



Application

10353 - 2018 Roadway Expansion

10914 - CSAH 610/I-94 Interchange in Maple Grove

Regional Solicitation - Roadways Including Multimodal Elements

Status: Submitted
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Primary Contact

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City of Maple Grove

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

Organization Information

Name: MAPLE GROVE, CITY OF

Jurisdictional Agency (if different):

Organization Type:

City

Organization Website:

www.maplegrovern.gov

Address:

12800 Arbor Lakes Parkway N

*

MAPLE GROVE

Minnesota

55311-6180

City

State/Province

Postal Code/Zip

County:

Hennepin

Phone:*

763-494-6000

Ext.

Fax:

PeopleSoft Vendor Number

0000020964

Project Information

Project Name

CSAH 610 Expansion

Primary County where the Project is Located

Hennepin

Cities or Townships where the Project is Located:

City of Maple Grove

Jurisdictional Agency (If Different than the Applicant):

N/A

The proposed CSAH 610 project includes construction of a new four-lane divided A-Minor Arterial Expander roadway between CSAH 30 and TH 610 in Maple Grove. As shown in Figure 1, the project will complete missing movements in the I-94 interchange area, including a westbound I-94 to westbound CSAH 610 loop and an I-94 bridge on CSAH 610 connecting eastbound CSAH 30 to TH 610. CSAH 30 will be realigned to form a new signalized intersection with CSAH 610, and a traffic signal will be installed at the proposed CSAH 610 at I-94 eastbound on-ramp intersection. The project will construct sidewalks and multiuse trails along CSAH 610 including curb ramps and accessible pedestrian signals at all crosswalk locations.

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

The proposed project is an extension of the MnDOT TH 610 Completion project constructed in 2017 and included in the approved environmental documents. The first phase of these improvements was recently constructed by MnDOT with Corridors of Commerce funding. There are additional connections to the TH 610 project that are not yet funded (as identified in Figure 1) and were not included in the first phase of construction. The proposed CSAH 610 project will construct the remaining connections to assist the City in achieving their cost participation portion for the overall improvements highlighted in yellow in Figure 1.

The proposed project is a vital east-west link for the growing northern suburbs. CSAH 610 will provide improved regional connections to three important roadway facilities in the northwest Twin Cities Metropolitan Area: I-94, TH 610, and CSAH 30. The CSAH 30 corridor, as it extends to the west, serves a large geographic area between TH 55 and I-94 that is currently underserved by an arterial roadway system. The Metropolitan Council's

Environmental Services is currently extending an interceptor to serve Corcoran, Rogers, and Dayton, which will promote growth in this area with significant impacts to an already congested CSAH 30 corridor.

The proposed project will also provide multimodal benefits by providing direct access to the Blue Line LRT and the Maple Grove Transit Parkway Station located on Maple Grove Parkway between I-94 and TH 610.

More importantly, CSAH 610 is identified in the Metropolitan Council's 2040 Transportation Policy Plan as one of the few remaining A-Minor Arterial Expander roadways that are planned, but not yet constructed. The proposed project is a pivotal component in fulfilling regional plans for expansion, while supporting infrastructure investments that are currently being made by MnDOT in the surrounding area.

(Limit 2,800 characters; approximately 400 words)

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

Construction of new four-lane divided highway (CSAH 610) between CSAH 30 and TH 610. Includes new bridge over I-94 and turning movement and signalization improvements on CSAH 30.

Project Length (Miles)

1.6

to the nearest one-tenth of a mile

Project Funding

Are you applying for competitive funds from another source(s) to implement this project?

No

If yes, please identify the source(s)

N/A

Federal Amount

\$7,000,000.00

Match Amount

\$13,477,000.00

Minimum of 20% of project total

Project Total

\$20,477,000.00

Match Percentage

65.82%

Minimum of 20%

Compute the match percentage by dividing the match amount by the project total

Source of Match Funds

City of Maple Grove, Hennepin County

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: 2022

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

Additional Program Years: 2020, 2021

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 Maple Grove

Functional Class of Road

A-Minor Arterial Expander

Road System

CSAH

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

Road/Route No.

610

i.e., 53 for CSAH 53

Name of Road

CSAH 610

Example; 1st ST., MAIN AVE

Zip Code where Majority of Work is Being Performed

55311

(Approximate) Begin Construction Date

06/01/2020

(Approximate) End Construction Date

12/31/2021

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

From:

CSAH 30

(Intersection or Address)

To:

TH 610

(Intersection or Address)

DO NOT INCLUDE LEGAL DESCRIPTION

Or At

GRADE, AGG BASE, BIT BASE, BIT SURF, SIDEWALK, CURB AND GUTTER, STORM SEWER, SIGNALS, LIGHTING, BIKE PATH, PED RAMPS, BRIDGE, LANDSCAPING

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.:	N/A
New Bridge/Culvert No.:	TBD
Structure is Over/Under (Bridge or culvert name):	I-94

Requirements - All Projects

All Projects

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

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

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

Goal B: Safety and Security (2040 TPP, pg. 2.7); Objective: Reduce crash rates and improve safety and security for all modes of passenger travel and freight transport. Strategy B1: Regional transportation partners will incorporate safety and security considerations for all modes and users throughout the processes of planning, funding, construction, operation. Strategy B6: Regional transportation partners will use best practices to provide and improve facilities for safe walking and bicycling, since pedestrians and bicyclists are the most vulnerable users of the transportation system.

Goal C: Access to Destinations (2040 TPP, pg. 2.8); Objective: Increase the availability of multimodal travel options, especially in congested highway corridors. Objective: Improve multimodal travel options for people of all ages and abilities to connect to jobs and other opportunities, particularly for historically under-represented populations. Strategy C1: Regional transportation partners will continue to work together to plan and implement transportation system that are multimodal and provide connections between modes. The Council will prioritize regional projects that are multimodal and cost-effective and encourage investments to include appropriate provisions for bicycle and pedestrian travel. Strategy C2: Local units of government should provide a system of interconnected arterial roads, streets, bicycle facilities, and pedestrian facilities to meet local travel needs using Complete Street principles.

Goal D: Competitive Economy (2040 TPP, pg. 2.11); Objective: Support the region's economic competitiveness through the efficient movement of freight. Strategy D5: The Council and MnDOT will work with transportation partners to identify the impacts of highway congestion on freight and

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

identify cost-effective mitigation.

Goal E: Healthy Environment (TPP, pg. 2.12);
Objective: Increase the availability and attractiveness of transit, bicycling, and walking to encourage healthy communities and active car-free lifestyles. Strategy E3: Regional transportation partners will plan and implement a transportation system that considers the needs of all potential users, including children, senior citizens, and persons with disabilities, and that promotes active lifestyles and cohesive communities. A special emphasis should be place on promoting the environment and health benefits of alternative to single-occupancy vehicle travel.

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.

2040 Metropolitan Council Transportation Policy Plan (2015), Figures 1-2 and 12-1

2030 Hennepin County Transportation Systems Plan (2011), Page 5-12, Maps C through F

List the applicable documents and pages:

City of Maple Grove Transportation Plan (2018), Page 14

City of Maple Grove Transportation Plan (2009), Page 22

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

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

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

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

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

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

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

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

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

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

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

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

8. The project must comply with the Americans with Disabilities Act (ADA).

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

9. In order for a selected project to be included in the Transportation Improvement Program (TIP) and approved by USDOT, the public agency sponsor must either have, or be substantially working towards, completing a current Americans with Disabilities Act (ADA) self-evaluation or transition plan that covers the public right of way/transportation, as required under Title II of the ADA.

The applicant is a public agency that employs 50 or more people and has an adopted ADA transition plan that covers the public right of way/transportation.

Date plan adopted by governing body

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

07/01/2016

12/31/2018

Date process started

Date of anticipated plan completion/adoption

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

Date self-evaluation completed

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

Date process started

Date of anticipated plan completion/adoption

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

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

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

11. The owner/operator of the facility must operate and maintain the project year-round for the useful life of the improvement, per FHWA direction established 8/27/2008 and updated 6/27/2017.

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

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

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

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

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

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

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

Roadways Including Multimodal Elements

1. All roadway and bridge projects must be identified as a principal arterial (non-freeway facilities only) or A-minor arterial as shown on the latest TAB approved roadway functional classification map.

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

Roadway Expansion and Reconstruction/Modernization and Spot Mobility projects only:

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

Check the box to indicate that the project meets this requirement. 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 MnDOT's Cost Participation for Cooperative Construction Projects and Maintenance Responsibilities manual. In the case of a federally funded trunk highway project, the policy guidelines should be read as if the funded trunk highway route is under local jurisdiction.

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

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

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

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

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

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

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

Roadway Expansion, Reconstruction/Modernization and Spot Mobility, and Bridge Rehabilitation/Replacement projects only:

7. All roadway projects that involve the construction of a new/expanded interchange or new interchange ramps must have approval by the Metropolitan Council/MnDOT Interchange Planning Review Committee prior to application submittal. Please contact Michael Corbett at MnDOT (Michael.J.Corbett@state.mn.us or 651-234-7793) to determine whether your project needs to go through this process.

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

Requirements - Roadways Including Multimodal Elements

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES

	Cost
Mobilization (approx. 5% of total cost)	\$780,000.00
Removals (approx. 5% of total cost)	\$25,000.00
Roadway (grading, borrow, etc.)	\$3,350,000.00

Roadway (aggregates and paving)	\$3,520,000.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$1,470,000.00
Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$438,000.00
Traffic Control	\$459,000.00
Striping	\$128,000.00
Signing	\$341,000.00
Lighting	\$89,000.00
Turf - Erosion & Landscaping	\$451,000.00
Bridge	\$5,392,000.00
Retaining Walls	\$278,000.00
Noise Wall (not calculated in cost effectiveness measure)	\$0.00
Traffic Signals	\$205,000.00
Wetland Mitigation	\$0.00
Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00
Roadway Contingencies	\$3,374,000.00
Other Roadway Elements	\$0.00
Totals	\$20,300,000.00

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	\$72,000.00
Sidewalk Construction	\$105,000.00
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

\$177,000.00

Specific Transit and TDM Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES

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

Transit Operating Costs

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

Totals

Total Cost	\$20,477,000.00
Construction Cost Total	\$20,477,000.00
Transit Operating Cost Total	\$0.00

Congestion on adjacent Parallel Routes:

Adjacent Parallel Corridor	CSAH 30 and Maple Grove Parkway
Adjacent Parallel Corridor Start and End Points:	
Start Point:	CSAH 30 at 520 feet east of Troy Lane
End Point:	Maple Grove Parkway at TH 610
Free-Flow Travel Speed:	39

The Free-Flow Travel Speed is black number.

Peak Hour Travel Speed: 29

The Peak Hour Travel Speed is red number.

Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow: 25.64%

Upload Level of Congestion Map: 1531228730560_CSAH 610 Expansion_Level of Congestion.pdf

Principal Arterial Intersection Conversion Study:

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

(80 Points)

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

(60 Points)

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

(50 Points)

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

(40 Points)

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

(0 Points)

Not listed as a priority in the study: Yes

(0 Points)

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

Existing Employment within 1 Mile: 5044

Existing Manufacturing/Distribution-Related Employment within 1 Mile: 909

Existing Post-Secondary Students within 1 Mile: 0

Upload Map 1531228848467_CSAH 610 Expansion_Regional Economy.pdf

Please upload attachment in PDF form.

Measure C: Current Heavy Commercial Traffic

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

Along Tier 1:

Along Tier 2: Yes

Along Tier 3:

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

None of the tiers:

Measure A: Current Daily Person Throughput

Location	Maple Grove Parkway east of CSAH 30
Current AADT Volume	29000
Existing Transit Routes on the Project	787

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

Upload Transit Connections Map	1531404662765_CSAH 610 Expansion_Transit Connections.pdf
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Please upload attachment in PDF form.

Response: Current Daily Person Throughput

Average Annual Daily Transit Ridership	18.0
Current Daily Person Throughput	37718.0

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	2040 Met Council Regional Activity Based Model refined for the City of Maple Grove. Forecast location on CSAH 610 between CSAH 30 and I-94.
Forecast (2040) ADT volume	33000

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

Select one:

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

(up to 100% of maximum score)

Project located in Area of Concentrated Poverty:

(up to 80% of maximum score)

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

(up to 60% of maximum score)

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

Yes

(up to 40% of maximum score)

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

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

Response:

The TH 610 Completion project actively engaged the community during its development phase, which included the CSAH 610 component currently proposed for construction. Engagement activities already performed include 3 public open house events and 3 public meetings. Attendance at these events represented a full cross section of the community including low-income, people of color, children, people with disabilities, elderly residents, property owners, multimodal users, business owners, and school officials. These community members were able to learn about the project, review proposed designs, share their input and concerns, and ask questions and receive responses. The TH 610 project provided added engagement through brochures, newsletters, newspaper and TV advertising, a website, email alerts, direct mailings, project hotline, and direct contact information.

The CSAH 610 project will continue to engage the full cross section of the community through public events, print materials, social media, and one-on-one meetings. Pop-up events will be held at locations accessible to low-income populations, people of color, children, people with disabilities, and the elderly to provide residents opportunities to receive information directly and voice their concerns in person. A survey will be facilitated within the community to identify specific positive and negative elements of the project.

(Limit 1,400 characters; approximately 200 words)

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

The project will provide benefits to all members of the surrounding community including low-income populations, people of color, children, people with disabilities, and the elderly.

Supporting the City's local economy and providing opportunities for job growth is a direct benefit to nearby low-income populations. Improvements in regional accessibility and mobility resulting from the CSAH 610 extension will increase business demand, freight operations, and employment growth in the surrounding corridor by relieving congestion and travel delays on the overburdened existing roadway system. The demand for more business will provide low-income populations new employment opportunities within the project area and surrounding region.

Response:

Another direct benefit to all members of the community, especially low-income populations, children, people with disabilities, and the elderly, is the reduction of existing traffic volumes on CSAH 30 and Maple Grove Parkway. As indicated in the 2040 Met Council Regional Activity Based Model refined for the City of Maple Grove, the proposed CSAH 610 connections to TH 610 and I-94 will remove 55% of traffic on CSAH 30 and 33% of traffic on Maple Grove Parkway by 2040, significantly reducing congestion. Reducing congestion on CSAH 30 and Maple Grove Parkway will provide the needed capacity for improving transit services by increasing access and mobility to nearby schools, employment centers, and healthcare facilities.

CSAH 610, CSAH 30, and Maple Grove Parkway are important access routes for all travel modes and serve various population groups. For example,

the project will improve access for low-income populations, people of color, children, people with disabilities, and the elderly to the Blue Line LRT. This connection will provide greater opportunities to access jobs throughout the Twin Cities without having to own a personal vehicle. The project will also improve regional access for children living in the area to Fernbrook Elementary School and the Maple Grove Senior High School.

The project is located in proximity to several hospitals and medical facilities on Maple Grove Parkway such as the Maple Grove Hospital, North Memorial Health, and Gillette Children's Specialty Healthcare. By reducing congestion on Maple Grove Parkway, the proposed project will benefit disabled and elderly populations by improving access, mobility, and emergency response times to these facilities.

The multiuse trails featured in the project will offer benefits to all users, including children and users with disabilities that are unable to drive. The multiuse trails along CSAH 610 will provide a multimodal connection across I-94, offering additional and alternative access to employment centers, schools, healthcare facilities, and other destinations.

(Limit 2,800 characters; approximately 400 words)

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

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

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

Increased noise.

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

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

Increased speed and/or cut-through traffic.

Removed or diminished safe bicycle access.

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

Displacement of residents and businesses.

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

Other

Response:

As with most construction projects negative externalities will be created; however proactive mitigation measures will be implemented to minimize impacts. For example, construction of the new CSAH 610 alignment will likely require temporary roadway closures and detour routes commonly resulting in negative externalities such as traffic congestion and delays. To minimize traffic congestion and delays near the work zone, a project-specific transportation management plan (TMP) will be designed and implemented to maintain acceptable levels of safety, accessibility, and mobility. The TMP will identify a variety of management strategies to mitigate negative impacts on traffic. These strategies will include increased incident management and vehicle removal capabilities, intelligent transportation system (ITS) technologies to divert traffic and inform travelers of delays and encourage alternate routes, work zone traffic simulations to forecast impacts on traffic flow and congestion, alternative scheduling and phasing including nighttime construction, and scheduling work to minimize lane closures and delays during peak traffic hours.

Noise originating from construction of the new CSAH 610 roadway is another negative externality of the project. Construction activities will occur in close proximity to existing employment centers, schools, healthcare facilities, and residences, and need to be closely controlled and monitored to avoid excessive noise impacts. Identifying noise sensitive locations within the adjacent community will allow proper mitigation measures to be employed. Mitigation approaches include performing construction activities at the appropriate time of day, adhering to local noise control requirements, utilizing the FHWA Roadway Construction Noise Model to predict noise levels during various stages of construction, and

restricting equipment to locations where noise will be reduced.

An additional negative externality is stormwater runoff due to increased impervious surface resulting from the project. Without proper mitigation measures, stormwater runoff can contaminate existing watersheds and erode existing support embankments and wetland barriers. Drainage ponds and other Best Management Practices (BMP) will be implemented to mitigate the impact of stormwater runoff. In addition, a NPDES permit will be required for construction activities associated with the project. During construction, grading, ditches, siltation fences, and fiber rolls will be employed as temporary erosion control measures. These measures will be implemented to control runoff and prevent off-site sedimentation. After construction, all disturbed areas will be sodded or seeded, leaving temporary erosion control measures in-place until the vegetative cover has been established.

(Limit 2,800 characters; approximately 400 words)

Upload Map

1531238361795_CSAH 610 Expansion_Socio-Economic Conditions.pdf

Measure B: Affordable Housing

City	Segment Length (For stand-alone projects, enter population from Regional Economy map) within each City/Township	Segment Length/Total Project Length	Score	Housing Score Multiplied by Segment percent
Maple Grove	1.6	1.0	75.0	75.0

Total Project Length

Total Project Length (as entered in the "Project Information" form) 1.6

Affordable Housing Scoring

Total Project Length (Miles) or Population 1.6
Total Housing Score 75.0

Affordable Housing Scoring

Measure A: Infrastructure Age

Year of Original Roadway Construction or Most Recent Reconstruction	Segment Length	Calculation	Calculation 2
1965.0	1.22	2397.3	1965.0
	1	2397	1965

Average Construction Year

Weighted Year 1965.0

Total Segment Length (Miles)

Total Segment Length 1.22

Measure A: Congestion Reduction/Air Quality

Total Peak Hour Delay Per Vehicle Without The Project (Seconds/Vehicle)	Total Peak Hour Delay Per Vehicle With The Project (Seconds/Vehicle)	Total Peak Hour Delay Reduced by Project (Seconds/Vehicle)	Volume (Vehicles per hour)	Total Peak Hour Delay Reduced by the Project:	EXPLANATION of methodology used to calculate railroad crossing delay, if applicable.	Synchro or HCM Reports
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0 0 0 0

See attached sheet with the calculations for vehicle delay reduction. Because the intersection volume changes between existing and improved, the online application calculator cannot be used. The total delay reduction is on the fourth page of the attachment.

15314998151
87_SynchroRe
sults.pdf

Vehicle Delay Reduced

Total Peak Hour Delay Reduced 0

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

Total (CO, NOX, and VOC)
Peak Hour Emissions
without the Project
(Kilograms):

0

Total (CO, NOX, and VOC)
Peak Hour Emissions with
the Project (Kilograms):

0

Total (CO, NOX, and VOC)
Peak Hour Emissions
Reduced by the Project
(Kilograms):

0

Total

Total Emissions Reduced: 0

Upload Synchro Report

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

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

Total (CO, NOX, and VOC) Peak Hour Emissions without the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions with the Project (Kilograms):	Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):
63.38	44.68	18.7
63	45	19

Total Parallel Roadway

Emissions Reduced on Parallel Roadways	18.7
Upload Synchro Report	1530821205780_Synchro Results.pdf

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

New Roadway Portion:

Cruise speed in miles per hour with the project:	50.0
Vehicle miles traveled with the project:	1127.0
Total delay in hours with the project:	14.0
Total stops in vehicles per hour with the project:	1589.0
Fuel consumption in gallons:	72.397
Total (CO, NOX, and VOC) Peak Hour Emissions Reduced or Produced on New Roadway (Kilograms):	7.218

EXPLANATION of methodology and assumptions used:(Limit 1,400 characters; approximately 200 words)

Obtained results of the new CSAH 610 section over I-94. This includes the travel distance and delay and stops at the new intersection with CSAH 30.

Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):	11.482
--	--------

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:

See attached explanation form. The provided method for new roadways was used.

(Limit 700 Characters; approximately 100 words)

Rationale for Crash Modification Selected:

See attached explanation form. The provided method for new roadways was used.

(Limit 1400 Characters; approximately 200 words)

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

1.5526348E7

Worksheet Attachment

1531328397296_Complete CSAH 610 Crash Analysis8x11.pdf

Please upload attachment in PDF form.

Roadway projects that include railroad grade-separation elements:

Current AADT volume: 0
Average daily trains: 0
Crash Risk Exposure eliminated: 0

Measure A: Multimodal Elements and Existing Connections

The project includes a multiuse trail on the south side of CSAH 610 from CSAH 30 to Maple Grove Parkway, providing a safe, convenient, and grade-separated pedestrian and bicycle crossing of I-94 and improving pedestrian and bicycle safety and connectivity. People of all ages and abilities will be able to use the new multiuse trail to connect to existing bicycle, pedestrian, and transit facilities and access parks, schools, employment centers, healthcare facilities, and commercial areas on CSAH 30 and Maple Grove Parkway.

The project will provide an alternative connection between CSAH 30 and TH 610, and as indicated in the 2040 Met Council Regional Activity Based Model refined for the City of Maple Grove, will reduce traffic volumes on Maple Grove Parkway by 15,000 vpd by 2040. Reduction of traffic volumes will improve access to pedestrian, bicycle, and transit facilities and improve existing transit operations by reducing congestion and increasing mobility. The project will provide an additional pedestrian and bicycle connection between CSAH 30 and the Medicine Lake Regional Trail.

Response:

The multiuse trail will tie into the existing CSAH 30 RBTN Tier 2 Corridor on the western terminus and the existing multiuse trail on Maple Grove Parkway on the eastern terminus, which provides direct access to the CSAH 81 RBTN Tier 1 Corridor. The CSAH 30 RBTN Tier 2 Corridor connects to the CSAH 101 RBTN Tier 2 Alignment, while the CSAH 81 RBTN Tier 1 Corridor connects to the Medicine Lake Regional Trail and CSAH 81 RBTN Tier 1 Alignment. The project will provide the missing RBTN connection between existing RBTN Tier 2 Corridors and Alignments west of I-94 to existing RBTN Tier 1 Alignments and Corridors east of I-94. By providing the missing RBTN connection, the

project will make it easier and safer for residents to connect to the regional bicycle system.

The project will also improve existing pedestrian and transit connections. Existing multiuse trails are located on both sides of CSAH 30 and Maple Grove Parkway and are included on the Medicine Lake Regional Trail and Elm Creek Park Reserve Trail. The project will provide a shorter and more direct connection between the CSAH 30 and Maple Grove Parkway pedestrian trails providing access to shopping centers, schools, healthcare facilities and the Medicine Lake Regional Trail and Elm Creek Park Reserve Trail.

The project will also enhance existing transit connections as the Maple Grove Transit (MGT) Parkway Station is located on Maple Grove Parkway east of I-94. The facility serves both MGT Local Connector Route 787 and Express Route 785 connecting to downtown Minneapolis. Other existing MGT connections include Express Route 781 which provides trips to and from downtown Minneapolis and services CSAH 30.

(Limit 2,800 characters; approximately 400 words)

Transit Projects Not Requiring Construction

If the applicant is completing a transit application that is operations only, check the box and do not complete the remainder of the form. These projects will receive full points for the Risk Assessment.

Park-and-Ride and other transit construction projects require completion of the Risk Assessment below.

Check Here if Your Transit Project Does Not Require Construction

Measure A: Risk Assessment - Construction Projects

1)Layout (30 Percent of Points)

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

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

Yes

100%

Attach Layout

1531426121875_CSAH 610_Aproved Layout.pdf

Please upload attachment in PDF form.

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

50%

Attach Layout

Please upload attachment in PDF form.

Layout has not been started

0%

Anticipated date or date of completion

10/29/2012

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

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

Yes

100%

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

100%

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

80%

Historic/archeological property impacted; determination of adverse effect anticipated

40%

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

0%

Project is located on an identified historic bridge

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

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

100%

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

Yes

50%

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

25%

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

0%

Anticipated date or date of acquisition 12/31/2021

4)Railroad Involvement (20 Percent of Points)

No railroad involvement on project or railroad Right-of-Way
agreement is executed (include signature page, if applicable) Yes

100%

Signature Page

Please upload attachment in PDF form.

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

50%

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

0%

Anticipated date or date of executed Agreement

Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form): \$20,477,000.00

Enter Amount of the Noise Walls: \$0.00

Total Project Cost subtract the amount of the noise walls: \$20,477,000.00

Points Awarded in Previous Criteria

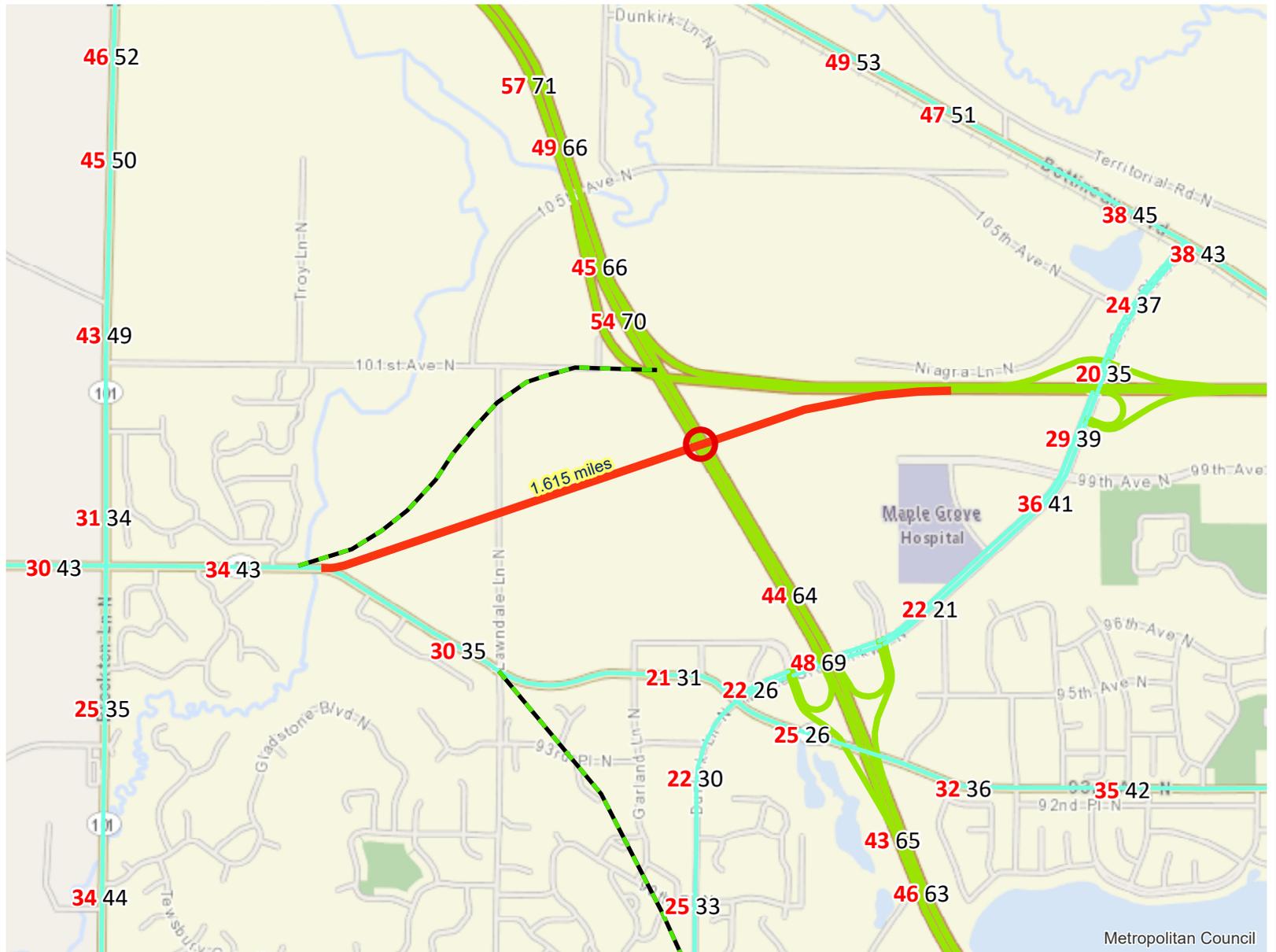
Cost Effectiveness \$0.00

Other Attachments

File Name	Description	File Size
CSAH 610_Approval Letter_Interchange Planning Review Committee.pdf	Approval letter from Interchange Planning Review Committee.	54 KB
CSAH 610_Concept_Figure 1.pdf	Concept drawing (Figure 1).	1.9 MB
CSAH 610_Delay Reductions.pdf	CSAH 610 Intersection Delay Reductions	36 KB
CSAH 610_Existing Conditions Photograph.pdf	Existing conditions photograph.	1.2 MB
CSAH 610_Letter of Support_Hennepin County.pdf	Letter of support from Hennepin County.	106 KB
CSAH 610_Letter of Support_MnDOT.pdf	Letter of support from MnDOT.	541 KB
CSAH 610_Project Summary.pdf	One-page project summary.	168 KB

Level of Congestion

Roadway Expansion Project: CSAH 610 Expansion | Map ID: 1529424372686



Metropolitan Council

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



Created: 6/19/2018
LandscapeRSA1



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



Regional Economy

Roadway Expansion Project: CSAH 610 Expansion | Map ID: 1529424372686

Results

WITHIN ONE MI of project:
Postsecondary Students: 0

Totals by City:
Maple Grove
Population: 11104
Employment: 5044
Mfg and Dist Employment: 909



NCompass Technologies
MapInfo

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



Created: 6/19/2018
LandscapeRSA5



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



Transit Connections

Roadway Expansion Project: CSAH 610 Expansion | Map ID: 1529424372686

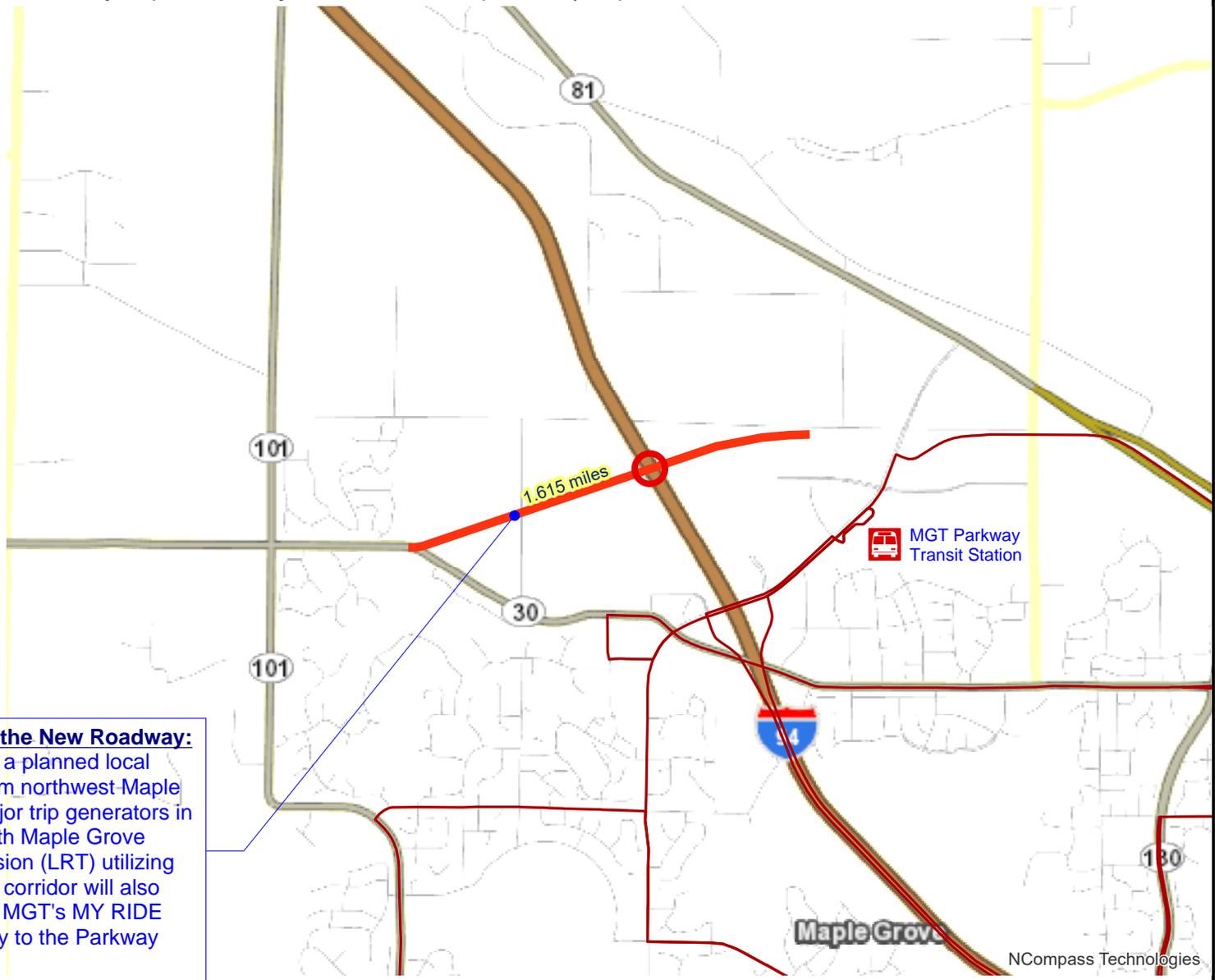
Results

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

**indicates Planned Alignments*

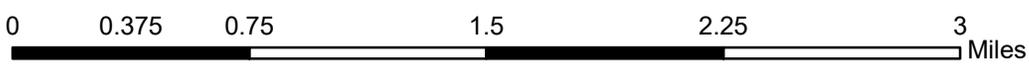
Transit Routes that will be Diverted to the New Roadway:

Maple Grove Transit (MGT) Route 784 is a planned local fixed route that will make connections from northwest Maple Grove through the heart of the City to major trip generators in Brooklyn Park. This route will connect both Maple Grove Transit Stations with the Blue Line Extension (LRT) utilizing the proposed CSAH 610. The CSAH 610 corridor will also facilitate quick and efficient rides through MGT's MY RIDE service in the northwest portion of the City to the Parkway Transit Station.



○ Project Points — Transit Routes

— Project



Created: 6/19/2018
LandscapeRSA3



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<http://giswebsite.metc.state.mn.us/gisitenew/notice.aspx>



NCompass Technologies

Socio-Economic Conditions

Roadway Expansion Project: CSAH 610 Expansion | Map ID: 1529424372686

Results

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:
(0 to 12 Points)



 Project Points

 Project

 Area of Concentrated Poverty > 50% residents of color

 Area of Concentrated Poverty

 Above reg'l avg conc of race/poverty

0 0.25 0.5 1 1.5 2 Miles

Created: 6/19/2018
LandscapeRSA2



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



John Hagen

From: John Hagen
Sent: Friday, July 13, 2018 11:15 AM
To: 'Koutsoukos, Elaine'; Peterson, Steven
Cc: Tim Babich; 'Tom Sachi'
Subject: CSAH 610 Regional Solicitation Application: Section 5A (Total Delay Reduction)
Attachments: Delay Email Question With Steve Peterson.pdf

Elaine and Steve:

The purpose of this email is remind you of the past discussions that you had with Tom Sachi with SRF Consulting (our consultant that is assisting us with the technical analysis our application) regarding our response to Section 5A (Congestion Reduction/Air Quality) of the Webgrant form for Maple Grove's CSAH 610 Expansion project 2018 Regional Solicitation Application.

As Tom pointed out in his attached July 2, 2018 email, the online application does not accurately show delay reductions for projects that result in a reduction of vehicles as a result of the proposed project. Based on a follow-up conversation that Tom had with Steve, the agreed upon approach was for us to enter zeros in Section 5A of the Webgrant form, in order for us to be able to include an attachment that provides our peak hour delay reductions at each intersection, total network delay reductions, and Synchro results.

Therefore, since the online application does not accurately show delay reductions for projects that result in reduction in vehicles, we respectfully request that you utilize the Total Peak Hour Delay reported in our PDF attachment of Section 5A for the scoring in Section 5A (Congestion Reduction/Air Quality) of our CSAH 610 Expansion project application.

Thanks for your time and consideration in this matter!

John

John Hagen, P.E., PTOE
Transportation Operations Engineer
City of Maple Grove
12800 Arbor Lakes Parkway
Maple Grove, MN 55369-7064
(Note: New mailing address Effective May 1, 2018)
Direct-Dial: 763-494-6364

Tom Sachi

From: Peterson, Steven <Steven.Peterson@metc.state.mn.us>
Sent: Monday, July 02, 2018 10:27 PM
To: Tom Sachi
Subject: Re: Synchro

Thanks

Sent from my iPhone

On Jul 2, 2018, at 5:34 PM, Tom Sachi <TSachi@srfconsulting.com> wrote:

Steve,

See attached for the synchro reports. The example I have is intersection #70 in the attached reports. The delay at the intersection remains the same at 28 sec/veh after optimizing, but the volume reduces from 1856 to 1656. In the application, we can only enter one volume, therefore, the application gives us a zero reduction in delay at intersection 70, when really there is a reduction in overall delay because there is a fewer amount of vehicles

For example:

How the application shows it:

Existing Delay – 28 sec/veh

Future delay – 28 sec/veh

Delay Reduction = 0 sec/veh

Number of Vehicles = 1856 vehicles

Reduction in delay = 0 sec

How I would show it

Existing: 28 sec/veh * 1856 veh = 51968 sec of delay

Future: 28 sec/veh * 1656 veh = 46368 sec of delay

Total Reduction = 5600 sec

The online app doesn't let us accurately show the reduction because it cannot account for the reduction in vehicles.

Let me know if you still have questions.

-Tom

From: Peterson, Steven [<mailto:Steven.Peterson@metc.state.mn.us>]

Sent: Monday, July 02, 2018 4:57 PM

To: Tom Sachi <TSachi@srfconsulting.com>

Subject: Synchro

Tom,

When you get done with the Synchro reports for those two projects, could you please share them with Elaine and I to make sure there isn't a way to input it into Webgrants somehow?

Thanks,
Steve

<image001.png>

Steve Peterson, AICP

Manager of Highway Planning and TAB/TAC Process
Metropolitan Transportation Services

steven.peterson@metc.state.mn.us

P. 651.602.1819 | F. 651.602.1739

390 North Robert Street | St. Paul, MN | 55101 | metro council.org

<image002.gif><image003.png><image004.png><image005.png> <image006.gif>

<Future PM_Balanced - Report.pdf>

<Existing PM_Balanced - Report.pdf>

Maple Grove - CSAH 610 Expansion

399: CR 30 and Lawndale		
Existing Volume	1936	vehicles
Existing Delay	36	sec/veh
Existing Total Delay	69696	seconds
Future Volume	737	vehicles
Future Delay	28	sec/veh
Future Total Delay	20636	seconds
Total Delay Reduction	49060	seconds

403: Maple Grove Parkway/East 94 Ramps		
Existing Volume	3164	vehicles
Existing Delay	39	sec/veh
Existing Total Delay	123396	seconds
Future Volume	2398	vehicles
Future Delay	29	sec/veh
Future Total Delay	69542	seconds
Total Delay Reduction	53854	seconds

407: Maple Grove Parkway/South 610 Ramps		
Existing Volume	1901	vehicles
Existing Delay	4	sec/veh
Existing Total Delay	7604	seconds
Future Volume	1274	vehicles
Future Delay	4	sec/veh
Future Total Delay	5096	seconds
Total Delay Reduction	2508	seconds

400: CR 30 and Garland Ln		
Existing Volume	2134	vehicles
Existing Delay	19	sec/veh
Existing Total Delay	40546	seconds
Future Volume	935	vehicles
Future Delay	15	sec/veh
Future Total Delay	14025	seconds
Total Delay Reduction	26521	seconds

404: Maple Grove Parkway/Upland Ln		
Existing Volume	2601	vehicles
Existing Delay	19	sec/veh
Existing Total Delay	49419	seconds
Future Volume	2061	vehicles
Future Delay	16	sec/veh
Future Total Delay	32976	seconds
Total Delay Reduction	16443	seconds

408: Maple Grove Parkway/North 610 Ramps		
Existing Volume	1390	vehicles
Existing Delay	17	sec/veh
Existing Total Delay	23630	seconds
Future Volume	975	vehicles
Future Delay	13	sec/veh
Future Total Delay	12675	seconds
Total Delay Reduction	10955	seconds

401: CR 30 and Dunkirk/Maple Grove Parkway		
Existing Volume	3935	vehicles
Existing Delay	37	sec/veh
Existing Total Delay	145595	seconds
Future Volume	2751	vehicles
Future Delay	26	sec/veh
Future Total Delay	71526	seconds
Total Delay Reduction	74069	seconds

405: Maple Grove Parkway/Hospital Drive		
Existing Volume	2209	vehicles
Existing Delay	28	sec/veh
Existing Total Delay	61852	seconds
Future Volume	1750	vehicles
Future Delay	22	sec/veh
Future Total Delay	38500	seconds
Total Delay Reduction	23352	seconds

409: Maple Grove Parkway/CR 81		
Existing Volume	2431	vehicles
Existing Delay	16	sec/veh
Existing Total Delay	38896	seconds
Future Volume	2331	vehicles
Future Delay	16	sec/veh
Future Total Delay	37296	seconds
Total Delay Reduction	1600	seconds

402: Maple Grove Parkway/West 94 Ramps		
Existing Volume	3549	vehicles
Existing Delay	37	sec/veh
Existing Total Delay	131313	seconds
Future Volume	2591	vehicles
Future Delay	30	sec/veh
Future Total Delay	77730	seconds
Total Delay Reduction	53583	seconds

406: Maple Grove Parkway/Grove Circle		
Existing Volume	2369	vehicles
Existing Delay	17	sec/veh
Existing Total Delay	40273	seconds
Future Volume	1839	vehicles
Future Delay	16	sec/veh
Future Total Delay	29424	seconds
Total Delay Reduction	10849	seconds

410: CR 81/Fernbrook Lane		
Existing Volume	3355	vehicles
Existing Delay	60	sec/veh
Existing Total Delay	201300	seconds
Future Volume	3255	vehicles
Future Delay	51	sec/veh
Future Total Delay	166005	seconds
Total Delay Reduction	35295	seconds

Total Network Delay Reduction	358089	seconds
--------------------------------------	---------------	----------------

399: CR 30 & Lawndale Ln

Direction	All
Future Volume (vph)	1936
Total Delay / Veh (s/v)	36
CO Emissions (kg)	3.36
NOx Emissions (kg)	0.65
VOC Emissions (kg)	0.78

400: CR 30 & Garland Ln

Direction	All
Future Volume (vph)	2134
Total Delay / Veh (s/v)	19
CO Emissions (kg)	3.01
NOx Emissions (kg)	0.59
VOC Emissions (kg)	0.70

401: Dunkirk Ln/MGP & CR 30

Direction	All
Future Volume (vph)	3935
Total Delay / Veh (s/v)	39
CO Emissions (kg)	5.99
NOx Emissions (kg)	1.17
VOC Emissions (kg)	1.39

402: West Ramps & MGP

Direction	All
Future Volume (vph)	3549
Total Delay / Veh (s/v)	37
CO Emissions (kg)	5.13
NOx Emissions (kg)	1.00
VOC Emissions (kg)	1.19

403: East Ramps & MGP

Direction	All
Future Volume (vph)	3164
Total Delay / Veh (s/v)	39
CO Emissions (kg)	4.53
NOx Emissions (kg)	0.88
VOC Emissions (kg)	1.05

404: Upland Ln & MGP

Direction	All
Future Volume (vph)	2601
Total Delay / Veh (s/v)	19
CO Emissions (kg)	2.96
NOx Emissions (kg)	0.58
VOC Emissions (kg)	0.69

405: MGP & Hospital Dr

Direction	All
Future Volume (vph)	2290
Total Delay / Veh (s/v)	28
CO Emissions (kg)	3.10
NOx Emissions (kg)	0.60
VOC Emissions (kg)	0.72

406: MGP & Grove Circle/99th Ave

Direction	All
Future Volume (vph)	2369
Total Delay / Veh (s/v)	17
CO Emissions (kg)	2.67
NOx Emissions (kg)	0.52
VOC Emissions (kg)	0.62

407: MGP & 610 South Ramps

Direction	All
Future Volume (vph)	1901
Total Delay / Veh (s/v)	4
CO Emissions (kg)	1.07
NOx Emissions (kg)	0.21
VOC Emissions (kg)	0.25

408: MGP & 610 North Ramps

Direction	All
Future Volume (vph)	1390
Total Delay / Veh (s/v)	17
CO Emissions (kg)	1.51
NOx Emissions (kg)	0.29
VOC Emissions (kg)	0.35

409: MGP & CR 81

Direction	All
Future Volume (vph)	2431
Total Delay / Veh (s/v)	16
CO Emissions (kg)	4.39
NOx Emissions (kg)	0.85
VOC Emissions (kg)	1.02

410: Fernbrook Ln & CR 81

Direction	All
Future Volume (vph)	3355
Total Delay / Veh (s/v)	60
CO Emissions (kg)	7.50
NOx Emissions (kg)	1.46
VOC Emissions (kg)	1.74

Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

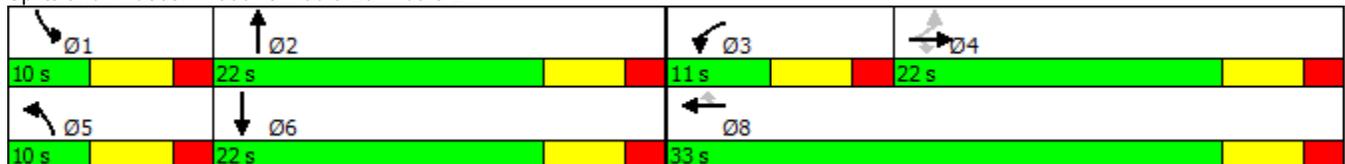


Phase Number	1	2	3	4	5	6	8
Movement	SBL	NBT	WBL	EBTL	NBL	SBT	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Max	None	None	None	Max	None
Maximum Split (s)	10	22	11	22	10	22	33
Maximum Split (%)	15.4%	33.8%	16.9%	33.8%	15.4%	33.8%	50.8%
Minimum Split (s)	10	22	10	22	10	22	22
Yellow Time (s)	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2
Minimum Initial (s)	4	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	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	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	10	32	43	0	10	32
End Time (s)	10	32	43	0	10	32	0
Yield/Force Off (s)	4	26	37	59	4	26	59
Yield/Force Off 170(s)	4	15	37	48	4	15	48
Local Start Time (s)	55	0	22	33	55	0	22
Local Yield (s)	59	16	27	49	59	16	49
Local Yield 170(s)	59	5	27	38	59	5	38

Intersection Summary

Cycle Length	65
Control Type	Actuated-Uncoordinated
Natural Cycle	65

Splits and Phases: 399: CR 30 & Lawndale Ln



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

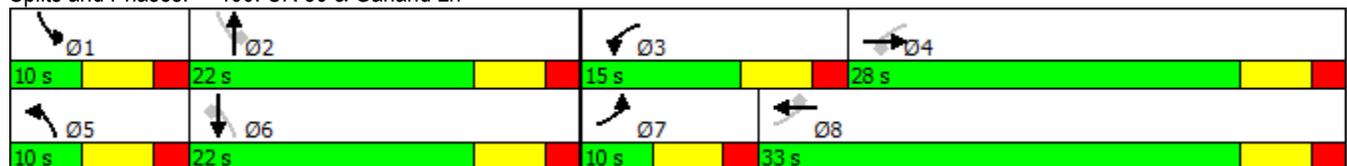


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBSB	WBL	EBWB	NBL	NBSB	EBL	EBWB
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	10	22	15	28	10	22	10	33
Maximum Split (%)	13.3%	29.3%	20.0%	37.3%	13.3%	29.3%	13.3%	44.0%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	0	10	32	47	0	10	32	42
End Time (s)	10	32	47	0	10	32	42	0
Yield/Force Off (s)	4	26	41	69	4	26	36	69
Yield/Force Off 170(s)	4	15	41	58	4	15	36	58
Local Start Time (s)	65	0	22	37	65	0	22	32
Local Yield (s)	69	16	31	59	69	16	26	59
Local Yield 170(s)	69	5	31	48	69	5	26	48

Intersection Summary

Cycle Length	75
Control Type	Actuated-Uncoordinated
Natural Cycle	75

Splits and Phases: 400: CR 30 & Garland Ln



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

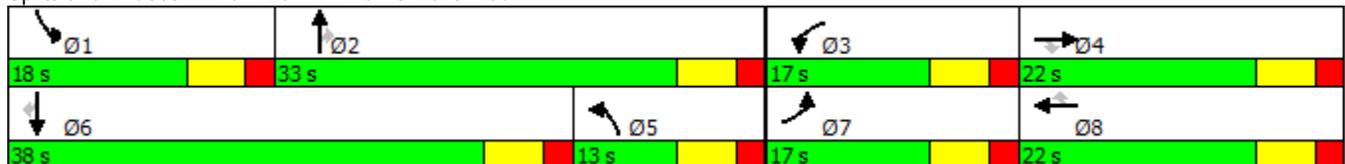


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	18	33	17	22	13	38	17	22
Maximum Split (%)	20.0%	36.7%	18.9%	24.4%	14.4%	42.2%	18.9%	24.4%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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	No	No	No	No	No	No	No	No
Start Time (s)	0	18	51	68	38	0	51	68
End Time (s)	18	51	68	0	51	38	68	0
Yield/Force Off (s)	12	45	62	84	45	32	62	84
Yield/Force Off 170(s)	12	34	62	73	45	21	62	73
Local Start Time (s)	72	0	33	50	20	72	33	50
Local Yield (s)	84	27	44	66	27	14	44	66
Local Yield 170(s)	84	16	44	55	27	3	44	55

Intersection Summary

Cycle Length	90
Control Type	Actuated-Uncoordinated
Natural Cycle	90

Splits and Phases: 401: Dunkirk Ln/MGP & CR 30



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

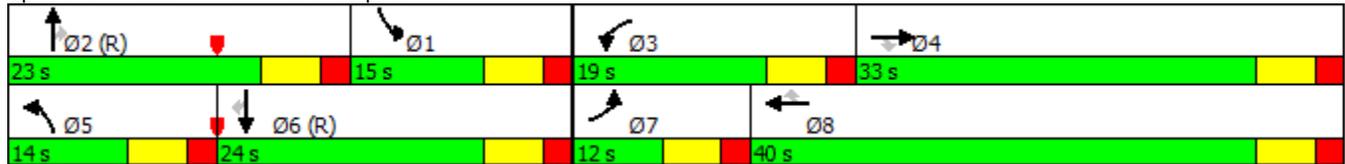


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	15	23	19	33	14	24	12	40
Maximum Split (%)	16.7%	25.6%	21.1%	36.7%	15.6%	26.7%	13.3%	44.4%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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	76	24	43	76	0	24	36
End Time (s)	24	9	43	76	0	24	36	76
Yield/Force Off (s)	18	3	37	70	84	18	30	70
Yield/Force Off 170(s)	18	82	37	59	84	7	30	59
Local Start Time (s)	9	76	24	43	76	0	24	36
Local Yield (s)	18	3	37	70	84	18	30	70
Local Yield 170(s)	18	82	37	59	84	7	30	59

Intersection Summary

Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 402: West Ramps & MGP



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018



Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	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)	15	30	12	23	21	24	10	25
Maximum Split (%)	18.8%	37.5%	15.0%	28.8%	26.3%	30.0%	12.5%	31.3%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	59	74	47	24	59	0	24	34
End Time (s)	74	24	59	47	0	24	34	59
Yield/Force Off (s)	68	18	53	41	74	18	28	53
Yield/Force Off 170(s)	68	7	53	30	74	7	28	42
Local Start Time (s)	59	74	47	24	59	0	24	34
Local Yield (s)	68	18	53	41	74	18	28	53
Local Yield 170(s)	68	7	53	30	74	7	28	42

Intersection Summary

Cycle Length	80
Control Type	Actuated-Coordinated
Natural Cycle	80
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 403: East Ramps & MGP



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

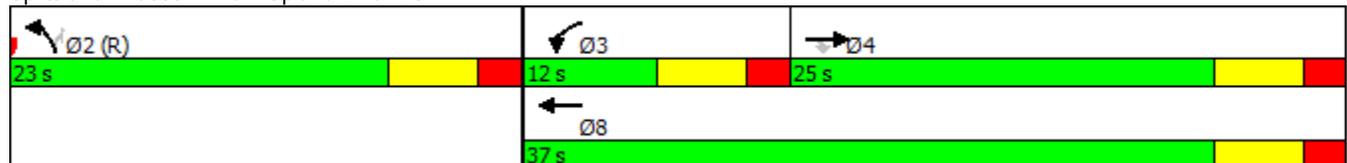


Phase Number	2	3	4	8
Movement	NBL	WBL	EBT	WBT
Lead/Lag		Lead	Lag	
Lead-Lag Optimize		Yes	Yes	
Recall Mode	C-Max	None	None	None
Maximum Split (s)	23	12	25	37
Maximum Split (%)	38.3%	20.0%	41.7%	61.7%
Minimum Split (s)	22	10	22	22
Yellow Time (s)	4	4	4	4
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	4	4	4	4
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)	5		5	5
Flash Dont Walk (s)	11		11	11
Dual Entry	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	23	35	23
End Time (s)	23	35	0	0
Yield/Force Off (s)	17	29	54	54
Yield/Force Off 170(s)	6	29	43	43
Local Start Time (s)	0	23	35	23
Local Yield (s)	17	29	54	54
Local Yield 170(s)	6	29	43	43

Intersection Summary

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

Splits and Phases: 404: Upland Ln & MGP



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

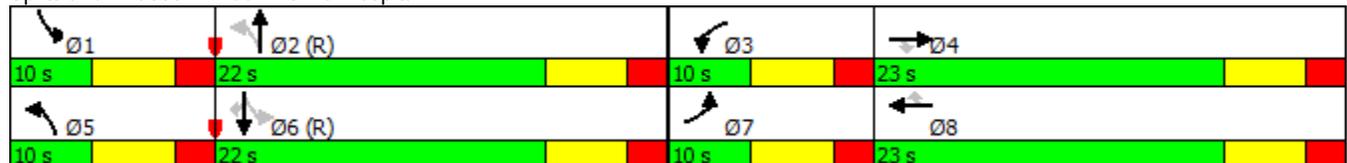


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	22	10	23	10	22	10	23
Maximum Split (%)	15.4%	33.8%	15.4%	35.4%	15.4%	33.8%	15.4%	35.4%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	55	0	22	32	55	0	22	32
End Time (s)	0	22	32	55	0	22	32	55
Yield/Force Off (s)	59	16	26	49	59	16	26	49
Yield/Force Off 170(s)	59	5	26	38	59	5	26	38
Local Start Time (s)	55	0	22	32	55	0	22	32
Local Yield (s)	59	16	26	49	59	16	26	49
Local Yield 170(s)	59	5	26	38	59	5	26	38

Intersection Summary

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

Splits and Phases: 405: MGP & Hospital Dr



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

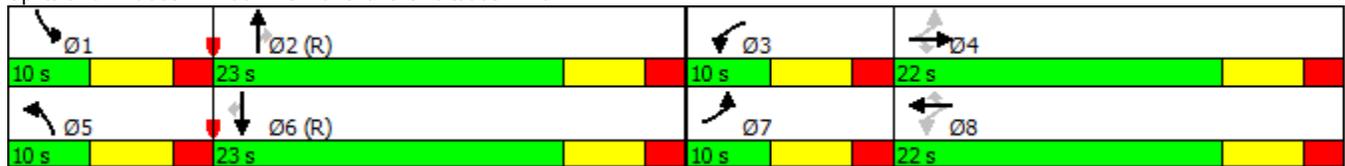


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBTL	NBL	SBT	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	23	10	22	10	23	10	22
Maximum Split (%)	15.4%	35.4%	15.4%	33.8%	15.4%	35.4%	15.4%	33.8%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	55	0	23	33	55	0	23	33
End Time (s)	0	23	33	55	0	23	33	55
Yield/Force Off (s)	59	17	27	49	59	17	27	49
Yield/Force Off 170(s)	59	6	27	38	59	6	27	38
Local Start Time (s)	55	0	23	33	55	0	23	33
Local Yield (s)	59	17	27	49	59	17	27	49
Local Yield 170(s)	59	6	27	38	59	6	27	38

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: 406: MGP & Grove Circle/99th Ave



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

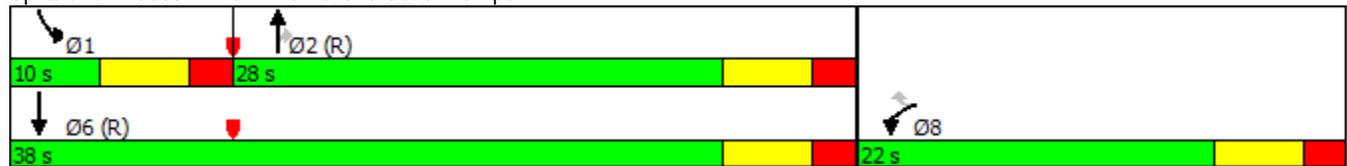


Phase Number	1	2	6	8
Movement	SBL	NBT	SBT	WBL
Lead/Lag	Lead	Lag		
Lead-Lag Optimize	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None
Maximum Split (s)	10	28	38	22
Maximum Split (%)	16.7%	46.7%	63.3%	36.7%
Minimum Split (s)	10	22	22	22
Yellow Time (s)	4	4	4	4
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	4	4	4	4
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)		5	5	5
Flash Dont Walk (s)		11	11	11
Dual Entry	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	50	0	50	28
End Time (s)	0	28	28	50
Yield/Force Off (s)	54	22	22	44
Yield/Force Off 170(s)	54	11	11	33
Local Start Time (s)	50	0	50	28
Local Yield (s)	54	22	22	44
Local Yield 170(s)	54	11	11	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: 407: MGP & 610 South Ramps



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

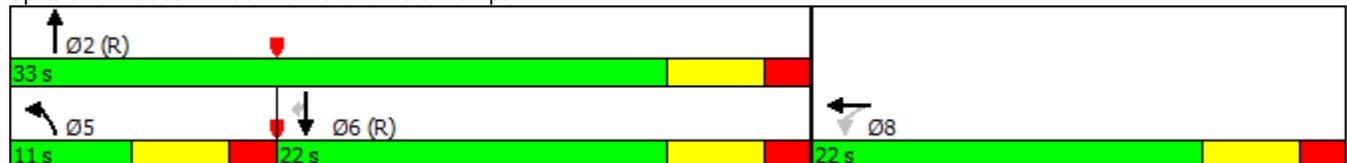


Phase Number	2	5	6	8
Movement	NBT	NBL	SBT	WBTL
Lead/Lag		Lead	Lag	
Lead-Lag Optimize		Yes	Yes	
Recall Mode	C-Max	None	C-Max	None
Maximum Split (s)	33	11	22	22
Maximum Split (%)	60.0%	20.0%	40.0%	40.0%
Minimum Split (s)	22	10	22	22
Yellow Time (s)	4	4	4	4
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	4	4	4	4
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)	5		5	5
Flash Dont Walk (s)	11		11	11
Dual Entry	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	44	44	0	22
End Time (s)	22	0	22	44
Yield/Force Off (s)	16	49	16	38
Yield/Force Off 170(s)	5	49	5	27
Local Start Time (s)	44	44	0	22
Local Yield (s)	16	49	16	38
Local Yield 170(s)	5	49	5	27

Intersection Summary

Cycle Length	55
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 408: MGP & 610 North Ramps



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018



Phase Number	2	3	4	8
Movement	NBL	WBL	EBT	WBT
Lead/Lag		Lead	Lag	
Lead-Lag Optimize		Yes	Yes	
Recall Mode	C-Max	None	None	None
Maximum Split (s)	22	16	22	38
Maximum Split (%)	36.7%	26.7%	36.7%	63.3%
Minimum Split (s)	22	10	22	22
Yellow Time (s)	4	4	4	4
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	4	4	4	4
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)	5		5	5
Flash Dont Walk (s)	11		11	11
Dual Entry	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	22	38	22
End Time (s)	22	38	0	0
Yield/Force Off (s)	16	32	54	54
Yield/Force Off 170(s)	5	32	43	43
Local Start Time (s)	0	22	38	22
Local Yield (s)	16	32	54	54
Local Yield 170(s)	5	32	43	43

Intersection Summary

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

Splits and Phases: 409: MGP & CR 81



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

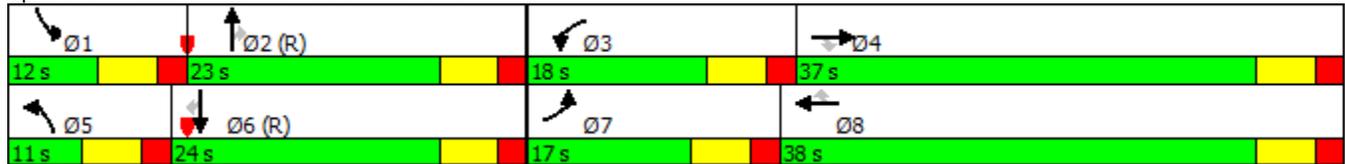


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	12	23	18	37	11	24	17	38
Maximum Split (%)	13.3%	25.6%	20.0%	41.1%	12.2%	26.7%	18.9%	42.2%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	78	0	23	41	78	89	23	40
End Time (s)	0	23	41	78	89	23	40	78
Yield/Force Off (s)	84	17	35	72	83	17	34	72
Yield/Force Off 170(s)	84	6	35	61	83	6	34	61
Local Start Time (s)	78	0	23	41	78	89	23	40
Local Yield (s)	84	17	35	72	83	17	34	72
Local Yield 170(s)	84	6	35	61	83	6	34	61

Intersection Summary

Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 410: Fernbrook Ln & CR 81



399: CR 30 & Lawndale Ln

Direction	All
Future Volume (vph)	737
Total Delay / Veh (s/v)	28
CO Emissions (kg)	1.05
NOx Emissions (kg)	0.20
VOC Emissions (kg)	0.24

400: CR 30 & Garland Ln

Direction	All
Future Volume (vph)	935
Total Delay / Veh (s/v)	15
CO Emissions (kg)	1.11
NOx Emissions (kg)	0.21
VOC Emissions (kg)	0.26

401: Dunkirk Ln/MGP & CR 30

Direction	All
Future Volume (vph)	2751
Total Delay / Veh (s/v)	26
CO Emissions (kg)	3.61
NOx Emissions (kg)	0.70
VOC Emissions (kg)	0.84

402: West Ramps & MGP

Direction	All
Future Volume (vph)	2591
Total Delay / Veh (s/v)	30
CO Emissions (kg)	3.53
NOx Emissions (kg)	0.69
VOC Emissions (kg)	0.82

403: East Ramps & MGP

Direction	All
Future Volume (vph)	2398
Total Delay / Veh (s/v)	29
CO Emissions (kg)	2.98
NOx Emissions (kg)	0.58
VOC Emissions (kg)	0.69

404: Upland Ln & MGP

Direction	All
Future Volume (vph)	2061
Total Delay / Veh (s/v)	16
CO Emissions (kg)	2.21
NOx Emissions (kg)	0.43
VOC Emissions (kg)	0.51

405: MGP & Hospital Dr

Direction	All
Future Volume (vph)	1750
Total Delay / Veh (s/v)	22
CO Emissions (kg)	2.15
NOx Emissions (kg)	0.42
VOC Emissions (kg)	0.50

406: MGP & Grove Circle/99th Ave

Direction	All
Future Volume (vph)	1839
Total Delay / Veh (s/v)	16
CO Emissions (kg)	2.00
NOx Emissions (kg)	0.39
VOC Emissions (kg)	0.46

407: MGP & 610 South Ramps

Direction	All
Future Volume (vph)	1274
Total Delay / Veh (s/v)	4
CO Emissions (kg)	0.74
NOx Emissions (kg)	0.14
VOC Emissions (kg)	0.17

408: MGP & 610 North Ramps

Direction	All
Future Volume (vph)	975
Total Delay / Veh (s/v)	13
CO Emissions (kg)	0.93
NOx Emissions (kg)	0.18
VOC Emissions (kg)	0.22

409: MGP & CR 81

Direction	All
Future Volume (vph)	2331
Total Delay / Veh (s/v)	16
CO Emissions (kg)	4.21
NOx Emissions (kg)	0.82
VOC Emissions (kg)	0.98

410: Fernbrook Ln & CR 81

Direction	All
Future Volume (vph)	3255
Total Delay / Veh (s/v)	51
CO Emissions (kg)	6.83
NOx Emissions (kg)	1.33
VOC Emissions (kg)	1.58

Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

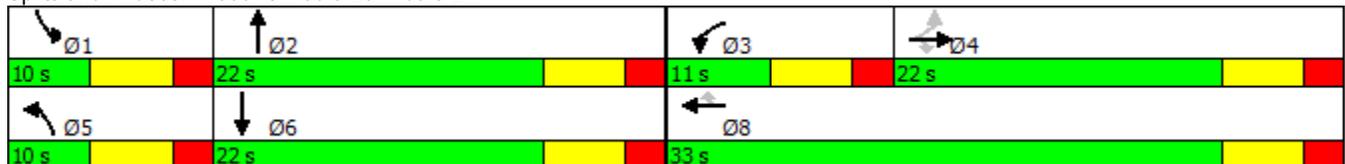


Phase Number	1	2	3	4	5	6	8
Movement	SBL	NBT	WBL	EBTL	NBL	SBT	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Max	None	None	None	Max	None
Maximum Split (s)	10	22	11	22	10	22	33
Maximum Split (%)	15.4%	33.8%	16.9%	33.8%	15.4%	33.8%	50.8%
Minimum Split (s)	10	22	10	22	10	22	22
Yellow Time (s)	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2
Minimum Initial (s)	4	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	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	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	10	32	43	0	10	32
End Time (s)	10	32	43	0	10	32	0
Yield/Force Off (s)	4	26	37	59	4	26	59
Yield/Force Off 170(s)	4	15	37	48	4	15	48
Local Start Time (s)	55	0	22	33	55	0	22
Local Yield (s)	59	16	27	49	59	16	49
Local Yield 170(s)	59	5	27	38	59	5	38

Intersection Summary

Cycle Length	65
Control Type	Actuated-Uncoordinated
Natural Cycle	65

Splits and Phases: 399: CR 30 & Lawndale Ln



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

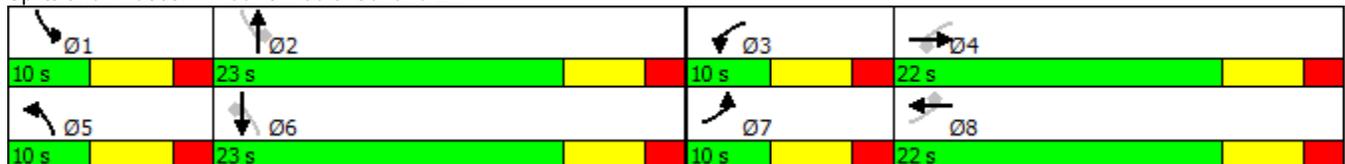


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBSB	WBL	EBWB	NBL	NBSB	EBL	EBWB
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	10	23	10	22	10	23	10	22
Maximum Split (%)	15.4%	35.4%	15.4%	33.8%	15.4%	35.4%	15.4%	33.8%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	0	10	33	43	0	10	33	43
End Time (s)	10	33	43	0	10	33	43	0
Yield/Force Off (s)	4	27	37	59	4	27	37	59
Yield/Force Off 170(s)	4	16	37	48	4	16	37	48
Local Start Time (s)	55	0	23	33	55	0	23	33
Local Yield (s)	59	17	27	49	59	17	27	49
Local Yield 170(s)	59	6	27	38	59	6	27	38

Intersection Summary

Cycle Length	65
Control Type	Actuated-Uncoordinated
Natural Cycle	65

Splits and Phases: 400: CR 30 & Garland Ln



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

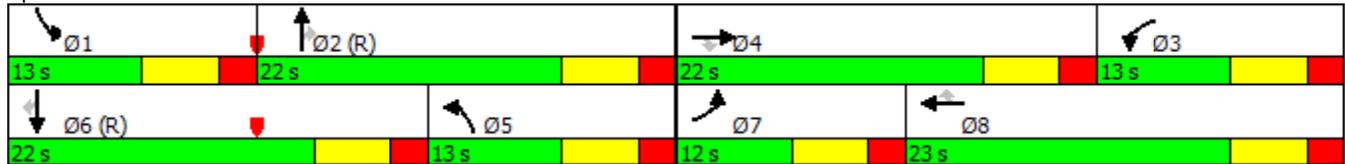


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	13	22	13	22	13	22	12	23
Maximum Split (%)	18.6%	31.4%	18.6%	31.4%	18.6%	31.4%	17.1%	32.9%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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	No	No	No	No	No	No	No	No
Start Time (s)	57	0	44	22	9	57	22	34
End Time (s)	0	22	57	44	22	9	34	57
Yield/Force Off (s)	64	16	51	38	16	3	28	51
Yield/Force Off 170(s)	64	5	51	27	16	62	28	40
Local Start Time (s)	57	0	44	22	9	57	22	34
Local Yield (s)	64	16	51	38	16	3	28	51
Local Yield 170(s)	64	5	51	27	16	62	28	40

Intersection Summary

Cycle Length	70
Control Type	Actuated-Coordinated
Natural Cycle	70
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 401: Dunkirk Ln/MGP & CR 30



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

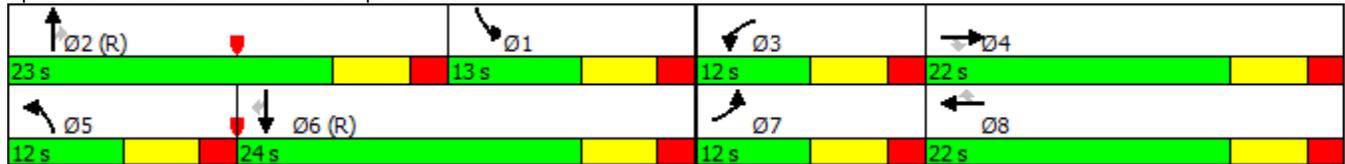


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	13	23	12	22	12	24	12	22
Maximum Split (%)	18.6%	32.9%	17.1%	31.4%	17.1%	34.3%	17.1%	31.4%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	11	58	24	36	58	0	24	36
End Time (s)	24	11	36	58	0	24	36	58
Yield/Force Off (s)	18	5	30	52	64	18	30	52
Yield/Force Off 170(s)	18	64	30	41	64	7	30	41
Local Start Time (s)	11	58	24	36	58	0	24	36
Local Yield (s)	18	5	30	52	64	18	30	52
Local Yield 170(s)	18	64	30	41	64	7	30	41

Intersection Summary

Cycle Length	70
Control Type	Actuated-Coordinated
Natural Cycle	70
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 402: West Ramps & MGP



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

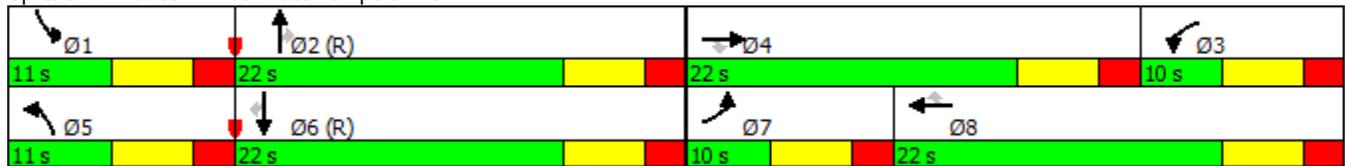


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lag	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	11	22	10	22	11	22	10	22
Maximum Split (%)	16.9%	33.8%	15.4%	33.8%	16.9%	33.8%	15.4%	33.8%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	54	0	44	22	54	0	22	32
End Time (s)	0	22	54	44	0	22	32	54
Yield/Force Off (s)	59	16	48	38	59	16	26	48
Yield/Force Off 170(s)	59	5	48	27	59	5	26	37
Local Start Time (s)	54	0	44	22	54	0	22	32
Local Yield (s)	59	16	48	38	59	16	26	48
Local Yield 170(s)	59	5	48	27	59	5	26	37

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: 403: East Ramps & MGP



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

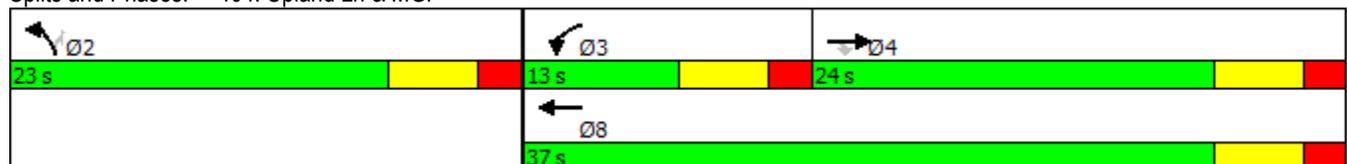


Phase Number	2	3	4	8
Movement	NBL	WBL	EBT	WBT
Lead/Lag		Lead	Lag	
Lead-Lag Optimize		Yes	Yes	
Recall Mode	Max	None	None	None
Maximum Split (s)	23	13	24	37
Maximum Split (%)	38.3%	21.7%	40.0%	61.7%
Minimum Split (s)	22	10	22	22
Yellow Time (s)	4	4	4	4
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	4	4	4	4
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)	5		5	5
Flash Dont Walk (s)	11		11	11
Dual Entry	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	23	36	23
End Time (s)	23	36	0	0
Yield/Force Off (s)	17	30	54	54
Yield/Force Off 170(s)	6	30	43	43
Local Start Time (s)	0	23	36	23
Local Yield (s)	17	30	54	54
Local Yield 170(s)	6	30	43	43

Intersection Summary

Cycle Length		60
Control Type	Actuated-Uncoordinated	
Natural Cycle		60

Splits and Phases: 404: Upland Ln & MGP



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

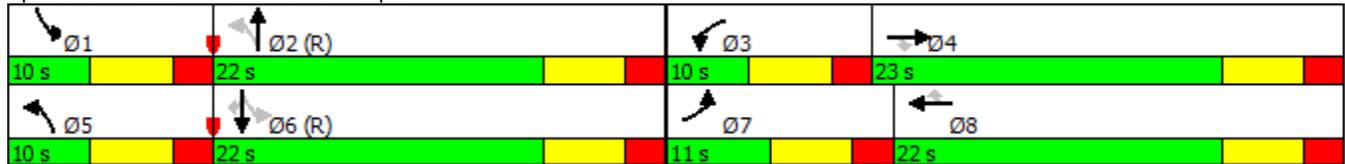


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	22	10	23	10	22	11	22
Maximum Split (%)	15.4%	33.8%	15.4%	35.4%	15.4%	33.8%	16.9%	33.8%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	55	0	22	32	55	0	22	33
End Time (s)	0	22	32	55	0	22	33	55
Yield/Force Off (s)	59	16	26	49	59	16	27	49
Yield/Force Off 170(s)	59	5	26	38	59	5	27	38
Local Start Time (s)	55	0	22	32	55	0	22	33
Local Yield (s)	59	16	26	49	59	16	27	49
Local Yield 170(s)	59	5	26	38	59	5	27	38

Intersection Summary

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

Splits and Phases: 405: MGP & Hospital Dr



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

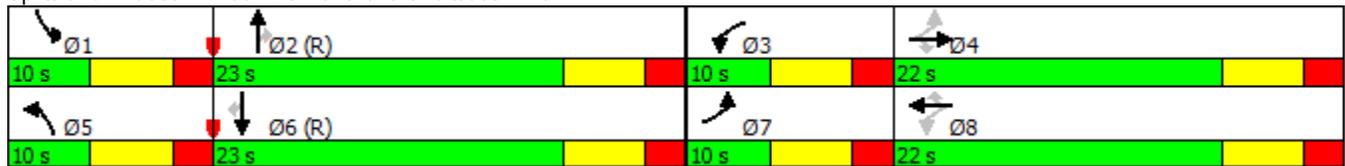


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBTL	NBL	SBT	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	23	10	22	10	23	10	22
Maximum Split (%)	15.4%	35.4%	15.4%	33.8%	15.4%	35.4%	15.4%	33.8%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	55	0	23	33	55	0	23	33
End Time (s)	0	23	33	55	0	23	33	55
Yield/Force Off (s)	59	17	27	49	59	17	27	49
Yield/Force Off 170(s)	59	6	27	38	59	6	27	38
Local Start Time (s)	55	0	23	33	55	0	23	33
Local Yield (s)	59	17	27	49	59	17	27	49
Local Yield 170(s)	59	6	27	38	59	6	27	38

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: 406: MGP & Grove Circle/99th Ave



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

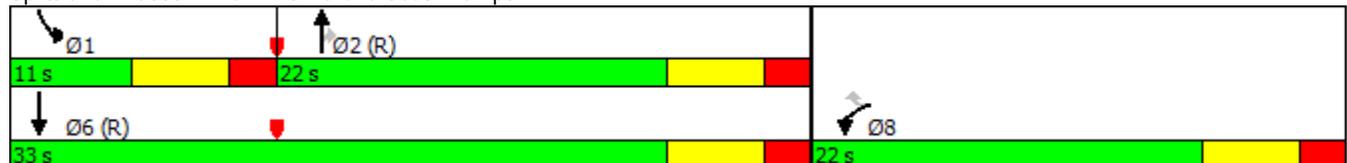


Phase Number	1	2	6	8
Movement	SBL	NBT	SBT	WBL
Lead/Lag	Lead	Lag		
Lead-Lag Optimize	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None
Maximum Split (s)	11	22	33	22
Maximum Split (%)	20.0%	40.0%	60.0%	40.0%
Minimum Split (s)	10	22	22	22
Yellow Time (s)	4	4	4	4
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	4	4	4	4
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)		5	5	5
Flash Dont Walk (s)		11	11	11
Dual Entry	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	44	0	44	22
End Time (s)	0	22	22	44
Yield/Force Off (s)	49	16	16	38
Yield/Force Off 170(s)	49	5	5	27
Local Start Time (s)	44	0	44	22
Local Yield (s)	49	16	16	38
Local Yield 170(s)	49	5	5	27

Intersection Summary

Cycle Length	55
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 407: MGP & 610 South Ramps



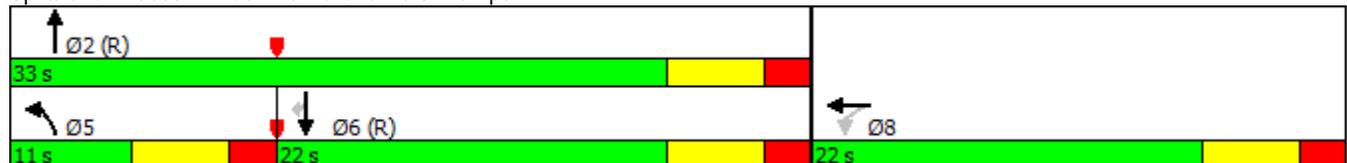


Phase Number	2	5	6	8
Movement	NBT	NBL	SBT	WBTL
Lead/Lag		Lead	Lag	
Lead-Lag Optimize		Yes	Yes	
Recall Mode	C-Max	None	C-Max	None
Maximum Split (s)	33	11	22	22
Maximum Split (%)	60.0%	20.0%	40.0%	40.0%
Minimum Split (s)	22	10	22	22
Yellow Time (s)	4	4	4	4
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	4	4	4	4
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)	5		5	5
Flash Dont Walk (s)	11		11	11
Dual Entry	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	44	44	0	22
End Time (s)	22	0	22	44
Yield/Force Off (s)	16	49	16	38
Yield/Force Off 170(s)	5	49	5	27
Local Start Time (s)	44	44	0	22
Local Yield (s)	16	49	16	38
Local Yield 170(s)	5	49	5	27

Intersection Summary

Cycle Length	55
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 408: MGP & 610 North Ramps



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

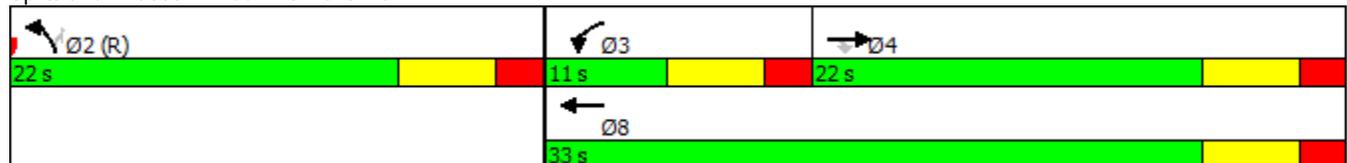


Phase Number	2	3	4	8
Movement	NBL	WBL	EBT	WBT
Lead/Lag		Lead	Lag	
Lead-Lag Optimize		Yes	Yes	
Recall Mode	C-Max	None	None	None
Maximum Split (s)	22	11	22	33
Maximum Split (%)	40.0%	20.0%	40.0%	60.0%
Minimum Split (s)	22	10	22	22
Yellow Time (s)	4	4	4	4
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	4	4	4	4
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)	5		5	5
Flash Dont Walk (s)	11		11	11
Dual Entry	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	22	33	22
End Time (s)	22	33	0	0
Yield/Force Off (s)	16	27	49	49
Yield/Force Off 170(s)	5	27	38	38
Local Start Time (s)	0	22	33	22
Local Yield (s)	16	27	49	49
Local Yield 170(s)	5	27	38	38

Intersection Summary

Cycle Length	55
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green	

Splits and Phases: 409: MGP & CR 81



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

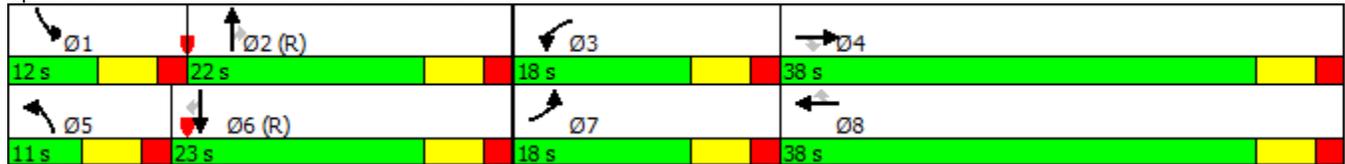


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	12	22	18	38	11	23	18	38
Maximum Split (%)	13.3%	24.4%	20.0%	42.2%	12.2%	25.6%	20.0%	42.2%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	78	0	22	40	78	89	22	40
End Time (s)	0	22	40	78	89	22	40	78
Yield/Force Off (s)	84	16	34	72	83	16	34	72
Yield/Force Off 170(s)	84	5	34	61	83	5	34	61
Local Start Time (s)	78	0	22	40	78	89	22	40
Local Yield (s)	84	16	34	72	83	16	34	72
Local Yield 170(s)	84	5	34	61	83	5	34	61

Intersection Summary

Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 410: Fernbrook Ln & CR 81



Network Totals

Number of Intersections	1
Total Delay / Veh (s/v)	21
Total Delay (hr)	14
Stops (#)	1589
Average Speed (mph)	27
Total Travel Time (hr)	41
Distance Traveled (mi)	1127
Fuel Consumed (gal)	72
Fuel Economy (mpg)	15.8
CO Emissions (kg)	5.00
NOx Emissions (kg)	0.97
VOC Emissions (kg)	1.16
Performance Index	18.7

Maple Grove Regional Solicitation Improved PM Peak

06/26/2018

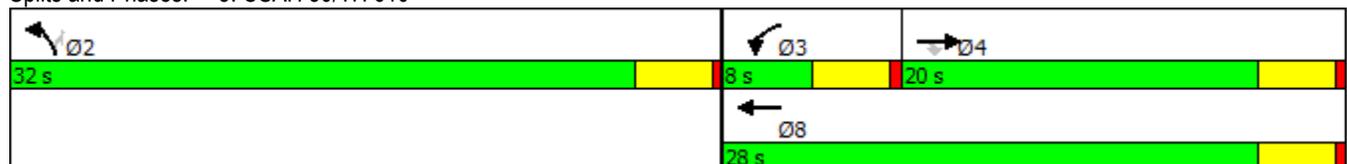


Phase Number	2	3	4	8
Movement	NBL	WBL	EBT	WBT
Lead/Lag		Lead	Lag	
Lead-Lag Optimize		Yes	Yes	
Recall Mode	Max	None	None	None
Maximum Split (s)	32	8	20	28
Maximum Split (%)	53.3%	13.3%	33.3%	46.7%
Minimum Split (s)	20	8	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5
Minimum Initial (s)	4	4	4	4
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)	5		5	5
Flash Dont Walk (s)	11		11	11
Dual Entry	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	32	40	32
End Time (s)	32	40	0	0
Yield/Force Off (s)	28	36	56	56
Yield/Force Off 170(s)	17	36	45	45
Local Start Time (s)	0	32	40	32
Local Yield (s)	28	36	56	56
Local Yield 170(s)	17	36	45	45

Intersection Summary

Cycle Length		60
Control Type	Actuated-Uncoordinated	
Natural Cycle		60

Splits and Phases: 3: CSAH 30/TH 610



399: CR 30 & Lawndale Ln

Direction	All
Future Volume (vph)	1936
Total Delay / Veh (s/v)	36
CO Emissions (kg)	3.36
NOx Emissions (kg)	0.65
VOC Emissions (kg)	0.78

400: CR 30 & Garland Ln

Direction	All
Future Volume (vph)	2134
Total Delay / Veh (s/v)	19
CO Emissions (kg)	3.01
NOx Emissions (kg)	0.59
VOC Emissions (kg)	0.70

401: Dunkirk Ln/MGP & CR 30

Direction	All
Future Volume (vph)	3935
Total Delay / Veh (s/v)	39
CO Emissions (kg)	5.99
NOx Emissions (kg)	1.17
VOC Emissions (kg)	1.39

402: West Ramps & MGP

Direction	All
Future Volume (vph)	3549
Total Delay / Veh (s/v)	37
CO Emissions (kg)	5.13
NOx Emissions (kg)	1.00
VOC Emissions (kg)	1.19

403: East Ramps & MGP

Direction	All
Future Volume (vph)	3164
Total Delay / Veh (s/v)	39
CO Emissions (kg)	4.53
NOx Emissions (kg)	0.88
VOC Emissions (kg)	1.05

404: Upland Ln & MGP

Direction	All
Future Volume (vph)	2601
Total Delay / Veh (s/v)	19
CO Emissions (kg)	2.96
NOx Emissions (kg)	0.58
VOC Emissions (kg)	0.69

405: MGP & Hospital Dr

Direction	All
Future Volume (vph)	2290
Total Delay / Veh (s/v)	28
CO Emissions (kg)	3.10
NOx Emissions (kg)	0.60
VOC Emissions (kg)	0.72

406: MGP & Grove Circle/99th Ave

Direction	All
Future Volume (vph)	2369
Total Delay / Veh (s/v)	17
CO Emissions (kg)	2.67
NOx Emissions (kg)	0.52
VOC Emissions (kg)	0.62

407: MGP & 610 South Ramps

Direction	All
Future Volume (vph)	1901
Total Delay / Veh (s/v)	4
CO Emissions (kg)	1.07
NOx Emissions (kg)	0.21
VOC Emissions (kg)	0.25

408: MGP & 610 North Ramps

Direction	All
Future Volume (vph)	1390
Total Delay / Veh (s/v)	17
CO Emissions (kg)	1.51
NOx Emissions (kg)	0.29
VOC Emissions (kg)	0.35

409: MGP & CR 81

Direction	All
Future Volume (vph)	2431
Total Delay / Veh (s/v)	16
CO Emissions (kg)	4.39
NOx Emissions (kg)	0.85
VOC Emissions (kg)	1.02

410: Fernbrook Ln & CR 81

Direction	All
Future Volume (vph)	3355
Total Delay / Veh (s/v)	60
CO Emissions (kg)	7.50
NOx Emissions (kg)	1.46
VOC Emissions (kg)	1.74

Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

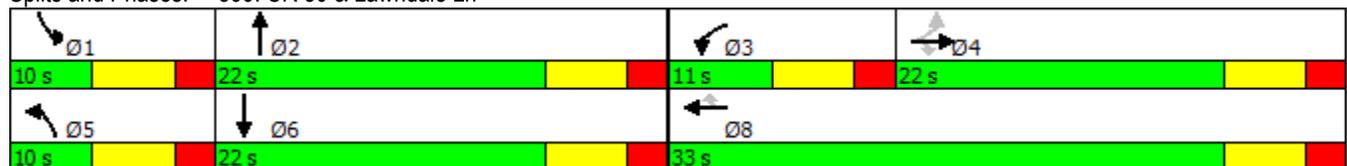


Phase Number	1	2	3	4	5	6	8
Movement	SBL	NBT	WBL	EBTL	NBL	SBT	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Max	None	None	None	Max	None
Maximum Split (s)	10	22	11	22	10	22	33
Maximum Split (%)	15.4%	33.8%	16.9%	33.8%	15.4%	33.8%	50.8%
Minimum Split (s)	10	22	10	22	10	22	22
Yellow Time (s)	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2
Minimum Initial (s)	4	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	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	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	10	32	43	0	10	32
End Time (s)	10	32	43	0	10	32	0
Yield/Force Off (s)	4	26	37	59	4	26	59
Yield/Force Off 170(s)	4	15	37	48	4	15	48
Local Start Time (s)	55	0	22	33	55	0	22
Local Yield (s)	59	16	27	49	59	16	49
Local Yield 170(s)	59	5	27	38	59	5	38

Intersection Summary

Cycle Length	65
Control Type	Actuated-Uncoordinated
Natural Cycle	65

Splits and Phases: 399: CR 30 & Lawndale Ln



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

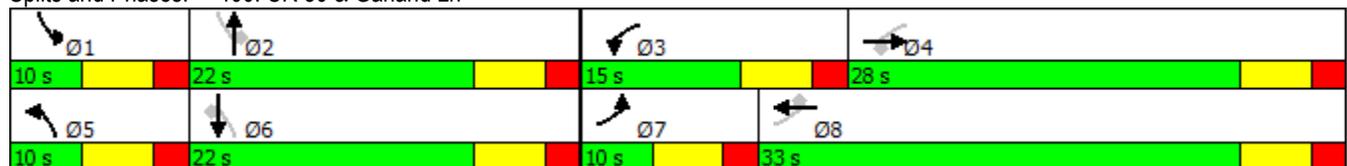


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBSB	WBL	EBWB	NBL	NBSB	EBL	EBWB
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	10	22	15	28	10	22	10	33
Maximum Split (%)	13.3%	29.3%	20.0%	37.3%	13.3%	29.3%	13.3%	44.0%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	0	10	32	47	0	10	32	42
End Time (s)	10	32	47	0	10	32	42	0
Yield/Force Off (s)	4	26	41	69	4	26	36	69
Yield/Force Off 170(s)	4	15	41	58	4	15	36	58
Local Start Time (s)	65	0	22	37	65	0	22	32
Local Yield (s)	69	16	31	59	69	16	26	59
Local Yield 170(s)	69	5	31	48	69	5	26	48

Intersection Summary

Cycle Length	75
Control Type	Actuated-Uncoordinated
Natural Cycle	75

Splits and Phases: 400: CR 30 & Garland Ln



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

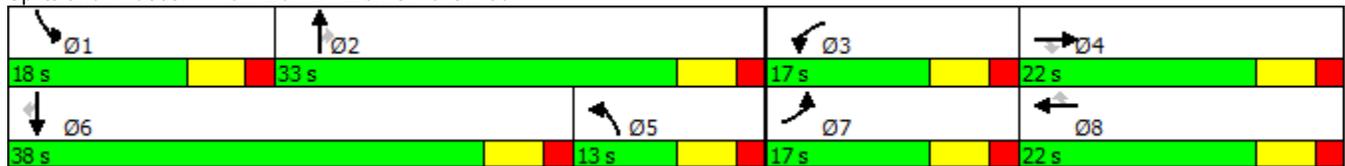


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	18	33	17	22	13	38	17	22
Maximum Split (%)	20.0%	36.7%	18.9%	24.4%	14.4%	42.2%	18.9%	24.4%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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	No	No	No	No	No	No	No	No
Start Time (s)	0	18	51	68	38	0	51	68
End Time (s)	18	51	68	0	51	38	68	0
Yield/Force Off (s)	12	45	62	84	45	32	62	84
Yield/Force Off 170(s)	12	34	62	73	45	21	62	73
Local Start Time (s)	72	0	33	50	20	72	33	50
Local Yield (s)	84	27	44	66	27	14	44	66
Local Yield 170(s)	84	16	44	55	27	3	44	55

Intersection Summary

Cycle Length	90
Control Type	Actuated-Uncoordinated
Natural Cycle	90

Splits and Phases: 401: Dunkirk Ln/MGP & CR 30



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

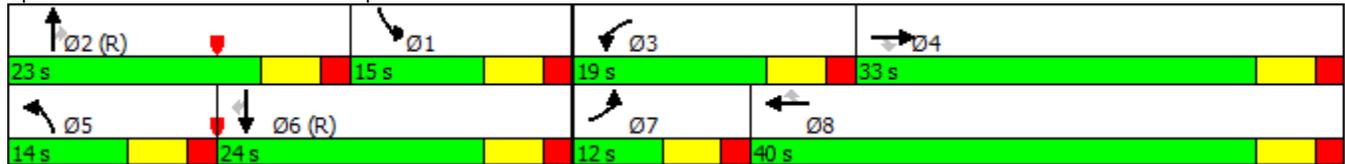


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	15	23	19	33	14	24	12	40
Maximum Split (%)	16.7%	25.6%	21.1%	36.7%	15.6%	26.7%	13.3%	44.4%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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	76	24	43	76	0	24	36
End Time (s)	24	9	43	76	0	24	36	76
Yield/Force Off (s)	18	3	37	70	84	18	30	70
Yield/Force Off 170(s)	18	82	37	59	84	7	30	59
Local Start Time (s)	9	76	24	43	76	0	24	36
Local Yield (s)	18	3	37	70	84	18	30	70
Local Yield 170(s)	18	82	37	59	84	7	30	59

Intersection Summary

Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 402: West Ramps & MGP



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018



Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	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)	15	30	12	23	21	24	10	25
Maximum Split (%)	18.8%	37.5%	15.0%	28.8%	26.3%	30.0%	12.5%	31.3%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	59	74	47	24	59	0	24	34
End Time (s)	74	24	59	47	0	24	34	59
Yield/Force Off (s)	68	18	53	41	74	18	28	53
Yield/Force Off 170(s)	68	7	53	30	74	7	28	42
Local Start Time (s)	59	74	47	24	59	0	24	34
Local Yield (s)	68	18	53	41	74	18	28	53
Local Yield 170(s)	68	7	53	30	74	7	28	42

Intersection Summary

Cycle Length	80
Control Type	Actuated-Coordinated
Natural Cycle	80
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 403: East Ramps & MGP



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

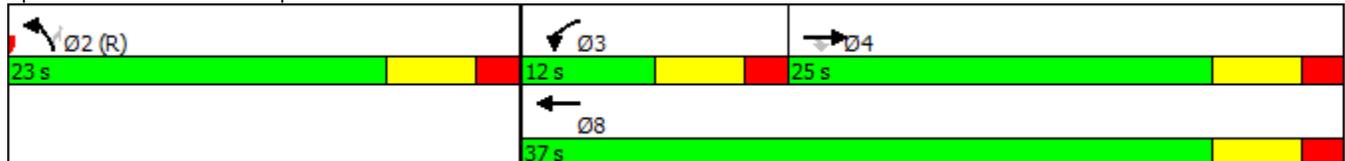


Phase Number	2	3	4	8
Movement	NBL	WBL	EBT	WBT
Lead/Lag		Lead	Lag	
Lead-Lag Optimize		Yes	Yes	
Recall Mode	C-Max	None	None	None
Maximum Split (s)	23	12	25	37
Maximum Split (%)	38.3%	20.0%	41.7%	61.7%
Minimum Split (s)	22	10	22	22
Yellow Time (s)	4	4	4	4
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	4	4	4	4
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)	5		5	5
Flash Dont Walk (s)	11		11	11
Dual Entry	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	23	35	23
End Time (s)	23	35	0	0
Yield/Force Off (s)	17	29	54	54
Yield/Force Off 170(s)	6	29	43	43
Local Start Time (s)	0	23	35	23
Local Yield (s)	17	29	54	54
Local Yield 170(s)	6	29	43	43

Intersection Summary

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

Splits and Phases: 404: Upland Ln & MGP



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

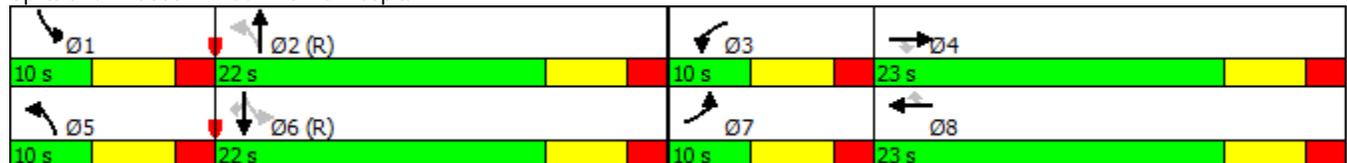


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	22	10	23	10	22	10	23
Maximum Split (%)	15.4%	33.8%	15.4%	35.4%	15.4%	33.8%	15.4%	35.4%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	55	0	22	32	55	0	22	32
End Time (s)	0	22	32	55	0	22	32	55
Yield/Force Off (s)	59	16	26	49	59	16	26	49
Yield/Force Off 170(s)	59	5	26	38	59	5	26	38
Local Start Time (s)	55	0	22	32	55	0	22	32
Local Yield (s)	59	16	26	49	59	16	26	49
Local Yield 170(s)	59	5	26	38	59	5	26	38

Intersection Summary

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

Splits and Phases: 405: MGP & Hospital Dr



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

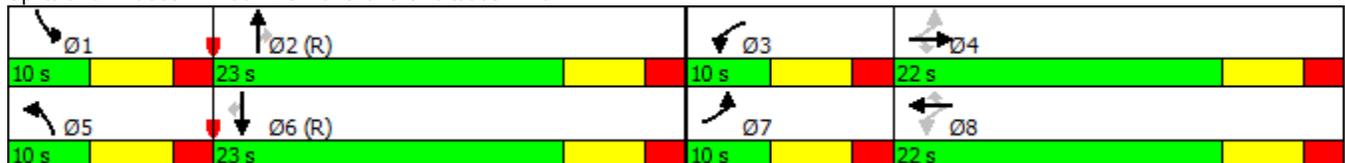


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBTL	NBL	SBT	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	23	10	22	10	23	10	22
Maximum Split (%)	15.4%	35.4%	15.4%	33.8%	15.4%	35.4%	15.4%	33.8%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	55	0	23	33	55	0	23	33
End Time (s)	0	23	33	55	0	23	33	55
Yield/Force Off (s)	59	17	27	49	59	17	27	49
Yield/Force Off 170(s)	59	6	27	38	59	6	27	38
Local Start Time (s)	55	0	23	33	55	0	23	33
Local Yield (s)	59	17	27	49	59	17	27	49
Local Yield 170(s)	59	6	27	38	59	6	27	38

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: 406: MGP & Grove Circle/99th Ave



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

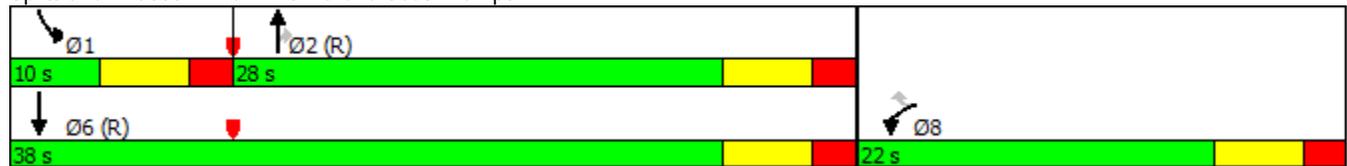


Phase Number	1	2	6	8
Movement	SBL	NBT	SBT	WBL
Lead/Lag	Lead	Lag		
Lead-Lag Optimize	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None
Maximum Split (s)	10	28	38	22
Maximum Split (%)	16.7%	46.7%	63.3%	36.7%
Minimum Split (s)	10	22	22	22
Yellow Time (s)	4	4	4	4
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	4	4	4	4
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)		5	5	5
Flash Dont Walk (s)		11	11	11
Dual Entry	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	50	0	50	28
End Time (s)	0	28	28	50
Yield/Force Off (s)	54	22	22	44
Yield/Force Off 170(s)	54	11	11	33
Local Start Time (s)	50	0	50	28
Local Yield (s)	54	22	22	44
Local Yield 170(s)	54	11	11	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: 407: MGP & 610 South Ramps



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

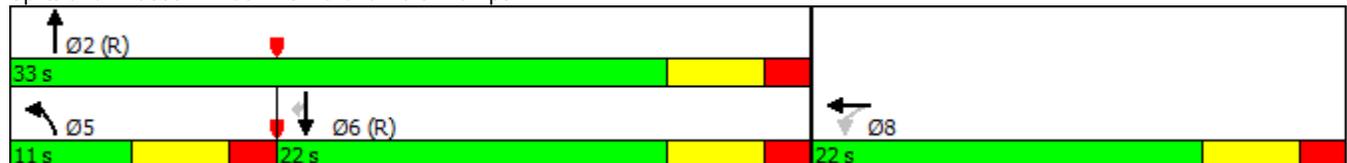


Phase Number	2	5	6	8
Movement	NBT	NBL	SBT	WBTL
Lead/Lag		Lead	Lag	
Lead-Lag Optimize		Yes	Yes	
Recall Mode	C-Max	None	C-Max	None
Maximum Split (s)	33	11	22	22
Maximum Split (%)	60.0%	20.0%	40.0%	40.0%
Minimum Split (s)	22	10	22	22
Yellow Time (s)	4	4	4	4
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	4	4	4	4
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)	5		5	5
Flash Dont Walk (s)	11		11	11
Dual Entry	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	44	44	0	22
End Time (s)	22	0	22	44
Yield/Force Off (s)	16	49	16	38
Yield/Force Off 170(s)	5	49	5	27
Local Start Time (s)	44	44	0	22
Local Yield (s)	16	49	16	38
Local Yield 170(s)	5	49	5	27

Intersection Summary

Cycle Length	55
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 408: MGP & 610 North Ramps



Maple Grove Regional Solicitation
Existing PM Peak

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Phase Number	2	3	4	8
Movement	NBL	WBL	EBT	WBT
Lead/Lag		Lead	Lag	
Lead-Lag Optimize		Yes	Yes	
Recall Mode	C-Max	None	None	None
Maximum Split (s)	22	16	22	38
Maximum Split (%)	36.7%	26.7%	36.7%	63.3%
Minimum Split (s)	22	10	22	22
Yellow Time (s)	4	4	4	4
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	4	4	4	4
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)	5		5	5
Flash Dont Walk (s)	11		11	11
Dual Entry	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	22	38	22
End Time (s)	22	38	0	0
Yield/Force Off (s)	16	32	54	54
Yield/Force Off 170(s)	5	32	43	43
Local Start Time (s)	0	22	38	22
Local Yield (s)	16	32	54	54
Local Yield 170(s)	5	32	43	43

Intersection Summary

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

Splits and Phases: 409: MGP & CR 81



Maple Grove Regional Solicitation
Existing PM Peak

06/26/2018

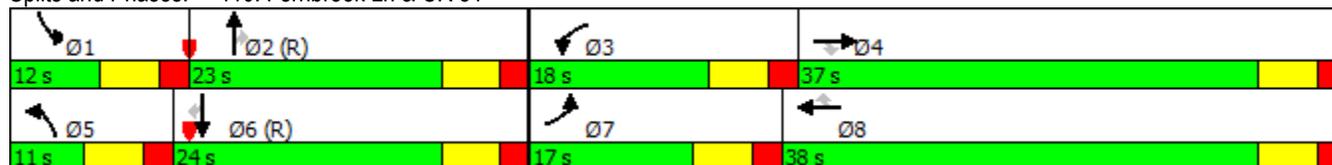


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	12	23	18	37	11	24	17	38
Maximum Split (%)	13.3%	25.6%	20.0%	41.1%	12.2%	26.7%	18.9%	42.2%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	78	0	23	41	78	89	23	40
End Time (s)	0	23	41	78	89	23	40	78
Yield/Force Off (s)	84	17	35	72	83	17	34	72
Yield/Force Off 170(s)	84	6	35	61	83	6	34	61
Local Start Time (s)	78	0	23	41	78	89	23	40
Local Yield (s)	84	17	35	72	83	17	34	72
Local Yield 170(s)	84	6	35	61	83	6	34	61

Intersection Summary

Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 410: Fernbrook Ln & CR 81



399: CR 30 & Lawndale Ln

Direction	All
Future Volume (vph)	737
Total Delay / Veh (s/v)	28
CO Emissions (kg)	1.05
NOx Emissions (kg)	0.20
VOC Emissions (kg)	0.24

400: CR 30 & Garland Ln

Direction	All
Future Volume (vph)	935
Total Delay / Veh (s/v)	15
CO Emissions (kg)	1.11
NOx Emissions (kg)	0.21
VOC Emissions (kg)	0.26

401: Dunkirk Ln/MGP & CR 30

Direction	All
Future Volume (vph)	2751
Total Delay / Veh (s/v)	26
CO Emissions (kg)	3.61
NOx Emissions (kg)	0.70
VOC Emissions (kg)	0.84

402: West Ramps & MGP

Direction	All
Future Volume (vph)	2591
Total Delay / Veh (s/v)	30
CO Emissions (kg)	3.53
NOx Emissions (kg)	0.69
VOC Emissions (kg)	0.82

403: East Ramps & MGP

Direction	All
Future Volume (vph)	2398
Total Delay / Veh (s/v)	29
CO Emissions (kg)	2.98
NOx Emissions (kg)	0.58
VOC Emissions (kg)	0.69

404: Upland Ln & MGP

Direction	All
Future Volume (vph)	2061
Total Delay / Veh (s/v)	16
CO Emissions (kg)	2.21
NOx Emissions (kg)	0.43
VOC Emissions (kg)	0.51

405: MGP & Hospital Dr

Direction	All
Future Volume (vph)	1750
Total Delay / Veh (s/v)	22
CO Emissions (kg)	2.15
NOx Emissions (kg)	0.42
VOC Emissions (kg)	0.50

406: MGP & Grove Circle/99th Ave

Direction	All
Future Volume (vph)	1839
Total Delay / Veh (s/v)	16
CO Emissions (kg)	2.00
NOx Emissions (kg)	0.39
VOC Emissions (kg)	0.46

407: MGP & 610 South Ramps

Direction	All
Future Volume (vph)	1274
Total Delay / Veh (s/v)	4
CO Emissions (kg)	0.74
NOx Emissions (kg)	0.14
VOC Emissions (kg)	0.17

408: MGP & 610 North Ramps

Direction	All
Future Volume (vph)	975
Total Delay / Veh (s/v)	13
CO Emissions (kg)	0.93
NOx Emissions (kg)	0.18
VOC Emissions (kg)	0.22

409: MGP & CR 81

Direction	All
Future Volume (vph)	2331
Total Delay / Veh (s/v)	16
CO Emissions (kg)	4.21
NOx Emissions (kg)	0.82
VOC Emissions (kg)	0.98

410: Fernbrook Ln & CR 81

Direction	All
Future Volume (vph)	3255
Total Delay / Veh (s/v)	51
CO Emissions (kg)	6.83
NOx Emissions (kg)	1.33
VOC Emissions (kg)	1.58

Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

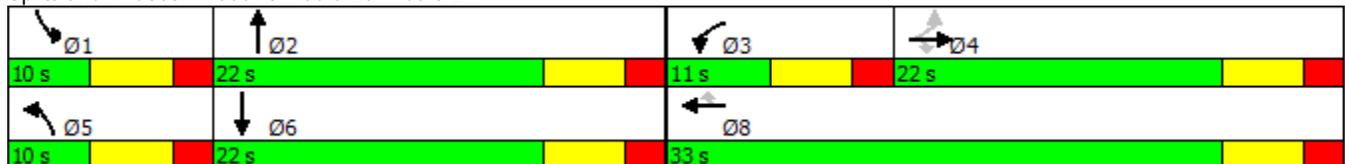


Phase Number	1	2	3	4	5	6	8
Movement	SBL	NBT	WBL	EBTL	NBL	SBT	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Max	None	None	None	Max	None
Maximum Split (s)	10	22	11	22	10	22	33
Maximum Split (%)	15.4%	33.8%	16.9%	33.8%	15.4%	33.8%	50.8%
Minimum Split (s)	10	22	10	22	10	22	22
Yellow Time (s)	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2
Minimum Initial (s)	4	4	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	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	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	10	32	43	0	10	32
End Time (s)	10	32	43	0	10	32	0
Yield/Force Off (s)	4	26	37	59	4	26	59
Yield/Force Off 170(s)	4	15	37	48	4	15	48
Local Start Time (s)	55	0	22	33	55	0	22
Local Yield (s)	59	16	27	49	59	16	49
Local Yield 170(s)	59	5	27	38	59	5	38

Intersection Summary

Cycle Length	65
Control Type	Actuated-Uncoordinated
Natural Cycle	65

Splits and Phases: 399: CR 30 & Lawndale Ln



Maple Grove Regional Solicitation
Improved PM Peak

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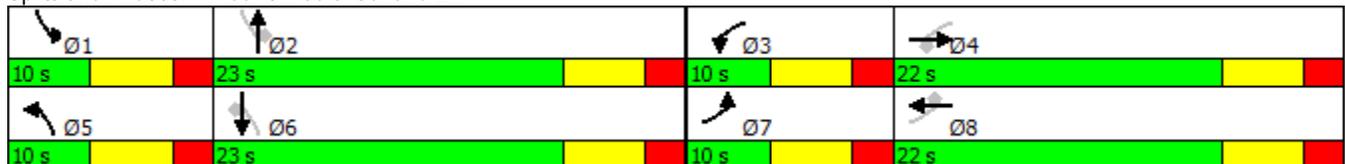


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBSB	WBL	EBWB	NBL	NBSB	EBL	EBWB
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	Max	None	None
Maximum Split (s)	10	23	10	22	10	23	10	22
Maximum Split (%)	15.4%	35.4%	15.4%	33.8%	15.4%	35.4%	15.4%	33.8%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	0	10	33	43	0	10	33	43
End Time (s)	10	33	43	0	10	33	43	0
Yield/Force Off (s)	4	27	37	59	4	27	37	59
Yield/Force Off 170(s)	4	16	37	48	4	16	37	48
Local Start Time (s)	55	0	23	33	55	0	23	33
Local Yield (s)	59	17	27	49	59	17	27	49
Local Yield 170(s)	59	6	27	38	59	6	27	38

Intersection Summary

Cycle Length	65
Control Type	Actuated-Uncoordinated
Natural Cycle	65

Splits and Phases: 400: CR 30 & Garland Ln



Maple Grove Regional Solicitation
Improved PM Peak

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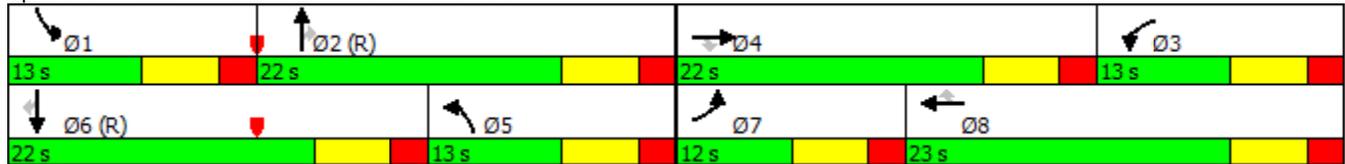


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	13	22	13	22	13	22	12	23
Maximum Split (%)	18.6%	31.4%	18.6%	31.4%	18.6%	31.4%	17.1%	32.9%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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	No	No	No	No	No	No	No	No
Start Time (s)	57	0	44	22	9	57	22	34
End Time (s)	0	22	57	44	22	9	34	57
Yield/Force Off (s)	64	16	51	38	16	3	28	51
Yield/Force Off 170(s)	64	5	51	27	16	62	28	40
Local Start Time (s)	57	0	44	22	9	57	22	34
Local Yield (s)	64	16	51	38	16	3	28	51
Local Yield 170(s)	64	5	51	27	16	62	28	40

Intersection Summary

Cycle Length	70
Control Type	Actuated-Coordinated
Natural Cycle	70
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 401: Dunkirk Ln/MGP & CR 30



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018



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	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	13	23	12	22	12	24	12	22
Maximum Split (%)	18.6%	32.9%	17.1%	31.4%	17.1%	34.3%	17.1%	31.4%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	11	58	24	36	58	0	24	36
End Time (s)	24	11	36	58	0	24	36	58
Yield/Force Off (s)	18	5	30	52	64	18	30	52
Yield/Force Off 170(s)	18	64	30	41	64	7	30	41
Local Start Time (s)	11	58	24	36	58	0	24	36
Local Yield (s)	18	5	30	52	64	18	30	52
Local Yield 170(s)	18	64	30	41	64	7	30	41

Intersection Summary

Cycle Length	70
Control Type	Actuated-Coordinated
Natural Cycle	70
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 402: West Ramps & MGP



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

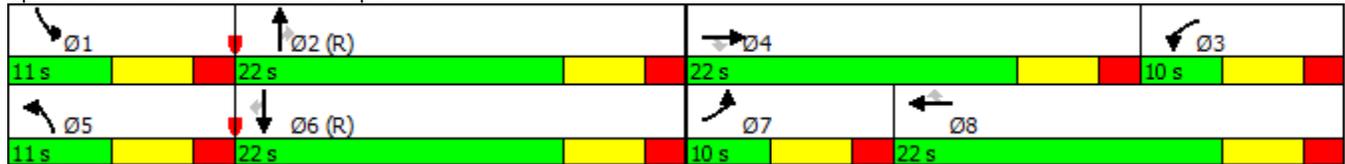


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lag	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	11	22	10	22	11	22	10	22
Maximum Split (%)	16.9%	33.8%	15.4%	33.8%	16.9%	33.8%	15.4%	33.8%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	54	0	44	22	54	0	22	32
End Time (s)	0	22	54	44	0	22	32	54
Yield/Force Off (s)	59	16	48	38	59	16	26	48
Yield/Force Off 170(s)	59	5	48	27	59	5	26	37
Local Start Time (s)	54	0	44	22	54	0	22	32
Local Yield (s)	59	16	48	38	59	16	26	48
Local Yield 170(s)	59	5	48	27	59	5	26	37

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: 403: East Ramps & MGP



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

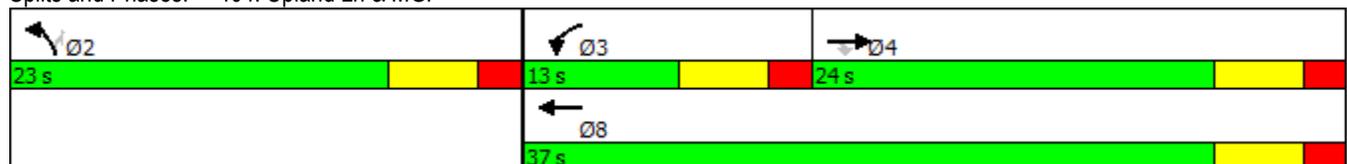


Phase Number	2	3	4	8
Movement	NBL	WBL	EBT	WBT
Lead/Lag		Lead	Lag	
Lead-Lag Optimize		Yes	Yes	
Recall Mode	Max	None	None	None
Maximum Split (s)	23	13	24	37
Maximum Split (%)	38.3%	21.7%	40.0%	61.7%
Minimum Split (s)	22	10	22	22
Yellow Time (s)	4	4	4	4
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	4	4	4	4
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)	5		5	5
Flash Dont Walk (s)	11		11	11
Dual Entry	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	23	36	23
End Time (s)	23	36	0	0
Yield/Force Off (s)	17	30	54	54
Yield/Force Off 170(s)	6	30	43	43
Local Start Time (s)	0	23	36	23
Local Yield (s)	17	30	54	54
Local Yield 170(s)	6	30	43	43

Intersection Summary

Cycle Length		60
Control Type	Actuated-Uncoordinated	
Natural Cycle		60

Splits and Phases: 404: Upland Ln & MGP



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

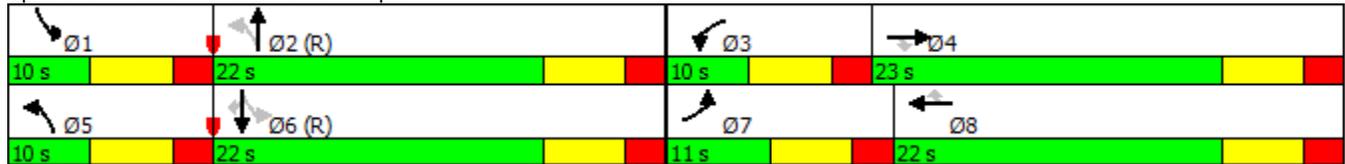


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBTL	WBL	EBT	NBL	SBTL	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	22	10	23	10	22	11	22
Maximum Split (%)	15.4%	33.8%	15.4%	35.4%	15.4%	33.8%	16.9%	33.8%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	55	0	22	32	55	0	22	33
End Time (s)	0	22	32	55	0	22	33	55
Yield/Force Off (s)	59	16	26	49	59	16	27	49
Yield/Force Off 170(s)	59	5	26	38	59	5	27	38
Local Start Time (s)	55	0	22	32	55	0	22	33
Local Yield (s)	59	16	26	49	59	16	27	49
Local Yield 170(s)	59	5	26	38	59	5	27	38

Intersection Summary

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

Splits and Phases: 405: MGP & Hospital Dr



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

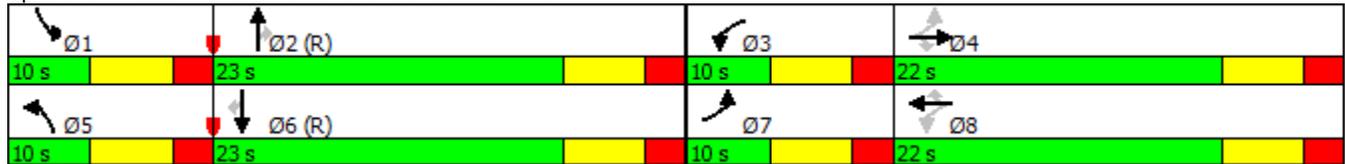


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBTL	NBL	SBT	EBL	WBTL
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	10	23	10	22	10	23	10	22
Maximum Split (%)	15.4%	35.4%	15.4%	33.8%	15.4%	35.4%	15.4%	33.8%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	55	0	23	33	55	0	23	33
End Time (s)	0	23	33	55	0	23	33	55
Yield/Force Off (s)	59	17	27	49	59	17	27	49
Yield/Force Off 170(s)	59	6	27	38	59	6	27	38
Local Start Time (s)	55	0	23	33	55	0	23	33
Local Yield (s)	59	17	27	49	59	17	27	49
Local Yield 170(s)	59	6	27	38	59	6	27	38

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: 406: MGP & Grove Circle/99th Ave



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

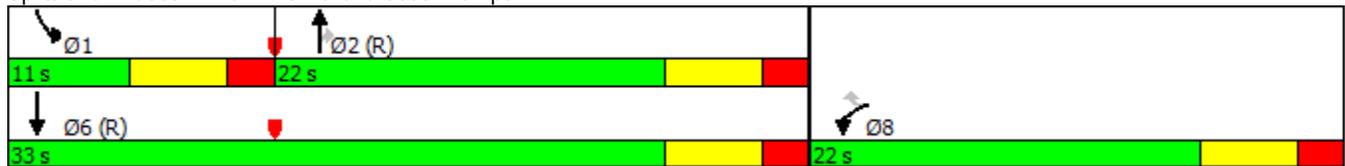


Phase Number	1	2	6	8
Movement	SBL	NBT	SBT	WBL
Lead/Lag	Lead	Lag		
Lead-Lag Optimize	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None
Maximum Split (s)	11	22	33	22
Maximum Split (%)	20.0%	40.0%	60.0%	40.0%
Minimum Split (s)	10	22	22	22
Yellow Time (s)	4	4	4	4
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	4	4	4	4
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)		5	5	5
Flash Dont Walk (s)		11	11	11
Dual Entry	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	44	0	44	22
End Time (s)	0	22	22	44
Yield/Force Off (s)	49	16	16	38
Yield/Force Off 170(s)	49	5	5	27
Local Start Time (s)	44	0	44	22
Local Yield (s)	49	16	16	38
Local Yield 170(s)	49	5	5	27

Intersection Summary

Cycle Length	55
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 407: MGP & 610 South Ramps



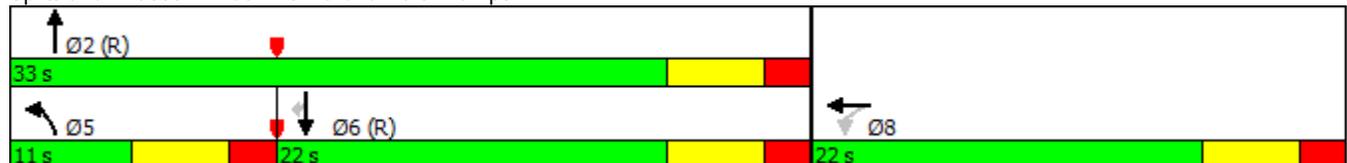


Phase Number	2	5	6	8
Movement	NBT	NBL	SBT	WBTL
Lead/Lag		Lead	Lag	
Lead-Lag Optimize		Yes	Yes	
Recall Mode	C-Max	None	C-Max	None
Maximum Split (s)	33	11	22	22
Maximum Split (%)	60.0%	20.0%	40.0%	40.0%
Minimum Split (s)	22	10	22	22
Yellow Time (s)	4	4	4	4
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	4	4	4	4
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)	5		5	5
Flash Dont Walk (s)	11		11	11
Dual Entry	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	44	44	0	22
End Time (s)	22	0	22	44
Yield/Force Off (s)	16	49	16	38
Yield/Force Off 170(s)	5	49	5	27
Local Start Time (s)	44	44	0	22
Local Yield (s)	16	49	16	38
Local Yield 170(s)	5	49	5	27

Intersection Summary

Cycle Length	55
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 408: MGP & 610 North Ramps



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

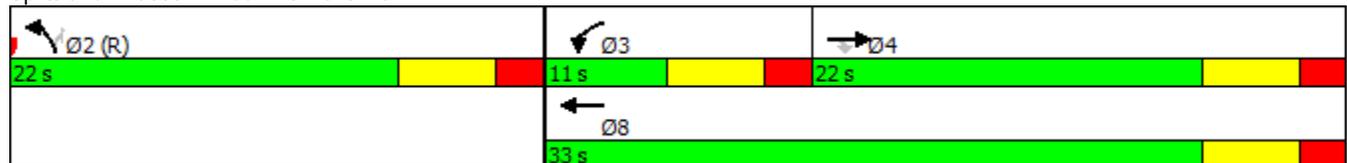


Phase Number	2	3	4	8
Movement	NBL	WBL	EBT	WBT
Lead/Lag		Lead	Lag	
Lead-Lag Optimize		Yes	Yes	
Recall Mode	C-Max	None	None	None
Maximum Split (s)	22	11	22	33
Maximum Split (%)	40.0%	20.0%	40.0%	60.0%
Minimum Split (s)	22	10	22	22
Yellow Time (s)	4	4	4	4
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	4	4	4	4
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)	5		5	5
Flash Dont Walk (s)	11		11	11
Dual Entry	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	22	33	22
End Time (s)	22	33	0	0
Yield/Force Off (s)	16	27	49	49
Yield/Force Off 170(s)	5	27	38	38
Local Start Time (s)	0	22	33	22
Local Yield (s)	16	27	49	49
Local Yield 170(s)	5	27	38	38

Intersection Summary

Cycle Length	55
Control Type	Actuated-Coordinated
Natural Cycle	55
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green	

Splits and Phases: 409: MGP & CR 81



Maple Grove Regional Solicitation
Improved PM Peak

06/26/2018

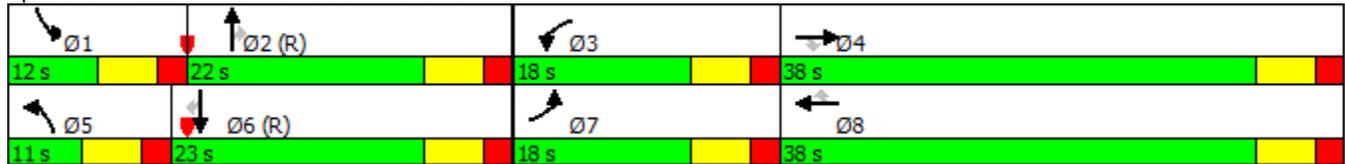


Phase Number	1	2	3	4	5	6	7	8
Movement	SBL	NBT	WBL	EBT	NBL	SBT	EBL	WBT
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	C-Max	None	None
Maximum Split (s)	12	22	18	38	11	23	18	38
Maximum Split (%)	13.3%	24.4%	20.0%	42.2%	12.2%	25.6%	20.0%	42.2%
Minimum Split (s)	10	22	10	22	10	22	10	22
Yellow Time (s)	4	4	4	4	4	4	4	4
All-Red Time (s)	2	2	2	2	2	2	2	2
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)	78	0	22	40	78	89	22	40
End Time (s)	0	22	40	78	89	22	40	78
Yield/Force Off (s)	84	16	34	72	83	16	34	72
Yield/Force Off 170(s)	84	5	34	61	83	5	34	61
Local Start Time (s)	78	0	22	40	78	89	22	40
Local Yield (s)	84	16	34	72	83	16	34	72
Local Yield 170(s)	84	5	34	61	83	5	34	61

Intersection Summary

Cycle Length	90
Control Type	Actuated-Coordinated
Natural Cycle	90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	

Splits and Phases: 410: Fernbrook Ln & CR 81



Maple Grove - CSAH 610 Expansion

399: CR 30 and Lawndale		
Existing Volume	1936	vehicles
Existing Delay	36	sec/veh
Existing Total Delay	69696	seconds
Future Volume	737	vehicles
Future Delay	28	sec/veh
Future Total Delay	20636	seconds
Total Delay Reduction	49060	seconds

403: Maple Grove Parkway/East 94 Ramps		
Existing Volume	3164	vehicles
Existing Delay	39	sec/veh
Existing Total Delay	123396	seconds
Future Volume	2398	vehicles
Future Delay	29	sec/veh
Future Total Delay	69542	seconds
Total Delay Reduction	53854	seconds

407: Maple Grove Parkway/South 610 Ramps		
Existing Volume	1901	vehicles
Existing Delay	4	sec/veh
Existing Total Delay	7604	seconds
Future Volume	1274	vehicles
Future Delay	4	sec/veh
Future Total Delay	5096	seconds
Total Delay Reduction	2508	seconds

400: CR 30 and Garland Ln		
Existing Volume	2134	vehicles
Existing Delay	19	sec/veh
Existing Total Delay	40546	seconds
Future Volume	935	vehicles
Future Delay	15	sec/veh
Future Total Delay	14025	seconds
Total Delay Reduction	26521	seconds

404: Maple Grove Parkway/Upland Ln		
Existing Volume	2601	vehicles
Existing Delay	19	sec/veh
Existing Total Delay	49419	seconds
Future Volume	2061	vehicles
Future Delay	16	sec/veh
Future Total Delay	32976	seconds
Total Delay Reduction	16443	seconds

408: Maple Grove Parkway/North 610 Ramps		
Existing Volume	1390	vehicles
Existing Delay	17	sec/veh
Existing Total Delay	23630	seconds
Future Volume	975	vehicles
Future Delay	13	sec/veh
Future Total Delay	12675	seconds
Total Delay Reduction	10955	seconds

401: CR 30 and Dunkirk/Maple Grove Parkway		
Existing Volume	3935	vehicles
Existing Delay	37	sec/veh
Existing Total Delay	145595	seconds
Future Volume	2751	vehicles
Future Delay	26	sec/veh
Future Total Delay	71526	seconds
Total Delay Reduction	74069	seconds

405: Maple Grove Parkway/Hospital Drive		
Existing Volume	2209	vehicles
Existing Delay	28	sec/veh
Existing Total Delay	61852	seconds
Future Volume	1750	vehicles
Future Delay	22	sec/veh
Future Total Delay	38500	seconds
Total Delay Reduction	23352	seconds

409: Maple Grove Parkway/CR 81		
Existing Volume	2431	vehicles
Existing Delay	16	sec/veh
Existing Total Delay	38896	seconds
Future Volume	2331	vehicles
Future Delay	16	sec/veh
Future Total Delay	37296	seconds
Total Delay Reduction	1600	seconds

402: Maple Grove Parkway/West 94 Ramps		
Existing Volume	3549	vehicles
Existing Delay	37	sec/veh
Existing Total Delay	131313	seconds
Future Volume	2591	vehicles
Future Delay	30	sec/veh
Future Total Delay	77730	seconds
Total Delay Reduction	53583	seconds

406: Maple Grove Parkway/Grove Circle		
Existing Volume	2369	vehicles
Existing Delay	17	sec/veh
Existing Total Delay	40273	seconds
Future Volume	1839	vehicles
Future Delay	16	sec/veh
Future Total Delay	29424	seconds
Total Delay Reduction	10849	seconds

410: CR 81/Fernbrook Lane		
Existing Volume	3355	vehicles
Existing Delay	60	sec/veh
Existing Total Delay	201300	seconds
Future Volume	3255	vehicles
Future Delay	51	sec/veh
Future Total Delay	166005	seconds
Total Delay Reduction	35295	seconds

Total Network Delay Reduction	358089	seconds
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Network Totals

Number of Intersections	1
Total Delay / Veh (s/v)	21
Total Delay (hr)	14
Stops (#)	1589
Average Speed (mph)	27
Total Travel Time (hr)	41
Distance Traveled (mi)	1127
Fuel Consumed (gal)	72
Fuel Economy (mpg)	15.8
CO Emissions (kg)	5.00
NOx Emissions (kg)	0.97
VOC Emissions (kg)	1.16
Performance Index	18.7

Maple Grove Regional Solicitation Improved PM Peak

06/26/2018

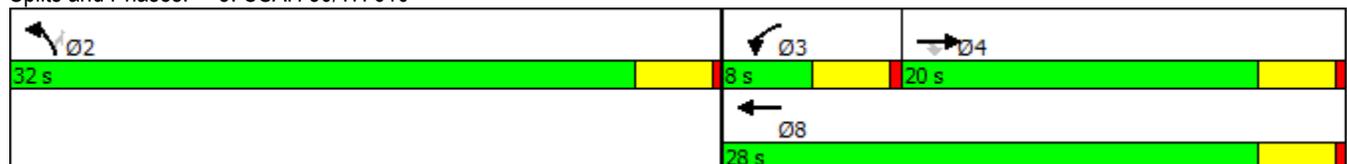


Phase Number	2	3	4	8
Movement	NBL	WBL	EBT	WBT
Lead/Lag		Lead	Lag	
Lead-Lag Optimize		Yes	Yes	
Recall Mode	Max	None	None	None
Maximum Split (s)	32	8	20	28
Maximum Split (%)	53.3%	13.3%	33.3%	46.7%
Minimum Split (s)	20	8	20	20
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5
Minimum Initial (s)	4	4	4	4
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)	5		5	5
Flash Dont Walk (s)	11		11	11
Dual Entry	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	32	40	32
End Time (s)	32	40	0	0
Yield/Force Off (s)	28	36	56	56
Yield/Force Off 170(s)	17	36	45	45
Local Start Time (s)	0	32	40	32
Local Yield (s)	28	36	56	56
Local Yield 170(s)	17	36	45	45

Intersection Summary

Cycle Length		60
Control Type	Actuated-Uncoordinated	
Natural Cycle		60

Splits and Phases: 3: CSAH 30/TH 610



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
	CSAH 30/Maple Grove Pkwy	CSAH 30 From Queensland Rd to Maple Grove Parkway, MGP from CSAH 30 to CR 81 and Weaver Lake Rd/94			Maple Grove	1/1/2013	12/31/2015
Description of Proposed Work		CSAH 610 Extension (reducing number of vehicles/day on roadway)					

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	Other	Total

Study Period: Number of Crashes	Fatal	F					1		1
	Personal Injury (PI)	A							
		B	4	1				2	7
		C	31			8	2	3	1	3
	Property Damage	PD	85	13	3	12	2	3	4	122

% Change in Crashes	Fatal	F					-14%		
	PI	A							
		B	-14%	-14%		-14%		-14%	-14%
		C	-14%			-14%	-14%	-14%	-14%
	Property Damage	PD	-14%	-14%	-14%	-14%	-14%	-14%	-14%

**Use Crash Modification Factors Clearinghouse*

Change in Crashes <small>= No. of crashes X % change in crashes</small>	Fatal	F					-0.14		-0.14
	PI	A							
		B	-0.56	-0.14				-0.28	-0.98
		C	-4.34			-1.12	-0.28	-0.42	-0.14	-0.42
	Property Damage	PD	-11.90	-1.82	-0.42	-1.68	-0.28	-0.42	-0.56	-17.08

Year (Safety Improvement Construction) **2021**

Project Cost (exclude Right of Way)	Year	Type of Crash	Study Period: Change in Crashes	Annual Change in Crashes	Cost per Crash	Annual Benefit
\$ 20,477,000	2021	F	-0.14	-0.05	\$ 1,180,000	\$ 55,117
Right of Way Costs (optional)		A			\$ 590,000	
Traffic Growth Factor	3%	B	-0.98	-0.33	\$ 170,000	\$ 55,584
Capital Recovery		C	-6.72	-2.24	\$ 87,000	\$ 195,058
1. Discount Rate	1.3%	PD	-17.08	-5.70	\$ 7,800	\$ 44,449
2. Project Service Life (n)	30	Total			\$ 350,208	

B/C= 0.66

Using present worth values.
B= \$ 13,512,832
C= \$ 20,477,000
 See "Calculations" sheet for amortization.

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
	Weaver Lake Rd	From Queensland Rd to Maple Grove Parkway, and MGP/94 Ramps (Both) and Weaver			Maple Grove	1/1/2013	12/31/2015
Description of Proposed Work		CSAH 610 Extension (reducing number of vehicles/day on roadway)					

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	Other	Total
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Study Period: Number of Crashes	Fatal	F								
	Personal Injury (PI)	A								
		B								
		C		6			1		1	8
Property Damage	PD		39	4		7	2		2	54

% Change in Crashes	Fatal	F							
	PI	A							
		B							
		C		-14%			-14%		-14%
	Property Damage	PD		-14%	-14%		-14%	-14%	

Change in Crashes = No. of crashes X % change in crashes	Fatal	F								
	PI	A								
		B								
		C		-0.84			-0.14		-0.14	-1.12
	Property Damage	PD		-5.46	-0.56		-0.98	-0.28		-0.28	-7.56

Year (Safety Improvement Construction) **2021**

Project Cost (exclude Right of Way)	Right of Way Costs (optional)	Traffic Growth Factor	Capital Recovery	1. Discount Rate	2. Project Service Life (n)	Total
\$ 20,447,000		3%		1.3%	30	
	F	A	B	C	PD	
				-1.12	-7.56	
	\$ 1,180,000	\$ 590,000	\$ 170,000	-0.37	-2.52	
				\$ 87,000	\$ 7,800	
				\$ 32,510	\$ 19,674	
						\$ 52,184

B/C= 0.10

Using present worth values.
B= \$ 2,013,516
C= \$ 20,447,000
 See "Calculations" sheet for amortization.

Intersections	Total Number of Accidents	Years of Data	ADT*	Calculated Crash Rate (Million Entering Vehicles)	Type of Intersection:		Average Crash Rate for Similar Intersections, Ra	Vehicle Exposure During Study Period, m
					Vol. < 15K ADT: Speed < 45 mph	Low		
Maple Grove Parkway/CSAH 30	44	3	37550	1.08	Signalized: High Volume, Low Speed	Low	0.68	41.12
Maple Grove Parkway/CSAH 30	30	3	25550	1.08	Signalized: High Volume, Low Speed	Low	0.68	27.98
Maple Grove Parkway/West 94 Ramp	20	3	20700	0.89	Signalized: High Volume, Low Speed	Low	0.68	22.67
Maple Grove Parkway/West 94 Ramp	12	3	12700	0.87	Signalized: High Volume, Low Speed	Low	0.68	13.91
Maple Grove Parkway/East 94 Ramp	12	3	26575	0.42	Signalized: High Volume, Low Speed	Low	0.68	29.10
Maple Grove Parkway/East 94 Ramp	10	3	22075	0.42	Signalized: High Volume, Low Speed	Low	0.68	24.17
Maple Grove Parkway/Upland Dr	9	3	28800	0.35	Signalized: High Volume, Low Speed	Low	0.68	26.06
Maple Grove Parkway/Upland Dr	7	3	19300	0.34	Signalized: High Volume, Low Speed	Low	0.68	21.13
Maple Grove Parkway/Hospital Ln	6	3	21300	0.26	Signalized: High Volume, Low Speed	Low	0.68	23.32
Maple Grove Parkway/Hospital Ln	4	3	16300	0.23	Signalized: High Volume, Low Speed	Low	0.68	17.85
Maple Grove Parkway/99th ave	10	3	23665	0.39	Signalized: High Volume, Low Speed	Low	0.68	25.91
Maple Grove Parkway/99th ave	7	3	18665	0.35	Signalized: High Volume, Low Speed	Low	0.68	20.44
Maple Grove Parkway/CR 81	43	3	24250	1.62	Signalized: High Volume, Low Speed	Low	0.68	26.55
Maple Grove Parkway/CR 81	41	3	23250	1.62	Signalized: High Volume, Low Speed	Low	0.68	25.46
CR 81 and Fernbrook	34	3	33550	0.93	Signalized: High Volume, Low Speed	Low	0.68	36.74
CR 81 and Fernbrook	33	3	32550	0.93	Signalized: High Volume, Low Speed	Low	0.68	35.64
Elm Creek Rd and Weaver Lake Rd	12	3	39600	0.28	Signalized: High Volume, Low Speed	Low	0.68	43.36
Elm Creek Rd and Weaver Lake Rd	10	3	35600	0.26	Signalized: High Volume, Low Speed	Low	0.68	38.98
Weaver Lake Rd/Fish Lake Rd	30	3	23300	1.19	Signalized: High Volume, Low Speed	Low	0.68	25.40
Weaver Lake Rd/Fish Lake Rd	26	3	20700	1.15	Signalized: High Volume, Low Speed	Low	0.68	22.67
Weaver Lake Rd/North 94 Ramps	12	3	14850	0.26	Signalized: High Volume, Low Speed	Low	0.68	47.80
Weaver Lake Rd/North 94 Ramps	11	3	41150	0.25	Signalized: High Volume, Low Speed	Low	0.68	45.06
Weaver Lake Rd/South 94 Ramps	8	3	34750	0.22	Signalized: High Volume, Low Speed	Low	0.68	38.05
Weaver Lake Rd/South 94 Ramps	7	3	32250	0.20	Signalized: High Volume, Low Speed	Low	0.68	35.31

Existing
Future
Future New Road

Segments	Total Number of Accidents	Years of Data	ADT	Segment Length (Miles)	Calculated Crash Rate (Million Entering Vehicles)	Type of Segment: 2-, 3-, 4-, or 5-Lane: Urban vs Rural, Divided vs Undivided	Average Crash Rate for Similar Segments, Ra
CSAH 30 from Queenstand Dr to Maple Grove Parkway	10	3	14800	1.0	0.62	4-Lane Divided Conventional	2.84
CSAH 30 from Queenstand Dr to Maple Grove Parkway	6	3	8800	1.0	0.75	4-Lane Divided Conventional	2.84
510 Volume from CSAH 30	11	3	6000	1.0	1.52	4-Lane Expressway	1.67

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 46 crashes will be reduced from this project, however, 11 additional crashes will occur along CSAH 610, thus reducing the crashes reduced to 35 crashes.
Represents the Minnesota Average Crash Rates for the Metro Area similar roadway segments or intersections.

Crash Reduction Methodology

Maple Grove Parkway – **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.
 - **CSAH 30 from Queensland Rd to Maple Grove Parkway, Maple Grove Parkway from CSAH 30 to CR 81, CR 81 from Maple Grove Parkway to Fernbrook Lane and Weaver Lake Rd Ramps will be most affected by the CSAH 610 extension.**
- Using the crash data for the most recent three years, calculate the existing crash rate for the parallel roadway(s).
 - **Existing crash rate was calculated for the previously listed segments**
- Identify the daily traffic volume that will be relocated from the parallel roadway(s) to the new roadway.
 - **Approximately 5000 to 12,000 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 46 crashes will be eliminated by reducing the volumes at the 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 6000 vpd on CSAH 610 are expected to add 11 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 46 crashes will be reduced, however 11 new crashes are estimated to occur along the extension of CSAH 610, thus a reduced crash total of 35 crashes. The crash reduction factor is $35/250 = 14\%$**
- The calculated crash reduction factor should be used in the HSIP B/C worksheet.

CITY	DOW	MONTH	DAY	YEAR	TIME	SEV	NUM_KILLED	NUM_VEH	JUNC	SL	TYPE	DIAG	LOCI	TCD	LIT	WTHR1	WTHR2	SURF	CHAR	DESGN	ACC_NUM	PERSON1
2430	4-Wed	6	19	2013	1514	N	0	2	1	40	1	1	1	98	1	1	0	1	1	5	131700118	1
2430	2-Mon	8	11	2014	1631	N	0	2	4	45	1	2	1	1	1	1	1	1	1	5	142240087	1
2430	6-Fri	1	24	2014	0717	N	0	3	4	45	1	1	1	1	1	2	0	4	5	3	140240150	1
2430	2-Mon	1	27	2014	1055	C	0	1	1	70	34	7	2	98	1	1	0	5	5	2	140340346	3
2430	7-Sat	3	16	2013	0829	N	0	2	4	40	1	1	1	1	2	1	1	5	1	5	130750199	1
2430	4-Wed	4	10	2013	0801	N	0	1	4	40	1	1	1	1	1	2	0	1	1	3	131000049	1
2430	2-Mon	7	22	2013	1540	N	0	2	4	40	1	3	1	4	1	1	0	1	1	8	132030122	4
2430	1-Sun	2	23	2014	1220	N	0	2	4	40	1	1	1	98	1	1	0	5	1	5	140540167	3
2430	3-Tue	11	17	2015	1157	N	0	2	7	40	1	5	1	98	1	3	0	2	1	5	153210099	2
2430	2-Mon	1	12	2015	0836	C	0	2	4	45	1	1	1	1	1	1	0	1	1	3	150120072	3
2430	2-Mon	6	23	2014	1049	N	0	2	4	40	1	2	1	1	1	1	1	1	1	5	141740062	3
2430	6-Fri	3	8	2013	0826	N	0	2	4	45	1	1	1	1	1	1	1	1	1	5	130670065	4
2430	3-Tue	5	21	2013	0839	N	0	2	4	40	1	1	1	1	1	3	2	2	1	3	131410119	1
2430	1-Sun	6	9	2013	1447	N	0	2	4	40	1	1	1	1	1	3	0	2	1	90	131600094	3
2430	2-Mon	6	17	2013	1635	N	0	3	4	45	1	1	1	1	2	2	0	1	1	90	131680108	3
2430	4-Wed	11	27	2013	1420	N	0	2	4	40	1	1	1	1	1	2	0	1	1	90	133310128	2
2430	4-Wed	12	11	2013	0540	N	0	2	4	40	1	1	1	1	4	1	0	5	1	5	133460030	1
2430	6-Fri	12	13	2013	1712	N	0	2	4	45	1	2	1	1	4	2	0	5	2	3	133470193	2
2430	6-Fri	12	20	2013	1545	N	0	3	2	40	1	1	1	4	4	2	4	2	1	3	133540169	1
2430	2-Mon	2	24	2014	1747	N	0	2	2	45	1	5	1	4	4	1	1	5	1	5	140350342	1
2430	7-Sat	5	17	2014	0802	N	0	2	4	40	1	1	1	1	1	1	0	1	1	90	141370032	4
2430	3-Tue	7	29	2014	1843	N	0	2	4	40	1	1	1	1	1	1	1	1	1	3	142100185	2
2430	4-Wed	7	30	2014	0654	N	0	2	4	40	22	1	1	1	1	1	0	1	1	8	142110027	1
2430	7-Sat	9	27	2014	1729	C	0	2	4	10	1	6	1	5	4	1	1	2	1	5	142700133	1
2430	4-Wed	12	6	2014	1742	N	0	2	4	40	1	1	1	1	4	1	0	2	1	3	143400113	1
2430	1-Sun	1	28	2015	0721	N	0	2	4	40	1	1	1	1	4	2	2	2	1	5	150280029	1
2430	5-Thu	2	1	2015	1233	C	0	3	4	45	1	1	1	1	1	1	0	1	1	5	150320051	3
2430	3-Tue	7	2	2015	1140	C	0	3	4	40	1	1	1	1	1	1	0	1	1	5	151830107	3
2430	4-Wed	8	12	2015	1808	C	0	2	4	40	1	5	1	1	1	1	0	1	1	5	152240210	1
2430	3-Tue	8	18	2015	1507	N	0	2	4	40	1	2	1	4	1	3	0	2	1	5	152300107	4
2430	3-Tue	9	15	2015	1801	N	0	2	1	45	1	1	1	1	1	1	0	1	1	5	152580181	4
2430	6-Fri	10	30	2015	1640	N	0	3	4	45	1	8	1	1	1	1	0	1	1	5	153080169	1
2430	3-Tue	11	3	2015	1348	C	0	3	4	40	1	1	1	1	1	1	0	1	1	5	153080142	1
2430	5-Thu	11	5	2015	1732	N	0	2	4	45	1	1	1	5	4	1	1	1	1	3	153090157	1
2430	7-Sat	3	29	2014	1802	C	0	2	4	45	1	1	1	1	3	1	0	1	1	90	140880099	3
2430	5-Thu	5	15	2014	1930	C	0	3	4	40	1	5	1	1	1	2	0	2	1	3	141350130	1
2430	2-Mon	10	13	2014	2040	C	0	2	4	40	1	5	1	1	4	2	0	2	1	90	142870253	2
2430	3-Tue	10	21	2014	0709	C	0	2	4	45	1	1	1	1	2	1	0	1	1	3	142940030	1
2430	6-Fri	12	18	2015	0644	N	0	2	4	45	1	3	1	1	4	1	0	2	1	5	153520020	3
2430	3-Tue	15	15	2013	1534	N	0	2	4	45	1	1	1	1	1	3	0	2	1	3	132880219	3
2430	4-Wed	9	25	2013	0840	C	0	2	2	40	1	6	1	4	1	1	1	1	1	5	132680055	1
2430	5-Thu	5	2	2013	1420	C	0	2	8	45	1	5	1	98	1	1	0	1	1	3	131220088	3
2430	5-Thu	5	22	2014	1420	C	0	2	1	45	1	1	1	98	1	1	0	1	1	5	141420113	3
2430	3-Tue	9	8	2015	1646	N	0	2	4	40	1	5	1	98	1	1	0	1	1	3	152510322	1

															PERSON2					PERSON3				
DIR	ACT	FAC1	FAC2	POSN	INU	EQP	PHYS	AGE	SEX	VTYPE2	DIR3	ACT4	FAC15	FAC26	POSN7	INU8	EQP9	PHYS10	AGE11	SEX12	VTYPE13	DIR14	ACT15	
1	9	1	0	1	N	4	1	41	M	2	1	9	21	0	1	N	4	1	16	F	2		1	
1	1	1	1	1	N	4	1	39	F	4	1	14	8	1	1	N	4	1	63	F				
3	5	1	0	1	N	4	1	17	M	3	3	5	1	0	1	N	4	1	54	F	1		3	
3	1	3	15	1	C	4	1	58	F															
1	5	4	1	1	N	4	1	50	F	3	1	5	1	0	1	N	4	1	58	M				
7	5	1	0	1	N	99	1	29	F															
5	6	2	15	1	N	4	1	25	M	1	1	1	1	0	1	N	4	1	58	M				
5	5	3	3	1	N	4	1	31	M	1	5	5	3	0	1	N	4	1	18	F	1		5	
6	7	10	0	1	N	4	1	19	M	2	7	1	1	0	1	N	4	1	73	M				
3	11	1	0	1	C	4	1	43	F	3	3	1	31	4	1	N	4	1	31	M	3		3	

																							PERSON2					PERSON3				
DIR	ACT	FAC1	FAC2	POSN	INU	EQP	PHYS	AGE	SEX	VTYPE2	DIR3	ACT4	FAC15	FAC26	POSN7	INU8	EQP9	PHYS10	AGE11	SEX12	VTYPE13	DIR14	ACT15									
3	1	1	1	1	N	4	1	39	F	3	3	14	2	8	1	N	4	1	66	F	3		3									
3	11	15	1	1	N	4	98	41	F	4	3	11	1	1	1	N	4	1	38	F	4		3									
3	1	4	0	1	N	4	1	32	F	4	3	11	1	0	1	N	4	1	56	F	4		3									
1	5	1	0	1	N	4	1	49	M	3	1	5	15	0	1	N	4	1	34	F	3		1									
3	11	1	1	1	N	4	1	19	F	1	3	11	1	1	2	N	4	1	20	F	3		3									
1	5	4	90	1	N	4	1	58	M	1	1	5	1	0	1	N	4	1	26	F	1		1									
3	1	4	46	1	N	4	1	36	M	1	3	1	1	0	1	N	4	1	66	M	1		3									
3	14	8	15	1	N	99	1	49	M	1	3	1	1	0	1	N	4	1	39	M	1		3									
7	1	1	0	1	N	4	1	34	F	1	7	1	1	1	1	N	4	1	21	M	2		7									
5	5	2	3	1	N	4	1	36	F	1	7	1	1	1	1	N	4	1	26	M												
3	10	21	0	1	N	90	1	51	M	1	3	11	1	0	1	N	4	1	28	F	4		3									
8	3	15	0	1	N	4	1	30	M	1	8	3	1	0	1	N	4	1	17	M												
3	3	15	0	1	N	4	1	26	M	1	3	11	1	0	1	N	4	1	39	M	1		3									
7	1	1	1	1	C	4	1	67	F	3	3	5	8	10	1	N	4	1	74	F	1		7									
1	16	15	4	1	N	4	1	22	M	1	1	16	1	0	1	N	4	1	28	F												
1	2	1	1	1	N	4	1	16	F	1	2	5	2	15	1	N	4	1	18	F	1		2									
1	1	4	0	1	N	4	1	39	F	4	1	1	1	0	1	C	4	1	40	M	3		1									
1	1	1	0	1	C	4	1	51	F	1	1	11	1	0	1	N	4	1	29	F	3		1									
3	11	1	15	1	N	4	1	33	M	1	1	31	1	1	1	C	99	1	54	M	1		1									
3	37	5	15	1	N	4	1	69	M	2	7	5	2	15	1	N	4	1	74	M												
7	1	1	15	1	N	4	1	53	F	4	3	6	1	0	1	N	4	1	40	F	4		3									
5	6	4	0	1	N	4	1	16	M	1	5	6	1	1	1	N	4	1	52	F												
7	1	1	0	1	C	4	1	52	F	4	5	11	1	0	1	N	4	1	35	M	4		1									
1	5	15	1	1	N	4	1	39	F	1	1	5	1	1	1	N	4	1	17	F												
8	0	1	0	1	N	3	1	16	F	3	8	16	4	0	1	N	4	1	51	M	3		8									
3	1	2	15	1	N	4	1	49	F	1	5	1	1	0	1	C	4	1	39	M	4		1									
3	1	1	0	1	N	4	1	49	M	1	7	1	5	0	1	C	4	1	35	F	2		1									
1	1	1	0	1	C	4	1	69	M	3	3	5	4	15	1	N	4	1	45	F	3		3									
3	5	1	0	1	N	4	1	35	F	2	3	11	5	0	1	N	4	1	43	M												
6	6	1	0	1	N	4	1	49	F	4	7	1	1	0	1	N	4	1	40	F	4		7									
7	1	2	0	1	N	4	1	36	F	1	8	6	2	0	1	N	4	1	36	F	1		3									
3	1	1	0	1	C	4	1	36	F	3	1	6	4	33	1	N	4	1	59	F	3		3									
7	1	1	0	1	N	4	1	17	M	1	1	1	4	16	1	N	4	1	17	F	1		7									
5	1	33	0	1	N	4	1	25	F	2	3	1	1	0	1	N	4	1	50	M												

FAQI16	FAQI17	POSNI8	INJ19	EQP20	PHYS21	AGE22	SEX23	PERSON4	VTYPE24	DIR25	ACT26	FAQI27	FACQ28	POSN29	INJ30	EQP31	PHYS32	AGE33	SEX34
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FAQI16	FAQI17	POSNI8	INJ19	EQP20	PHYS21	AGE22	SEX23	PERSON4	VTYPE24	DIR25	ACT26	FAQI27	FACQ28	POSN29	INJ30	EQP31	PHYS32	AGE33	SEX34
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TH 94 @ Weaver Lake Road East and West Ramps (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
North Ramp									
01	00000094	215+00.579	0100000094	216.236	W	A04	1	1	U
01	00000094	215+00.579	0100000094	216.236	W	A04	1	1	U
01	00000094	215+00.579	0100000094	216.236	Z	A04	1	3	U
01	00000094	215+00.579	0100000094	216.236	W	A04	1	1	U
01	00000094	215+00.579	0100000094	216.236	W	A04	1	3	U
01	00000094	215+00.579	0100000094	216.236	Z	A04	1	3	U
01	00000094	215+00.579	0100000094	216.236	E	A04	1	3	U
01	00000094	215+00.579	0100000094	216.236	Z	A04	1	3	U
01	00000094	215+00.579	0100000094	216.236	W	A04	2	1	U
01	00000094	215+00.579	0100000094	216.236	Z	A04	2	3	U
01	00000094	215+00.579	0100000094	216.236	Z	A05	1	0	U
01	00000094	215+00.579	0100000094	216.236	W	A05	1	3	U
South Ramp									
01	00000094	215+00.579	0100000094	216.236	E	B03	2	3	U
01	00000094	215+00.579	0100000094	216.236	E	B04	1	1	U
01	00000094	215+00.579	0100000094	216.236	Z	B04	1	3	U
01	00000094	215+00.579	0100000094	216.236	E	B04	2	1	U
01	00000094	215+00.579	0100000094	216.236	W	B05	1	3	U
01	00000094	215+00.579	0100000094	216.236	E	B05	2	3	U
01	00000094	215+00.579	0100000094	216.236	E	B15	1	1	U
01	00000094	215+00.579	0100000094	216.236	E	B15	1	3	U

ATP	CO	CITY	DOW	MONTH	DAY	YEAR	TIME	SEV	NUM_KILLED
BOTH DRIVER EXITED FROM WEST 94 TO WEAVER LAKE RD. AT THE TOP OF THE RAMP. BOTH VEHICLES WERE GOIN	27	2430	1-Sun	1	20	2013	1802	N	0
V1 (MANDOT SNOWPLOW) STOPPED AT TOP OF RAMP. DRIVER OF V2 TRAVELING TOO FAST FOR ROAD CONDITIONS CO	27	2430	1-Sun	1	27	2013	1455	N	0
I SPOKE WITH THE DRIVERS INVOLVED IN THIS VEHICLE PROPERTY DAMAGE ACCIDENT AND I OBTAINED SOME OF T	27	2430	3-Tue	6	18	2013	1153	N	0
DRIVER TWO WAS STOPPED AT THE STOP LIGHT WHEN HE WAS REAR ENDED BY VEHICLE ONE. DRIVER ONE SAID S	27	2430	5-Thu	11	21	2013	2026	N	0
UNITS 1 AND 2 EXITING FROM WB 194 TO EAST WEAVER. UNIT 2 STOPPED FOR TRAFFIC AND UNIT 1 DID NOT SEE	27	2430	4-Wed	12	11	2013	1341	N	0
UNIT 2 WAS STOPPED AT THE TOP OF THE RAMP FROM WB 1-94 TO EB CO RD 109. UNIT 1 WAS FOLLOWING AND DR	27	2430	7-Sat	9	13	2014	0924	N	0
D1 WAS DRIVING V1 BEHIND D2 WHO WAS DRIVING V2. BOTH D1 AND D2 WERE EXITING 194 AT WEAVER LAKE RD T	27	2430	4-Wed	12	24	2014	1614	N	0
#NAME?	27	2430	6-Fri	1	24	2014	1200	N	0
UPON ARRIVAL BOTH VEHICLES WERE OFF THE ROADWAY IN A PARKING LOT. THE DRIVER OF V1 STATED THAT HE	27	2430	3-Tue	2	24	2015	1855	N	0
DRIVER VEHICLE #1 SAID HE HAD EXITED WESTBOUND I-94 EXIT RAMP AT WEAVER LKRD. HE WAS SLOWING DOWN A	27	2430	4-Wed	8	19	2015	0850	N	0
VEH 1 AND VEH 2 BOTH EXITED WESTBOUND I 94 ON THE WEAVER LAKE RD EXIT. THEY WERE BOTH TAKING THE DE	27	2430	1-Sun	3	31	2013	1300	N	0
	27	2430	4-Wed	7	15	2015	1706	C	0
DRIVER 1 WAS ON THE ENTRANCE RAMP TO EASTBOUND I 94 FROM WEAVER LAKE RD. AS HE WAS GOING AROUND TH	27	2430	1-Sun	12	13	2015	0907	N	0
BOTH VEHICLES WERE ON THE RAMP FROM E/B 94 TO WEAVER LAKE ROAD. THE DRIVER OF VEH #1 STATED THAT H	27	2430	3-Tue	2	12	2013	1238	N	0
#1 SAID SHE WAS GOING SLOWLY THINKING SHE HAD TO MERGE AND NOT REALIZING SHE HAD HER OWN LANE AFTER	27	2430	4-Wed	3	13	2013	1344	C	0
V1 WAS STOPPED ON THE RAMP FROM EB 1STH94 TO WEAVER LAKE ROAD IN THE CENTER LANE. DVA1 STATED HE WA	27	2430	5-Thu	12	31	2015	1043	N	0
SIGN ON THE OFF RAMP INDICATING TO TRAFFIC THAT IS ATTEMPTING TO EXIT ONTO WEAVER LAKE RD EB THEY	27	2430	6-Fri	9	26	2014	1145	N	0
KIDD ADVISED SHE WAS WALKING E/B WEAVER LAKE RD AND WALKED OVER THE 194 BRIDGE ON THE SOUTH SIDE. S	27	2430	5-Thu	10	8	2015	0946	C	0
UPON ARRIVAL V1 WAS IN THE APEX OF 94 EASTBOUND FROM WEAVER LAKE RD. THE DRIVER MAY HAVE HAD SOME	27	2430	3-Tue	3	12	2013	2007	N	0
BOTH VEHICLES WERE ENTERING EASTBOUND I 694 FROM WEAVER LAKE RD. BOTH VEHICLES, AS WELL AS SEVERAL	27	2430	4-Wed	12	25	2013	0903	N	0

PERSON1																				
NUM_VEH	JUNC	SL	TYPE	DIAG	LOCI	TCD	LIT	WTHR1	WTHR2	SURF	CHAR	DESGN	ACC_NUM	VTYPE	DIR	ACT	FAC1	FAC2	POSN	INU
2	4	35	1	1	1	1	4	1	0	1	5	2	130250242	3	8	10	1	0	1	N
2	1	30	1	2	1	1	1	4	0	3	2	2	130310215	90	7	11	1	0	1	N
2	21	60	1	1	1	1	1	1	0	1	2	2	131690099	3	7	9	15	0	1	N
2	4	60	1	1	1	1	4	2	0	1	1	2	133260222	1	7	1	18	0	1	N
2	21	40	1	1	1	5	1	1	0	5	6	2	133450177	1	7	11	1	0	1	N
2	21	40	1	1	1	98	1	1	0	1	5	2	142560064	1	3	5	15	0	1	N
2	2	40	1	1	1	5	1	1	1	1	5	5	143580152	3	3	1	1	1	1	N
2	2	60	1	1	1	90	1	2	2	1	7	2	150240122	3	2	5	1	1	1	N
2	1	60	1	1	1	1	4	1	0	1	5	2	150680193	3	7	11	1	0	1	N
2	4	40	1	1	1	1	1	3	0	2	7	2	152310065	4	7	10	1	0	1	N
2	0	30	1	1	0	5	1	1	0	1	0	0	131230062	4	1	5	0	0	1	N
2	4	40	1	1	1	1	1	1	0	1	5	2	151960405	3	3	11	14	0	1	C
1	20	60	1	7	1	98	1	3	0	2	6	2	153470031	2	3	1	46	16	1	N
2	7	60	1	2	1	98	1	1	0	1	1	2	130450337	31	5	6	1	0	1	N
2	7	40	1	1	1	98	1	1	1	1	1	3	130720142	3	3	57	8	1	1	C
2	2	30	1	1	1	1	1	2	0	1	2	2	153650280	2	3	11	1	0	1	N
2	21	45	1	1	1	90	1	1	1	1	5	2	142690091	4	7	1	1	1	1	N
1	21	40	7	1	1	90	1	1	0	1	7	2	152810076	54	98	35	1	0	35	C
1	20	60	22	4	1	98	4	1	0	2	1	1	130880166	3	3	1	8	90	1	N
2	1	60	1	5	1	98	1	4	0	4	6	2	133590043	2	3	1	61	46	1	N

INI19 EQP20 PHYS21 AGE22 SEX23 PERSONA VTYPEZ4 DIR25 ACT26 FAC127 FAC228 POSN29 INJ30 EQP31 PHYS32 AGE33 SEX34

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	E	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	W	—	2	1	U
01	00000094	214+00.118	0100000094	214.798	W	—	2	3	U
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	805	1	0	U
01	00000094	214+00.118	0100000094	214.798	Z	805	1	3	U
01	00000094	214+00.118	0100000094	214.798	W	805	1	3	U
01	00000094	214+00.118	0100000094	214.798	Z	805	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 / ICK ROADS. I ASKED HOW FAST HE WAS GOING AND HE TOLD ME 60 AND WAS KEEPING UPON ARRIVAL. BOTH VEHICLES WERE ON THE LEFT SHOULDER. THE DRIVER OF V1 STATED THAT SHE WAS STOPPED UPON ARRIVAL. BOTH VEHICLES WERE ON THE LEFT SHOULDER. THE DRIVER OF V2 STATED THAT SHE WAS IN THE V1 AND V2 WERE STOPPED IN THE LEFT LANE OF EB 94 DUE TO RUSH HOUR TRAFFIC. DVA STATED HE WAS IN THE UPON ARRIVAL. V1 WAS ON THE RIGHT SHOULDER. PER WITNESSES V1 WAS TRAVELING IN THE CENTER LANE. UNIT 2 VEH 1 EB 94 LEFT ROADWAY TO THE RIGHT. STRUCK SIGN STRUCTURE AND ENDED UP IN DITCH WITH WATER. DVA UPON ARRIVAL. BOTH VEHICLES WERE ON THE RIGHT SHOULDER. THE DRIVER OF V1 STATED THAT SHE HAD JUST ALL VEHICLES 1 94 E/B IN THE LEFT LANE. QUOTE: MORNING RUSH HOUR AND QUOTE: TRAFFIC CONDITIONS. D1 ST VEH 1 WAS TRAVELING EB ON 194 NEAR MAPLE GROVE PARKWAY. IT WAS SNOWING AND THE ROADS WERE SNOWY. GOV UPON ARRIVAL. BOTH VEHICLES WERE ON THE RIGHT SHOULDER. THE DRIVER OF V1 STATED THAT SHE WAS IN THE BOTH VEHICLES WERE WB 194. V1 WAS STOPPED IN HEAVY TRAFFIC IN THE LEFT LANE. DRIVER OF V2 STATED VEHICLE 1 WAS IN THE RIGHT THROUGH LANE OF EAST BOUND 94 AND VEHICLE 2 WAS IN RIGHT MERGE LANE. D VEH 1 AND 2 WERE STOPPED. DRIVER 3 SAID SHE WAS LOOKING OVER HER SHOULDER AND DIDN'T SEE THAT THEY V1 WAS HEADING EB ON 194 IN THE LEFT LANE. DVA STATED THAT SHE WAS STOPPED IN TRAFFIC WHEN SHE VEHICLE 1 WAS IN THE LEFT LANE OF EAST BOUND 94 AND VEHICLE 2 WAS IN THE CENTER LANE. BOTH DRIVERS SQUAD HAD BEEN ON RIGHT SHOULDER OF E/B 94 WITH REAR EMERGENCY LIGHTS FLASHING. ASSISTING ANOTHER IN VEH 1 WAS IN LEFT LANE OF E/B 94 UNDER MAPLE GROVE PARKWAY. VEH 2 AND OTHER TRAFFIC STOPPED DUE TO BOTH VEHICLES WERE IN THE LEFT LANE OF HWY 94 EAST BOUND NEAR MAPLE GROVE PARKWAY. TRAFFIC WAS STG DRIVER 1 REALIZED THE ROADS WERE SLIPPERY AND THERE WERE EMERGENCY VEHICLES AHEAD ON THE SIDE OF THE BOTH VEHICLES TRAVELING EB ON 194 NEAR MAPLE GROVE PKWY. DRIVER OF VEHICLE #1 RICHARDSON STAI V1 WAS 94 E/B. D1 STATED THAT SHE WAS INTENDING TO EXIT TO MAPLE GROVE PARKWAY. D1 STATED THAT SH AUBRICH (V2) STATED CAME OFF RAMP FROM MGR, LOST CONTROL, HIT MEDIAN CABLE SAFETY BARRIER, BOUNCED O UPON ARRIVAL. BOTH V1 AND V2 WERE ON THE LEFT SHOULDER AGAINST THE CABLE SAFETY BARRIER. THE DRIV ALL VEHICLES WERE WB 194. V1 AND V2 WERE SLOWING IN HEAVY TRAFFIC. DRIVER OF V3 STATED SHE LOCKE BOTH VEHICLES WERE IN THE LEFT LANE OF WEST BOUND HWY 94. DRIVER 1 SAID TRAFFIC AHEAD OF VEHICLE 1 V1 WAS HEADING WB ON 194 IN THE LEFT LANE. DVA STATED THAT HE WAS TRAVELING APPROXIMATELY 40MPH UNIT 1 AND 2 DRIVING WESTBOUND ON 194 NEAR MAPLE GROVE PARKWAY. UNIT 1 IN LANE 1. UNIT 2 BEHIND UNIT V2 SLOWED FOR TRAFFIC. D1 WAS UNABLE TO STOP IN TIME. V1 STRUCK THE REAR OF V2. BOTH OCCUPANTS IN V1 WAS HEADING WB ON 194 IN THE LEFT LANE. DVA STATED THAT SHE WAS SLOWING WITH TRAFFIC WHEN SH VEH 1 WAS EXITING EB 194 TO MAPLE GROVE PARKWAY. VEH 2 WAS STOPPED AT A RED TRAFFIC SIGNAL AT THE TOP	22	2430	5-Thu	4	11	2013	1054	N	0
BOTH VEHICLES HAD BEEN 1 94 E/B IN THE LEFT LANE. D1 STATED THAT HE HAD BEEN LOOKING AT HIS RADIO. BOTH VEHICLES WERE IN THE LEFT LANE IN MODERATELY HEAVY TRAFFIC. DVA 1 HAD TO APPLY BRAKES HARD A UPON ARRIVAL. BOTH VEHICLES WERE ON THE LEFT SHOULDER. THE DRIVER OF V1 STATED THAT SHE WAS IN THE VEH #1 WAS E/B ON 94 AT MAPLE GROVE PARKWAY WHEN THE VEHICLE WENT OFF THE ROAD TO THE RIGHT JUST EA A ELATED. SEMI WAS TRAVELING ON AND OFF OF THE RIGHT SHOULDER EB 94. THIS CAUSED V2 TO STOP IN RIGH VEH #1 LOST CONTROL ON ICK ROADS AND JACK KAMEED INTO THE MEDIAN BLOCKING ALL LANES. VEH #2 WAS UN UNIT 1 WAS WEST ON 194 APPROACHING OVERPASS OF CO RD 30 IN THE INSIDE LANE COMING TO A STOP DUE TO I VEH 1 AND VEH 2 WERE EB 94. VEH 1 WAS ENTERING FREEWAY FROM MAPLE GROVE PARKWAY. VEH 2 WAS IN CENT DVA STATED THAT SHE WAS IN THE FAR RIGHT LANE HEADING WB 194. SHE STATED THAT V2 LOST CONTROL A VEH 1-2-3 WB 94 LEFT LANE. VEH 1 REAR END VEH 2 SLOWING IN TRAFFIC PUSHING INTO VEH 3 SLOWING IN T BOTH VEHICLES WERE SOUTH ON MAPLE GROVE PARKWAY GOING OVER 194. VEHICLE ONE WAS BEHIND VEHICLE TWO	22	2430	2-Mon	6	30	2014	0804	N	0
	22	2430	2-Mon	6	30	2014	0829	N	0
	22	2430	3-Thu	1	27	2015	0722	N	0
	22	2430	6-Fri	6	19	2015	1031	N	0
	22	2430	5-Thu	4	24	2014	0952	N	0
	22	2430	3-Thu	5	6	2014	0633	N	0
	22	2430	7-Sat	8	1	2015	1849	N	0
	22	2430	4-Wed	2	5	2014	0631	N	0
	22	2430	6-Fri	8	4	2014	0454	N	0
	22	2430	3-Thu	8	5	2014	1733	N	0
	22	2430	6-Fri	8	8	2014	1645	C	0
	22	2430	4-Wed	12	17	2014	0751	N	0
	22	2430	6-Fri	1	31	2014	1544	B	0
	22	2430	6-Fri	10	2	2015	0635	B	0
	22	2430	6-Fri	10	30	2015	1433	N	0
	22	2430	2-Mon	11	18	2013	0636	N	0
	22	2430	4-Wed	12	11	2013	0746	B	0
	22	2430	4-Wed	1	8	2014	0638	N	0
	22	2430	7-Sat	1	18	2014	0956	N	0
	22	2430	1-Sun	10	19	2014	1123	N	0
	22	2430	4-Wed	11	12	2014	0914	N	0
	22	2430	3-Thu	1	14	2014	1106	C	0
	22	2430	6-Fri	4	25	2014	1629	C	0
	22	2430	6-Fri	7	17	2015	1410	G	0
	22	2430	3-Thu	9	9	2015	1933	N	0
	22	2430	6-Fri	8	14	2015	1708	N	0
	22	2430	3-Thu	10	22	2015	1326	C	0
	22	2430	3-Thu	11	17	2015	1828	N	0
	22	2430	5-Thu	12	17	2015	1752	N	0
	22	2430	5-Thu	3	7	2013	0858	N	0
	22	2430	3-Thu	10	8	2013	0836	N	0
	22	2430	2-Mon	10	14	2013	0804	N	0
	22	2430	6-Fri	10	4	2013	1150	C	0
	22	2430	3-Thu	1	24	2013	1018	N	0
	22	2430	6-Fri	2	21	2014	0756	N	0
	22	2430	5-Thu	4	24	2014	1748	N	0
	22	2430	4-Wed	8	27	2014	2016	N	0
	22	2430	3-Thu	3	3	2015	0907	N	0
	22	2430	5-Thu	7	2	2015	1426	N	0
	22	2430	5-Thu	10	29	2015	1926	C	0
	22	2430	1-Sun	7	26	2015	1149	N	0

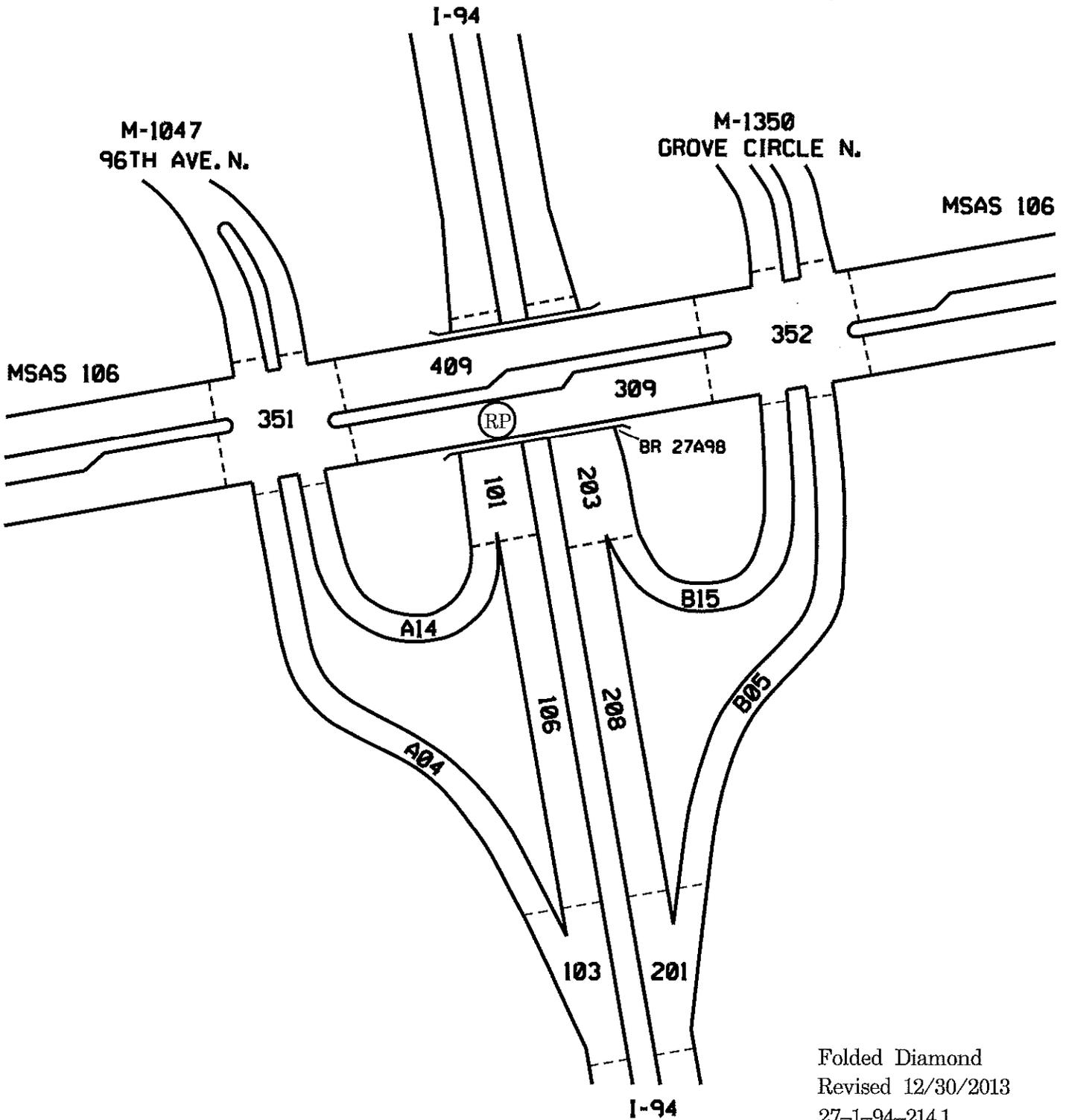
NUM_VEH	JUNC	SL	TYPE	DIAG	LOCI	TCD	LIT	WTHR1	WTHR2	SURF	CHAR	DESGN	ACC_NUM	PERSON1	VTYPE	DIR	ACT	FAC1	FAC2	POSN	INU
1	24	70	1	7	1	98	1	4	0	3	1	1	131050190		1	7	1	3	0	1	N
2	1	70	1	1	1	98	1	1	0	1	1	1	141910185		1	3	1	1	0	1	N
2	1	70	1	1	1	98	1	1	0	1	1	1	141910186		2	2	1	4	15	1	N
3	22	65	1	1	1	98	1	2	0	1	2	1	150270215		4	4	14	15	0	1	N
1	22	45	54	90	1	98	1	1	0	1	1	1	151750197		11	5	13	0	0	1	B
2	1	70	1	7	1	98	1	2	0	2	1	1	141140196		25	2	3	0	0	1	N
1	22	70	26	7	4	98	1	1	0	1	5	1	141260179		1	4	1	24	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	14	1	1	1	N
1	1	70	32	4	2	98	4	4	0	3	1	1	141960285		1	7	1	1	46	1	N
2	1	70	1	1	1	98	1	1	0	1	1	1	142180180		3	4	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	1	0	1	1	1	143890103		35	3	11	1	1	1	N
3	4	70	1	1	1	98	1	1	0	1	2	1	150920040		3	7	1	1	15	1	N
4	1	70	1	1	1	98	2	1	0	1	1	1	152770192		3	3	11	1	0	1	N
2	22	70	1	1	1	98	1	2	0	1	5	1	153110155		1	3	1	15	0	1	N
2	1	70	1	1	1	98	4	2	0	1	1	1	132220211		1	3	10	1	0	1	N
2	1	60	1	1	1	98	4	1	0	1	1	1	132220211		1	3	10	1	0	1	N
2	1	70	1	1	1	98	1	1	0	1	1	1	139450406		1	3	10	1	0	1	B
2	1	60	1	1	1	98	4	1	0	90	2	1	140090454		1	3	10	1	0	1	N
2	1	60	1	1	1	98	1	4	1	5	1	1	140180123		2	4	14	0	14	1	N
1	24	70	26	4	4	98	1	1	0	1	6	1	142930217		1	3	14	8	8	1	N
1	20	70	32	4	1	98	1	4	0	3	1	1	143180304		1	4	16	24	64	1	N
2	1	70	1	1	1	98	1	1	0	2	1	1	140160305		1	3	1	8	0	1	C
2	1	70	1	1	1	98	1	1	0	1	1	1	141170252		2	7	10	1	0	1	N
2	1	70	1	1	1	98	1	1	0	1	1	1	141160135		3	7	1	1	0	1	C
2	1	70	1	1	1	98	1	1	0	1	1	1	151990174		3	7	1	1	0	1	N
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	1	1	98	1	1	0	1	1	1	152650182		1	7	1	19	0	1	N
2	1	70	1	1	1	98	3	2	0	2	1	1	152890155		2	7	10	1	0	1	N
2	1	70	1	1	1	98	1	2	0	1	1	1	153220243		2	7	10	1	0	1	N
2	1	45	1	1	1	98	6	3	1	2	1	1	153510194		1	3	11	1	0	1	N
2	1	60	1	1	1	98	4	1	1	1	0	1	130990082		1	3	1	15	0	1	N
2	1	70	1	1	1	98	1	1	0	1	1	1	132810317		1	3	1	4	0	1	N
2	1	70	1	1	1	98	1	2	0	1	1	1	132990044		1	3	10	4	0	1	N
2	1	60	1	2	2	98	1	1	0	1	1	1	133290177		2	3	14	8	7	1	N
1	1	70	54	7	1	98	1	1	0	1	5	1	133600223		1	3	1	1	16	1	C
2	1	70	1	1	1	98	1	2	0	2	1	1	140190210		35	2	1	15	3	1	N
2	1	70	1	1	1	98	1	1	0	0	1	1	140540322		2	7	1	1	0	1	N
2	7	70	1	1	1	98	1	2	0	1	1	1	141140124		3	8	14	1	0	1	N
2	1	70	1	1	1	98	4	4	0	1	1	1	142100221		3	3	14	8	15	1	N
2	1	70	1	5	1	98	1	4	0	2	1	1	150630357		1	7	1	4	64	1	N
3	1	70	1	1	1	98	1	4	0	1	1	1	152050244		1	8	1	4	3	1	N
2	1	40	1	1	1	98	4	2	0	1	1	1	153030081		1	5	11	4	0	1	C
2	1	70	1	1	1	98	1	1	0	1	1	1	152070071		1	5	1	4	4	1	N

INI19 EQP20 PHYS21 AGE22 SEX23 PERSONA VTY/PEZ4 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 USE (RP) =214+00.118
A&B's
MSAS 106 300's USE (RP) =004+00.740
400's



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

Maple Grove Parkway at Upland Ln - Created on 6/27/18 by Tschai

Sys	Route	Ref Point	Co	City	Dist	Trib	Crash_Num	Month	Day	Year	DWk	Time	Rd_Dir	Elem	Rely	Investigat	Sev	NumKilled	Diag	NunVeh	
05-MSAS	24300106	005+00.099		2430		0	142170125		8	5	2014	TUE	1210 Z	Z	1	1	3 C	0		1	3
05-MSAS	24300106	005+00.098		2430		0	140450033		2	13	2014	THU	1508 W	Z	1	1	3 C	0		1	2
05-MSAS	24300106	005+00.098		2430		0	142020144		7	10	2014	THU	1510 Z	Z	1	1	1 C	0		1	2
05-MSAS	24300106	005+00.097		2430		0	131720287		6	22	2013	SAT	1714 W	Z	1	1	3 B	0		5	1
05-MSAS	24300106	005+00.097		2430		0	132890085		10	16	2013	WED	1300 W	Z	1	1	3 N	0		2	2
05-MSAS	24300106	005+00.097		2430		0	140370227		2	6	2014	THU	1511 Z	Z	1	1	3 N	0		1	2
05-MSAS	24300106	005+00.097		2430		0	140420215		2	11	2014	TUE	1431 E	Z	1	1	3 N	0		1	3
05-MSAS	24300106	005+00.097		2430		0	143510151		12	16	2014	TUE	1510 Z	Z	1	1	3 N	0		1	2
10-M	24301247	000+00.437		2430		0	152810115		10	8	2015	THU	1142 Z	Z	1	1	3 C	0		1	2

Junc	SL	Type	Loc1	TCD	LIT	Wthr1	Wthr2	Surf	Char	Desgn	WZ	V1Type	V1Dir	V1Act	V1Fac1	V1Fac2	V1Phys	V1Age	V1Sex	V2Type
2	40	1	1	1	1	1	1	1	1	1	90	98	1	2	10	1	1	1	67 F	1
1	40	1	1	1	98	1	1	0	1	2	5	98	1	7	11	1	0	1	59 F	1
7	35	1	1	1	98	1	1	0	1	1	5	98	1	1	1	15	0	1	22 F	3
4	40	6	1	1	1	1	1	0	1	1	5	98	3	8	6	2	0	1	56 F	53
7	40	1	1	1	1	1	1	0	1	1	3	98	4	7	14	2	0	1	68 F	35
2	40	1	1	1	1	1	1	1	1	1	5	98	4	4	5	4	4	1	51 M	1
4	40	1	1	1	1	1	1	0	1	1	5	98	1	3	11	1	0	1	85 M	1
4	40	1	1	1	1	1	2	0	3	1	5	98	3	7	11	1	0	1	30 F	1
2	30	1	1	1	1	1	2	0	1	1	5	98	3	8	11	1	0	1	34 F	1

V4Age	V4Sex	True MilesRoute Code	POINT X	POINT Y
5.099		524300106	462232	4997494
5.098		524300106	462230.7	4997493
5.098		524300106	462230.7	4997493
5.097		524300106	462229.1	4997491
5.097		524300106	462229.1	4997491
5.097		524300106	462229.1	4997491
5.097		524300106	462229.1	4997491
5.097		524300106	462229.1	4997491
0.437		1024301247	462229.1	4997491

Maple Grove Pkwy at Grove Circle - created on 6/27/18 By Teach!

Sys	Route	Ref Point	Co	City	Dist	Trib	Crash_Num	Month	Day	Year	DWk	Time	Rd_Dir	Elem	Rely	Investigat	Sev	NunKilled	Diag	NumVeh
10-M	24301902	000+00.40:		2430	2430	0	143220051	11	18	2014	TUE	854 N	Z	Z	1	1	3 N	0	2	2
10-M	24301902	000+00.40:		2430	2430	0	153570166	12	23	2015	WED	1639 Z	Z	Z	1	1	3 N	0	5	2
10-M	24301902	000+00.40:		2430	2430	0	153470079	12	13	2015	SUN	1156 W	Z	Z	1	1	3 N	0	1	2
10-M	24301902	000+00.40:		2430	2430	0	152810149	10	8	2015	THU	1410 Z	Z	Z	1	1	3 N	0	1	2
05-MSAS	24300106	005+00.50:		2430	2430	0	150060274	1	6	2015	TUE	1305 W	Z	Z	1	1	3 N	0	1	2
05-MSAS	24300106	005+00.50:		2430	2430	0	151960423	7	15	2015	WED	1812 S	Z	Z	1	1	3 C	0	1	2
05-MSAS	24300106	005+00.49(		2430	2430	0	131550165	6	4	2013	TUE	2030 E	Z	Z	1	1	3 N	0	5	2
05-MSAS	24300106	005+00.49(		2430	2430	0	151040154	4	14	2015	TUE	1920 W	Z	Z	1	1	3 C	0	5	2
05-MSAS	24300106	005+00.49(		2430	2430	0	153200170	11	16	2015	MON	1710 Z	Z	Z	1	1	3 C	0	5	2
05-MSAS	24300106	005+00.49(		2430	2430	0	152810173	10	7	2015	WED	1748 W	Z	Z	2	2	3 N	0	1	3

Junc	SL	Type	Loc1	TCD	LIT	Wthr1	Wthr2	Surf	Char	Desgn	WZ	V1Type	V1Dir	V1Act	V1Fac1	V1Fac2	V1Phvs	V1Age	V1Sex	V2Type
4	40	1	1	1	1	1	1	1	5	5	5	98	4	1	1	8	33	1	71 M	1
7	45	1	1	1	1	4	2	0	2	5	5	98	1	6	2	0	1	40 F	1	
4	40	1	1	1	1	1	3	0	2	5	5	98	1	7	4	15	1	38 M	4	
4	40	1	1	1	1	1	2	0	1	6	5	98	3	2	11	0	1	63 F	1	
7	40	1	1	1	1	1	2	0	5	1	5	98	2	7	46	0	1	35 M	1	
4	40	1	1	1	1	1	0	0	1	1	3	98	3	5	15	4	1	22 M	3	
4	40	1	1	1	1	4	2	3	2	1	1	98	1	3	5	3	1	23 F	1	
4	40	1	1	1	1	1	1	1	1	1	5	98	1	1	2	3	1	50 F	1	
4	40	1	1	1	1	4	3	3	2	1	90	98	1	6	1	1	1	40 F	3	
1	40	1	1	1	98	1	1	1	1	5	5	98	1	7	15	0	1	62 M	1	

V2Dir	V2Act	V2Fac1	V2Fac2	V2Phys	V2Age	V2Sex	V3Type	V3Dir	V3Act	V3Fac1	V3Fac2	V3Phys	V3Age	V3Sex	V4Type	V4Dir	V4Act	V4Fac1	V4Fac2	V4Phys
1	1	1	1	1	39 F															
3	1	1	0	1	33 M															
7	11	1	0	1	48 F															
2	1	4	0	1	60 M															
7	11	1	0	1	23 M															
5	11	1	0	1	34 F															
3	1	1	1	1	18 M															
7	1	1	1	1	24 F															
3	1	1	1	1	62 F															
7	10	1	0	1	67 F		1	7	10	1	0	1		33 F						

V4Age	V4Sex	True_MilesRoute	Code	POINT_X	POINT_Y
0.407		1024301902		462731.6	4997984
0.407		1024301902		462731.6	4997984
0.407		1024301902		462731.6	4997984
0.407		1024301902		462731.6	4997984
5.507		524300106		462744.4	4998006
5.505		524300106		462743	4998003
5.49		524300106		462731.6	4997984
5.49		524300106		462731.6	4997984
5.49		524300106		462731.6	4997984
5.49		524300106		462731.6	4997984

Junc	SL	Type	Loc1	TCD	LIT	Wthr1	Wthr2	Surf	Char	Desgn	WZ	V1Type	V1Dir	V1Act	V1Fac1	V1Fac2	V1Phvs	V1Age	V1Sex	V2Type
4	40	1	1	1	1	1	2	0	1	1	5	98	1	5	5	15	0	1	56 F	3
4	30	6	1	1	1	1	1	0	1	1	3	98	1	4	3	2	0	1	43 F	53
4	45	1	1	1	1	1	2	0	1	1	90	98	4	1	15	0	1	35 F	4	
4	40	1	1	1	1	1	1	1	1	1	90	98	1	6	10	1	1	17 F	1	
4	40	1	1	1	1	4	1	0	5	1	5	98	1	5	1	1	0	32 F	1	
1	40	8	1	1	98	4	1	0	1	1	5	98	1	1	1	1	0	48 M	1	

V4Age	V4Sex	True_MilesRoute	Code	POINT_X	POINT_Y
		0.015	1024301903	462424	4997707
		5.259	524300106	462442.8	4997690
		5.259	524300106	462442.8	4997690
		5.259	524300106	462442.8	4997690
		5.259	524300106	462442.8	4997690
		5.259	524300106	462442.8	4997690

CR 81 and Fernbrook Lane - Created 6/27/18 by Tsachi

Sys	Route	Ref Point	Co	City	Dist	Trib	Crash Num	Month	Day	Year	DWVK	Time	Rd_Dir	Elem	Rely	Investigat	Sev	NumKilled	Diag	NunVeh	
04-CSAH	27000121	001+00.140		27	2430	0	130600136	3	1	2013	FRI	1400 S	Z	Z	1	3	B	0		1	2
04-CSAH	27000121	001+00.140		27	2430	0	133000105	11	26	2013	TUE	1116 S	Z	Z	1	3	C	0		1	2
04-CSAH	27000121	001+00.151		27	2430	0	152860132	10	13	2015	TUE	1655 Z	Z	Z	1	3	N	0		5	2
04-CSAH	27000081	013+00.921		27	2430	0	142740027	10	1	2014	WED	719 S	Z	Z	1	3	N	0		1	2
04-CSAH	27000081	013+00.921		27	2430	0	143500154	12	16	2014	TUE	713 W	Z	Z	1	3	N	0		1	2
04-CSAH	27000121	001+00.150		27	2430	0	151390147	5	19	2015	TUE	1542 Z	Z	Z	1	3	N	0		1	2
04-CSAH	27000121	001+00.150		27	2430	0	130140026	1	14	2013	MON	733 E	Z	Z	1	3	N	0		1	2
04-CSAH	27000121	001+00.150		27	2430	0	132470167	9	4	2013	WED	1450 Z	Z	Z	1	3	N	0		1	2
04-CSAH	27000121	001+00.150		27	2430	0	133470079	12	13	2013	FRI	709 N	Z	Z	1	3	C	0		1	2
04-CSAH	27000121	001+00.150		27	2430	0	143020052	10	29	2014	WED	819 Z	Z	Z	1	3	N	0		1	2
04-CSAH	27000121	001+00.150		27	2430	0	151240113	5	4	2015	MON	1410 Z	Z	Z	1	3	N	0		1	2
04-CSAH	27000121	001+00.150		27	2430	0	153360105	11	30	2015	MON	725 Z	Z	Z	2	3	N	0		2	2
04-CSAH	27000121	001+00.150		27	2430	0	153230068	11	19	2015	THU	837 W	Z	Z	1	3	N	0		1	2
04-CSAH	27000121	001+00.150		27	2430	0	153260026	11	21	2015	SAT	2145 S	Z	Z	1	3	N	0		90	1
04-CSAH	27000121	001+00.150		27	2430	0	132060065	7	25	2013	THU	947 S	Z	Z	1	3	N	0		1	1
04-CSAH	27000121	001+00.131		27	2430	0	131220094	5	2	2013	THU	1342 Z	Z	Z	1	3	N	0		1	2
04-CSAH	27000081	013+00.923		27	2430	0	132320226	8	20	2013	TUE	1921 Z	Z	Z	3	3	N	0		1	2
04-CSAH	27000081	013+00.939		27	2430	0	143420161	12	8	2014	MON	1751 W	Z	Z	1	3	N	0		1	4
04-CSAH	27000121	001+00.131		27	2430	0	131090046	4	19	2013	THU	1921 Z	Z	Z	1	3	N	0		1	2
04-CSAH	27000081	013+00.921		27	2430	0	131390109	5	19	2013	SUN	1645 S	Z	Z	1	3	N	0		5	2
04-CSAH	27000081	013+00.921		27	2430	0	132940011	10	20	2013	SUN	3 S	Z	Z	1	3	N	0		90	1
04-CSAH	27000081	013+00.921		27	2430	0	133050045	11	1	2013	FRI	612 W	Z	Z	1	3	B	0		2	2
04-CSAH	27000081	013+00.921		27	2430	0	141850086	7	4	2014	FRI	1349 Z	Z	Z	1	3	B	0		6	1
04-CSAH	27000081	013+00.921		27	2430	0	153420091	12	8	2015	TUE	718 Z	Z	Z	2	3	C	0		90	4
04-CSAH	27000081	013+00.921		27	2430	0	153100168	11	6	2015	FRI	1448 E	Z	Z	1	3	C	0		1	2
04-CSAH	27000081	013+00.921		27	2430	0	152510106	9	8	2015	TUE	917 E	Z	Z	1	3	C	0		1	2
04-CSAH	27000081	013+00.921		27	2430	0	141300058	5	10	2014	SAT	1343 Z	Z	Z	1	3	B	0		1	2
04-CSAH	27000081	013+00.921		27	2430	0	142690136	9	26	2014	FRI	1730 Z	Z	Z	1	3	N	0		1	3
04-CSAH	27000081	013+00.921		27	2430	0	153540135	12	20	2015	SUN	1903 Z	Z	Z	1	3	N	0		1	2
04-CSAH	27000081	013+00.921		27	2430	0	153650134	12	31	2015	THU	1130 Z	Z	Z	1	3	N	0		2	2
04-CSAH	27000081	013+00.921		27	2430	0	152610005	9	17	2015	THU	1726 N	Z	Z	1	3	C	0		1	2
04-CSAH	27000081	013+00.921		27	2430	0	131030083	4	13	2013	SAT	1255 W	Z	Z	1	3	C	0		1	2
04-CSAH	27000081	013+00.921		27	2430	0	131730027	6	20	2013	THU	2059 Z	Z	Z	1	3	C	0		1	2
04-CSAH	27000081	013+00.921		27	2430	0	152180006	8	6	2015	THU	1724 N	Z	Z	1	3	N	0		1	2

Junc	SL	Type	Loc1	TCD	LT	Wthr1	Wthr2	Surf	Char	Desgn	WZ	V1Type	V1Dir	V1Act	V1Fac1	V1Fac2	V1Phys	V1Age	V1Sex	V2Type
4	45	1	1	1	1	1	1	0	1	1	3	98	8	5	11	1	0	1	43 F	1
4	45	1	1	1	13	1	1	0	1	1	8	98	8	5	11	1	0	1	55 F	2
4	55	1	1	1	4	1	1	1	1	1	8	98	1	7	1	2	0	1	17 M	1
1	50	1	1	1	1	2	3	2	2	1	5	98	1	4	10	1	1	22 F	2	
4	55	1	1	1	1	1	4	0	3	1	5	98	1	7	11	1	0	1	63 M	1
4	40	1	1	1	1	1	1	0	1	1	3	98	3	5	11	1	0	98	72 M	3
4	45	1	1	1	1	1	1	1	1	5	8	98	1	5	5	1	1	1	38 F	1
4	45	1	1	1	1	4	1	0	2	5	5	98	1	1	11	0	1	55 F	2	
7	45	1	1	1	5	1	2	0	1	5	5	98	1	1	5	0	1	1	51 M	1
4	45	1	1	1	1	1	1	0	1	5	90	98	1	1	1	0	1	28 M	1	
1	45	1	1	1	1	1	4	0	1	1	5	98	1	1	5	0	1	18 F	1	
4	55	1	1	1	98	1	1	0	3	1	5	98	1	3	16	0	1	16 M	2	
4	55	1	1	1	1	1	1	0	1	1	3	98	1	7	10	2	1	39 F	3	
4	45	1	1	1	1	4	1	0	1	6	3	98	1	5	5	3	1	18 M	1	
4	55	37	1	1	1	1	1	0	1	1	3	98	1	11	1	1	1	26 F	31	
1	45	1	1	1	13	1	1	0	1	1	8	98	1	5	6	4	0	1	18 M	8
2	55	1	1	1	1	4	1	0	1	1	5	98	2	7	1	15	1	45 M	3	
4	55	1	1	1	1	3	1	0	1	1	5	98	3	3	9	3	1	31 M	3	
4	55	1	1	1	3	4	4	4	3	1	5	98	3	1	1	3	1	35 M	2	
4	55	1	1	1	1	1	3	3	2	1	3	98	5	5	1	15	1	19 M	3	
1	55	8	1	1	98	6	1	0	1	1	3	98	1	1	1	0	1	19 F	1	
4	55	1	1	1	1	4	1	0	1	1	5	98	1	8	1	0	1	30 M	35	
4	55	1	1	1	1	1	1	1	1	1	5	98	2	8	3	1	1	31 M	53	
4	55	6	1	1	1	1	1	1	1	1	5	98	2	4	3	2	1	20 F	35	
1	55	1	1	1	98	2	2	2	1	1	3	98	1	14	7	8	1	24 F	3	
4	55	1	1	1	1	1	2	0	1	1	3	98	3	3	1	0	1	63 F	1	
4	55	1	1	1	1	1	2	0	1	1	3	98	3	3	99	0	1	34 F	4	
4	50	1	1	1	1	1	1	0	1	1	3	98	2	1	15	0	1	39 M	1	
7	45	1	1	1	1	6	2	0	1	2	5	98	1	5	4	0	1	41 M	1	
1	55	1	1	1	98	1	2	0	1	1	90	98	3	4	13	8	1	31 F	2	
1	40	1	1	1	1	1	2	3	2	1	3	98	1	3	3	0	1	38 F	1	
7	55	1	1	1	1	1	1	0	1	1	3	98	1	7	1	4	0	16 F	3	
4	55	1	1	1	1	3	2	0	1	1	5	98	3	3	16	0	1	43 F	1	
2	55	1	1	1	98	1	1	0	1	1	3	98	2	1	11	0	1	45 M	1	

Maple Grove Parkway and CR 81 - Created on 6/27/2018 by Tsaachi

Sys	Route	Ref Point	Co	City	Dist	Trib	Crash_Num	Month	Day	Year	DWk	Time	Rd_Dir	Elem	Rely	Investigat	Sev	NumKilled	Diag	NunVeh
05-MSAS	24300106	006+00.192		27	2430	0	143170029	11	13	2014	THU	629 S	Z	Z	1	3 N		0	90	2
04-CSAH	27000081	014+00.190		27	2430	0	131980156	7	17	2013	WED	1700 W	Z	Z	2	3 C		0	1	2
04-CSAH	27000081	014+00.190		27	2430	0	141530073	6	1	2014	SUN	1308 W	Z	Z	2	3 N		0	1	2
04-CSAH	27000081	014+00.154		27	2430	0	155210193	11	17	2015	TUE	1802 N	Z	Z	1	3 C		0	1	2
04-CSAH	27000081	014+00.125		27	2430	0	133400390	12	6	2015	FRI	1920 Z	Z	Z	1	3 N		0	1	2
04-CSAH	27000081	014+00.171		27	2430	0	150790063	3	20	2015	FRI	729 E	Z	Z	2	3 N		0	5	1
04-CSAH	27000081	014+00.171		27	2430	0	132610093	9	16	2013	MON	1605 W	Z	Z	2	3 N		0	1	2
04-CSAH	27000081	014+00.153		27	2430	0	153310079	8	19	2015	WED	923 Z	Z	Z	1	3 N		0	1	2
04-CSAH	27000081	014+00.153		27	2430	0	142490132	9	6	2014	SAT	1629 Z	Z	Z	1	3 N		0	1	2
04-CSAH	27000081	014+00.153		27	2430	0	152470050	7	30	2015	THU	615 Z	Z	Z	1	0 N		0	1	2
04-CSAH	27000081	014+00.153		27	2430	0	140550022	2	22	2014	SAT	2204 Z	Z	Z	1	3 N		0	1	2
04-CSAH	27000081	014+00.153		27	2430	0	150360008	2	4	2015	WED	1900 W	Z	Z	1	3 N		0	1	3
04-CSAH	27000081	014+00.153		27	2430	0	151310096	5	11	2015	MON	1313 Z	Z	Z	1	3 C		0	1	2
04-CSAH	27000081	014+00.153		27	2430	0	152930155	10	20	2015	TUE	1854 Z	Z	Z	2	3 N		0	2	2
04-CSAH	27000081	014+00.153		27	2430	0	142500005	9	6	2014	SAT	2058 E	Z	Z	1	3 C		0	1	2
04-CSAH	27000081	014+00.153		27	2430	0	142540053	9	11	2014	THU	929 N	Z	Z	1	3 N		0	1	2
04-CSAH	27000081	014+00.153		27	2430	0	143030151	10	30	2014	THU	1821 Z	Z	Z	1	3 N		0	8	1
04-CSAH	27000081	014+00.153		27	2430	0	150550023	2	24	2015	TUE	800 Z	Z	Z	1	3 C		0	1	2
04-CSAH	27000081	014+00.153		27	2430	0	131160129	4	26	2013	FRI	1747 Z	Z	Z	1	3 N		0	1	2
04-CSAH	27000081	014+00.153		27	2430	0	131470077	5	27	2013	MON	1632 Z	Z	Z	1	3 N		0	1	2
04-CSAH	27000081	014+00.153		27	2430	0	132800064	10	6	2013	SUN	836 N	Z	Z	1	3 N		0	1	2
04-CSAH	27000081	014+00.153		27	2430	0	132970039	10	24	2013	THU	705 Z	Z	Z	1	3 N		0	1	2
04-CSAH	27000081	014+00.153		27	2430	0	140410148	2	10	2014	MON	1643 Z	Z	Z	2	3 N		0	1	2
04-CSAH	27000081	014+00.153		27	2430	0	140440047	2	13	2014	THU	903 Z	Z	Z	1	3 N		0	98	2
04-CSAH	27000081	014+00.153		27	2430	0	141280143	5	8	2014	THU	2005 W	Z	Z	1	3 C		0	1	2
04-CSAH	27000081	014+00.153		27	2430	0	153040147	10	31	2015	SAT	1716 N	Z	Z	1	3 N		0	1	2
04-CSAH	27000081	014+00.153		27	2430	0	153370177	12	3	2015	THU	1818 N	Z	Z	1	3 C		0	1	2
04-CSAH	27000081	014+00.153		27	2430	0	152930028	10	20	2015	TUE	635 W	Z	Z	1	3 N		0	2	2
04-CSAH	27000081	014+00.153		27	2430	0	152750293	10	17	2015	FRI	1752 N	Z	Z	1	3 C		0	1	3
04-CSAH	27000081	014+00.115		27	2430	0	152310224	8	8	2015	MON	1257 S	Z	Z	1	1 N		0	1	2
04-CSAH	27000081	014+00.115		27	2430	0	133590089	12	25	2013	WED	1304 Z	Z	Z	1	3 B		0	1	2
04-CSAH	27000081	014+00.200		27	2430	0	133680115	9	25	2013	WED	1438 W	Z	Z	2	3 N		0	1	2
04-CSAH	27000081	014+00.209		27	2430	0	133120136	11	8	2013	FRI	1740 Z	Z	Z	1	3 C		0	1	2
05-MSAS	24300106	006+00.211		27	2430	0	140550248	2	24	2014	MON	924 Z	Z	Z	1	3 N		0	1	2
05-MSAS	24300106	006+00.211		27	2430	0	141270038	4	5	2014	SAT	1315 Z	Z	Z	1	0 N		0	1	2
05-MSAS	24300106	006+00.211		27	2430	0	143060081	11	2	2014	SUN	1430 Z	Z	Z	1	3 N		0	1	2
05-MSAS	24300106	006+00.211		27	2430	0	150640082	3	5	2015	THU	1023 N	Z	Z	1	3 C		0	1	2
05-MSAS	24300106	006+00.211		27	2430	0	151210092	7	31	2015	FRI	1127 N	Z	Z	1	3 N		0	1	2
05-MSAS	24300106	006+00.211		27	2430	0	14130102	11	9	2014	SUN	1941 N	Z	Z	1	3 N		0	1	2
05-MSAS	24300106	006+00.211		27	2430	0	152680069	9	24	2015	THU	739 Z	Z	Z	1	3 N		0	1	2
04-CSAH	27000081	014+00.173		27	2430	0	132101115	8	9	2013	FRI	1612 Z	Z	Z	1	3 N		0	1	3
04-CSAH	27000081	014+00.181		27	2430	0	143600116	12	26	2014	FRI	1554 Z	Z	Z	2	3 K		0	8	4
04-CSAH	27000081	014+00.181		27	2430	0	150090110	1	9	2015	FRI	855 S	Z	Z	1	3 N		0	1	2

Junc	SL	Type	Loc1	TCD	LIT	Wthr1	Wthr2	Surf	Char	Desgn	WZ	V1Type	V1Dir	V1Act	V1Fac1	V1Fac2	V1Phys	V1Age	V1Sex	V2Type
1	45	1	1	1	98	6	1	0	1	1	3	1	5	1	1	1	1	30 M	3	
7	55	1	1	1	1	1	1	0	1	1	3	3	7	1	15	0	1	55 M	3	
1	55	1	1	1	1	1	2	0	1	1	3	4	8	10	2	0	1	36 F	3	
1	55	1	1	1	98	4	3	0	2	1	3	3	1	0	0	0	0	65 F	2	
2	55	1	1	1	1	4	2	2	5	1	5	3	8	11	1	1	1	48 F	1	
1	55	1	8	1	98	1	2	0	1	1	5	1	3	1	1	0	1	55 F	1	
1	50	1	1	1	98	1	1	0	1	2	3	1	7	10	2	0	1	17 F	2	
7	55	1	1	1	1	1	3	2	2	1	5	4	7	11	1	0	1	45 F	1	
2	40	1	1	1	1	1	1	0	1	1	3	1	1	5	15	0	1	61 M	1	
0	45	1	1	0	1	1	1	0	1	0	0	4	1	3	0	0	0	36 F	3	
2	45	1	1	1	1	4	1	0	5	1	3	1	1	5	46	0	1	23 F	1	
4	45	1	1	1	1	4	1	1	1	1	3	1	7	11	1	0	1	64 F	1	
2	55	1	1	1	1	1	2	0	2	1	5	1	3	3	9	0	1	40 M	3	
2	55	1	1	1	1	1	1	1	1	1	5	3	8	1	1	1	1	28 F	1	
2	55	1	1	1	1	4	1	1	1	1	5	1	3	1	3	4	1	19 M	1	
1	55	1	1	1	1	1	1	0	1	1	5	1	8	10	4	0	1	71 F	1	
2	55	8	1	1	98	6	1	0	1	1	8	1	3	1	1	1	1	40 F	3	
2	45	1	1	1	1	1	4	0	2	5	5	3	2	11	1	0	1	37 F	3	
2	55	1	1	1	1	1	1	1	1	1	3	3	2	5	1	1	1	53 F	4	
2	45	1	1	1	1	1	1	2	1	5	3	1	2	5	1	1	1	43 F	3	
2	45	1	1	1	1	1	2	2	1	5	5	1	1	5	1	1	1	41 F	3	
1	55	1	1	1	1	1	1	1	1	5	5	1	3	5	1	1	1	36 M	3	
1	55	1	1	1	1	4	1	0	1	1	3	3	8	1	15	0	1	18 M	3	
1	55	1	1	1	98	3	1	0	1	1	8	1	8	1	15	0	1	25 M	3	
7	55	1	1	1	1	1	2	2	1	1	7	3	7	6	1	1	1	36 M	3	
1	55	1	1	1	1	1	3	3	1	1	3	3	7	6	15	0	1	35 M	3	
2	55	1	1	1	1	1	2	0	2	2	3	3	1	1	15	0	1	39 M	1	
1	40	1	1	1	5	1	2	0	2	2	3	3	1	1	15	0	1	37 F	1	
4	40	1	1	1	1	4	1	1	1	1	5	1	1	1	15	0	1	34 M	1	
2	55	1	1	1	1	1	1	0	1	1	5	1	7	14	1	0	1	27 M	1	
4	50	1	1	1	1	4	1	0	1	1	5	1	1	14	4	5	1	29 M	4	
1	55	1	1	1	1	1	1	0	1	1	5	3	5	1	3	15	1	60 F	1	
2	45	1	1	1	1	1	2	0	1	1	5	1	1	1	15	0	1	44 F	1	
2	50	1	1	3	1	1	1	0	1	1	3	3	7	11	1	0	99	31 F	1	
2	45	1	1	1	1	1	2	0	1	6	5	1	3	3	1	1	1	31 F	3	
2	40	1	1	1	98	4	2	0	5	1	90	4	1	1	46	0	1	31 F	8	
0	45	1	1	0	1	1	1	0	2	0	0 NL	1	2	3	0	0	0	40 M	4	
2	45	1	1	1	1	1	1	0	1	1	5	4	1	11	1	0	1	42 M	4	
2	45	1	1	1	1	1	1	1	5	6	5	1	2	5	1	1	1	63 F	1	
2	55	1	1	1	1	1	1	0	1	1	3	3	1	11	1	0	1	34 F	1	
2	40	1	1	1	1	4	1	0	1	2	3	1	1	5	15	0	1	63 M	1	
1	55	1	1	1	98	2	2	0	2	1	3	2	8	1	4	46	1	55 M	7	
1	55	1	1	1	98	1	1	0	1	1	8	4	1	1	3	4	1	36 F	3	
1	55	1	1	1	98	1	2	0	1	1	8	2	7	2	6	0	99	54 M	1	
1	50	1	1	1	98	1	1	7	5	1	8	1	4	11	1	1	1	25 F	1	

V2Dir	V2Act	V2Fac1	V2Fac2	V2PhyS	V2Age	V2Sex	V3Type	V3Dir	V3Act	V3Fac1	V3Fac2	V3PhyS	V3Age	V3Sex	V4Type	V4Dir	V4Act	V4Fac1	V4Fac2	V4PhyS
	5	14	15	1	1	47 F														
	7	11	1	0	1	31 F														
	8	11	1	0	1	32 M														
	1	1	4	15	1	33 M														
	8	10	3	16	1	23 F														
	7	11	1	0	1	54 F														
	7	10	16	41	1	19 F														
	1	5	1	0	1	30 F														
	3	3	0	0	0	37 F														
M/C	1	5	1	0	1	26 M		1	7	54	1	1	1	27 M						
	7	54	1	1	1	17 F														
	3	3	15	0	1	57 F														
	8	14	8	15	1	36 M														
	3	1	1	1	1	53 M														
	8	11	1	0	1	46 F														
	2	9	15	0	1	44 M														
	2	5	15	0	1	37 M														
	1	5	4	1	1	29 F														
	3	5	2	4	1	62 M														
	8	1	1	0	1	41 F														
	8	10	1	0	1	52 F														
	7	6	15	1	1	27 F														
	7	6	1	1	1	34 F														
	1	11	1	0	1	33 M														
	1	11	1	0	1	36 M														
	7	1	4	0	1	29 F														
	1	1	50	1	1	41 M		1	1	50	1	1	49 M							
	5	11	1	0	1	48 M														
	1	5	1	0	1	60 M														
	7	10	9	46	1	19 F														
	3	3	90	0	1	44 M														
	1	5	1	0	1	48 M														
	2	3	0	0	0	40 M														
	1	3	15	0	1	41 F														
	1	5	2	50	1	25 M														
	1	5	15	9	1	52 M														
	1	3	1	0	1	65 F														
	8	1	1	0	1	64 M														
	1	11	1	0	1	23 F		1	11	1	0	1	39 F							
	3	1	1	0	1	68 F		2	3	1	0	1	32 F							
	4	1	61	46	1	26 F									1	7	1	1	0	1

Elm Creek Blvd @ Weaver Lake Road (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
04	27000130	001+00.292	0427000130	1.292	Z		1	0	U
04	27000130	001+00.297	0427000130	1.297	Z		1	3	U
04	27000130	001+00.298	0427000130	1.298	Z		1	3	U
04	27000130	001+00.300	0427000130	1.300	Z		1	3	U
04	27000130	001+00.300	0427000130	1.300	N		1	3	U
04	27000130	001+00.300	0427000130	1.300	Z		1	3	U
04	27000130	001+00.300	0427000130	1.300	N		1	3	U
04	27000130	001+00.300	0427000130	1.300	Z		1	3	U
04	27000130	001+00.300	0427000130	1.300	Z		1	3	U
04	27000130	001+00.301	0427000130	1.301	S		1	3	U
04	27000130	001+00.368	0427000130	1.368	N		2	3	U

ATP

CO	CITY	DOW	MONTH	DAY	YEAR	TIME	SEV
27	2430	1-Sun	12	8	2013	1400	N
27	2430	3-Tue	12	10	2013	0841	N
27	2430	6-Fri	1	25	2013	1728	N
27	2430	4-Wed	4	17	2013	1147	N
27	2430	3-Tue	8	26	2014	0003	N
27	2430	7-Sat	1	10	2015	1105	N
27	2430	6-Fri	2	20	2015	0758	N
27	2430	3-Tue	6	16	2015	1220	N
27	2430	2-Mon	6	22	2015	0624	N
27	2430	3-Tue	6	30	2015	1410	N
27	2430	7-Sat	12	6	2014	2233	N
27	2430	6-Fri	10	23	2015	1912	C

UNIT 1 WAS STOPPED DUE TO THE RED LIGHT IN THE LEFT TURN LANE OF SOUTHBOUND ELM CREEK BOULEVARD TO T
 BOTH VEHICLES WERE IN THE INSIDE TURN LANE ON NORTHBOUND CO 130 TO GO WEST ON CO 109. BOTH DRIVE
 BOTH UNITS WERE IN THE LEFT TURN LANE STOPPED. DR 1 SAID THE LIGHT TURNED GREEN BUT SHE AND DR 2 HA
 DRIVER #1 WAS TRAVELLING NORTHBOUND ON ELM CREEK BLVD. DRIVER #2 WAS STOPPED FOR A RED LIGHT AT TH
 DV1 STATED SHE WAS E/B WEAVER LAKE RD STOPPED IN TRAFFIC AT THE RED LIGHT AT ELM CREEK BLVD. V2 RAN
 DRIVER 1 WAS STOPPED IN THE LEFT TURN LANE WAITING FOR TRAFFIC TO PASS. DRIVER 2 MOVED INTO THE
 VEHICLE #1 EAST ON WEAVER LAKE ROAD TO TURN SOUTH ON ELM CREEK BOULEVARD. DRIVER OF VEHICLE #1 STA
 VEHICLE #1 SB ELM CREEK BLVD ENTERED THE INTERSECTION OF WEAVER LAKE RD ON THE GREEN LIGHT AND WAS
 DRIVER 1 AND INDEPENDENT WITNESS SAID THAT VEH 2 SWERVED SUDDENLY FROM THE LANE TO GO STRAIGHT AND
 UNIT #1 CAME TO A STOP IN THE NORTH BOUND LANE OF ELM CREEK BLVD. AT WEAVER LAKE ROAD. THE DRIVER O
 UNIT 1 WAS NORTHBOUND ON CSAH 130 MOVING FROM LEFT LANE TO RIGHT IN FRONT OF UNIT 2. TRAFFIC AHEAD

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	0	40	1	1	0	1	1	2	0	5	0	0	140100096	1	5	11	0	0
0	2	4	40	1	1	1	1	1	1	0	5	1	5	133470072	3	5	11	1	0
0	2	4	40	1	1	1	1	1	2	0	1	1	3	130250261	1	1	1	4	15
0	2	4	40	1	1	1	1	1	2	0	1	1	3	131070078	4	1	1	1	0
0	2	4	45	2	1	1	1	4	1	1	1	1	5	142380179	1	1	1	15	0
0	2	4	40	1	1	1	1	1	2	0	5	1	3	150100086	3	3	11	1	0
0	2	4	40	1	1	1	1	1	2	0	5	1	5	150510127	3	1	11	1	0
0	2	4	40	1	1	1	1	1	1	1	1	1	3	151670097	3	3	11	1	0
0	2	4	40	1	1	1	1	1	3	0	2	1	3	151730091	1	3	3	2	0
0	2	4	40	1	5	1	1	1	1	0	1	1	5	151810134	1	7	1	1	0
0	2	4	40	1	2	1	1	4	1	90	1	1	5	143410026	1	7	1	1	0
0	3	1	40	1	1	1	1	4	3	0	2	1	5	152960248	3	1	10	1	0

PERSON1

POSN	INU	EQP	PHYS	AGE	SEX	PERSON2										PERSON3			
						VTYPE2	DIR3	ACT4	FAC15	FAC26	POSN7	INJ8	EQP9	PHYS10	AGE11	SEX12	VTYPE13	DIR14	ACT15	FAC116
1	N	4	0	70	M	3	5	10	0	0	1	N	0	65	M	3	5		
1	N	4	1	48	F	1	5	10	61	0	1	N	1	35	F				
1	N	4	1	55	M	1	1	10	1	0	1	N	1	30	F				
1	N	4	1	73	F	3	1	1	1	0	1	N	1	30	F				
1	N	4	1	18	F	1	1	11	1	1	1	N	1	18	F				
1	N	4	1	41	F	4	3	1	15	4	1	N	1	46	F	3	3		
1	N	4	1	42	F	1	1	10	61	46	1	N	1	30	F	1	1		
1	N	4	1	47	F	1	3	1	15	0	1	N	1	23	F				
1	N	4	1	69	F	1	5	1	1	0	1	N	1	60	F				
1	N	3	1	16	M	4	7	5	2	8	1	N	1	26	M	4	7		
1	N	4	1	42	M	1	5	1	2	0	1	N	3	58	M				
1	N	4	1	42	M	2	1	1	1	0	1	C	1	58	M	2	1		

FAC17 POSN18 INJ19 EQP20 PHYS21 AGE22 SEX23 PERSONA VTYPE24 DIR25 ACT26 FAC127 FAC228 POSN29 INJ30 EQP31 PHYS32 AGE33 SEX34

TH 94 @ Weaver Lake Road East and West Ramps (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
North Ramp									
01	00000094	215+00.579	0100000094	216.236	W	A04	1	1	U
01	00000094	215+00.579	0100000094	216.236	W	A04	1	1	U
01	00000094	215+00.579	0100000094	216.236	Z	A04	1	3	U
01	00000094	215+00.579	0100000094	216.236	W	A04	1	1	U
01	00000094	215+00.579	0100000094	216.236	W	A04	1	3	U
01	00000094	215+00.579	0100000094	216.236	Z	A04	1	3	U
01	00000094	215+00.579	0100000094	216.236	E	A04	1	3	U
01	00000094	215+00.579	0100000094	216.236	Z	A04	1	3	U
01	00000094	215+00.579	0100000094	216.236	W	A04	2	1	U
01	00000094	215+00.579	0100000094	216.236	Z	A04	2	3	U
01	00000094	215+00.579	0100000094	216.236	Z	A05	1	0	U
01	00000094	215+00.579	0100000094	216.236	W	A05	1	3	U
South Ramp									
01	00000094	215+00.579	0100000094	216.236	E	B03	2	3	U
01	00000094	215+00.579	0100000094	216.236	E	B04	1	1	U
01	00000094	215+00.579	0100000094	216.236	Z	B04	1	3	U
01	00000094	215+00.579	0100000094	216.236	E	B04	2	1	U
01	00000094	215+00.579	0100000094	216.236	W	B05	1	3	U
01	00000094	215+00.579	0100000094	216.236	E	B05	2	3	U
01	00000094	215+00.579	0100000094	216.236	E	B15	1	1	U
01	00000094	215+00.579	0100000094	216.236	E	B15	1	3	U

ATP	CO	CITY	DOW	MONTH	DAY	YEAR	TIME	SEV	NUM_KILLED
BOTH DRIVER EXITED FROM WEST 94 TO WEAVER LAKE RD. AT THE TOP OF THE RAMP. BOTH VEHICLES WERE GOIN	27	2430	1-Sun	1	20	2013	1802	N	0
V1 (MANDOT SNOWPLOW) STOPPED AT TOP OF RAMP. DRIVER OF V2 TRAVELING TOO FAST FOR ROAD CONDITIONS CO	27	2430	1-Sun	1	27	2013	1455	N	0
I SPOKE WITH THE DRIVERS INVOLVED IN THIS VEHICLE PROPERTY DAMAGE ACCIDENT AND I OBTAINED SOME OF T	27	2430	3-Tue	6	18	2013	1153	N	0
DRIVER TWO WAS STOPPED AT THE STOP LIGHT WHEN HE WAS REAR ENDED BY VEHICLE ONE. DRIVER ONE SAID S	27	2430	5-Thu	11	21	2013	2026	N	0
UNITS 1 AND 2 EXITING FROM WB 194 TO EAST WEAVER. UNIT 2 STOPPED FOR TRAFFIC AND UNIT 1 DID NOT SEE	27	2430	4-Wed	12	11	2013	1341	N	0
UNIT 2 WAS STOPPED AT THE TOP OF THE RAMP FROM WB 1-94 TO EB CO RD 109. UNIT 1 WAS FOLLOWING AND DR	27	2430	7-Sat	9	13	2014	0924	N	0
D1 WAS DRIVING V1 BEHIND D2 WHO WAS DRIVING V2. BOTH D1 AND D2 WERE EXITING 194 AT WEAVER LAKE RD T	27	2430	4-Wed	12	24	2014	1614	N	0
#NAME?	27	2430	6-Fri	1	24	2014	1200	N	0
UPON ARRIVAL BOTH VEHICLES WERE OFF THE ROADWAY IN A PARKING LOT. THE DRIVER OF V1 STATED THAT HE	27	2430	3-Tue	2	24	2015	1855	N	0
DRIVER VEHICLE #1 SAID HE HAD EXITED WESTBOUND I-94 EXIT RAMP AT WEAVER LKRD. HE WAS SLOWING DOWN A	27	2430	4-Wed	8	19	2015	0850	N	0
VEH 1 AND VEH 2 BOTH EXITED WESTBOUND I 94 ON THE WEAVER LAKE RD EXIT. THEY WERE BOTH TAKING THE DE	27	2430	1-Sun	3	31	2013	1300	N	0
	27	2430	4-Wed	7	15	2015	1706	C	0
DRIVER 1 WAS ON THE ENTRANCE RAMP TO EASTBOUND I 94 FROM WEAVER LAKE RD. AS HE WAS GOING AROUND TH	27	2430	1-Sun	12	13	2015	0907	N	0
BOTH VEHICLES WERE ON THE RAMP FROM E/B 94 TO WEAVER LAKE ROAD. THE DRIVER OF VEH #1 STATED THAT H	27	2430	3-Tue	2	12	2013	1238	N	0
#1 SAID SHE WAS GOING SLOWLY THINKING SHE HAD TO MERGE AND NOT REALIZING SHE HAD HER OWN LANE AFTER	27	2430	4-Wed	3	13	2013	1344	C	0
V1 WAS STOPPED ON THE RAMP FROM EB 1STH94 TO WEAVER LAKE ROAD IN THE CENTER LANE. DVA STATED HE WA	27	2430	5-Thu	12	31	2015	1043	N	0
SIGN ON THE OFF RAMP INDICATING TO TRAFFIC THAT IS ATTEMPTING TO EXIT ONTO WEAVER LAKE RD EB THEY	27	2430	6-Fri	9	26	2014	1145	N	0
KIDD ADVISED SHE WAS WALKING E/B WEAVER LAKE RD AND WALKED OVER THE 194 BRIDGE ON THE SOUTH SIDE. S	27	2430	5-Thu	10	8	2015	0946	C	0
UPON ARRIVAL V1 WAS IN THE APEX OF 94 EASTBOUND FROM WEAVER LAKE RD. THE DRIVER MAY HAVE HAD SOME	27	2430	3-Tue	3	12	2013	2007	N	0
BOTH VEHICLES WERE ENTERING EASTBOUND I 694 FROM WEAVER LAKE RD. BOTH VEHICLES, AS WELL AS SEVERAL	27	2430	4-Wed	12	25	2013	0903	N	0

NUM_VEH	JUNC	SL	TYPE	DIAG	LOCI	TCD	LIT	WTHR1	WTHR2	SURF	CHAR	DESGN	ACC_NUM	PERSON1 VTYPE	DIR	ACT	FAC1	FAC2	POSN	INU
2	4	35	1	1	1	1	4	1	0	1	5	2	130250242	3	8	10	1	0	1	N
2	1	30	1	2	1	1	1	4	0	3	2	2	130310215	90	7	11	1	0	1	N
2	21	60	1	1	1	1	1	1	0	1	2	2	131690099	3	7	9	15	0	1	N
2	4	60	1	1	1	1	4	2	0	1	1	2	133260222	1	7	1	18	0	1	N
2	21	40	1	1	1	5	1	1	0	5	6	2	133450177	1	7	11	1	0	1	N
2	21	40	1	1	1	98	1	1	0	1	5	2	142560064	1	3	5	15	0	1	N
2	2	40	1	1	1	5	1	1	1	1	5	5	143580152	3	3	1	1	1	1	N
2	2	60	1	1	1	90	1	2	2	1	7	2	150240122	3	2	5	1	1	1	N
2	1	60	1	1	1	1	4	1	0	1	5	2	150680193	3	7	11	1	0	1	N
2	4	40	1	1	1	1	1	3	0	2	7	2	152310065	4	7	10	1	0	1	N
2	0	30	1	1	0	5	1	1	0	1	0	0	131230062	4	1	5	0	0	1	N
2	4	40	1	1	1	1	1	1	0	1	5	2	151960405	3	3	11	14	0	1	C
1	20	60	1	7	1	98	1	3	0	2	6	2	153470031	2	3	1	46	16	1	N
2	7	60	1	2	1	98	1	1	0	1	1	2	130450337	31	5	6	1	0	1	N
2	7	40	1	1	1	98	1	1	1	1	1	3	130720142	3	3	57	8	1	1	C
2	2	30	1	1	1	1	1	2	0	1	2	2	153650280	2	3	11	1	0	1	N
2	21	45	1	1	1	90	1	1	1	1	5	2	142690091	4	7	1	1	1	1	N
1	21	40	7	1	1	90	1	1	0	1	7	2	152810076	54	98	35	1	0	35	C
1	20	60	22	4	1	98	4	1	0	2	1	1	130880166	3	3	1	8	90	1	N
2	1	60	1	5	1	98	1	4	0	4	6	2	133590043	2	3	1	61	46	1	N

INI19 EQP20 PHYS21 AGE22 SEX23 PERSONA VTYPEZ4 DIR25 ACT26 FAC127 FAC228 POSN29 INJ30 EQP31 PHYS32 AGE33 SEX34

Weaver Lake Road from approx. 300' east and west of Fish Lake Road (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	24300102	002+00.813	0524300102	2.813	W		3	2	U
05	24300102	002+00.859	0524300102	2.859	E		2	3	U
05	24300102	003+00.019	0524300102	3.019	Z		1	3	U
05	24300102	003+00.020	0524300102	3.020	E		1	3	U
05	24300102	003+00.030	0524300102	3.030	E		1	3	U
05	24300102	003+00.030	0524300102	3.030	Z		1	3	U
05	24300102	003+00.039	0524300102	3.039	Z		1	3	U
05	24300102	003+00.039	0524300102	3.039	W		1	3	U
05	24300102	003+00.039	0524300102	3.039	Z		1	3	U
05	24300102	003+00.039	0524300102	3.039	N		1	3	U
05	24300102	003+00.039	0524300102	3.039	Z		1	3	U
05	24300102	003+00.039	0524300102	3.039	Z		1	3	U
05	24300102	003+00.039	0524300102	3.039	Z		1	3	U
05	24300102	003+00.039	0524300102	3.039	Z		1	3	U
05	24300102	003+00.039	0524300102	3.039	E		2	3	U
05	24300102	003+00.039	0524300102	3.039	Z		1	3	U
05	24300102	003+00.048	0524300102	3.048	Z		1	3	U
05	24300102	003+00.054	0524300102	3.054	Z		1	3	U
05	24300102	003+00.063	0524300102	3.063	Z		1	3	U
05	24300102	003+00.074	0524300102	3.074	W		1	3	U
05	24300102	003+00.092	0524300102	3.092	Z		2	3	U
05	24300102	003+00.135	0524300102	3.135	Z		1	3	U

NUM_KILLED	NUM_VEH	JUNC	SL	TYPE	DIAG	LOC1	TCD	LIT	WTHR1	WTHR2	SURF	CHAR	DESGN	ACC_NUM	PERSON1	DIR	ACT	FAC1	FAC2
0	2	1	40	2	90	2	98	4	1	1	1	2	5	133010030	1	7	8	9	9
0	2	7	40	1	1	1	1	1	1	0	1	1	5	131170049	1	98	1	1	0
0	2	1	40	1	1	1	98	2	1	0	1	1	90	130070031	1	3	1	1	0
0	2	7	40	1	1	1	1	3	2	0	5	4	3	133580228	3	3	11	21	2
0	2	4	40	1	1	1	1	1	1	1	5	6	5	130750180	1	2	5	2	4
0	2	21	40	1	5	1	1	1	2	0	2	1	5	133250107	2	7	1	1	0
0	2	4	40	1	2	1	1	4	2	0	1	1	3	133250035	1	7	1	1	0
0	2	4	40	1	1	1	1	4	2	0	5	2	3	133390357	4	7	11	1	0
0	3	4	40	1	1	1	1	4	2	0	5	2	5	133390367	1	7	10	61	0
0	2	4	40	1	1	1	1	4	1	1	5	2	5	133470218	1	7	4	1	0
0	4	4	40	1	1	1	98	4	4	0	3	8	5	140560360	1	3	1	3	46
0	2	1	40	1	1	1	1	1	1	1	1	2	3	151400160	4	7	11	1	1
0	2	4	40	1	1	1	1	1	1	0	1	1	5	152300080	1	3	11	1	0
0	2	4	40	1	1	1	1	1	1	1	1	1	3	153530027	2	3	11	1	0
0	2	2	40	1	1	1	1	4	1	1	4	2	3	153630099	1	3	11	1	0
0	2	7	40	1	1	1	1	1	2	0	4	2	5	150120165	1	3	11	1	0
0	2	1	35	1	1	1	98	1	1	1	1	1	4	140200110	3	7	11	1	1
0	2	4	40	1	1	1	98	1	2	0	2	5	5	140210199	1	3	1	9	0
0	2	1	40	1	1	1	98	4	2	0	2	1	5	152870173	1	7	1	4	4
0	2	1	40	1	1	1	1	1	1	0	1	1	3	153550316	2	7	1	15	4
0	2	2	40	1	1	1	1	4	1	1	1	1	3	151460090	2	3	1	15	15
0	2	7	40	1	1	1	98	1	2	2	1	1	3		2	3	1	1	1

POSN	INU	EQP	PHYS	AGE	SEX	PERSON2										PERSON3			
						VTPE2	DIR3	ACT4	FAC15	FAC26	POSN7	INL8	EQP9	PHYS10	AGE11	SEX12	VTPE13	DIR14	ACT15	FAC116
1	N	4	1	25	F	2	98	1	4	0	1	N	4	1	29	M			
1	N	4	1	45	M	1	3	14	1	0	1	N	4	1	33	M			
1	N	4	1	44	M	1	3	11	1	0	1	N	4	1	33	M			
1	N	4	1	59	F	3	3	11	1	0	1	N	4	1	67	M	3		3
1	N	4	1	30	F	1	2	5	1	1	1	N	4	1	23	F	1		2
1	N	4	1	51	M	1	3	6	2	21	1	N	99	90	81	F			
1	N	99	1	34	F	1	7	14	8	0	1	N	4	1	31	M	1		7
1	N	4	1	30	F	1	7	10	61	46	1	N	4	1	55	F	1		7
1	N	4	1	29	M	3	7	11	1	0	1	N	4	1	43	F	3		7
1	N	4	1	52	F	1	7	4	3	61	1	N	4	1	29	F			
1	N	4	1	23	F	1	3	1	46	3	1	N	4	1	50	M			3
1	N	4	1	37	F	1	7	1	15	18	1	N	99	2	28	F			
1	N	4	1	44	M	1	3	9	15	0	1	N	4	1	50	F			
1	N	99	1	58	M	3	3	1	15	0	1	N	99	1	35	M	3		3
1	N	4	1	64	F	1	3	11	15	0	1	N	4	1	60	F			
1	N	4	1	48	F	1	7	1	15	4	1	N	4	1	23	M			
1	N	4	1	34	M	1	3	1	15	0	1	N	4	1	19	M			
1	N	4	1	20	M	1	7	10	1	0	1	N	4	1	20	M			
1	N	4	1	18	F	3	7	11	1	1	1	N	4	1	22	F	1		7
1	N	4	1	42	M	1	7	11	1	1	1	N	4	1	38	F			
1	N	4	1	30	M	1	3	1	1	1	1	C	4	1	33	F	1		3

FAC217 POSN18 INJ19 EQP20 PHYS21 AGE22 SEX23

Fish Lake Road approx. 150' south of Weaver Lake Road (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	24300107	002+00.790	0524300107	2.790	Z		1	3	U
05	24300107	002+00.790	0524300107	2.790	Z		1	3	U
05	24300107	002+00.790	0524300107	2.790	Z		1	3	U
05	24300107	002+00.820	0524300107	2.820	Z		1	3	U
05	24300107	002+00.871	0524300107	2.871	E		1	3	U
05	24300107	002+00.878	0524300107	2.878	Z		1	3	U
05	24300107	002+00.890	0524300107	2.890	N		1	3	U
05	24300107	002+00.890	0524300107	2.890	Z	1	1	3	U
05	24300107	002+00.890	0524300107	2.890	E		1	3	U

ATP

* DRIVER CONTACTED US COMPLAINING OF NECK PAIN FROM OUR MC DONALDS AT 2307. * HE IS UNSURE OF WH
PROPERTY DAMAGE CRASH ONLY, NO INJURIES. D1 OF V1 SAID HE WAS TURNING FROM EB MAPLE LANE TO NB EAS
DRIVER WAS TRAVELING NORTH ON EAST FISH LAKE RD APPROACHING THE CURVE WEST BY MAPLE LA WHEN SHE HIT
#1 SAID SHE WAS SLOWING WHEN #2 IN FRONT OF HER BEGAN TO START SKIDDING, #1 APPLIED HER BRAKES BUT
BOTH VEHICLES WERE EASTBOUND ON WEAVER LAKE RD. DRIVER 1 STOPPED FOR OTHER TRAFFIC. DRIVER 2 WAS
UNIT #2 MADE TURN FROM WB WEAVER TO SB EAST FISH LAKE RD. DRIVER OF UNIT #1 NB EAST FISH, UNABLE T
WHILE ON ROUTINE PATROL IN THE AREA OF WEAVER LAKE RD AND W FISH LAKE RD, I OBSERVED TWO VEHICLES S
UNIT1 WAS STOPPED IN THE RIGHT TURN LANE, DUE TO THE RED LIGHT, TO GO EAST ONTO WEAVER LAKE ROAD FR
VEH 1 WAS EB ON WEAVER LAKE RD IN TRAFFIC. VEH 2 APPROACHED VEH 1 FROM BEHIND. VEH 2 APPLIED BRAKES

CO	CITY	DOW	MONTH	DAY	YEAR	TIME	SEV
27	2430	5-Thu	5	8	2014	2200	C
27	2430	7-Sat	11	1	2014	2154	N
27	2430	7-Sat	12	27	2014	1121	N
27	2430	3-Tue	2	25	2014	0700	N
27	2430	1-Sun	3	1	2015	1034	N
27	2430	1-Sun	1	5	2014	2155	N
27	2430	6-Fri	7	26	2013	1857	N
27	2430	2-Mon	10	13	2014	1538	N
27	2430	6-Fri	12	18	2015	1721	C

NUM_KILLED	NUM_VEH	JUNC	SL	TYPE	DIAG	LOC1	TCD	LIT	WTHR1	WTHR2	SURF	CHAR	DESGN	ACC_NUM1	PERSON1 VTYPE	DIR	ACT	FAC1	FAC2
0	1	2	40	37	7	1	98	4	3	0	2	5	8	141290001	1	1	1	0	0
0	2	2	40	1	5	1	4	4	1	0	1	5	8	143070164	1	3	6	2	0
0	1	1	45	13	98	1	90	1	4	1	3	5	99	143610196	2	0	0	3	0
0	3	1	40	1	1	1	98	1	1	1	5	5	8	140560115	1	1	10	46	61
0	2	2	40	1	1	1	1	1	1	0	1	1	5	150600042	4	3	11	1	0
0	2	7	40	1	5	1	1	4	1	0	5	6	8	150060002	1	8	1	3	46
0	2	4	45	1	1	1	1	1	1	1	1	1	5	132100008	1	7	1	15	0
0	2	4	40	1	5	1	1	1	3	0	2	6	5	142860146	3	1	11	1	0
0	5	4	40	1	1	1	1	4	1	1	1	1	5	153520290	1	3	1	1	0

POSN	INU	EQP	PHYS	AGE	SEX	PERSON2					PERSON3								
						VTYPE2	DIR3	ACT4	FAC15	FAC26	POSN7	INU8	EQP9	PHYS10	AGE11	SEX12	VTYPE13	DIR14	
1	C	3	1	18	M	3	5	1	1	0	1	N	4	1	54	F	3	5	
1	N	4	1	25	M														
1	N	3	1	19	F														
1	N	4	1	18	F	1	1	1	1	61	1	N	4	1	30	F	1	1	
1	N	4	1	41	F	3	3	1	1	0	1	N	4	1	44	F	4	3	
1	N	4	1	20	M	3	6	1	1	0	1	N	4	1	19	M			
1	N	4	1	66	M	1	98	1	1	0	1	N	4	1	41	M			
1	N	4	1	64	M	1	5	5	1	0	1	N	4	1	16	M			
1	C	4	1	54	M	1	3	1	1	0	1	N	4	1	22	M	1	3	





Minnesota Department of Transportation

Metropolitan District

Waters Edge Building

1500 County Road B2 West

Roseville, MN 55113

July 7, 2016

John Hagen, P.E., PTOE
Transportation Operations Engineer
City of Maple Grove
12800 Arbor Lakes Parkway
PO Box 1180
Maple Grove, MN 55311

Dear Mr. Hagen,

This letter is to serve as your notification that the Interchange Review Committee has determined that the proposed CR 610 Extension to I-94 and MN 610 as shown in your July 5, 2016 memo is consistent with the qualifying criteria found in Appendix F of the Council's Transportation Policy Plan and no additional documentation is necessary.

Please note that this evaluation concerns itself only with appropriate location of access to the trunk highway system's Twin Cities freeways. We do have safety concerns with the specifics of how the movement from westbound TH 610 to eastbound I-94 is proposed and we look forward to later stages in the process where we can consider a wide range of alternatives to improve upon how this might be accomplished.

As the project layout and design progresses, please continue to work with MnDOT, FHWA and Met Council to assure the technical and design criteria of Appendix F continue to be met and that appropriate steps are taken to complete the Metropolitan Council's Controlled Access Approval (contact Steve Peterson at 651-602-1819) and FHWA's Interchange Access Request (IAR) (including a PM peak hour analysis) when needed.

We appreciate your efforts to work with the Interchange Review Committee in our effort to understand this project.

If you have any questions concerning this letter, please contact me at (651) 234-7784.

Sincerely,

A handwritten signature in black ink, appearing to read 'KScheffing'.

Karen Scheffing
Principal Planner

CC:

Lynne Bly, MnDOT

Tony Fischer, MnDOT

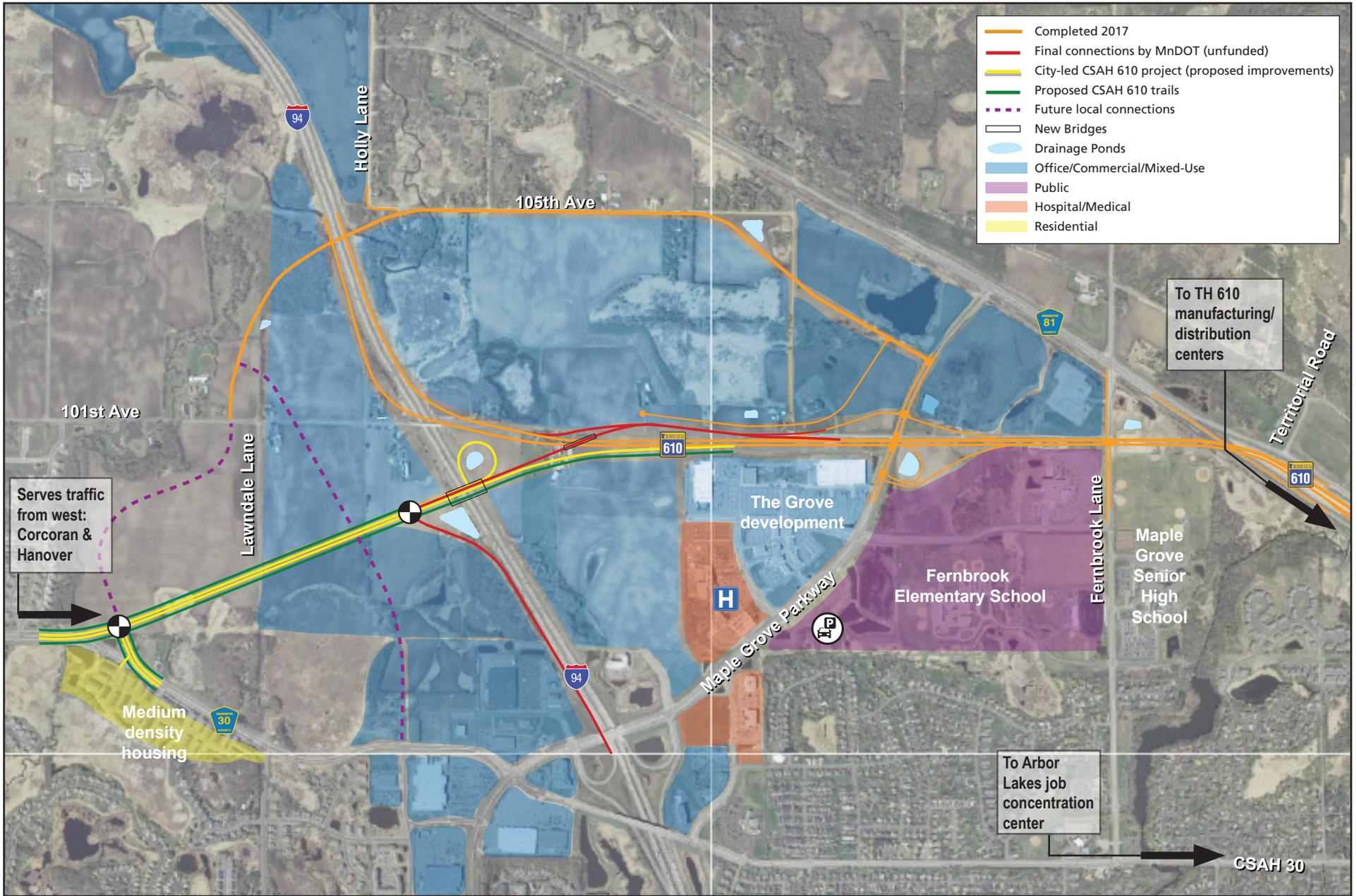
John Griffith, MnDOT

Ramankutty Kanankutty, MnDOT

Steve Peterson, Met Council

Ryan Hickson, FHWA

Cyrus Knutson, MnDOT



Maple Grove - CSAH 610 Expansion

399: CR 30 and Lawndale		
Existing Volume	1936	vehicles
Existing Delay	36	sec/veh
Existing Total Delay	69696	seconds
Future Volume	737	vehicles
Future Delay	28	sec/veh
Future Total Delay	20636	seconds
Total Delay Reduction	49060	seconds

403: Maple Grove Parkway/East 94 Ramps		
Existing Volume	3164	vehicles
Existing Delay	39	sec/veh
Existing Total Delay	123396	seconds
Future Volume	2398	vehicles
Future Delay	29	sec/veh
Future Total Delay	69542	seconds
Total Delay Reduction	53854	seconds

407: Maple Grove Parkway/South 610 Ramps		
Existing Volume	1901	vehicles
Existing Delay	4	sec/veh
Existing Total Delay	7604	seconds
Future Volume	1274	vehicles
Future Delay	4	sec/veh
Future Total Delay	5096	seconds
Total Delay Reduction	2508	seconds

400: CR 30 and Garland Ln		
Existing Volume	2134	vehicles
Existing Delay	19	sec/veh
Existing Total Delay	40546	seconds
Future Volume	935	vehicles
Future Delay	15	sec/veh
Future Total Delay	14025	seconds
Total Delay Reduction	26521	seconds

404: Maple Grove Parkway/Upland Ln		
Existing Volume	2601	vehicles
Existing Delay	19	sec/veh
Existing Total Delay	49419	seconds
Future Volume	2061	vehicles
Future Delay	16	sec/veh
Future Total Delay	32976	seconds
Total Delay Reduction	16443	seconds

408: Maple Grove Parkway/North 610 Ramps		
Existing Volume	1390	vehicles
Existing Delay	17	sec/veh
Existing Total Delay	23630	seconds
Future Volume	975	vehicles
Future Delay	13	sec/veh
Future Total Delay	12675	seconds
Total Delay Reduction	10955	seconds

401: CR 30 and Dunkirk/Maple Grove Parkway		
Existing Volume	3935	vehicles
Existing Delay	37	sec/veh
Existing Total Delay	145595	seconds
Future Volume	2751	vehicles
Future Delay	26	sec/veh
Future Total Delay	71526	seconds
Total Delay Reduction	74069	seconds

405: Maple Grove Parkway/Hospital Drive		
Existing Volume	2209	vehicles
Existing Delay	28	sec/veh
Existing Total Delay	61852	seconds
Future Volume	1750	vehicles
Future Delay	22	sec/veh
Future Total Delay	38500	seconds
Total Delay Reduction	23352	seconds

409: Maple Grove Parkway/CR 81		
Existing Volume	2431	vehicles
Existing Delay	16	sec/veh
Existing Total Delay	38896	seconds
Future Volume	2331	vehicles
Future Delay	16	sec/veh
Future Total Delay	37296	seconds
Total Delay Reduction	1600	seconds

402: Maple Grove Parkway/West 94 Ramps		
Existing Volume	3549	vehicles
Existing Delay	37	sec/veh
Existing Total Delay	131313	seconds
Future Volume	2591	vehicles
Future Delay	30	sec/veh
Future Total Delay	77730	seconds
Total Delay Reduction	53583	seconds

406: Maple Grove Parkway/Grove Circle		
Existing Volume	2369	vehicles
Existing Delay	17	sec/veh
Existing Total Delay	40273	seconds
Future Volume	1839	vehicles
Future Delay	16	sec/veh
Future Total Delay	29424	seconds
Total Delay Reduction	10849	seconds

410: CR 81/Fernbrook Lane		
Existing Volume	3355	vehicles
Existing Delay	60	sec/veh
Existing Total Delay	201300	seconds
Future Volume	3255	vehicles
Future Delay	51	sec/veh
Future Total Delay	166005	seconds
Total Delay Reduction	35295	seconds

Total Network Delay Reduction	358089	seconds
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Existing Conditions within Project Area

CSAH 610 Expansion
City of Maple Grove

Path: L:\Projects\1179\pno\CSAH610.aprx

HENNEPIN COUNTY
MINNESOTA

June 7, 2018

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

Re: Support for Regional Solicitation Application
CSAH 610 Roadway Expansion Project
From 93rd Avenue (CSAH 30) to I-94/TH 610

Dear Ms. Koutsoukos,

Hennepin County has been notified that the City of Maple Grove is submitting an application for funding as part of the Regional Solicitation through the Metropolitan Council. The project is the CSAH 610 Roadway Expansion Project as identified in the TH 610 Corridor Study.

The project will provide various mobility improvements in the Maple Grove area that include: additional access to I-94, an extension of TH 610 to the west, and connections to the local roadway system. Hennepin County supports this funding application and acknowledges that the county will have jurisdictional authority over the roadway. At this time, Hennepin County has no funding programmed in its 2018-2022 Transportation Capital Improvement Program (CIP) for this project. Additionally, Hennepin County will operate and maintain the CSAH 610 roadway facilities for the useful life of the improvements.

Hennepin County looks forward to working with the City of Maple Grove on this project, if the city is successful in securing funding.

Sincerely,



Carla Stueve, P.E., P.T.O.E.
County Engineer
Hennepin County Transportation Project Delivery

cc: Chad Ellos, Transportation Planning Division Manger





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

June 20, 2018

John Hagen, P.E., PTOE
Transportation Operations Engineer
City of Maple Grove
12800 Arbor Lakes Parkway
Maple Grove, MN 55369-7064

Re: Letter of Support for City of Maple Grove
Metro Council/Transportation Advisory Board 2018 Regional Solicitation Funding Request for CSAH
610 project from CSAH 30 to I-94

Dear Mr. Hagen,

This letter documents MnDOT Metro District's support for the City of Maple Grove's funding request to the Metro Council for the 2018 regional solicitation for 2022-23 funding for its proposed CSAH 610 project from CSAH 30 to I-94.

As proposed, this project would impact MnDOT right-of-way on both MN 610 and Interstate I-94. As the agency with jurisdiction over MN 610 and I-94, MnDOT will support Maple Grove and will allow the improvements proposed in the application for the CSAH 610 project from CSAH 30 to I-94. Details of a future maintenance agreement with the City of Maple Grove will need to be determined during project development to define how the project improvements on MN 65 will be maintained for the project's useful life.

No funding from MnDOT is currently programmed for this project, and no discretionary funding in years 2022-23 is currently anticipated. However Metro District does have other roadway investments planned to occur nearby. I would request that you coordinate project development with MnDOT Area staff so that our agencies can work together to best leverage our respective efforts.

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

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

Sincerely,

A handwritten signature in blue ink that reads 'Scott R. McBride'.

Scott McBride
Metro District Engineer

CC: April Crockett, Metro District West Area Manager
Lynne Bly, Metro Program Director
Dan Erickson, Metro State Aid Engineer

2018 Metropolitan Council Regional Solicitation CSAH 610 Expansion – Project Summary



Project Name: CSAH 610 Expansion

Applicant: City of Maple Grove

Contact: John Hagen, PE, PTOE,
Transportation Operations Engineer

Email/Phone: jhagen@maplegrovern.gov
(763) 494-6364

Location Map:



Project Details:

- Total Project Cost = \$20,477,000
- Requested Award Amount = \$7,000,000
- Construction Dates: Begin by June 2020
- Consistent with local & regional plans
- Preliminary plans completed
- State environmental documents completed
- Technical analysis complete for interstate access (update required)
- Right of way needs identified & ready for acquisition

Project Description:

The CSAH 610 project includes construction of a new four-lane divided A-Minor Arterial Expander roadway between CSAH 30 and TH 610. The project will complete the missing roadway movements in the I-94 interchange area, including a westbound I-94 to westbound CSAH 610 loop and an I-94 bridge on CSAH 610 connecting CSAH 30 to TH 610. CSAH 30 will be realigned to form a new signalized intersection with CSAH 610, and a traffic signal will be installed at the proposed CSAH 610/Eastbound I-94 on-ramp intersection. The project will also construct a multiuse trail along the south side of CSAH 610 that will connect to existing multiuse trails on CSAH 30 and Maple Grove Parkway and provide a safe, convenient, and grade-separated pedestrian and bicycle crossing of I-94. The project is the next phase of the MnDOT TH 610 project that was recently constructed with Corridors of Commerce funding and is one of the few remaining A-Minor Arterial Expander roadways in the Met Council's 2040 Transportation Policy Plan that are planned, but not constructed.

Project Benefits:

- Improvements in regional accessibility and mobility by relieving congestion and travel delays on CSAH 30 and Maple Grove Parkway will promote growth and increase business demand, freight operations, and employment opportunities in the surrounding corridor.
- Reduction of existing traffic volumes on CSAH 30 and Maple Grove Parkway will provide the needed capacity for improving transit services and increasing access and mobility to nearby schools, employment centers, healthcare facilities, commercial areas, and the Blue Line LRT.
- Provides an additional pedestrian and bicycle route and serves as a connection between CSAH 30 and the Medicine Lake Regional Trail and will provide the missing RBTN connection between existing RBTN Corridors and Alignments west and east of I-94 making it easier and safer for Maple Grove residents to cross I-94 connect to the regional bicycle system.
- Will fulfill regional plans for expansion, while supporting infrastructure investments that are currently being made by MnDOT in the area.