	11	11	1	N	4
26	2014	1129	N	0	2	4	45	10	1	1	1	1	7	2	5	4	5	140260095	3	1	11	1	50	1	N	4
13	2014	1716	N	0	2	7	40	1	2	1	5	1	1	1	1	5	4	140440151	1	2	1	1	1	1	N	4
20	2014	1439	N	0	2	4	55	1	1	1	1	1	4	0	4	1	3	140510129	35	1	11	1	0	1	N	4
21	2014	1343	C	0	3	4	50	1	5	1	1	1	7	2	5	1	7	140520261	1	7	6	1	1	1	C	4
23	2014	1249	N	0	2	7	40	1	1	1	5	1	1	1	5	2	3	140540220	34	2	5	3	21	1	N	4
16	2014	1717	C	0	2	4	45	1	3	4	1	3	4	4	5	2	5	141060202	1	2	4	5	2	1	N	4
24	2014	1606	C	0	2	4	40	1	1	1	1	1	2	2	1	1	3	142050138	3	5	1	15	4	1	C	4
25	2014	1907	N	0	2	4	45	1	1	1	1	1	2	2	1	1	3	142060148	1	5	1	1	1	1	N	99
2	2014	0914	N	0	2	4	40	1	1	1	1	1	1	1	1	5	3	142450033	3	1	9	4	1	1	N	4
3	2014	1112	N	0	2	4	40	11	3	1	1	1	3	3	2	1	5	142460092	1	2	4	2	5	1	N	4
10	2014	1315	N	0	2	4	45	1	1	1	1	1	1	1	1	2	3	142830100	1	1	14	8	21	1	N	4
29	2014	1758	K	1	2	4	55	10	1	1	1	3	1	2	1	1	1	143030005	1	5	1	3	4	1	K	4
11	2014	0457	N	0	2	4	40	1	2	1	1	4	4	4	5	3	5	143150026	2	5	1	10	15	1	N	4
14	2014	0650	N	0	2	4	40	1	1	1	1	2	1	0	1	1	3	143180096	1	5	14	8	3	1	N	4
21	2014	1553	N	0	2	4	40	1	5	1	1	1	2	2	2	1	3	143250141	1	1	1	15	99	1	N	4
30	2014	0825	N	0	2	4	35	90	90	1	1	1	2	2	1	1	3	143340067	1	5	1	18	21	1	N	4
3	2014	1735	C	0	2	7	40	1	1	1	1	4	2	0	1	1	3	143370143	3	5	1	4	90	1	N	4
11	2015	2240	N	0	2	4	55	1	5	1	1	4	1	0	1	1	3	150420376	1	8	4	5	0	1	N	4
25	2015	2156	N	0	2	4	35	1	1	1	1	4	1	1	1	1	90	151760201	1	7	1	5	15	1	N	99
9	2015	1402	N	0	1	4	55	1	1	1	1	1	3	0	2	1	3	152210075	1	5	11	1	0	1	N	4
18	2015	1702	N	0	2	4	35	1	1	1	4	1	3	0	2	1	7	152300141	1	7	6	1	0	1	N	4
10	2015	1445	N	0	3	4	45	1	1	1	1	1	1	1	1	1	5	152530116	3	7	1	41	41	1	N	4
22	2015	1400	C	0	2	4	40	1	1	1	5	1	1	0	1	1	3	153270129	3	6	9	9	0	1	N	4
10	2013	2156	N	0	3	7	55	10	1	1	1	4	2	0	1	1	3	130690152	1	5	1	15	0	1	N	99
1	2015	0604	N	0	3	1	45	1	1	1	98	1	1	0	1	2	3	151820136	1	5	9	1	0	1	N	4
13	2015	2025	N	0	2	4	45	1	1	1	1	4	1	1	1	1	3	153170196	2	5	1	1	1	1	N	4
26	2013	2033	N	0	2	4	40	1	3	1	1	4	1	0	1	1	5	130260120	3	4	4	5	0	1	N	99
1	2013	1944	N	0	2	4	40	1	6	1	1	4	4	0	3	1	5	130320175	3	4	3	2	0	1	N	99
13	2015	1454	N	0	2	4	40	1	6	1	1	1	1	1	1	1	3	150440199	3	3	3	2	99	1	N	4
17	2015	1049	N	0	2	7	40	1	1	1	1	1	1	0	1	2	3	151680051	1	5	1	4	15	1	N	4
23	2015	1202	N	0	2	1	55	1	1	1	1	1	2	1	1	1	3	152350049	1	5	1	15	15	1	N	4
2	2015	1215	N	0	2	4	55	2	1	1	1	1	1	1	1	1	3	152460216	1	5	1	5	15	1	N	99
7	2015	1343	N	0	2	4	40	1	1	1	1	1	1	1	1	1	3	152800112	1	3	11	1	0	1	N	4
26	2015	9998	N	0	2	0	35	1	2	0	1	2	1	0	1	0	0	153290047	99	0	0	0	0	1	N	98
11	2015	1621	B	0	2	4	40	1	1	1	1	1	2	99	1	1	3	153460032	1	5	1	15	15	1	B	4
17	2015	0557	N	0	2	4	35	1	1	1	1	4	2	99	1	1	3	153510033	1	3	3	1	1	1	N	99
19	2015	1256	N	0	2	4	55	1	5	1	1	1	2	0	1	2	5	153530084	1	5	1	5	15	1	N	4
23	2015	2002	N	0	2	4	55	1	1	1	1	1	1	1	1	5	90	152040163	1	7	5	4	15	1	N	4
12	2015	2237	B	0	2	4	45	1	8	1	1	4	1	1	1	1	3	150430293	1	1	1	5	2	1	C	4
31	2014	1243	N	0	2	1	55	10	1	1	98	1	1	1	1	1	5	143650105	1	1	1	2	2	1	N	4
9	2013	1531	N	0	2	1	40	11	2	1	98	1	1	1	1	1	5	132210101	1	1	1	1	50	1	N	4
20	2014	1751	N	0	2	1	45	1	2	1	98	1	1	1	1	1	3	142930126	2	1	16	2	8	1	N	4
27	2015	0936	C	0	2	1	40	1	2	1	98	1	1	0	1	1	3	151240033	1	5	14	8	7	1	C	4
5	2013	1635	N	0	2	1	40	10	1	1	98	3	2	3	2	3	90	132780105	1	5	13	4	4	1	N	4

			PERSON2											PERSON3											PERSON4	
PHYS	AGE	SEX	VTYPE2	DIR3	ACT4	FAC15	FAC26	POSN7	INJ8	EQP9	PHYS10	AGE11	SEX12	VTYPE13	DIR14	ACT15	FAC116	FAC217	POSN18	INJ19	EQP20	PHYS21	AGE22	SEX23	VTYPE24	DIR25
1	19	F	1	5	11	1	0	1	N	4	1	54	F													
1	48	F	1	1	11	1	0	1	N	99	1	47	M													
1	20	F	1	5	10	1	1	1	N	4	1	24	F	1	5											
1	29	F	35	1	1	21	0	1	N	4	1	24	M	1	1											
1	25	F	1	5	1	90	2	1	N	4	1	29	F													
1	52	M	1	2	10	1	0	1	N	99	1	15	M	1	2											
0	25	M	1	4	6	0	0	1	N	0	0	56	M	1	1											
1	45	M	1	1	1	90	0	1	C	4	1	22	M	3	7											
1	37	F	4	1	6	1	0	1	C	4	1	41	F	3	1											
1	49	M	1	1	1	4	0	1	N	4	1	40	M													
1	17	F	1	1	1	46	0	1	N	4	1	38	F													
1	45	M	3	1	11	1	50	1	N	4	1	37	F	4	1											
1	34	M	1	1	1	46	61	1	N	4	1	24	F	1	1											
1	26	F	1	2	5	15	21	1	N	4	1	56	M	1	2											
1	33	M	3	1	1	46	61	1	N	4	1	49	M													
1	66	F	1	1	1	5	3	1	N	4	1	31	M	35	7											
1	25	M	1	2	5	1	1	1	N	4	1	33	F	1	2											
1	90	F	1	6	1	1	1	1	N	4	1	44	M	1	6											
1	16	M	1	5	11	1	1	1	N	4	1	39	F	1	5											
1	37	F	2	5	1	15	1	1	N	99	1	27	M	1	5											
1	25	F	2	1	13	1	1	1	N	4	1	34	M													
1	34	F	3	5	1	1	50	1	N	4	1	61	F	3	5											
1	43	F	1	1	1	1	1	1	N	4	1	53	M													
99	45	M	33	5	11	1	1	1	N	4	1	46	M													
1	22	M	3	5	1	1	1	1	N	4	1	50	F													
1	33	M	1	5	11	1	0	1	N	4	1	25	F													
1	27	M	3	3	1	1	99	1	N	4	1	36	M													
1	27	M	1	3	11	1	1	1	N	4	1	71	M	1	3											
1	47	M	3	5	1	1	0	1	C	4	1	44	F													
1	77	M	1	5	1	1	0	1	N	4	1	28	F	1	5											
1	21	M	2	7	99	1	99	1	N	99	1	24	M													
1	18	M																								
1	20	M	35	7	1	4	0	1	N	4	1	43	M													
1	18	M	1	7	1	1	1	1	N	4	98	17	F	1	7											
99	34	F	1	6	11	1	0	1	C	4	99	44	F													
1	23	F	1	5	11	1	0	1	N	99	1	22	M	1	5											
1	55	M	1	5	1	15	0	1	N	4	1	35	F	2	5											
1	40	M	3	5	1	5	15	1	N	4	1	34	F													
1	16	F	3	1	1	1	0	1	N	99	1	36	M													
1	50	M	1	5	1	1	0	1	N	99	1	25	M	1	5											
1	72	F	35	5	1	1	1	1	N	4	1	49	M													
1	20	M	1	5	11	1	0	1	N	4	1	55	M													
1	47	F	1	5	1	1	1	1	N	4	1	61	M													
1	22	F	1	5	11	1	1	1	N	99	1	34	F													
1	45	M	31	3	3	15	33	1	N	4	1	61	M													
0	903	Z	3	7	5	0	0	1	N	4	0	35	M													
1	80	F	2	5	1	1	1	1	N	4	1	34	F	1	5											
1	56	M	2	3	3	5	5	1	N	99	1	21	M													
1	34	M	1	2	6	1	0	1	N	99	1	41	M													
1	49	F	2	7	5	1	1	1	N	4	1	61	M	2	7											
1	38	M	1	3	54	1	1	1	N	4	1	19	M	1	3											
1	18	M	1	1	10	1	50	1	N	4	1	26	F	1	1											
1	36	M	2	1	14	2	2	1	N	4	1	33	M	2	1											
1	29	M	3	1	1	2	8	1	N	4	1	35	M													
1	28	M	32	5	1	1	0	1	N	4	1	50	M													
1	20	M	1	5	10	1	1	1	N	4	1	66	M	1	5											

ACT26	FAC127	FAC228	POSN29	INJ30	EQP31	PHYS32	AGE33	SEX34

South Diamond Lake Road from approx 200' east and west of TH 101 (2013 -2015)

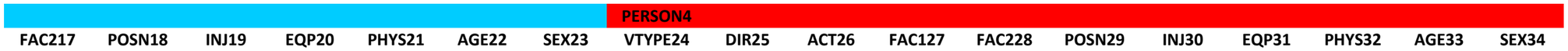
Crash data is managed by the Mn/DOT Office of Traffic, Safety, and Operations.

SYS	NUM	REF_POINT	GIS_ROUTE	GIS_TM	RD_DIR	ELEM	RELY	INV	R_U
05	32500110	000+00.037	0532500110	0.037	N		2	3	U
05	32500110	000+00.107	0532500110	0.107	Z		A	3	U
05	32500110	000+00.120	0532500110	0.120	Z		A	3	U
05	32500110	000+00.120	0532500110	0.120	W		B	3	U
05	32500110	000+00.120	0532500110	0.120	Z		A	3	U
05	32500110	000+00.120	0532500110	0.120	N		A	3	U
05	32500110	000+00.120	0532500110	0.120	Z		A	3	U
05	32500110	000+00.120	0532500110	0.120	E		B	3	U
05	32500110	000+00.120	0532500110	0.120	W		A	3	U
05	32500110	000+00.120	0532500110	0.120	S		A	3	U
05	32500110	000+00.120	0532500110	0.120	E		A	3	U
05	32500110	000+00.120	0532500110	0.120	Z		A	3	U
05	32500110	000+00.120	0532500110	0.120	Z		A	0	U
05	32500110	000+00.120	0532500110	0.120	E		A	3	U
05	32500110	000+00.120	0532500110	0.120	E		A	3	U
05	32500110	000+00.120	0532500110	0.120	E		A	3	U
05	32500110	000+00.120	0532500110	0.120	Z		A	3	U
05	32500110	000+00.120	0532500110	0.120	S		1	3	U
05	32500110	000+00.120	0532500110	0.120	E		A	3	U
05	32500110	000+00.120	0532500110	0.120	Z		1	3	U
05	32500110	000+00.120	0532500110	0.120	Z		1	3	U
05	32500110	000+00.120	0532500110	0.120	S		1	3	U
05	32500110	000+00.142	0532500110	0.142	Z		A	3	U

ATP	CO	CITY	DOW	MONTH	DAY	YEAR	TIME	SEV
CRASH INVESTIGATION I DETERMINED THAT HEINZ WAS LEAVING THE SUPER AMERICA LOT AT 21550 DIAMOND	27	3250	5-Thu	1	2	2014	1748	N
WB SOUTH DIAMOND LAKE ROAD INSIDE LANE NUMEROUS VE	27	3250	6-Fri	3	8	2013	1607	N
INITIAL INFORMATION ON 03/29/2013 AT 1940 HOURS I	27	3250	6-Fri	3	29	2013	1954	C
BOTH UNITS ENTERED THE LEFT TURN LANE WB SDLR W OF	27	3250	6-Fri	6	21	2013	1623	N
V1 STOPPPED WAITING TO MAKE RIGHT TURN FROM WB SOU	27	3250	5-Thu	7	18	2013	1504	N
DRIVER VEHICLE-2 MAKING RIGHT HAND TURN FROM SOUTH	27	3250	6-Fri	12	13	2013	1553	N
ACCORDING TO DRIVERS: DRIVER 1 STATED THAT HE KNEW	27	3250	2-Mon	12	30	2013	1804	N
OFFICER RESPONDED TO A TWO CAR PROPERTY DAMAGE ACC	27	3250	2-Mon	1	13	2014	1807	N
UNIT 1 AND 2 WERE STOPPED IN THE LEFT HAND TURN LA	27	3250	4-Wed	2	5	2014	1510	N
UNIT 2 WAS STOPPED AT A RED LIGHT ON EB SOUTH DIAM	27	3250	7-Sat	3	15	2014	0932	N
OFFICER WAS ON ROUTINE PATROL AND OBSERVED WHAT LO	27	3250	2-Mon	6	23	2014	2029	N
VEHICLE # 1 BEHIND VEHICLE # 2 AT STOP LIGHT LOCAT	27	3250	7-Sat	6	28	2014	1123	N
	27	3250	5-Thu	6	26	2014	0535	N
UNIT 2 AND 1 WERE STOPPED IN THE RIGHT HAND TURN LANE OF EB S DIAMOND LK RD ATTEMPTING TO MAKE A RI	27	3250	2-Mon	8	25	2014	1650	N
VEHICLE 1 REAR-ENDED VEHICLE 2 WHILE HE WAS ATTEMP	27	3250	4-Wed	9	3	2014	1543	N
DRIVER V-1 STOPPED IN LEFT LANE TO GO ACROSS MAIN	27	3250	5-Thu	10	16	2014	1522	N
UNIT 1 WAS SITTING BEHIND UNIT 2 FACING WEST ON DI	27	3250	6-Fri	12	26	2014	1219	N
OFFICER RESPONDED TO A PROPERTY DAMAGE CRASH NOT BLOCKING SOUTHBOUND HIGHWAY 101 NORTH OF DIAMOND L	27	3250	7-Sat	1	24	2015	1843	N
DRIVER 1 CAME TO THE POLICE DEPARTMENT TO REPORT A	27	3250	6-Fri	10	10	2014	0620	C
BOTH VEHICLE WERE ON THE FAR RIGHT TURNING LANE ATTEMPTING TO TAKE A RIGHT ONTO MAIN ST TO GO S. D1	27	3250	5-Thu	6	25	2015	1604	N
DRIVER OF VEHICLE 2 WAS MAKING A RIGHT TURN ON A RED LIGHT, FROM THE OUTSIDE TURN LANE OF EASTBOUND	27	3250	4-Wed	8	19	2015	0910	C
DRIVER 1 WAS BEHIND DRIVER 2 AT THE INTERSECTION OF MAIN STREET AND SOUTH DIAMOND LAKE ROAD. THEY W	27	3250	4-Wed	9	9	2015	0754	N
OFFICER RESPONDED TO A TWO VEHICLE PROPERTY DAMAGE	27	3250	2-Mon	6	9	2014	1513	N

															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	90	35	1	5	1	4	3	1	1	1	1	90	140020193	3	5	6	2	10
0	2	7	30	10	1	1	90	1	2	2	1	1	5	130670130	1	7	11	1	1
0	2	4	35	1	1	1	1	1	1	1	1	1	90	130880131	3	7	11	1	1
0	2	1	35	1	2	1	98	1	1	0	1	1	3	131740063	2	7	14	8	0
0	2	4	40	1	1	1	1	1	1	0	1	5	3	131990104	2	8	5	15	0
0	2	7	35	10	1	1	98	1	2	2	5	1	5	133470169	1	7	11	1	1
0	2	4	35	1	1	1	1	4	7	90	5	1	3	133640186	1	7	10	61	61
0	2	4	30	1	1	1	1	4	2	2	1	1	5	140130187	1	3	1	9	15
0	2	4	40	1	1	1	1	1	1	1	1	1	3	140360174	3	7	11	21	21
0	2	4	30	1	1	1	1	1	1	1	5	1	3	140740034	2	3	5	46	46
0	2	4	30	1	1	1	1	1	1	1	1	2	5	141740134	3	3	5	15	16
0	2	4	50	1	1	1	1	1	1	0	1	1	3	141790051	4	5	5	4	0
0	2	4	30	1	1	0	1	1	1	0	1	0	0	142090127	1	3	3	0	0
0	2	4	35	1	1	1	1	1	1	1	1	1	3	142380023	1	3	5	1	1
0	2	4	45	1	1	1	1	1	2	0	1	1	3	142460154	1	3	3	2	15
0	2	7	30	1	1	1	1	1	1	1	1	1	5	142890109	1	3	11	1	50
0	2	4	35	1	1	1	1	1	2	2	2	1	90	143600064	2	7	9	21	21
0	2	1	55	1	1	1	98	3	2	2	1	1	1	150240118	1	5	1	1	1
0	2	4	30	1	1	1	1	4	1	0	1	1	3	150260130	1	3	3	1	0
0	2	4	30	1	1	1	1	1	1	1	1	1	5	151770042	2	3	0	21	0
0	2	4	40	1	1	1	1	1	3	0	2	1	3	152310049	4	4	5	1	0
0	2	4	40	1	1	1	1	1	1	1	1	1	3	152520041	3	5	1	1	1
0	2	7	30	1	2	1	1	1	1	0	1	1	5	141600123	35	7	1	1	0

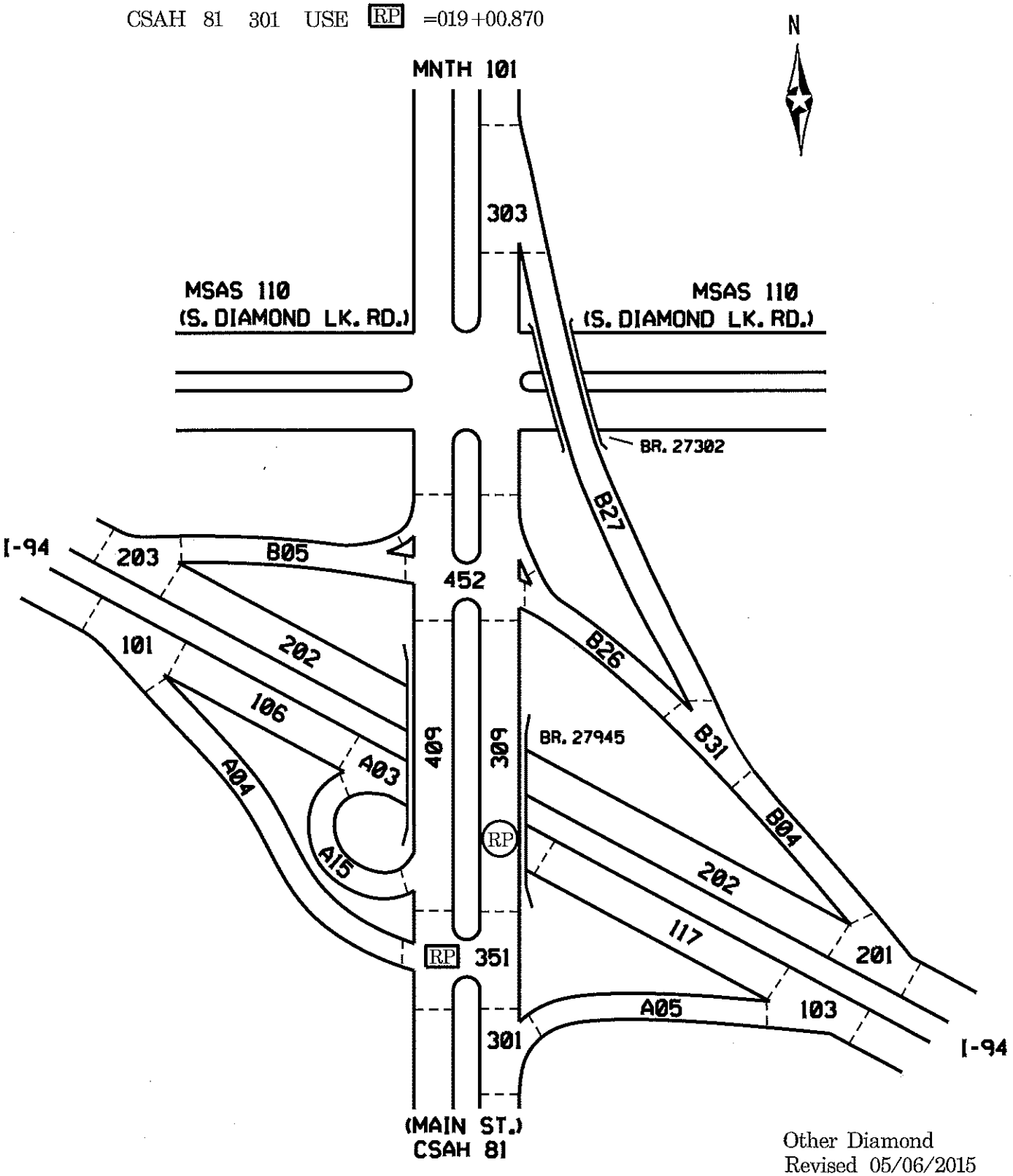
						PERSON2											PERSON3			
POSN	INJ	EQP	PHYS	AGE	SEX	VTYPE2	DIR3	ACT4	FAC15	FAC26	POSN7	INJ8	EQP9	PHYS10	AGE11	SEX12	VTYPE13	DIR14	ACT15	FAC116
1	N	4	1	25	F	3	1	1	1	1	1	N	4	1	30	M				
1	N	4	1	52	M	2	7	1	4	1	1	N	4	1	56	M				
1	N	4	1	32	F	1	7	10	15	4	1	C	4	1	19	M	1	7		
1	N	4	1	31	M	3	7	1	1	0	1	N	4	1	30	M	3	7		
1	N	4	1	54	M	1	8	11	1	0	1	N	4	1	35	F	1	8		
1	N	4	1	25	M	3	7	5	4	1	1	N	4	1	64	M				
1	N	4	1	51	M	2	7	11	1	1	1	N	4	1	68	M				
1	N	4	1	59	M	1	3	1	1	1	1	N	4	1	67	M	1	3		
1	N	4	1	17	M	4	7	11	1	1	1	N	4	1	43	F				
1	N	4	1	57	M	2	3	11	1	1	1	N	1	1	47	M	2	3		
1	N	4	1	19	M	1	3	5	1	1	1	N	4	1	43	M				
1	N	4	1	61	M	3	5	5	1	0	1	N	4	1	51	F	3	5		
1	N	4	0	56	M	1	3	1	0	0	1	N	0	0	36	M				
1	N	4	1	42	F	3	3	5	4	21	1	N	4	1	29	M				
1	N	4	1	78	M	3	3	3	1	0	1	N	4	1	43	M				
1	N	4	1	29	M	1	3	1	4	9	1	N	4	1	17	F				
1	N	4	1	49	F	1	7	11	1	1	1	N	4	1	25	F	1	7		
1	N	4	1	17	F	3	5	14	4	3	1	N	4	1	36	F				
1	C	4	1	27	F	3	3	3	4	0	1	N	4	1	32	F				
1	N	4	1	38	M	1	3	5	1	0	1	N	4	1	47	M				
1	C	4	1	36	F	3	4	3	10	15	1	N	4	1	47	F				
1	N	4	1	37	F	3	5	1	15	15	1	N	4	1	42	M				
1	N	4	1	55	M	1	7	15	8	7	1	N	4	1	22	F				


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

I–94 JCT WITH MNTH 101

HENNEPIN CO. 27
ROGERS 3250
PS 4560

I–94	100's 200's A&B's	USE	(RP)	=207+00.708
MNTH 101	300's 400's	USE	(RP)	=039+00.650
CSAH 81	301	USE	[RP]	=019+00.870



Other Diamond
Revised 05/06/2015
27–1–94–207.7

TH 94 @ Maple Grove Pkwy (300's & 400's) 2013 -2015

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SYS	NUM	REF_POINT	GIS_ROUTE	GIS_TM	RD_DIR	ELEM	RELY	INV	R_U
West Ramp									
05	24300106	004+00.740	0524300106	4.740	Z	351	1	3	U
05	24300106	004+00.740	0524300106	4.740	Z	351	1	3	U
05	24300106	004+00.740	0524300106	4.740	N	351	1	1	U
05	24300106	004+00.718	0524300106	4.718	N	409	1	3	U
05	24300106	004+00.740	0524300106	4.740	Z	409	1	3	U
05	24300106	004+00.740	0524300106	4.740	Z	409	2	3	U
05	24300106	004+00.784	0524300106	4.784	Z	409	2	3	U
05	24300106	004+00.740	0524300106	4.740	W	A14	1	3	U
05	24300106	004+00.718	0524300106	4.718	S		1	3	U
05	24300106	004+00.718	0524300106	4.718	S		1	3	U
05	24300106	004+00.718	0524300106	4.718	Z		1	3	U
05	24300106	004+00.736	0524300106	4.736	W		1	3	U
East Ramp									
05	24300106	004+00.740	0524300106	4.740	E	352	1	3	U
05	24300106	004+00.740	0524300106	4.740	E	352	1	3	U
05	24300106	004+00.740	0524300106	4.740	Z	352	1	3	U
05	24300106	004+00.740	0524300106	4.740	S	352	1	3	U
05	24300106	004+00.740	0524300106	4.740	Z	352	1	3	U

ATP	CO	CITY	DOW	MONTH	DAY	YEAR	TIME	SEV	NUM_KILLED
VEHICLE ONE WAS WEST ON MAPLE GROVE PARKWAY IN THE TURN LANE TO NORTHBOUND 96TH AVE. VEHICLE TWO W	27	2430	7-Sat	6	14	2014	1640	N	0
BOTH VEHICLES WERE IN THE TURN LANE FROM EAST MAPLE GROVE PKWY TO THE ON RAMP TO EASTBOUND I94. VE	27	2430	6-Fri	10	17	2014	1617	N	0
UPON ARRIVAL BOTH VEHICLES WERE ON THE RIGHT SHOULDER. THE DRIVER OF V1 STATED THAT SHE WAS STOPP	27	2430	5-Thu	5	7	2015	0729	N	0
VEH 1 2 AND 3 WERE WAITING AT A RED LIGHT TO TAKE A LEFT FROM SB MAPLE GROVE PKWY TO GET ONTO RAMP	27	2430	3-Tue	2	12	2013	1950	N	0
#NAME?	27	2430	3-Tue	5	13	2014	1640	N	0
-V1 & V2 TRAVELING WESTBOUND MAPLE GROVE PKWY FROM GROVE CIRCLE TO 96TH AVE. -V2 WAS STOPPED DO TO	27	2430	1-Sun	12	20	2015	1510	N	0
#NAME?	27	2430	7-Sat	10	10	2015	1203	N	0
DRIVER #1 WAS STOPPED YIELDING TO TRAFFIC AT RED LIGHT WAITING TO MAKE RIGHT TURN FROM THE I94 WEST	27	2430	4-Wed	2	26	2014	1659	C	0
DRIVER #1 WAS MAKING A LEFT TURN FROM MAPLE GROVE PARKWAY TO THE EB I94 ENTRANCE RAMP. DRIVER #1 W	27	2430	5-Thu	3	5	2015	1507	N	0
DRIVER OF UNIT 1 WAS MAKING A LEFT TURN ON THE GREEN ARROW AND DRIVER OF UNIT 2 ADMITTED TO RUNNING	27	2430	1-Sun	8	17	2014	1413	C	0
* DRIVER ONE AND TWO WERE BOTH TURNING ONTO WEST BOUND MAPLE GROVE PKWY. * DRIVER ONE STOPPED WITH	27	2430	3-Tue	6	23	2015	1741	N	0
. NO CITATIONS ISSUED STEMMING FROM THIS ACCIDENT.	27	2430	3-Tue	1	29	2013	1340	C	0
DRIVER 1 WAS STOPPED IN THE RIGHT TURN LANE TO TURN ON TO EASTBOUND I 94. DRIVER 2 SAID HE WAS SLOW	27	2430	3-Tue	1	7	2014	1401	C	0
. UNIT #1 STRUCK UNIT #2, WHICH WAS PUSHED INTO UNIT #3. DRIVER OF UNIT #2 COMPLAINING OF NECK AN	27	2430	4-Wed	2	5	2014	2151	C	0
DRIVER OF VEHICLE #1 STATED HE WAS COMING UP THE ON RAMP TO MAPLE GROVE PARKWAY FROM WESTBOUND INTE	27	2430	2-Mon	2	24	2014	2021	N	0
UNITS 1 AND 2 TURNED SOUTH ONTO MAPLE GROVE PARKWAY FROM I94. UNIT 1 SPUN OUT ON FRESH SNOW AND STR	27	2430	5-Thu	4	3	2014	1843	N	0
UNIT 1 WAS WAITING TO TURN LEFT ON TO MAPLE GROVE PARKWAY AT A RED LIGHT. UNIT 2 CAME ACROSS THE I	27	2430	7-Sat	11	15	2014	1716	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	2	1	1	1	2	0	1	1	5	141650091	1	1	3	5	0	1	N
2	1	40	1	1	1	98	1	2	0	1	1	5	142900135	4	3	1	4	0	1	N
2	7	60	1	1	1	1	1	1	0	2	1	1	151300135	3	1	11	1	0	1	N
3	4	40	1	1	1	1	4	2	0	1	2	5	130430206	1	5	9	1	0	1	N
2	1	40	1	2	1	1	1	2	0	1	1	5	141330133	3	6	1	8	0	1	N
2	1	40	1	1	1	1	1	2	0	1	1	5	153540099	1	7	1	4	15	1	N
2	1	40	1	1	1	98	1	1	0	1	1	5	152830050	2	6	1	4	0	1	N
2	21	40	1	1	1	1	1	7	8	5	6	2	140580098	1	8	5	1	1	1	C
2	4	40	1	1	1	1	1	1	1	5	2	5	150650089	2	6	11	1	1	1	N
2	4	45	1	5	1	1	1	1	0	1	1	5	142290046	1	3	6	1	0	1	C
2	4	40	1	1	1	1	1	1	0	1	2	5	151740176	3	7	1	1	0	1	N
2	7	40	1	1	1	1	1	1	0	2	1	3	130290289	2	7	11	1	0	1	C
2	4	40	1	1	1	1	1	1	0	1	1	5	140070173	1	3	1	15	0	1	N
3	7	40	1	5	1	1	4	1	0	1	1	3	140360251	1	8	6	1	0	1	C
2	4	40	1	5	1	1	4	2	0	5	2	5	140550375	1	2	57	46	3	1	N
2	21	40	1	2	1	1	1	4	5	5	2	2	140940027	3	5	6	1	0	1	N
2	4	30	1	8	1	1	4	2	2	3	1	2	143200114	1	1	11	1	1	1	N

				PERSON2											PERSON3					
EQP	PHYS	AGE	SEX	VTYPE2	DIR3	ACT4	FAC15	FAC26	POSN7	INJ8	EQP9	PHYS10	AGE11	SEX12	VTYPE13	DIR14	ACT15	FAC116	FAC217	POSN18
4	1	80	F	1	1	1	8	0	1	N	4	1	69	M	1	1				
4	1	22	F	1	3	1	4	0	1	N	4	1	17	F	1	3				
4	1	47	F	1	1	1	4	15	1	N	4	1	25	F						
4	1	28	M	1	5	9	1	0	1	N	4	1	23	F	2	5				
4	1	46	F	1	6	1	8	0	1	N	4	1	35	F						
4	1	58	M	1	7	11	1	0	1	N	4	1	46	F	1	7				
4	1	19	M	2	6	1	1	0	1	N	4	1	58	M						
4	1	43	F	3	8	5	46	61	1	N	4	1	45	M	3	8				
4	1	60	M	3	6	11	21	4	1	N	4	1	74	F						
4	1	33	F	1	1	1	5	0	1	N	4	1	20	F	1	1				
4	1	63	M	3	7	1	15	0	1	N	4	1	25	M	3	7				
4	1	52	M	2	7	1	15	41	1	N	4	1	58	M						
4	1	24	M	2	3	11	1	0	1	C	4	1	52	M						
4	1	48	F	1	7	1	5	0	1	N	4	1	49	F	1	8				
4	1	28	M	1	3	99	99	99	1	N	99	0	902	Z						
4	1	38	F	3	5	6	61	46	1	N	4	1	56	F						
4	1	45	F	1	5	32	21	5	1	C	99	7	73	F	1	1				


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

TH 94 @ Maple Grove Pkwy (100's & 200's) (A&B's) 2013 -2015

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
01	00000094	214+00.118	0100000094	214.798	W	101	1	1	U
01	00000094	214+00.118	0100000094	214.798	E	101	1	1	U
01	00000094	214+00.118	0100000094	214.798	E	101	1	1	U
01	00000094	214+00.118	0100000094	214.798	E	101	1	1	U
01	00000094	214+00.118	0100000094	214.798	Z	101	2	1	U
01	00000094	214+00.118	0100000094	214.798	E	103	1	1	U
01	00000094	214+00.118	0100000094	214.798	E	103	1	1	U
01	00000094	214+00.118	0100000094	214.798	Z	103	2	1	U
01	00000094	214+00.118	0100000094	214.798	E	106	1	1	U
01	00000094	214+00.118	0100000094	214.798	E	106	2	1	U
01	00000094	214+00.118	0100000094	214.798	W	106	2	1	U
01	00000094	214+00.118	0100000094	214.798	W	106	2	1	U
01	00000094	214+00.118	0100000094	214.798	E	106	2	1	U
01	00000094	214+00.118	0100000094	214.798	Z	106	1	3	U
01	00000094	214+00.118	0100000094	214.798	E	106	1	1	U
01	00000094	214+00.118	0100000094	214.798	E	106	2	1	U
01	00000094	214+00.118	0100000094	214.798	E	201	1	1	U
01	00000094	214+00.118	0100000094	214.798	E	201	1	1	U
01	00000094	214+00.118	0100000094	214.798	E	201	1	1	U
01	00000094	214+00.118	0100000094	214.798	E	201	1	3	U
01	00000094	214+00.118	0100000094	214.798	E	201	2	1	U
01	00000094	214+00.118	0100000094	214.798	E	203	1	1	U
01	00000094	214+00.118	0100000094	214.798	E	203	1	1	U
01	00000094	214+00.118	0100000094	214.798	W	203	1	1	U
01	00000094	214+00.118	0100000094	214.798	W	203	3	1	U
01	00000094	214+00.118	0100000094	214.798	W	203	2	1	U
01	00000094	214+00.118	0100000094	214.798	W	203	2	3	U
01	00000094	214+00.118	0100000094	214.798	W	203	2	1	U
01	00000094	214+00.118	0100000094	214.798	W	203	2	1	U
01	00000094	214+00.118	0100000094	214.798	E	203	2	3	U
01	00000094	214+00.118	0100000094	214.798	Z	208	2	0	U
01	00000094	214+00.118	0100000094	214.798	E	208	2	1	U
01	00000094	214+00.118	0100000094	214.798	E	208	1	1	U
01	00000094	214+00.118	0100000094	214.798	E	208	2	1	U
01	00000094	214+00.118	0100000094	214.798	E	208	1	1	U
01	00000094	214+00.118	0100000094	214.798	E	208	2	1	U
01	00000094	214+00.118	0100000094	214.798	W	208	2	1	U
01	00000094	214+00.118	0100000094	214.798	N	208	1	3	U
01	00000094	214+00.118	0100000094	214.798	E	208	2	1	U
01	00000094	214+00.118	0100000094	214.798	W	208	2	1	U
01	00000094	214+00.118	0100000094	214.798	Z	208	2	1	U
01	00000094	214+00.118	0100000094	214.798	Z	208	2	3	U
01	00000094	214+00.118	0100000094	214.798	E	309	2	3	U

~~01~~	~~00000094~~	~~214+00.118~~	~~0100000094~~	~~214.798~~	~~E~~	~~309~~	~~2~~	~~1~~	~~U~~
~~01~~	~~00000094~~	~~214+00.118~~	~~0100000094~~	~~214.798~~	~~Z~~	~~309~~	~~1~~	~~3~~	~~U~~
~~01~~	~~00000094~~	~~214+00.118~~	~~0100000094~~	~~214.798~~	~~Z~~	~~309~~	~~2~~	~~1~~	~~U~~
~~01~~	~~00000094~~	~~214+00.110~~	~~0100000094~~	~~214.790~~	~~E~~	~~—~~	~~2~~	~~3~~	~~U~~
~~01~~	~~00000094~~	~~214+00.118~~	~~0100000094~~	~~214.798~~	~~E~~	~~—~~	~~1~~	~~1~~	~~U~~
~~01~~	~~00000094~~	~~214+00.118~~	~~0100000094~~	~~214.798~~	~~W~~	~~—~~	~~3~~	~~1~~	~~U~~
~~01~~	~~00000094~~	~~214+00.118~~	~~0100000094~~	~~214.798~~	~~E~~	~~—~~	~~2~~	~~1~~	~~U~~
~~01~~	~~00000094~~	~~214+00.118~~	~~0100000094~~	~~214.798~~	~~E~~	~~—~~	~~2~~	~~1~~	~~U~~
~~01~~	~~00000094~~	~~214+00.118~~	~~0100000094~~	~~214.798~~	~~N~~	~~—~~	~~2~~	~~3~~	~~U~~
East Ramp									
01	00000094	214+00.118	0100000094	214.798	S	351	1	3	U
01	00000094	214+00.118	0100000094	214.798	Z	352	1	3	U
01	00000094	214+00.118	0100000094	214.798	Z	352	1	3	U
01	00000094	214+00.117	0100000094	214.797	Z	B05	1	0	U
01	00000094	214+00.118	0100000094	214.798	Z	B05	1	3	U
01	00000094	214+00.118	0100000094	214.798	W	B05	1	3	U
01	00000094	214+00.118	0100000094	214.798	Z	B05	2	3	U
West Ramp									
01	00000094	214+00.118	0100000094	214.798	Z	409	2	3	U
01	00000094	214+00.104	0100000094	214.784	E		3	1	U
01	00000094	214+00.118	0100000094	214.798	Z		2	3	U
01	00000094	214+00.118	0100000094	214.798	Z	A04	2	0	U
01	00000094	214+00.118	0100000094	214.798	Z	A14	1	3	U
01	00000094	214+00.118	0100000094	214.798	Z	A14	1	3	U
01	00000094	214+00.118	0100000094	214.798	Z	A14	1	0	U
01	00000094	214+00.118	0100000094	214.798	Z	A14	1	1	U

ATP	CO	CITY	DOW	MONTH	DAY	YEAR	TIME	SEV	NUM_KILLED
DRIVE SPUN OUT ON SNOWY / ICY ROADS. I ASKED HOW FAST HE WAS GOING AND HE TOLD ME 60 AND WAS KEEPIN	27	2430	5-Thu	4	11	2013	1054	N	0
UPON ARRIVAL BOTH VEHICLES WERE ON THE LEFT SHOULDER. THE DRIVER OF V1 STATED THAT SHE WAS STOPPED	27	2430	2-Mon	6	30	2014	0804	N	0
UPON ARRIVAL BOTH VEHICLES WERE ON THE LEFT SHOULDER. THE DRIVER OF V1 STATED THAT SHE WAS IN THE	27	2430	2-Mon	6	30	2014	0829	N	0
V1 AND V2 WERE STOPPED IN THE LEFT LANE OF EB 94 DUE TO RUSH HOUR TRAFFIC. DV3 STATED HE WAS IN TH	27	2430	3-Tue	1	27	2015	0722	N	0
- UPON ARRIVAL V1 WAS ON THE RIGHT SHOULDER. - PER WITNESSES V1 WAS TRAVELING IN THE CENTER LANE. -	27	2430	6-Fri	6	19	2015	1031	B	0
- UNIT 1 WAS TRAVELING EASTBOUND ON I94 FROM MAPLE GROVE PARKWAY IN THE ACCELERATION LANE. - UNIT 2	27	2430	5-Thu	4	24	2014	0952	N	0
VEH 1 EB 94 LEFT ROADWAY TO THE RIGHT, STRUCK SIGN STRUCTURE AND ENDED UP IN DITCH WITH WATER. DRIV	27	2430	3-Tue	5	6	2014	0633	N	0
UPON ARRIVAL BOTH VEHICLES WERE ON THE RIGHT SHOULDER. THE DRIVER OF V1 STATED THAT SHE HAD JUST	27	2430	7-Sat	8	1	2015	1849	N	0
ALL VEHICLES I-94 E/B IN THE LEFT LANE. &QUOTE;MORNING RUSH HOUR&QUOTE; TRAFFIC CONDITIONS. D1 ST	27	2430	4-Wed	2	5	2014	0631	N	0
V#1 WAS TRAVELING EB ON I94 NEAR MAPLE GROVE PARKWAY. IT WAS SNOWING AND THE ROADS WERE SNOW-COV	27	2430	6-Fri	4	4	2014	0454	N	0
UPON ARRIVAL BOTH VEHICLES WERE ON THE RIGHT SHOULDER. THE DRIVER OF V1 STATED THAT SHE WAS IN THE	27	2430	3-Tue	8	5	2014	1733	N	0
BOTH VEHICLES WERE WB I-94. V1 WAS STOPPED IN HEAVY TRAFFIC IN THE LEFT LANE. DRIVER OF V2 STATE	27	2430	6-Fri	8	8	2014	1645	C	0
VEHICLE 1 WAS IN THE RIGHT THROUGH-LANE OF EAST-BOUND 94 AND VEHICLE 2 WAS IN RIGHT MERGE LANE. D	27	2430	4-Wed	12	17	2014	0751	N	0
VEH 1 AND 2 WERE STOPPED. DRIVER 3 SAID SHE WAS LOOKING OVER HER SHOULDER AND DIDNT SEE THAT THEY	27	2430	6-Fri	1	31	2014	1544	C	0
V1 WAS HEADING EB ON ISTH94 IN THE LEFT LANE. DV1 STATED THAT SHE WAS STOPPED IN TRAFFIC WHEN SHE	27	2430	6-Fri	10	2	2015	0635	B	0
VEHICLE 1 WAS IN THE LEFT LANE OF EAST-BOUND 94 AND VEHICLE 2 WAS IN THE CENTER LANE. BOTH DRIVERS	27	2430	6-Fri	10	30	2015	1433	N	0
SQUAD HAD BEEN ON RIGHT SHOULDER OF E/B 94 WITH REAR EMERGENCY LIGHTS FLASHING, ASSISTING ANOTHER M	27	2430	2-Mon	11	18	2013	0636	N	0
VEH 1 WAS IN LEFT LANE OF E/B 94 UNDER MAPLE GROVE PARKWAY. VEH 2 AND OTHER TRAFFIC STOPPED DUE TO	27	2430	4-Wed	12	11	2013	0746	B	0
BOTH VEHICLES WERE IN THE LEFT LANE OF HWY 94 EAST-BOUND NEAR MAPLE GROVE PARKWAY. TRAFFIC WAS SLO	27	2430	4-Wed	1	8	2014	0638	N	0
DRIVER 1 REALIZED THE ROADS WERE SLIPPERY AND THERE WERE EMERGENCY VEHICLES AHEAD ON THE SIDE OF TH	27	2430	7-Sat	1	18	2014	0956	N	0
BOTH VEHICLES TRAVELING EB ON ISTH 94 NEAR MAPLE GROVE PKWY. DRIVER OF VEHICLE #1 RICHARDSON STAT	27	2430	1-Sun	10	19	2014	1123	N	0
V1 WAS I-94 E/B. D1 STATED THAT SHE WAS INTENDING TO EXIT TO MAPLE GROVE PKWY. D1 STATED THAT SH	27	2430	4-Wed	11	12	2014	0914	N	0
AURICH (V1) STATED CAME OFF RAMP FROM MGP, LOST CONTROL, HIT MEDIAN CABLE SAFETY BARRIER, BOUNCED O	27	2430	3-Tue	1	14	2014	1126	N	0
UPON ARRIVAL BOTH V1 AND V2 WERE ON THE LEFT SHOULDER AGAINST THE CABLE SAFETY BARRIER. THE DRIV	27	2430	3-Tue	1	14	2014	1408	C	0
ALL VEHICLES WERE WB I-94. V1 AND V2 WERE SLOWING IN HEAVY TRAFFIC. DRIVER OF V3 STATED SHE LOOKE	27	2430	6-Fri	4	25	2014	1629	C	0
BOTH VEHICLES WERE IN THE LEFT LANE OF WEST-BOUND HWY 94. DRIVER 1 SAID TRAFFIC AHEAD OF VEHICLE 1	27	2430	6-Fri	7	17	2015	1410	C	0
V1 WAS HEADING WB ON ISTH 94 IN THE LEFT LANE. DV1 STATED THAT HE WAS TRAVELING APPROXIMATELY 40MP	27	2430	6-Fri	8	14	2015	1708	N	0
UNIT 1 AND 2 DRIVING WESTBOUND ON I 94 NEAR MAPLE GROVE PKWY. UNIT 1 IN LANE 1. UNIT 2 BEHIND UNIT	27	2430	3-Tue	9	22	2015	1933	N	0
V2 SLOWED FOR TRAFFIC. D1 WAS UNABLE TO STOP IN TIME. V1 STRUCK THE REAR OF V2. BOTH OCCUPANT IN	27	2430	6-Fri	10	9	2015	1326	C	0
V1 WAS HEADING WB ON ISTH94 IN THE LEFT LANE. DV1 STATED THAT SHE WAS SLOWING WITH TRAFFIC WHEN SH	27	2430	3-Tue	11	17	2015	1828	N	0
VEH 1 WAS EXITING EB I-94 TO MAPLE GROVE PKWY. VEH 2 WAS STOPPED AT A RED TRAFFIC SIGNAL AT THE TOP	27	2430	5-Thu	12	17	2015	1752	N	0
_____	27	2430	5-Thu	3	7	2013	0858	N	0
BOTH VEHICLES HAD BEEN I-94 E/B IN THE LEFT LANE. D1 STATED THAT HE HAD BEEN LOOKING AT HIS RADIO	27	2430	3-Tue	10	8	2013	0836	N	0
BOTH VEHICLES WERE IN THE LEFT LANE IN MODERATELY HEAVY TRAFFIC. DRVR 1 HAD TO APPLY BRAKES HARD A	27	2430	2-Mon	10	14	2013	0804	N	0
UPON ARRIVAL BOTH VEHICLES WERE ON THE LEFT SHOULDER. THE DRIVER OF V1 STATED THAT SHE WAS IN THE	27	2430	6-Fri	10	4	2013	1150	N	0
VEH.#1 WAS E/B ON 94 AT MAPLE GROVE PARKWAY WHEN THE VEHICLE WENT OFF THE ROAD TO THE RIGHT JUST EA	27	2430	3-Tue	12	24	2013	1018	C	0
A FLATBED SEMI WAS TRAVELING ON AND OFF OF THE RIGHT SHOULDER EB 94. THIS CAUSED V2 TO STOP IN RIGH	27	2430	7-Sat	1	18	2014	0919	N	0
VEH #1 LOST CONTROL ON ICY ROADS AND JACK-KNIFED INTO THE MEDIAN BLOCKING ALL LANES. VEH #2 WAS UN	27	2430	6-Fri	2	21	2014	0756	N	0
UNIT1 WAS WEST ON I94 APPROACHING OVERPASS OF CO RD 30 IN THE INSIDE LANE COMING TO A STOP DUE TO T	27	2430	5-Thu	4	24	2014	1748	N	0
VEH 1 AND VEH 2 WERE EB 94. VEH 1 WAS ENTERING FREEWAY FROM MAPLE GROVE PARKWAY, VEH 2 WAS IN CENT	27	2430	4-Wed	8	27	2014	2016	N	0
DV1 STATED THAT SHE WAS IN THE FAR RIGHT LANE HEADING WB ISTH 94. SHE STATED THAT V2 LOST CONTROL A	27	2430	3-Tue	3	3	2015	0907	N	0
VEH 1, 2, 3 WB 94 LEFT LANE. VEH 1 REAREND VEH 2 SLOWING IN TRAFFIC PUSHING INTO VEH 3 SLOWING IN T	27	2430	5-Thu	7	2	2015	1426	N	0
BOTH VEHICLES WERE SOUTH ON MAPLE GROVE PARKWAY GOING OVER I94. VEHICLE ONE WAS BEHIND VEHICLE TWO	27	2430	5-Thu	10	29	2015	1926	C	0
-BOTH VEHS E/B I94. VEH 1 DIRECTLY BEHIND VEH 2. -VEH 2 STOPPED ABRUPTLY FOR TRAFFIC IN FRONT OF H	27	2430	1-Sun	7	26	2015	1149	N	0

~~DRIVER OF V1 STATED SHE WAS IN THE CENTER LANE GOING EAST ON 94 AT MAPLE GROVE PARKWAY. D1 ADMITTE~~	~~27~~	~~2430~~	~~4-Wed~~	~~8~~	~~19~~	~~2015~~	~~0837~~	~~N~~	~~0~~
~~WITNESS STATED VEH EB I94 AND FOR NO APPARENT REASON CROSSED LANES AND HIT THE GUARDRAIL ON THE INS~~	~~27~~	~~2430~~	~~1-Sun~~	~~10~~	~~18~~	~~2015~~	~~2138~~	~~N~~	~~0~~
~~DRIVER OF V1 STATED THAT SHE WAS DRIVING IN THE LEFT LANE GOING EAST ON 94 AT MAPLE GROVE PARKWAY.~~	~~27~~	~~2430~~	~~4-Wed~~	~~11~~	~~11~~	~~2015~~	~~2224~~	~~N~~	~~0~~
~~VEHICLE 1 WAS TRAVELING EAST BOUND ON I 94 IN THE FAR LEFT LANE. VEHICLE 2 WAS IN FRONT OF VEHICLE~~	~~27~~	~~2430~~	~~5 Thu~~	~~2~~	~~14~~	~~2013~~	~~0537~~	~~B~~	~~0~~
~~BOTH VEHICLES WERE E/B ON ISTH 94 APPROACHING MAPLE GROVE PARKWAY IN THE RIGHT LANE OF THREE. THE~~	~~27~~	~~2430~~	~~1 Sun~~	~~2~~	~~1~~	~~2015~~	~~0619~~	~~C~~	~~0~~
~~UPON ARRIVAL BOTH VEHICLES WERE ON THE LEFT SHOULDER. THE DRIVER OF V1 STATED THAT SHE HAD STOPPED~~	~~27~~	~~2430~~	~~5-Thu~~	~~6~~	~~25~~	~~2015~~	~~1913~~	~~N~~	~~0~~
~~UPON ARRIVAL BOTH VEHICLES WERE ON THE RIGHT SHOULDER. THE DRIVER OF V1 STATED THAT SHE WAS IN THE~~	~~27~~	~~2430~~	~~2-Mon~~	~~9~~	~~14~~	~~2015~~	~~1226~~	~~N~~	~~0~~
~~V1 AND V2 WERE TRAVELING WB ON 94 NEAR MAPLE GROVE PARKWAY. V2 WAS IN FRONT OF V1 IN THE LEFT LANE~~	~~27~~	~~2430~~	~~4 Wed~~	~~12~~	~~2~~	~~2015~~	~~0645~~	~~N~~	~~0~~
~~AFTER THE FACT AND WENT TO A DOCTOR TO BE SEEN. THE ACCOUNTS OF BOTH DRIVERS WERE TAKEN VIA PHONE~~	~~27~~	~~2430~~	~~7 Sat~~	~~12~~	~~12~~	~~2015~~	~~1940~~	~~C~~	~~0~~
DRIVER EXITING WB I94 TO SB MAPLE GROVE PARKWAY. DRIVER STATED AS HE TURNED SOUTHBOUND ON A GREEN	27	2430	2-Mon	2	18	2013	1723	N	0
VEHICLE 2 WAS TRAVELING SOUTHBOUND, AND STOPPED WITH TRAFFIC FOR THE SIGNAL ON THE SOUTH SIDE OF TH	27	2430	7-Sat	3	9	2013	1208	N	0
UNIT1 WAS NORTH ON THE EXIT RAMP FROM EB I94 TO MAPLE GROVE PARKWAY TO GO STRAIGHT ONTO GROVE CIRCL	27	2430	4-Wed	7	8	2015	0751	N	0
	27	2430	1-Sun	10	12	2014	1005	N	0
VEHICLE ONE WAS ON THE ONRAMP TO EASTBOUND 94 FROM MAPLE GROVE PARKWAY. DRIVER ONE STATED THAT WHI	27	2430	7-Sat	12	7	2013	1853	C	0
AND STRUCK HER. DRIVER 2 STATES ALL TRAFFIC WAS STOPPED AT THE LIGHT, EVERYONE, INCLUDING HIM AND	27	2430	3-Tue	8	19	2014	1528	C	0
- UNIT 2 WAS WAITING AT A RED LIGHT TO TURN RIGHT FROM THE TOP OF THE WESTBOUND I-94 RAMP TO NORTHB	27	2430	5-Thu	2	26	2015	1240	N	0
VEH 2 AND 3 WERE BOTH STOPPED IN TRAFFIC THAT WAS BACKED UP DUE TO CONSTRUCTION FURTHER DOWN THE RO	27	2430	5-Thu	7	23	2015	1712	N	0
DRIVER ONE BELIEVED TO HAVE SUFFERED UNKNOWN MEDICAL CONDITION WHILE DRIVING. HE WENT OFF THE ROAD	27	2430	6-Fri	7	26	2013	1642	N	0
ALL FOUR VEHICLE WERE WESTBOUND ON MAPLE GROVE PKWY ON THE BRIDGE OVER I94. ALL VEHICLES WERE IN T	27	2430	3-Tue	12	24	2013	1139	N	0
	27	2430	3-Tue	11	25	2014	2015	N	0
#NAME?	27	2430	7-Sat	1	4	2014	0727	N	0
#NAME?	27	2430	4-Wed	2	12	2014	1330	N	0
	27	2430	5-Thu	5	15	2014	1000	B	0
VEHICLE 1 SLOWED AND THEN STOPPED ON THE ENTRANCE RAMP TO 94 WEST-BOUND FROM MAPLE GROVE PARKWAY, B	27	2430	5-Thu	5	15	2014	1018	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
1	21	70	1	7	1	98	1	4	0	3	1	1	131050190	1	7	1	3	0	1	N
2	1	70	1	1	1	98	1	1	0	1	1	1	141910185	1	3	1	1	0	1	N
2	1	70	1	1	1	98	1	1	0	1	1	1	141910186	2	3	1	4	15	1	N
3	1	65	1	1	1	98	1	2	0	1	2	1	150270215	1	4	14	15	0	1	N
1	22	45	51	90	1	98	1	1	0	1	1	3	151750197	11	5	13	1	0	1	B
2	1	70	1	2	1	98	1	3	0	2	1	1	141140196	35	3	1	1	0	1	N
1	22	70	26	7	4	98	1	1	0	1	5	1	141260179	1	4	1	21	15	1	N
2	1	60	1	1	1	98	1	1	0	1	1	1	152300275	1	3	1	4	15	1	N
3	22	70	1	1	1	98	6	2	0	1	5	1	140380322	1	4	11	1	0	1	N
1	1	70	32	4	2	98	4	4	0	3	1	1	141060285	1	4	1	3	46	1	N
2	1	70	1	2	1	98	1	1	0	1	1	1	142180180	3	7	1	1	0	1	N
2	1	70	1	1	1	98	1	1	0	1	1	1	142220142	2	7	11	1	0	1	C
2	1	70	1	1	1	98	1	2	0	1	1	1	143590103	35	3	1	1	0	1	N
3	4	40	1	1	1	1	1	1	0	1	2	5	150320040	3	7	1	4	15	1	N
4	1	70	1	1	1	98	2	1	0	1	1	1	152770192	3	3	11	1	0	1	B
2	1	70	1	2	1	98	1	2	0	1	5	1	153110155	1	3	1	15	0	1	N
2	22	70	1	1	1	98	4	2	0	1	1	1	133220211	1	3	10	1	0	1	N
2	1	60	1	1	1	98	1	1	0	1	2	1	133450406	1	3	11	1	0	1	B
2	1	70	1	1	1	98	4	1	0	90	1	1	140090454	1	3	10	4	0	1	N
2	1	60	1	1	1	98	1	4	1	5	1	1	140180123	2	3	11	1	0	1	N
2	1	60	1	2	1	98	1	1	0	1	1	1	142930217	2	3	14	8	14	1	N
1	21	70	26	4	4	98	1	2	0	1	6	2	143180301	1	4	1	21	8	1	N
1	20	70	32	4	1	98	1	4	0	3	1	1	140160305	1	3	16	3	61	1	N
2	1	70	1	90	1	98	1	1	0	2	1	1	140170252	1	3	1	8	3	1	C
3	1	70	1	1	1	98	1	1	0	1	1	1	141160135	2	7	10	1	0	1	N
2	1	70	1	1	1	98	1	1	0	1	1	1	151990174	3	7	1	1	0	1	C
2	1	70	1	1	1	98	1	1	0	1	1	1	152280142	1	7	10	1	0	1	N
2	1	70	1	2	1	98	3	2	0	2	1	1	152650182	1	7	1	19	0	1	N
2	1	70	1	1	1	98	1	2	0	1	1	1	152830155	2	7	10	15	0	1	N
2	1	70	1	1	1	98	6	3	2	2	1	1	153220243	2	7	10	1	0	1	N
2	4	45	1	1	1	1	4	1	1	1	1	2	153510194	1	3	11	1	0	1	N
4	0	60	1	1	0	98	1	1	0	1	0	0	130990082	1	3	1	0	0	1	N
2	1	70	1	1	1	98	1	1	0	1	1	1	132810317	1	3	1	15	0	1	N
2	1	70	1	2	2	98	1	2	0	1	1	1	132900164	1	3	10	4	0	1	N
2	1	60	1	2	1	98	1	1	0	1	1	1	132930177	2	3	14	8	7	1	N
1	1	70	51	7	4	98	1	2	0	1	5	1	133600223	1	3	1	15	16	1	C
2	1	70	1	1	1	98	1	2	0	3	1	1	140190240	35	3	1	15	3	1	N
2	1	70	1	1	1	98	1	1	0	5	1	1	140540322	2	7	1	1	0	1	N
2	7	70	1	1	1	98	1	2	0	1	1	5	141140124	3	8	11	1	0	1	N
2	1	70	1	2	1	98	4	1	0	1	1	1	142400221	3	3	14	8	15	1	N
2	1	70	1	5	1	98	1	4	2	3	1	1	150630357	1	7	1	8	61	1	N
3	1	70	1	1	1	98	1	1	0	1	1	1	152050234	1	8	1	4	3	1	N
2	1	40	1	1	1	98	4	2	0	1	1	5	153030081	1	5	11	1	0	1	C
2	1	70	1	1	1	98	1	1	1	1	1	1	152070071	1	5	1	4	4	1	N

~~1~~	~~1~~	~~70~~	~~32~~	~~4~~	~~1~~	~~98~~	~~1~~	~~3~~	~~2~~	~~2~~	~~1~~	~~1~~	~~152320273~~	~~1~~	~~3~~	~~1~~	~~21~~	~~0~~	~~1~~	~~N~~
~~1~~	~~1~~	~~70~~	~~32~~	~~7~~	~~1~~	~~98~~	~~4~~	~~1~~	~~0~~	~~1~~	~~1~~	~~1~~	~~152910144~~	~~1~~	~~3~~	~~1~~	~~99~~	~~0~~	~~1~~	~~N~~
~~1~~	~~1~~	~~70~~	~~32~~	~~4~~	~~1~~	~~98~~	~~5~~	~~3~~	~~8~~	~~2~~	~~1~~	~~1~~	~~153160273~~	~~1~~	~~3~~	~~1~~	~~3~~	~~61~~	~~1~~	~~N~~
~~2~~	~~1~~	~~60~~	~~1~~	~~1~~	~~1~~	~~98~~	~~4~~	~~2~~	~~2~~	~~3~~	~~1~~	~~1~~	~~130450271~~	~~1~~	~~3~~	~~1~~	~~3~~	~~3~~	~~1~~	~~B~~
~~2~~	~~1~~	~~70~~	~~1~~	~~1~~	~~1~~	~~98~~	~~4~~	~~1~~	~~0~~	~~1~~	~~4~~	~~1~~	~~150330225~~	~~1~~	~~3~~	~~1~~	~~18~~	~~3~~	~~1~~	~~C~~
~~2~~	~~1~~	~~70~~	~~1~~	~~1~~	~~1~~	~~98~~	~~1~~	~~1~~	~~0~~	~~1~~	~~1~~	~~1~~	~~151850129~~	~~3~~	~~7~~	~~11~~	~~1~~	~~0~~	~~1~~	~~N~~
~~2~~	~~1~~	~~70~~	~~1~~	~~1~~	~~1~~	~~98~~	~~1~~	~~1~~	~~0~~	~~1~~	~~1~~	~~1~~	~~152600267~~	~~1~~	~~3~~	~~10~~	~~1~~	~~0~~	~~1~~	~~N~~
~~2~~	~~1~~	~~65~~	~~1~~	~~1~~	~~1~~	~~98~~	~~2~~	~~1~~	~~0~~	~~2~~	~~1~~	~~1~~	~~153360290~~	~~2~~	~~7~~	~~10~~	~~4~~	~~0~~	~~1~~	~~N~~
~~2~~	~~4~~	~~45~~	~~1~~	~~1~~	~~1~~	~~1~~	~~4~~	~~99~~	~~99~~	~~1~~	~~1~~	~~5~~	~~153510217~~	~~1~~	~~1~~	~~1~~	~~21~~	~~0~~	~~1~~	~~N~~
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2	4	40	1	5	1	1	1	1	0	1	1	5	151890085	1	1	1	1	0	1	N
2	0	0	1	1	0	98	1	1	0	1	0	0	143170090	3	3	5	0	0	1	N
2	1	70	1	4	1	98	4	4	0	5	8	2	133420150	1	3	1	46	61	1	N
2	4	45	1	1	1	1	1	1	0	1	2	2	142310146	4	1	11	1	0	1	C
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1	21	35	26	4	1	98	1	1	0	1	6	2	140430121	3	3	10	8	0	1	N
2	0	25	1	1	0	98	1	2	0	1	0	0	141640092	1	7	10	0	0	1	B
2	1	70	1	1	1	98	1	2	0	1	6	2	141840169	1	8	10	4	0	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
4	1	47	M																	
4	1	38	F	1	3	1	4	15	1	N	4	1	20	F	1	3				
4	1	16	M	1	3	11	1	0	1	N	4	1	32	F	1	3				
4	1	33	M	1	4	11	1	0	1	N	4	1	29	F	1	4				
11	1	44	M																	
4	1	32	M	1	3	16	2	0	1	N	4	1	74	M	1	3				
4	7	25	M	1	4	1	21	15	3	N	4	99	902	Z						
4	1	16	M	3	3	1	1	0	1	N	4	1	36	F						
4	1	24	M	1	4	10	1	0	1	N	4	1	58	F	1	4				
4	1	48	F																	
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4	1	74	F	31	3	1	1	0	1	N	4	1	28	M						
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4	1	29	F	1	3	10	1	0	1	N	4	1	45	F						
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4	90	39	F																	
4	1	19	F																	
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4	1	25	M	1	7	14	8	0	1	N	99	1	25	M	1	7				
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4	1	21	F	1	3	10	1	0	1	N	4	1	42	F	1	3				
4	1	51	M	1	3	1	1	0	1	N	4	1	37	F	1	3				
4	1	17	M																	
4	1	55	M	35	3	11	1	0	1	N	4	1	52	M						
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~~4~~	~~7~~	~~18~~	~~F~~													
~~99~~	~~99~~	~~28~~	~~M~~													
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~~4~~	~~3~~	~~23~~	~~M~~	~~4~~	~~3~~	~~1~~	~~1~~	~~0~~	~~1~~	~~C~~	~~4~~	~~1~~	~~52~~	~~F~~	~~4~~	~~3~~
~~4~~	~~1~~	~~25~~	~~F~~	~~2~~	~~7~~	~~1~~	~~4~~	~~15~~	~~1~~	~~N~~	~~4~~	~~1~~	~~16~~	~~M~~	~~2~~	~~7~~
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99	1	59	M													
4	1	41	F	1	7	1	4	0	1	N	4	1	46	M		
4	1	30	F	4	7	1	5	0	1	N	4	1	38	M	4	7
4	0	66	M	3	3	0	0	0	1	N	0	0	64	M	3	3
4	1	32	F	1	3	1	1	0	1	N	4	1	41	M	1	3
4	1	40	F	2	1	1	15	0	1	N	4	1	60	M	4	1
4	1	47	M	1	8	5	1	0	1	N	4	1	64	F		
4	1	46	M	3	8	11	1	0	1	N	4	1	45	F	1	8
4	99	48	M													
4	1	43	M	4	7	9	1	0	1	N	4	1	40	F	1	7
4	0	29	F	99	0	0	0	0	1	N	98	0	25	F		
4	1	31	M													
4	1	72	F													
3	0	26	M	3	7	0	0	0	1	N	0	0	50	F	1	7
4	1	50	F	1	8	13	8	0	1	N	4	1	26	M	1	8

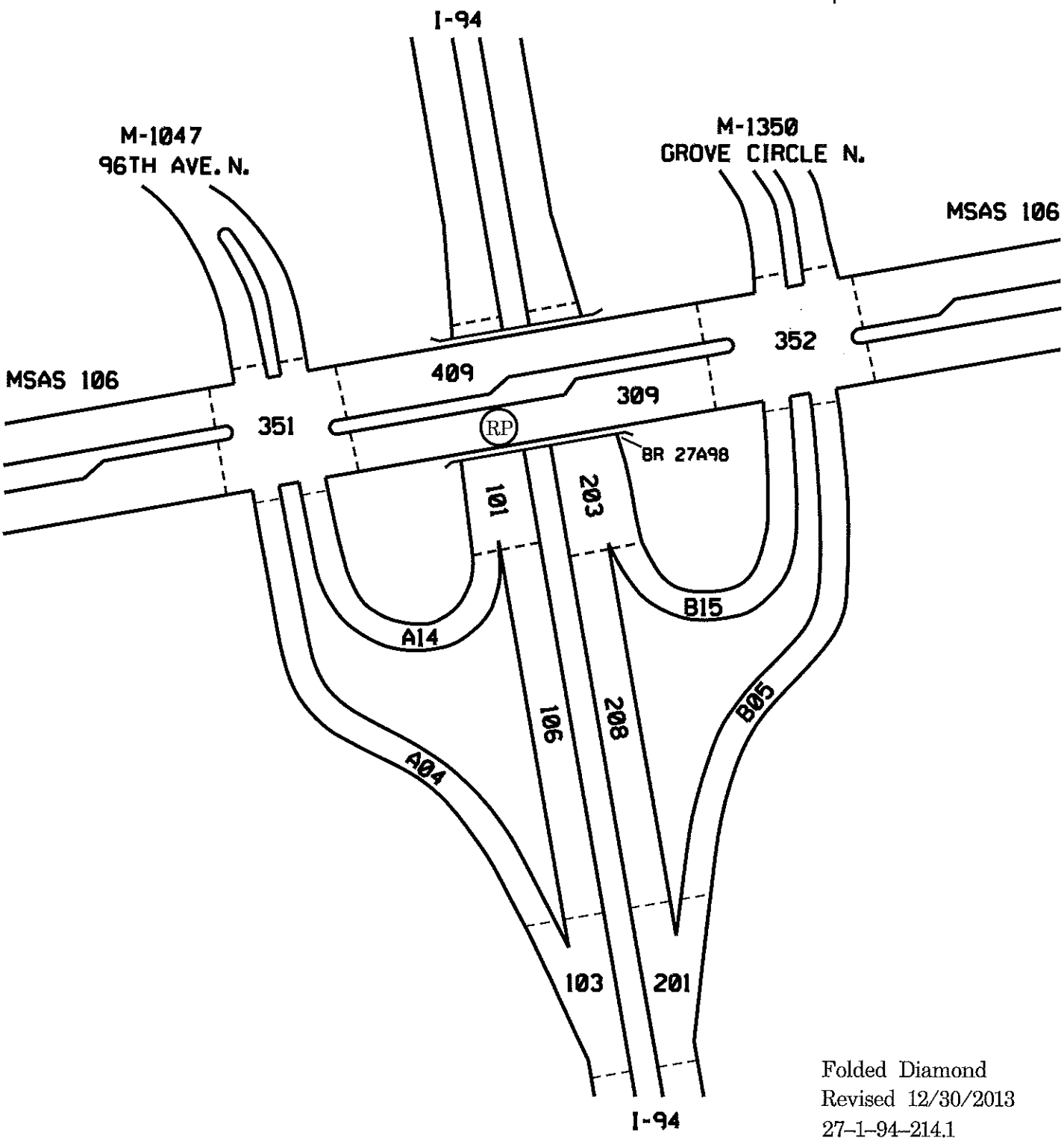

PERSON4
INJ19
EQP20
PHYS21
AGE22
SEX23
VTYPE24
DIR25
ACT26
FAC127
FAC228
POSN29
INJ30
EQP31
PHYS32
AGE33
SEX34

I–94 JCT WITH MSAS 106
(MAPLE GROVE PARKWAY N.)

HENNEPIN CO. 27
MAPLE GROVE 2430
PS 2520

I–94 100's 200's A&B's USE (RP) =214+00.118

MSAS 106 300's 400's USE (RP) =004+00.740



Folded Diamond
Revised 12/30/2013
27–1–94–214.1

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

July 8, 2016

Mayor Tim McNeil
City of Dayton
12260 S. Diamond Lake Road
Dayton, Minnesota 55327

RE: Regional Solicitation Application for Brockton Lane Interchange

Dear Mayor McNeil:

Thank you for requesting a letter of support from MnDOT for the Metropolitan Council/Transportation Advisory Board (TAB) 2016 Regional Solicitation. Your application for the Brockton Lane Interchange project impacts MnDOT right of way on I-94.

MnDOT, as the agency with jurisdiction over I-94, would allow the improvements included in the application for Brockton Lane Interchange. Details of a future maintenance agreement with the City would be determined during project development to define how the improvements will be maintained for the project's useful life.

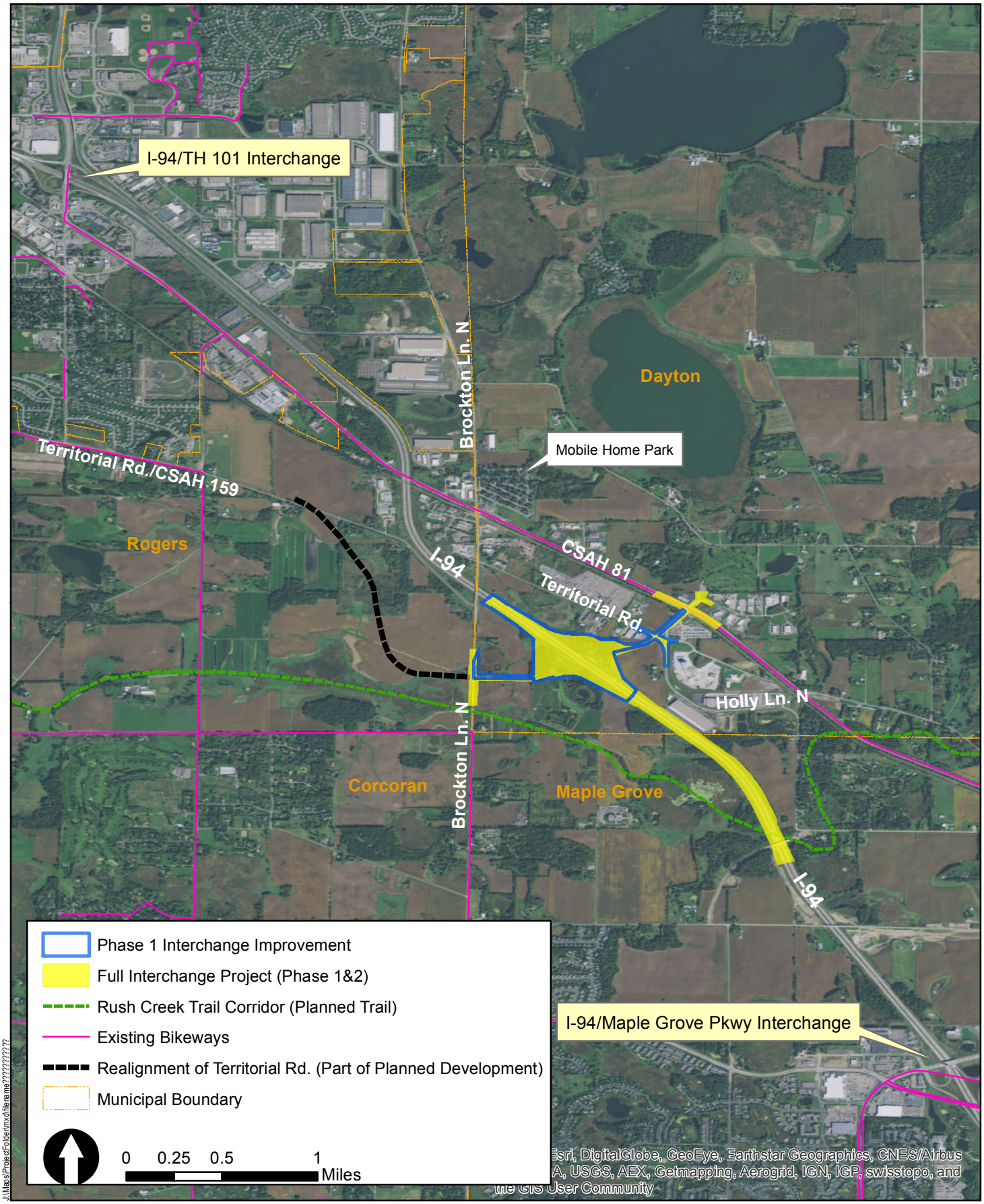
This project has no funding from MnDOT. In addition, the Metro District currently has no discretionary funding in year 2020 of the State Transportation Improvement Program (STIP) or year 2021 of the Capital Highway Investment Plan (CHIP) to assist with construction or assist with MnDOT services such as the design or construction engineering of the project. Please continue to work with MnDOT Area staff to assist in identifying additional project funding if needed.

Sincerely,

Scott McBride, P.E.
Metro District Engineer

Cc: Elaine Koustsoukos, Metropolitan Council
John Griffith, MnDOT Metro District – West Area Manager

Figure 1



Project Location

Interstate 94 and Brockton Lane Interchange

City of Dayton

Brockton Ln. Interchange

Photo taken looking southeast along CSAH 81 toward the intersection of Holly Ln. N and CSAH 81--an intersection that will be improved as part of the proposed project to facilitate improved access to the proposed interchange.

Legend

Figure 4

Brockton Ln. Interchange

Photo taken looking west toward I-94 from the intersection of Holly Ln. N and Territorial Rd. at the future location of the proposed interchange.

Legend

Figure 5

Brockton Ln. Interchange

Photo taken looking northeast toward the intersection of Holly Ln. N and CSAH 81--an intersection that will be improved as part of the proposed project to facilitate improved access to the proposed interchange.

Legend

Figure 6

Brockton Ln. Interchange

Photo taken looking north along Brockton Lane in the vicinity of the proposed connection of the proposed interchange to Brockton Lane.

Legend

Figure 7

Brockton Ln. Interchange

Photo taken looking southeast along Holly Ln. N toward an existing freight transportation business (King Solutions) immediately south of the proposed interchange connection to Holly Ln. N and Territorial Dr.

Legend

Figure 8

Businesses within the project area that are expected to benefit from this facility include:

City of Dayton

- King Solutions: A provider of freight transportation, warehousing and order fulfillment services with 115 employees, on Territorial Road a mile southeast of the Brockton interchange. King Solutions recently completed a 50,000 sq. ft. addition to their warehouse.
- Cemstone: A supplier of concrete and aggregate materials across the Midwest. The Dayton facility was recently constructed and includes new technology to produce concrete and aggregate materials. The company has about 40 employees and good growth prospects. The company is situated on Territorial Road about a mile southeast of the proposed interchange. The company operates a small fleet of trucks as well out of a $1.5 million building. Employees earn on average $41/hour.
- Dayton Distribution Center: Newly constructed (2014) warehouse and distribution center constructed by Liberty Property Trust. This 247,000 sq. ft. facility will employ approximately 60-80 employees. This facility is located on Holly Lane south of Territorial and less than one mile from the proposed interchange. There is also room for an additional approximately 80,000 square feet on this site.
- French Lake Industrial Center: A new industrial development north of 124th and east of Brockton Lane. This development has received preliminary plat for 1.8 million sq. ft. of industrial warehouse and distribution facilities. The project will include construction of the Rogers Drive and Brockton Lane intersection; improvements to W. French Lake Road as a frontage road that will connect to the proposed interchange and improvements to Brockton Lane and Hwy. 81. While over a mile from the interchange roadway improvements are planned that will provide more direct access to I-94 via this proposed interchange to serve this development and over 4 million sq. ft. of similar warehouse and distribution facilities already built in the City of Rogers along the west side of Brockton Lane. Anticipated future employment will range from 120 to over well over 2,000 depending on the end users.
- Countryside Covers: A local auto parts distributor with 2 employees and currently limited prospects for expansion. The company is situated at the intersection of Brockton Lane and CSAH 81. Average wages at the business amount to $42,000/year.
- Crystal Welding: A small welding company with 12 employees and plans to expand slowly. The business operates out of a $1 million building on CSAH 81, a mile southeast of the interchange. Employees earn on average $18/hour.
- ICA Corporation: An employee-owned contract manufacturing business established in 1970, that currently has 65 employees and plans for growth over the next five years. Average wages at the business are $20/hour, and it is situated less than half a mile north of the Brockton Lane/CSAH 81 intersection in a $1.7 million building.
- Fidelity Welding: A small welding company where employees earn about $60,000 a year. The company is situated about a mile southeast of the Brockton interchange off of CSAH 81.
- K-Manufacturing: A high-performance machining company with plans for growth over the next five years from 40 employees to 62 employees. Employees earn about $45,000 a year. The business is situated in a 25,000 square foot facility on Territorial Road about half a mile south of the Brockton interchange. This business is continuing to grow
- Unity Tool Inc.: A 40-year-old precision medical instrument manufacturing company, Unity Precision Manufacturing employs a staff of skilled professionals and sells products to medical device, electronic, commercial, industrial, aeronautic and automotive markets. The company

has plans for continued growth, and is located off of CSAH 81 less than a quarter mile from the Brockton Lane/CSAH 81 intersection, in very close proximity to the proposed interchange.
- Heating and Cooling Two: A family-owned HVAC company with approximately 15 employees located off of CSAH 81 in close proximity to the proposed Brockton Lane interchange.

City of Rogers

- Graco: An international manufacturer of premium pumps and sprays equipment for fluid application in construction, manufacturing, processing and maintenance. The company had close to $895 million in sales in 2011 and employs 2,300 people worldwide. It operates a facility with a sizeable fleet of trucks out of the Rogers' industrial park; about 2.5 miles north of the Brockton Lane interchange.
- Hisco: A distributor of supply-chain solution products with locations across the United States. The company operates out of a sizeable facility in the Rogers industrial park about 2.5 miles northwest of the Brockton Lane interchange.
- Great Northern Equipment Distributing, Inc.: The company is a wholesale distributor of gasoline and diesel small engines, outdoor power equipment, parts and accessories. It operates out of a large warehouse located within the Rogers industrial park about 2.5 miles northwest of the Brockton Lane interchange.
- Northwest Machine Technologies: Founded in 1983 with over 20 employees, this company provides machine tool solutions and offers engineering and maintenance services as well. It is located in the Rogers industrial park about 2.5 miles northwest of the Brockton interchange.
- Cabella's: Is a large regional retailer of outdoor recreational goods, employing approximately 265 employees. They generate considerable retail traffic, especially on some of the major weekends, like opening fishing/hunting, Labor Day, Memorial Day and Fourth of July.
- Medline is a large distribution warehouse facility, with daily semi-truck traffic; they have approximately 35 employees.
- FedEx is a new 335,000 square foot facility, which will begin operations in fall of 2016. When fully operational they will employ up to 750 employees and will generate significant increased traffic. The truck drivers are independent operators and are not included in the employee count. This facility is closer to the Brockton Interchange than it is to the 101 interchange.
- Archway Foods Archway is a leading provider of marketing logistics, fulfillment services and supply chain management solutions. They are housed in three facilities in Rogers, totaling approximately 800,000 square feet. They have approximately 350 employees in the Rogers' facilities.
- Thorp Distributing is another large distribution warehouse. They have approximately 90 employees.
- Reynolds Packaging is a Plastics products manufacturing facility with approximately 300 employees
- Reinhart Foodservice is a food processing/manufacturing facility employing approximately 270
- Diamondcrest at Welstad is a senior assisted and dementia living facility employing approximately 200.
- Clam Corporation is a sporting goods manufacturing facility of approximately 200 with close proximity to the Brockton
- Interchange
- There are a number of other leased and smaller industrial and warehouse facilities in the City of Rogers. Additionally, there are a significant number retail businesses as well.

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Brockton Interchange

Implementation Plan - Phase 1
City of Dayton

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Brockton Interchange

Implementation Plan - Phase 2

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