



GRAND VALLEY METROPOLITAN COUNCIL

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POLICY COMMITTEE

Wednesday, October 16, 2019

9:30 AM

**KENT COUNTY ROAD COMMISSION OFFICES
COMMISSIONERS BOARD ROOM
1500 SCRIBNER NW, GRAND RAPIDS**

AGENDA

- I. ROLL CALL AND INTRODUCTIONS**
- II. APPROVAL OF MINUTES—ACTION: Dated September 18, 2019
Please refer to Item II: Attachment A**
- III. OPPORTUNITY FOR PUBLIC COMMENT**
- IV. POLICIES AND PRACTICES DOCUMENT REVISION—ACTION: Staff has updated the non-motorized section of the Policies and Practices for Programming Projects document to align with the goals and objectives of the 2045 Metropolitan Transportation Plan.
Please refer to Item IV: Attachment A**
- V. 2045 MTP DEFICIENCIES AND NEEDS ANALYSIS—ACTION: The Policy Committee will be asked to review and take action on the deficiencies and needs analysis for the 2045 MTP.
Please refer to Item V: Attachment A**
- VI. OTHER BUSINESS**
 - Comment period open for GVMC's consultation plan
- VII. ADJOURNMENT**

MINUTES

**Grand Valley Metropolitan Council
Transportation Division
POLICY COMMITTEE
Wednesday, September 18, 2019
Kent County Road Commission
1500 Scribner NW, Grands Rapids, MI**

Schmalzel, chair of the Policy Committee, called the meeting to order at 9:35 am.

I. ROLL CALL AND INTRODUCTIONS

Voting Members Present

Darrell Schmalzel, <i>Chair</i>		City of Walker
Dan Burrill		City of Wyoming
Karyn Ferrick		City of Grand Rapids
Jim Holtrop		City of Hudsonville
Tom Hooker		Byron Township
Andrew Johnson		The Rapid
Dennis Kent	<i>Proxy for Eric Mullen</i>	MDOT
		MDOT
Greg Madura		Alpine Township
Josh Naramore		City of Grand Rapids
Rick Sprague	<i>Proxy for Wayne Harrall</i>	KCRC
		Kent County
Dan Strikwerda		City of Hudsonville
Julius Suchy		Village of Sparta
Ben Swayze		Cascade Charter Township
Cameron Van Wyngarden		Plainfield Township
Steve Warren	<i>Proxy for Mike DeVries</i>	KCRC
		Grand Rapids Township
Rod Weersing		Georgetown Township
Stephen Wooden		Kent County Commission

Staff and Non-Voting Guests Present

Amanda Chatel	Public Transit User
Andrea Faber	GVMC
Laurel Joseph	GVMC
Terry Martin	Carrier & Gable
Don Mayle	MDOT
Norm Sevensma	RWBC-WMEWAC
Kerri Smit	GVMC
George Yang	GVMC
Mike Zonyk	GVMC

Voting Members Not Present

Gail Altman	Jamestown Township
Tim Bradshaw	City of Kentwood
Terry Brod	Cannon Township
Mike Burns	City of Lowell

Jamie Davies
 Michael DeVries
 Robert DeWard
 Adam Elenbaas
 Betty Gajewski
 Rachel Gokey
 Kevin Green
 Tim Grifhorst
 George Haga
 Jerry Hale
 Bryan Harrison
 Jim Holtvluwer
 Ken Krombeen
 Doug LaFave
 Brett Laughlin
 Jim Miedema
 Eric Mullen
 Josh Naramore
 Tom Noreen
 Rob Postema
 Casey Ries
 Terry Schweitzer
 Sandy Stelma
 Toby VanEss
 Mike Womack
 Member awaiting appointment

City of Rockford
 Grand Rapids Charter Township
 Gaines Charter Township
 Allendale Township
 OCRC
 Village of Sand Lake
 Algoma Township
 Tallmadge Township
 Ada Township
 Lowell Township
 Caledonia Charter Township
 Ottawa County
 City of Grandville
 City of East Grand Rapids
 OCRC
 OCRC
 MDOT
 City of Grand Rapids
 Nelson Township
 City of Wyoming
 GFIAA
 City of Kentwood
 Village of Caledonia
 Tallmadge Township
 City of Cedar Springs
 Courtland Township

II. APPROVAL OF MINUTES

Schmalzel entertained a motion to approve the May 15 and July 17, 2019 Policy Committee minutes.

MOTION by Suchy, SUPPORT by Naramore, to approve the May 15 and July 17, 2019 Policy Committee meeting minutes. MOTION CARRIED UNANIMOUSLY.

III. OPPORTUNITY FOR PUBLIC COMMENT

None.

IV. FY2017- 2020 AND FY2020-2023 TIP AMENDMENTS/MODIFICATIONS

Referring to **Item IV: Attachment A**, Joseph explained that MDOT, Kentwood, Kent County Road Commission, Grand Rapids, and staff on behalf of Ottawa County and GVMC are requesting to amend/modify the FY2017-2020/FY2020-2023 TIP. Any action taken on FY2020-2023 projects will not go into effect until the FY2020-2023 TIP has final approval and becomes active. Here are the specific requests:

- MDOT is requesting the amendments/modifications to the TIP project list in the attached summaries. Please note that projects with the date of 6/6/2019 in the “Local Fed Approval Date” column were previously acted upon during the development of the FY2020-2023 TIP. Pending jobs without the 6/6/19 approval date have been highlighted

for Committee reference. MDOT is also requesting Committee review of the S/TIP exempt project list.

Kent explained all the details of the MDOT requests to the Committee.

Strikwerda advised the Committee that the City of Hudsonville may need to change its limits depending on funding.

Joseph continued to address the remaining requests.

- The City of Kentwood is requesting to increase the budget for a FY2020 project. This increase will not change the federal funding associated with the project.
- Kent County Road Commission is requesting to move a project from the illustrative list into FY2020 to utilize STP Rural funds they are purchasing from Montcalm County.
- The City of Grand Rapids is requesting a TIP amendment to reduce the budget of a 2019 project by more than 25%. The federal amount will not change.
- Staff on behalf of Ottawa County Road Commission is requesting to change the funding source of a 2019 local bridge project from federal to state. This has triggered a GPA threshold amendment in the 2019 Local Bridge GPA. However, being so close to the end of the fiscal year, it is likely this project will need to move to FY2020, so that should be considered by the Committee.
- Staff is requesting Committee review and approval of a technical correction amendment to the FY2020 Planning Studies project. This project was transferred into JobNet from the E-file in the incorrect phase type. Therefore, the original job number needs to be abandoned and a replacement job has been created.

MOTION by Naramore, SUPPORT by Holtrop, to accept the FY2017-2020 AND FY2020-FY20-23 TIP AMENDMENTS/MODIFICATIONS. MOTION CARRIED UNANIMOUSLY

V. 2045 MTP VISION STATEMENT, GOALS AND OBJECTIONS

Referring to **Item V: Attachment A** Faber advised the committee that one of the first steps in updating the MTP is to review the vision statement, goals and objectives to assure that they remain relevant and satisfy federal transportation planning factors. The goals and objectives in the 2040 MTP were too long and needed condensing. Taking into consideration the 10 planning factors from the FAST Act, data from the recent MTP survey, and performance-based planning requirements, the revision process began. The MTP Steering Committee met on Monday, August 26 to further refine them and the unanimously approved vision, goals and objectives are included in your agenda packet. Staff is asking for the committee to review and approve.

Naramore requested to strike the word “alternative” and use another term, such as “active.” Johnson followed up by suggesting the term “modes”.

MOTION by Naramore, SUPPORT by Warren, to approve the revised 2045 METROPOLITAN TRANSPORTATION PLAN (MTP) VISION STATEMENT, GOALS AND

**OBJECTIVES with the term “alternative” being substituted with another term.
MOTION CARRIED UNANIMOUSLY**

VI. FY2020-2023 DRAFT TAP PROJECT LIST

Referring to **Item VI: Attachment A** Joseph explained the proposed non-motorized projects and that they have gone through the non-motorized, TPSG and Technical Committees. Changes were made after the Technical meeting due to the City of Wyoming’s notification that the FY2020 Plaster Creek project will not be ready for obligation in that year so it was moved to FY2021. Staff is asking the Policy Committee to review and take action to support the attached pool of projects and to move forward in the MGS application system and go through the MDOT technical review process for potential regional TAP funding. Staff is asking for an action of support to move forward.

**MOTION by Madura, SUPPORT by Johnson, to approve to move forward with the
FY2020-2023 DRAFT TAP PROJECT LIST. MOTION CARRIED UNANIMOUSLY**

VII. OTHER BUSINESS

Faber discussed the e-mail that was sent to the Committee with the request for financial information for the long-range plan. Also advised them if they had questions to let staff know. Naramore asked that the week deadline of the request be extended. Schmalzel asked if this was new to request financial information for the long range plan. Faber discussed.

Zonyk gave an update on the MPO.

VIII. ADJOURNMENT

Schmalzel entertained a motion to adjourn the September 18, 2019 Policy Committee meeting at 10:56 am.

**MOTION by Madura, SUPPORT by Burrill, to adjourn the September 18, 2019 Policy
Committee meeting at 10:56 am. MOTION CARRIED UNANIMOUSLY.**



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MEMORANDUM

DATE: October 10, 2019
TO: Policy Committee
FROM: Laurel Joseph, Transportation Planner
RE: **Policies and Practices Document Revision**

Staff is requesting Committee review and recommendation for approval of the revised Non-Motorized section of the Policies and Practices for Programming Projects document.

As part of the MTP update process, staff reviews the Policies and Practices document to ensure the MPO's policies and practices align with the goals and objectives of the MTP.

Staff has completed this review and updated the Non-Motorized section (see attached), which referred to specific objectives from the 2040 MTP that were not retained in the 2045 MTP goals and objectives as a result of the significant effort that was made to condense the MTP's goals and objectives. This reduction in the number of Plan goals and objectives was a recommendation that came out of the MPO's last federal certification review.

No other sections were revised.

If you have any questions, please do not hesitate to contact me at (616) 776-7610.

Non-Motorized Transportation Federal Funding Eligibility

Goal:

The MPO shall support the development of an area-wide network of interconnected, convenient, safe, and efficient non-motorized routes so that they may become an integral mode of travel for area residents. A non-motorized element of the Metropolitan Transportation Plan shall maintain a listing of eligible non-motorized projects and funding shall be allocated through the MTP and TIP planning processes to achieve an overall goal of improving the non-motorized system.

Background:

~~The GVMC 2040 Metropolitan Transportation Plan (MTP) lays out goals that pertain to non-motorized transportation in our region. These MTP goals carry over the federal and state level themes encouraging non-motorized transportation. Related objectives include:~~

~~1d: “Sustain and develop the interconnected regional network of non-motorized transportation facilities to provide access to employment, services, schools, and other destinations.”~~

~~3d: “Collaborate with communities, public schools, and MDOT to regionally plan for safe bicycle and pedestrian routes for students to travel to and from home and school.”~~

~~3e: “Encourage the multiple and safe use of transportation rights-of-way by different modes, including non-motorized transportation.”~~

~~Federal surface transportation law provides flexibility to MPOs to fund bicycle and pedestrian improvements from a wide variety of federal programs (STP, CMAQ, TAP, etc.). However, historically the GVMC Committees have primarily funded projects containing only non-motorized elements (as opposed to a roadway project that includes bike/pedestrian facilities) using competitive grant dollars from the regional Transportation Alternatives Program (TAP) allocation.~~

Facility Definitions

The MPO, in cooperation with the Non-Motorized Subcommittee and using AASHTO standards, has developed definitions for each of the non-motorized facility types. These are the non-motorized facility types recognized by the MPO.

Sidewalks – A sidewalk is a paved pathway paralleling a highway, road, or street, and is intended for pedestrians. Sidewalks are typically four to five feet wide and made from concrete, but may be up to a maximum of eight feet wide and made from other materials depending on their location.

Shared Use Paths – Shared use paths mainly serve corridors not served by streets and highways, or where wide utility or former railroad rights-of-way exist (rail-trails), but may also parallel highway, roads, and streets (formally called “sidepaths”). Shared use paths are wider than sidewalks, between 8 and 12 feet wide (10 feet width is federally required for federal funds) with

a soft two to four-foot shoulder on each side, and a minimum width of 14 feet on all structures, such as bridges and boardwalks. They are shared facilities for use by both pedestrians and bicyclists.

Sidepath – Sidepaths are shared use paths that are located immediately adjacent and parallel to a roadway.

Bicycle Lanes – Bicycle lanes are dedicated, marked, and signed rights-of-way assigned to bicyclists. They are paired one-way facilities located on both sides of a street, with standard intersection designs to minimized conflicts between bicycles and automobiles. Standard bicycle lane widths are six feet; five feet is the minimum width adjacent to curbs and four feet is the minimum width when no curb exists. Dedicated bike lanes must be accompanied by both pavement markings and bike lanes signs (R3-17).

Signed Shared Roadways – Signed shared roadways are designated bicycle routes that are signed (D11-1 or W11-1) or have pavement markings to indicate that the roadway is shared with bicyclists (“sharrow” chevron pavement marking).

Unsigned Shared Roadways – Unsigned shared roadways are open to both bicycle and motor vehicle and are designed and constructed under the assumption that they may be used by bicyclists, but are not signed or marked. Unsigned shared roadways typically have wider than the standard 12-foot lane. Shared roadways may also be standard width roadways with a minimum four-foot paved shoulder (where there is no curb and gutter), also known as a “wide-shoulder.”

Bicycle Centers and Staging Areas – Bicycle centers and staging areas are auxiliary facilities to increase the convenience and effectiveness of non-motorized transportation and may offer amenities such as showers and bicycle parking, as well as motorized vehicle parking and network access points.

Pedestrian Bridges and Refuge Islands – Pedestrian bridges are modified road bridge structures that accommodate pedestrians and bicyclists, or they may be pedestrian/bike only structures. A refuge island is a protected area between traffic lanes providing pedestrians or bicyclists with a safe place to wait for gaps in traffic in order to cross a road safely.

Recommended Policy/Practice:

All non-motorized projects included in the GVMC Metropolitan Transportation Plan/Non-Motorized Transportation Plan are eligible for funding as allowed under applicable federal-aid categories. Proposed projects shall be evaluated during the development of the Non-Motorized Plan and scored using evaluation criteria set forth in the plan and agreed upon by the Non-motorized Subcommittee. Project evaluation results – along with fiscal constraint, project readiness, and other context-related factors – shall drive the programming process.

Federal surface transportation law provides flexibility to MPOs to fund bicycle and pedestrian improvements from a wide variety of federal programs (STP, CMAQ, TAP, etc.). However, historically the GVMC Committees have primarily funded projects containing only non-

motorized elements (as opposed to a roadway project that includes bike/pedestrian facilities) using competitive grant dollars from the regional Transportation Alternatives Program (TAP) allocation.

Any allocated funds to the MPO for the Congestion Mitigation and Air Quality (CMAQ) program shall also be eligible and considered for use on bicycle and pedestrian facility improvements. All CMAQ funded non-motorized projects shall be addressed on a case by case basis to prove high use, mode shift, and connectivity and score well using the scoring criteria set forth in the Non-Motorized Plan. For the use of CMAQ funds all projects must demonstrate emission reduction and alleviate congestion.

All non-motorized projects requesting federal funds must be endorsed by the MPO to receive federal funds and be included in the MPO TIP.



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MEMORANDUM

Date: October 10, 2019
To: GVMC Policy Committee
From: Andrea Faber, Transportation Planner
Re: 2045 MTP Deficiencies and Needs Analysis

At the October Policy Committee meeting, staff will present the findings of GVMC's modal needs analysis. To determine current and future transportation need by mode, GVMC worked with various stakeholders from organizations representing transit, passenger rail, air travel, freight movement, and non-motorized modes of transportation. As part of this effort, staff also analyzed deficiencies for pavement and bridge condition, traffic congestion, safety and reliability for all users of the transportation system based on the performance measure targets the Committee has previously supported. These analyses will be the basis for proposing solutions to meet the current and forecasted transportation needs by mode and deficiencies for the 2045 Metropolitan Transportation Plan (MTP).

The modal needs analysis is open for public comment through Tuesday, October 15. Two comments have been received and addressed so far, and the Technical Committee recommended that a subgroup meet to revise and enhance the analysis based on feedback provided at the meeting before presenting the document to the Policy Committee for approval. The subgroup met on Wednesday, October 9, and the results of that meeting have been incorporated into the attached needs and deficiencies analysis. For more information, or to submit comments, please visit www.gvmc.org/mtp. A [corresponding map](#) is also available on this webpage.

Endorsing the analysis will allow staff to move forward with the next phases of MTP development, which include selecting preferred alternatives to address current and projected system needs and deficiencies and creating a financially constrained project list.

If you have any questions, please contact me at (616) 776-7603 or andrea.faber@gvmc.org.

Recommended Action: Policy Committee approval of GVMC's modal needs analysis, as presented.

Modal Deficiencies and Needs Assessment

To determine current and future transportation need by mode, GVMC worked with various stakeholders from organizations representing transit, passenger rail, air travel, freight movement, and non-motorized modes of transportation. As part of this effort, staff also analyzed deficiencies for pavement and bridge condition, traffic congestion, safety and reliability for all users of the transportation system based on the performance measure targets the MPO has supported. These analyses will be the basis for proposing solutions to meet the current and forecasted transportation needs by mode and deficiencies for the 2045 Metropolitan Transportation Plan (MTP).

Roadway Deficiencies Analysis

A deficiencies analysis is the process of identifying future transportation infrastructure needs based on observing how well a roadway is performing or anticipated to perform based on available data. The analysis performed for this MTP looked at congestion deficiencies, safety deficiencies, and reliability deficiencies.

Congestion Deficiencies

The GVMC travel demand model has the ability to identify peak period capacity deficiencies. Peak hour volume-capacity (V/C) ratio from the travel demand model is used to identify congested corridors on existing and future highway network. For example, if Link A has a volume of 4,000 vehicles and a capacity of 8,000 vehicles, dividing the volume by the capacity yields a V/C ratio of 0.50. This ratio indicates that there is remaining capacity on Link A. The greater of the two values of AM (7am-9am) and PM (3pm-6pm) peak period V/C ratio is selected for the congestion deficiency analysis. Corridors are identified as “Low/No Congestion,” “Moderate Congestion,” or “Severe Congestion,” as summarized below.

V/C Ratio	Congestion Level
V/C ≤ 0.8	Low/No Congestion
0.8 < V/C < 1.0	Moderate Congestion
V/C ≥ 1.0	Severe Congestion

Safety Deficiencies

Safety deficiencies are defined based on the fatality and serious injury rates on the roadway segments. Traffic crash data are obtained from Roadsoft (developed by Michigan Tech University) and www.michigantafficcrashfacts.org (developed and maintained by the University of Michigan). For this MTP a segment was defined as safety deficient if the rate of fatalities per 100 million vehicle miles traveled (VMT) as greater than 1.00, or the rate of serious injuries per 100 million VMT was greater than 5.41, aligning with MDOT’s safety targets for the year of 2019, which GVMC has elected to support.

Reliability Deficiency

Travel Time Reliability is a measure of travel time consistency over a period of time. When travel times are unreliable, travelers are more likely to experience unexpected delays. Travel times are shown to be reliable when the 95th percentile travel time (close to the longest travel time one could experience) remains close to the average travel time.

Travel time reliability is an important performance measure because it can better measure the benefits of traffic management and operation activities than simple averages. Planning time index, which is computed as the ratio of the 95th percent travel time to the free flow travel time, represents the total time needed to plan for an on-time arrival 95% of the time. A value of 1.50 means that a 30 minute trip in free-flow traffic should be planned

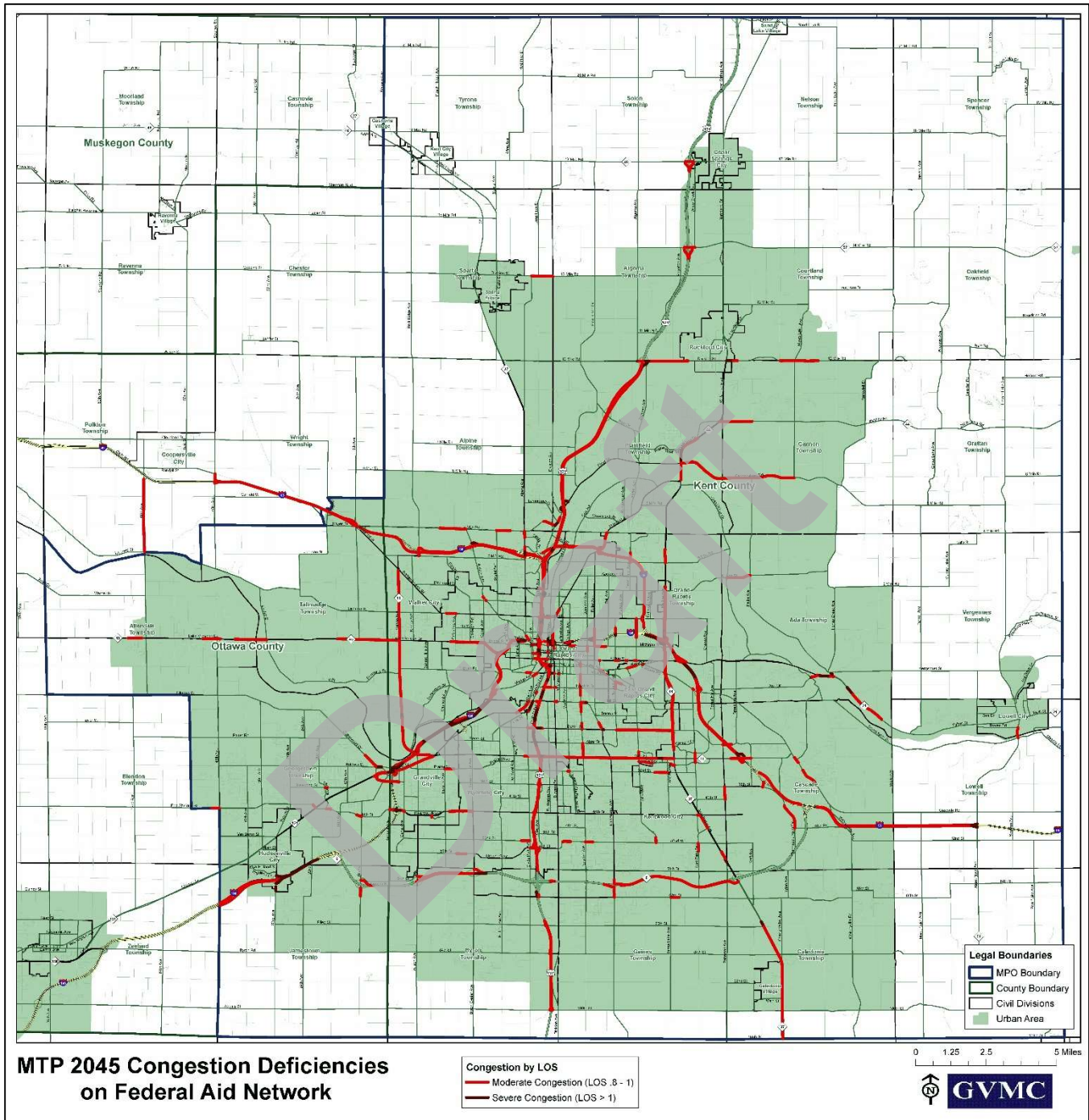
for 45 minutes. This measure is used to identify reliability deficiencies. Corridors are identified as “No Reliability Deficiency,” “Moderate Reliability Deficiency,” or “Severe Reliability Deficiency” as summarized below.

PTI	Congestion Level
PTI \leq 1.35	No Reliability Deficiency
1.35 < PTI < 1.8	Moderate Reliability Deficiency
PTI \geq 1.8	Severe Reliability Deficiency

The deficiencies as defined by the above metrics are shown in the following map and tables.

Draft

Figure 1 – 2045 Congestion Deficiencies



GVMC 2045 MTP Congestion Deficiencies List

Government Unit	Road Name	From Description	To Description	DAILY_VOC	PK_VOC	YearCong	Cong. Severity	PK PTI	Reliability Def.	Safety Def.	Legal System	Length Miles	NFC	NFC Description	NHS Designation	Lanes	PASER 2019
Sparta Twp	13 Mile Rd NE	Alpine Ave NW	Long Lake Dr	0.56	0.95	2025	Moderate	1.16	None	Yes	County Primary	0.24	4	Minor Arterial	Not On NHS	2	4
Sparta Twp	13 Mile Rd NE	Long Lake Dr NW	N Division Ave	0.52	0.82	2045	Moderate	1.16	None	Yes	County Primary	0.51	4	Minor Arterial	Not On NHS	2	4
Polkton Twp	68th Ave	Hayes St	Garfield St	0.70	0.83	2035	Moderate	N/A	N/A	No	County Primary	1.00	4	Minor Arterial	Not On NHS	2	0
Polkton Twp	68th Ave	Garfield St	68th/E I 96	0.76	0.94	2025	Moderate	N/A	N/A	No	County Primary	0.61	4	Minor Arterial	Not On NHS	2	0
Plainfield Twp	Cannonsburg Rd NE	Northland Dr NE	N M 44/West River RAMP	0.65	1.07	2015	Severe	3.69	Severe	No	County Primary	0.02	5	Other Principal Arterial	Non Connector	5	6
Plainfield Twp	Cannonsburg Rd NE	300' West of Brewer Ave	Brewer Ave NE	0.52	0.91	2035	Moderate	1.21	None	No	County Primary	0.06	5	Major Collector	Not On NHS	3	6
Plainfield Twp	Cannonsburg Rd NE	629' West of Sheda Dr	Sheda Dr NE	0.55	0.80	2045	Moderate	1.21	None	No	County Primary	0.12	5	Major Collector	Not On NHS	3	6
Plainfield Twp	Cannonsburg Rd NE	2405' West of Meadowmoor Dr	Meadowmoor Dr NE	0.58	0.81	2025	Moderate	N/A	N/A	No	County Primary	0.46	5	Major Collector	Not On NHS	2	6
Plainfield Twp	Cannonsburg Rd NE	Meadowmoor Dr NE	Chauncey Dr NE	0.58	0.81	2025	Moderate	N/A	N/A	No	County Primary	0.23	5	Major Collector	Not On NHS	2	6
Plainfield Twp	West River Dr NE	Marquette Rail	Mill Creek Ave NE	0.75	1.05	2015	Severe	2.36	Severe	Yes	County Primary	0.01	4	Minor Arterial	Not On NHS	3	3
Plainfield Twp	West River Dr NE	Leland Ave NE	Park Dr NE	0.72	1.15	2015	Severe	2.36	Severe	Yes	County Primary	0.05	4	Minor Arterial	Not On NHS	3	3
Plainfield Twp	West River Dr NE	Park Dr NE	Lamoreaux Dr NE	0.77	1.13	2015	Severe	2.36	Severe	Yes	County Primary	0.09	4	Minor Arterial	Not On NHS	3	3
Plainfield Twp	West River Dr NE	Lamoreaux Dr NE	School St NE	0.66	0.89	2035	Moderate	2.36	Severe	Yes	County Primary	0.15	4	Minor Arterial	Not On NHS	4	3
MDOT	100th St SE	S US 131	N US 131	0.79	0.87	2015	Moderate	1.16	None	No	County Primary	0.01	4	Minor Arterial	Not On NHS	2	6
MDOT	100th/N US 131 RAMP	N US 131/100th RAMP	N US 131	0.85	0.89	2015	Moderate	N/A	N/A	No	State Trunkline	0.13	2	Other Freeway	Non Connector	1	9
MDOT	14 Mile Rd NE	S US 131	N US 131	0.63	0.81	2045	Moderate	1.83	Severe	Yes	State Trunkline	0.04	4	Minor Arterial	Not On NHS	2	4
MDOT	14 Mile Rd NE	14 Mile/N US 131 RAMP & N US 131/14 Mile	White Creek Ave NE	0.62	0.80	2045	Moderate	1.52	Moderate	Yes	State Trunkline	0.09	4	Minor Arterial	Not On NHS	2	4
MDOT	14 Mile/S US 131 RAMP	S US 131/14 Mile RAMP & 14 Mile Rd NE	S US 131	0.57	0.87	2025	Moderate	1.40	Moderate	No	State Trunkline	0.41	2	Other Freeway	Non Connector	1	9
MDOT	17 Mile Rd NE	S US 131	N US 131	0.68	0.81	2045	Moderate	1.85	Severe	No	State Trunkline	0.02	4	Minor Arterial	Not On NHS	3	8
MDOT	17 Mile/S US 131 RAMP	17 Mile Rd NE & S US 131/17 Mile RAMP	S US 131	0.51	0.88	2025	Moderate	1.86	Severe	No	State Trunkline	0.36	2	Other Freeway	Non Connector	1	9
MDOT	1st/E I 196 RAMP	1st St NW	E I 196	0.81	0.99	2015	Moderate	1.66	Moderate	No	State Trunkline	0.21	1	Interstate	Non Connector	1	8
MDOT	28th St SE/M 11	Riley Ave SW	Tennysen Dr SW	0.72	0.87	2025	Moderate	1.78	Moderate	Yes	State Trunkline	0.07	3	Other Principal Arterial	Non Connector	5	4
MDOT	28th St SE/M 11	Tennysen Dr SW	Clyde Park Ave SW	0.56	0.80	2045	Moderate	1.78	Moderate	Yes	State Trunkline	0.06	3	Other Principal Arterial	Non Connector	5	4
MDOT	28th St SE/M 11	Clyde Park Ave SW	Mckee Ave SW	0.60	0.80	2045	Moderate	2.17	Severe	Yes	State Trunkline	0.06	3	Other Principal Arterial	Non Connector	5	8
MDOT	28th St SE/M 11	Mckee Ave SW	Woodward Ave SW	0.60	0.80	2045	Moderate	2.17	Severe	Yes	State Trunkline	0.06	3	Other Principal Arterial	Non Connector	5	4
MDOT	28th St SE/M 11	Woodward Ave SW	Longstreet Ave SW	0.66	0.80	2045	Moderate	2.17	Severe	Yes	State Trunkline	0.06	3	Other Principal Arterial	Non Connector	5	4
MDOT	28th St SE/M 11	Longstreet Ave SW	Highgate Ave SW	0.66	0.80	2045	Moderate	2.17	Severe	Yes	State Trunkline	0.06	3	Other Principal Arterial	Non Connector	5	4
MDOT	28th St SE/M 11	Highgate Ave SW	Charlesgate Ave SW	0.66	0.80	2045	Moderate	2.17	Severe	Yes	State Trunkline	0.03	3	Other Principal Arterial	Non Connector	5	4
MDOT	28th St SE/M 11	Charlesgate Ave SW	S US 131/28th RAMP	0.66	0.80	2045	Moderate	2.17	Severe	Yes	State Trunkline	0.04	3	Other Principal Arterial	Non Connector	5	4
MDOT	28th St SE/M 11	S US 131/28th RAMP	28th/S US 131 RAMP	0.85	0.99	2015	Moderate	2.73	Severe	Yes	State Trunkline	0.02	3	Other Principal Arterial	Non Connector	5	8
MDOT	28th St SE/M 11	28th/S US 131 RAMP	28th/S US 131 RAMP	0.71	0.87	2025	Moderate	2.73	Severe	Yes	State Trunkline	0.04	3	Other Principal Arterial	Non Connector	5	8
MDOT	28th St SE/M 11	S US 131	N US 131	0.75	0.87	2025	Moderate	2.73	Severe	Yes	State Trunkline	0.01	3	Other Principal Arterial	Non Connector	5	8
MDOT	28th St SE/M 11	28th/N US 131 RAMP	28th/N US 131 RAMP	0.75	0.84	2025	Moderate	2.88	Severe	Yes	State Trunkline	0.02	3	Other Principal Arterial	Non Connector	5	8
MDOT	28th St SE/M 11	28th/N US 131 RAMP	N US 131/28th RAMP	0.96	1.05	2015	Severe	2.88	Severe	Yes	State Trunkline	0.01	3	Other Principal Arterial	Non Connector	5	8
MDOT	28th St SE/M 11	N US 131/28th RAMP	Norfolk Southern Railway	0.89	1.07	2015	Severe	3.01	Severe	Yes	State Trunkline	0.03	3	Other Principal Arterial	Non Connector	4	8
MDOT	28th St SE/M 11	Norfolk Southern Railway	Buchanan Ave SW	0.80	0.91	2015	Moderate	3.01	Severe	Yes	State Trunkline	0.26	3	Other Principal Arterial	Non Connector	4	8
MDOT	28th St SE/M 11	Buchanan Ave SW	S Division Ave	0.71	0.81	2035	Moderate	3.01	Severe	Yes	State Trunkline	0.25	3	Other Principal Arterial	Non Connector	5	8
MDOT	28th St SE/M 11	Buchanan Ave SW	S Division Ave	0.71	0.81	2035	Moderate	3.01	Severe	Yes	State Trunkline	0.25	3	Other Principal Arterial	Non Connector	5	8
MDOT	28th St SE/M 11	Grand Elk Railroad	Jefferson Ave SE	0.77	0.87	2025	Moderate	2.05	Severe	Yes	State Trunkline	0.23	3	Other Principal Arterial	Non Connector	5	6
MDOT	28th St SE/M 11	Jefferson Ave SE	Madison Ave SE	0.77	0.84	2025	Moderate	2.05	Severe	Yes	State Trunkline	0.18	3	Other Principal Arterial	Non Connector	5	6
MDOT	28th St SE/M 11	Madison Ave SE	Union Ave SE	0.76	0.83	2035	Moderate	2.46	Severe	Yes	State Trunkline	0.16	3	Other Principal Arterial	Non Connector	5	6
MDOT	28th St SE/M 11	Union Ave SE	City/Twp Line	0.60	0.80	2045	Moderate	2.46	Severe	Yes	State Trunkline	0.14	3	Other Principal Arterial	Non Connector	5	6
MDOT	28th St SE/M 11	City/Twp Line	Eastern Ave SE	0.63	0.80	2045	Moderate	2.46	Severe	Yes	State Trunkline	0.20	3	Other Principal Arterial	Non Connector	5	6
MDOT	28th St SE/M 11	Eastern Ave SE	Brooklyn Ave SE	0.72	0.84	2035	Moderate	2.43	Severe	No	State Trunkline	0.46	3	Other Principal Arterial	Non Connector	5	6
MDOT	28th St SE/M 11	Vineland Ave SE	Kalamazoo Ave SE	0.71	0.82	2025	Moderate	2.43	Severe	No	State Trunkline	0.32	3	Other Principal Arterial	Non Connector	5	7
MDOT	28th St SE/M 11	Kalamazoo Ave SE	Chamberlain Ave SE	0.72	0.83	2025	Moderate	1.96	Severe	No	State Trunkline	0.48	3	Other Principal Arterial	Non Connector	5	7
MDOT	28th St SE/M 11	Chamberlain Ave SE	Englewood Ave SE	0.72	0.83	2025	Moderate	2.01	Severe	No	State Trunkline	0.09	3	Other Principal Arterial	Non Connector	5	7
MDOT	28th St SE/M 11	Service Dr SE	CSX Transportation	0.74	0.83	2025	Moderate	2.01	Severe	No	State Trunkline	0.13	3	Other Principal Arterial	Non Connector	5	7
MDOT	28th St SE/M 11	CSX Transportation	Birchcrest Dr SE	0.74	0.83	2025	Moderate	2.01	Severe	No	State Trunkline	0.15	3	Other Principal Arterial	Non Connector	5	7
MDOT	28th St SE/M 11	Birchcrest Dr SE	Breton Rd SE	0.74	0.83	2025	Moderate	2.01	Severe	No	State Trunkline	0.11	3	Other Principal Arterial	Non Connector	5	7
MDOT	28th St SE/M 11	Breton Rd SE	Woodlawn Ave SE	0.72	0.83	2025	Moderate	2.03	Severe	No	State Trunkline	0.49	3	Other Principal Arterial	Non Connector	5	5
MDOT	28th St SE/M 11	Woodlawn Ave SE	City/Twp Line	0.72	0.83	2025	Moderate	2.03	Severe	No	State Trunkline	0.15	3	Other Principal Arterial	Non Connector	5	5
MDOT	28th St SE/M 11	Ridgemoor Dr SE	Woodland Dr SE & Radcliff Ave SE	0.88	1.01	2015	Severe	1.96	Severe	No	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	5	5
MDOT	28th St SE/M 11	Woodland Dr SE & Radcliff Ave SE	Shaffer Ave SE & Mall Dr SE	0.73	0.80	2045	Moderate	1.96	Severe	No	State Trunkline	0.18	3	Other Principal Arterial	Non Connector	5	7
MDOT	28th St SE/M 11	Shaffer Ave SE & Mall Dr SE	Woodland Mall Access	0.71	0.82	2035	Moderate	1.96	Severe	No	State Trunkline	0.07	3	Other Principal Arterial	Non Connector	5	7
MDOT	28th St SE/M 11	Woodland Mall Access	Plaza Dr SE	0.71	0.82	2035	Moderate	1.96	Severe	No	State Trunkline	0.06	3	Other Principal Arterial	Non Connector	5	7
MDOT	28th St SE/M 11	Plaza Dr SE	Broadmoor Ave SE	0.76	0.86	2015	Moderate	1.96	Severe	No	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	8	7
MDOT	28th St SE/M 11	Northern Dr SE	Hotel Ave SE	0.77	0.84	2025	Moderate	2.08	Severe	No	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	5	9
MDOT	28th St SE/M 11	Hotel Ave SE	E I 96/E 28th RAMP	0.80	0.94	2015	Moderate	2.08	Severe	No	State Trunkline	0.13	3	Other Principal Arterial	Non Connector	6	9
MDOT	28th St SE/M 11	E I 96/E 28th RAMP	28th/E I 96 RAMP	0.68	0.80	2045	Moderate	2.17	Severe	Yes	State Trunkline	0.03	3	Other Principal Arterial	Non Connector	6	9
MDOT	28th St SE/M 11	28th/E I 96 RAMP	E I 96/W 28th RAMP	0.57	0.80	2045	Moderate	2.17	Severe	Yes	State Trunkline	0.07	3	Other Principal Arterial	Non Connector	6	9
MDOT	28th St SE/M 11	E I 96	W I 96	0.69	0.80	2045	Moderate	2.17	Severe	Yes	State Trunkline	0.02	3	Other Principal Arterial	Non Connector	6	9
MDOT	28th St SE/M 11	W I 96/E 28th RAMP	W I 96/W 28th RAMP	0.69	0.80	2045	Moderate	2.17	Severe	Yes	State Trunkline	0.08	3	Other Principal Arterial	Non Connector	6	9
MDOT	28th St SW/M 11	W I 196	E I 196	0.61	0.80	2045	Moderate	3.88	Severe	No	State Trunkline	0.02	3	Other Principal Arterial	Non Connector	5	8
MDOT	28th St SW/M 11	E I 196/28th RAMP	E I 196/28th RAMP	0.50	0.80	2045	Moderate	3.88	Severe	No	State Trunkline	0.03	3	Other Principal Arterial	Non Connector	2	8
MDOT	28th St SW/M 11	E I 196/28th RAMP	Wilson Ave	0.57	0.81	2045	Moderate	3.88	Severe	No	State Trunkline	0.05	3	Other Principal Arterial	Non Connector	5	8
MDOT	28th St SW/M 11	28th/E I 196 RAMP & Wilson Ave SW & W I 196	Church Ave SW	0.62	0.81	2035	Moderate	2.28	Severe	Yes	State Trunkline	0.07	3	Other Principal Arterial	Non Connector	5	8
MDOT	28th St SW/M 11	Church Ave SW	Carla St SW	0.62	0.81	2035	Moderate	2.28	Severe	Yes	State Trunkline	0.06	3	Other Principal Arterial	Non Connector	5	4
MDOT	28th St SW/M 11	Carla St SW	Ottawa Ave SW	0.62	0.81	2035	Moderate	2.28	Severe	Yes	State Trunkline	0.03	3	Other Principal Arterial	Non Connector	5	4
MDOT	28th St SW/M 11	Ottawa Ave SW	Faith St SW														

GVMC 2045 MTP Congestion Deficiencies List

Government Unit	Road Name	From Description	To Description	DAILY_VOC	PK_VOC	YearCong	Cong. Severity	PK PTI	Reliability Def.	Safety Def.	Legal System	Length Miles	NFC	NFC Description	NHS Designation	Lanes	PASER 2019
MDOT	28th St SW/M 11	Vermont Ave SW	Elwood Ave SW	0.56	0.80	2045	Moderate	2.28	Severe	Yes	State Trunkline	0.06	3	Other Principal Arterial	Non Connector	5	4
MDOT	28th/W I 96 RAMP	W I 96/W 28th RAMP	W I 96	0.94	1.01	2015	Severe	1.82	Severe	No	State Trunkline	0.38	1	Interstate	Non Connector	2	6
MDOT	32nd/E I 196 RAMP	32nd Ave	E I 196	0.88	1.01	2015	Severe	N/A	N/A	No	State Trunkline	0.43	1	Interstate	Non Connector	1	3
MDOT	36th/N US 131 RAMP	36th St SW & N US 131/36th RAMP	N US 131	0.85	0.85	2015	Moderate	2.32	Severe	No	State Trunkline	0.12	2	Other Freeway	Non Connector	1	3
MDOT	44th/N US 131 RAMP	E 44th/N US 131 RAMP	N US 131	0.76	0.82	2025	Moderate	2.23	Severe	No	State Trunkline	0.20	2	Other Freeway	Non Connector	1	9
MDOT	48th Ave	Bridge 8783	Bridge 8783	0.78	0.97	2025	Moderate	N/A	N/A	No	County Primary	0.01	5	Major Collector	Not On NHS	2	0
MDOT	48th/E I 96 RAMP	E I 96/48th RAMP	E I 96	0.65	0.85	2025	Moderate	N/A	N/A	No	State Trunkline	0.16	1	Interstate	Non Connector	1	0
MDOT	68th Ave	Leonard St	Hayes St	0.70	0.83	2035	Moderate	N/A	N/A	No	County Primary	0.97	4	Minor Arterial	Not On NHS	2	0
MDOT	68th/N US 131 RAMP	68th St SW & N US 131/68th RAMP	68th/E M 6 RAMP	0.86	0.96	2015	Moderate	2.56	Severe	No	State Trunkline	0.07	2	Other Freeway	Non Connector	2	8
MDOT	Alden Nash/W I 96 RAMP	Alden Nash Ave SE	W I 96	0.84	1.16	2015	Severe	1.51	Moderate	No	State Trunkline	0.21	1	Interstate	Non Connector	1	7
MDOT	Alpine Ave NW	Alpine/E I 96 RAMP	Alpine/S US 131 RAMP	0.68	0.83	2045	Moderate	2.94	Severe	No	State Trunkline	0.01	3	Other Principal Arterial	Non Connector	5	6
MDOT	Alpine Ave NW	E I 96	Alpine/E I 96 RAMP	0.68	0.83	2045	Moderate	2.94	Severe	No	State Trunkline	0.05	3	Other Principal Arterial	Non Connector	5	6
MDOT	Alpine Ave NW	Alpine/E I 96 RAMP	N I 296/Alpine RAMP	0.91	1.10	2020	Severe	2.94	Severe	No	State Trunkline	0.01	3	Other Principal Arterial	Non Connector	2	7
MDOT	Alpine Ave NW	N I 296/Alpine RAMP	W I 96	0.91	1.10	2020	Severe	2.94	Severe	No	State Trunkline	0.06	3	Other Principal Arterial	Non Connector	5	7
MDOT	Alpine Ave NW	W I 96/Alpine RAMP	W I 96/Alpine RAMP	0.91	1.10	2020	Severe	2.94	Severe	No	State Trunkline	0.01	3	Other Principal Arterial	Non Connector	5	7
MDOT	Alpine Ave NW	W I 96/Alpine RAMP	Alpine/W I 96 RAMP	0.88	0.97	2015	Moderate	2.94	Severe	No	State Trunkline	0.08	3	Other Principal Arterial	Non Connector	6	7
MDOT	Alpine Ave NW	Alpine/W I 96 RAMP	Center Dr NW	0.86	0.94	2015	Moderate	2.94	Severe	No	State Trunkline	0.09	3	Other Principal Arterial	Non Connector	6	7
MDOT	Alpine Ave NW	N Center Dr NW	Kingsbury St NW	0.66	0.80	2045	Moderate	2.94	Severe	No	State Trunkline	0.10	3	Other Principal Arterial	Non Connector	6	8
MDOT	Alpine Ave NW	Kingsbury St NW	4 Mile Rd NW	0.66	0.80	2045	Moderate	2.94	Severe	No	State Trunkline	0.13	3	Other Principal Arterial	Non Connector	6	8
MDOT	Baldwin/E I 196 RAMP	E I 196	E I 196	0.86	1.09	2015	Severe	N/A	N/A	No	State Trunkline	0.24	1	Interstate	Not On NHS	1	8
MDOT	Belding Rd NE	Wolverine Blvd NE	Wolverine Blvd NE	0.62	0.82	2015	Moderate	1.81	Severe	No	State Trunkline	0.01	4	Minor Arterial	Not On NHS	2	9
MDOT	Belding Rd NE	Wolverine Blvd NE	Courtland Dr NE	0.72	0.88	2015	Moderate	2.17	Severe	No	State Trunkline	0.10	4	Minor Arterial	Not On NHS	2	9
MDOT	Belding Rd NE	Fox Meadow Dr NE	Barkley Creek Dr NE	0.69	0.92	2015	Moderate	2.17	Severe	No	State Trunkline	0.43	4	Minor Arterial	Not On NHS	2	9
MDOT	Beltline/W I 96 RAMP	E Beltline Ave NE	W I 96	0.90	0.95	2020	Moderate	2.20	Severe	No	State Trunkline	0.27	1	Interstate	Non Connector	1	7
MDOT	Beltline/W I 96 RAMP	E Beltline Ave NE	W I 96	0.75	0.85	2035	Moderate	1.85	Severe	No	State Trunkline	0.33	1	Interstate	Non Connector	1	6
MDOT	Broadmoor Ave NE NB/M 37	Patterson Ave SE	SB Broadmoor/NB Broadmoor TURN	0.56	0.80	2045	Moderate	1.43	Moderate	Yes	State Trunkline	0.52	3	Other Principal Arterial	Non Connector	4	6
MDOT	Broadmoor Ave SE NB/M 37	Barden Dr SE	SB Broadmoor/NB Broadmoor TURN	0.62	0.83	2035	Moderate	2.16	Severe	No	State Trunkline	0.43	3	Other Principal Arterial	Non Connector	2	6
MDOT	Broadmoor Ave SE NB/M 37	SB Broadmoor/NB Broadmoor TURN	44th St SE	0.67	0.90	2025	Moderate	2.16	Severe	No	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	3	6
MDOT	Broadmoor Ave SE SB/M 37	Towncenter Ct SE	Patterson Ave SE	0.91	1.14	2015	Severe	2.40	Severe	Yes	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	2	6
MDOT	Broadmoor Ave SE/M 37	City/Twp Line	84th St SE	0.72	0.80	2045	Moderate	2.31	Severe	No	State Trunkline	0.22	4	Minor Arterial	Not On NHS	2	4
MDOT	Broadmoor Ave SE/M 37	84th St SE	Valley Point Industrial Dr SE & Valley Point Wes	0.77	0.87	2015	Moderate	2.58	Severe	No	State Trunkline	0.32	4	Minor Arterial	Not On NHS	4	3
MDOT	Broadmoor Ave SE/M 37	Valley Point Industrial Dr SE & Valley Point W	76th St SE	0.77	0.87	2015	Moderate	2.58	Severe	No	State Trunkline	0.80	4	Minor Arterial	Not On NHS	2	3
MDOT	Broadmoor Ave SE/M 37	76th St SE	1062' North	0.94	1.11	2015	Severe	2.31	Severe	No	State Trunkline	0.20	4	Minor Arterial	Not On NHS	3	5
MDOT	Burton St SW	Century Ave SW	S US 131/E Burton RAMP	0.47	0.80	2045	Moderate	2.80	Severe	Yes	City Major	0.04	3	Other Principal Arterial	Non Connector	4	8
MDOT	Burton St SW	S US 131/E Burton RAMP	S US 131	0.55	0.80	2045	Moderate	2.80	Severe	Yes	City Major	0.03	3	Other Principal Arterial	Non Connector	4	8
MDOT	Burton St SW	Grand Elk Railroad	Grand Elk Railroad	0.42	0.80	2045	Moderate	2.06	Severe	Yes	City Major	0.02	3	Other Principal Arterial	Non Connector	4	8
MDOT	Burton St SW	Alice Ave SW	Saint Charles Ave SW	0.83	1.05	2015	Severe	2.06	Severe	Yes	City Major	0.03	3	Other Principal Arterial	Non Connector	3	7
MDOT	Burton St SW	Saint Charles Ave SW	Towner Ave SW	0.83	1.05	2015	Severe	2.06	Severe	Yes	City Major	0.05	3	Other Principal Arterial	Non Connector	3	7
MDOT	Burton/N US 131 RAMP	Burton St SW & N US 131/Burton RAMP	N US 131	0.77	0.84	2025	Moderate	2.74	Severe	No	State Trunkline	0.16	2	Other Freeway	Non Connector	1	5
MDOT	Cascade/W I 96 RAMP	Cascade/RAMP Cutoff	W I 96	0.90	0.99	2015	Moderate	5.69	Severe	No	State Trunkline	0.33	1	Interstate	Non Connector	1	9
MDOT	Cherry Valley Ave SE/M 37	N M 37	Kinsey Ave SE	0.67	0.85	2015	Moderate	1.14	None	Yes	State Trunkline	0.86	4	Minor Arterial	Not On NHS	2	3
MDOT	Cherry Valley Ave SE/M 37	Kinsey Ave SE	100th St SE	0.56	0.80	2045	Moderate	1.34	None	Yes	State Trunkline	0.15	4	Minor Arterial	Not On NHS	3	4
MDOT	Cherry Valley Ave SE/M 37	100th St SE	E Main St SE	0.63	0.80	2045	Moderate	1.83	Severe	No	State Trunkline	0.44	4	Minor Arterial	Not On NHS	3	4
MDOT	Cherry Valley Ave SE/M 37	E Main St SE	Emmons St SE	0.70	0.80	2045	Moderate	2.04	Severe	Yes	State Trunkline	0.06	4	Minor Arterial	Not On NHS	3	4
MDOT	Cherry Valley Ave SE/M 37	Emmons St SE	94th St SE	0.70	0.80	2045	Moderate	2.04	Severe	Yes	State Trunkline	0.25	4	Minor Arterial	Not On NHS	3	4
MDOT	Cherry Valley Ave SE/M 37	Higley St	Kaechele St	0.70	0.80	2045	Moderate	2.44	Severe	Yes	State Trunkline	0.11	4	Minor Arterial	Not On NHS	4	4
MDOT	Cherry Valley Ave SE/M 37	Kaechele St	92nd St & 92nd St SE	0.70	0.80	2045	Moderate	2.44	Severe	Yes	State Trunkline	0.07	4	Minor Arterial	Not On NHS	4	3
MDOT	Cherry Valley Ave SE/M 37	92nd St & 92nd St SE	Glengarry Dr SE	0.84	0.89	2015	Moderate	2.44	Severe	Yes	State Trunkline	0.17	4	Minor Arterial	Not On NHS	3	3
MDOT	Cherry Valley Ave SE/M 37	Glengarry Dr SE	N Rodgers Ct SE	0.84	0.89	2015	Moderate	3.83	Severe	No	State Trunkline	0.14	4	Minor Arterial	Not On NHS	3	3
MDOT	Cherry Valley Ave SE/M 37	N Rodgers Ct SE	Cherry Meadow Dr SE	0.87	0.93	2015	Moderate	3.83	Severe	No	State Trunkline	0.24	4	Minor Arterial	Not On NHS	2	3
MDOT	Chicago Dr SW	Chicago Dr	W I 96	0.89	1.25	2015	Severe	1.86	Severe	No	City Major	0.06	3	Other Principal Arterial	Non Connector	5	3
MDOT	Chicago Dr SW	Chicago/E I 196 RAMP	RAMP/Chicago Cutoff	0.67	0.97	2015	Moderate	1.86	Severe	No	City Major	0.08	3	Other Principal Arterial	Non Connector	4	4
MDOT	Chicago Dr SW	RAMP/Chicago Cutoff	Fairlanes Ave SW	0.67	0.96	2015	Moderate	1.86	Severe	No	City Major	0.11	3	Other Principal Arterial	Non Connector	5	3
MDOT	Chicago Dr SW	Fairlanes Ave SW	Chicago Dr/W I 196 Ramp	0.66	0.97	2015	Moderate	1.86	Severe	No	City Major	0.01	3	Other Principal Arterial	Non Connector	2	4
MDOT	Chicago Dr SW	Chicago Dr/W I 196 Ramp	Canal Ave SW	0.63	0.92	2025	Moderate	1.86	Severe	No	City Major	0.18	3	Other Principal Arterial	Non Connector	5	3
MDOT	Chicago Dr SW	Chicago Dr/W I 196 Ramp	Canal Ave SW	0.66	0.97	2015	Moderate	1.86	Severe	No	City Major	0.18	3	Other Principal Arterial	Non Connector	5	3
MDOT	Chicago Dr SW	Canal Ave SW	Broadway Ave SW & Prairie St SW	0.65	0.99	2015	Moderate	1.86	Severe	No	City Major	0.03	3	Other Principal Arterial	Non Connector	3	4
MDOT	Chicago Dr SW	Broadway Ave SW & Prairie St SW	Pine Ave SW	0.55	0.85	2025	Moderate	1.86	Severe	No	City Major	0.07	3	Other Principal Arterial	Non Connector	3	4
MDOT	Chicago Dr SW	Pine Ave SW	Chestnut Ave SW	0.55	0.85	2025	Moderate	1.86	Severe	No	City Major	0.07	3	Other Principal Arterial	Non Connector	3	4
MDOT	Chicago Dr SW	Chestnut Ave SW	Division Ave SW	0.55	0.87	2025	Moderate	1.86	Severe	No	City Major	0.07	3	Other Principal Arterial	Non Connector	3	4
MDOT	Chicago Dr SW	Division Ave SW	Fayette Ave SW	0.56	0.86	2035	Moderate	1.86	Severe	No	City Major	0.07	3	Other Principal Arterial	Non Connector	3	7
MDOT	Chicago Dr SW	Fayette Ave SW	Washington Ave SW	0.55	0.82	2045	Moderate	1.86	Severe	No	City Major	0.07	3	Other Principal Arterial	Non Connector	3	7
MDOT	Chicago Dr SW	Washington Ave SW	Franklin Ave SW	0.57	0.82	2045	Moderate	1.86	Severe	No	City Major	0.06	3	Other Principal Arterial	Non Connector	3	7
MDOT	Chicago Dr SW	Franklin Ave SW	Wilson Ave SW	0.57	0.80	2045	Moderate	1.86	Severe	No	City Major	0.07	3	Other Principal Arterial	Non Connector	3	7
MDOT	Chicago Dr SW	Wilson Ave SW	30th St SW	0.67	0.94	2025	Moderate	1.28	None	No	City Major	0.04	3	Other Principal Arterial	Non Connector	4	3
MDOT	Chicago Dr SW	30th St SW	Church Ave SW	0.66	0.87	2025	Moderate	1.28	None	No	City Major	0.05	3	Other Principal Arterial	Non Connector	2	3
MDOT	Chicago Dr SW	Church Ave SW	Ottawa Ave SW & Crystal St SW	0.66	0.87	2025	Moderate	1.28	None	No	City Major	0.10	3	Other Principal Arterial	Non Connector	4	3
MDOT	Chicago Dr SW	Ottawa Ave SW & Crystal St SW	Barrett Ave SW	0.62	0.80	2045	Moderate	1.28	None	No	City Major	0.09	3	Other Principal Arterial	Non Connector	4	2
MDOT	Chicago Dr SW	Barrett Ave SW	Vermont Ave SW	0.67	0.84	2025	Moderate	1.28	None	No	City Major	0.06	3	Other Principal Arterial	Non Connector	4	2
MDOT	Chicago Dr SW	Vermont Ave SW	Earle Ave SW	0.67	0.90	2025	Moderate	1.28	None	No	City Major	0.18	3	Other Principal Arterial	Non Connector	4	3
MDOT	Chicago Dr SW	Vermont Ave SW	Earle Ave SW	0.67	0.84	2025	Moderate	1.28	None	No	City Major	0.18	3	Other Principal Arterial	Non Connector	4	3
MDOT	Chicago Dr SW	Earle Ave SW	Chicago/28th Cutoff	0.68	0.94	2025	Moderate	1.28	None	No	City Major	0.08	3	Other Principal Arterial	Non Connector	4	3

GVMC 2045 MTP Congestion Deficiencies List

Government Unit	Road Name	From Description	To Description	DAILY_VOC	PK_VOC	YearCong	Cong. Severity	PK PTI	Reliability Def.	Safety Def.	Legal System	Length Miles	NFC	NFC Description	NHS Designation	Lanes	PASER 2019
MDOT	Chicago Dr SW	City/Twp Line	Cordelia St SW	0.85	1.08	2015	Severe	1.62	Moderate	No	State Trunkline	0.06	3	Other Principal Arterial	Non Connector	3	2
MDOT	Chicago Dr SW	Cordelia St SW	Vanraalte Dr SW	0.79	0.95	2015	Moderate	1.62	Moderate	No	State Trunkline	0.04	3	Other Principal Arterial	Non Connector	2	3
MDOT	Chicago Dr SW	Vanraalte Dr SW	High St SW	0.82	1.20	2015	Severe	1.62	Moderate	No	State Trunkline	0.01	3	Other Principal Arterial	Non Connector	2	3
MDOT	Chicago Dr SW	High St SW	Coate Ct SW	0.80	1.05	2015	Severe	1.62	Moderate	No	State Trunkline	0.04	3	Other Principal Arterial	Non Connector	2	3
MDOT	Chicago Dr SW	Naylor St SW	Tulip St SW	0.80	1.05	2015	Severe	1.62	Moderate	No	State Trunkline	0.03	3	Other Principal Arterial	Non Connector	2	3
MDOT	Chicago Dr SW	Stolpe St SW	Olympia St SW	0.80	1.05	2015	Severe	1.62	Moderate	No	State Trunkline	0.04	3	Other Principal Arterial	Non Connector	2	3
MDOT	Chicago Dr SW	Olympia St SW	Liberty St SW	0.80	1.05	2015	Severe	1.62	Moderate	No	State Trunkline	0.04	3	Other Principal Arterial	Non Connector	2	3
MDOT	Chicago Dr SW	Liberty St SW	Liberty St SW	0.84	1.07	2015	Severe	1.62	Moderate	No	State Trunkline	0.01	3	Other Principal Arterial	Non Connector	2	3
MDOT	Chicago Dr SW	Ritzema Ct SW	Shamrock St SW	0.84	1.07	2015	Severe	1.62	Moderate	No	State Trunkline	0.03	3	Other Principal Arterial	Non Connector	2	3
MDOT	Chicago Dr SW	Shamrock St SW	Hall St SW	0.84	1.07	2015	Severe	1.62	Moderate	No	State Trunkline	0.07	3	Other Principal Arterial	Non Connector	2	3
MDOT	Chicago Dr SW	Gilners Ct SW	B St SW	0.54	0.81	2045	Moderate	1.52	Moderate	Yes	State Trunkline	0.03	4	Minor Arterial	Not On NHS	2	3
MDOT	Chicago Dr SW	EB Chicago/WB Chicago TURN	Cottonwood Dr	0.58	0.85	2035	Moderate	1.84	Severe	No	State Trunkline	0.11	3	Other Principal Arterial	Non Connector	2	6
MDOT	Chicago Dr SW	Cottonwood Dr	EB Chicago/WB Chicago TURN	0.56	0.84	2035	Moderate	1.84	Severe	No	State Trunkline	0.10	3	Other Principal Arterial	Non Connector	2	6
MDOT	Chicago Dr SW	Cottonwood Dr	Chicago Drive Turnaround	0.65	0.88	2035	Moderate	1.77	Moderate	Yes	State Trunkline	0.09	3	Other Principal Arterial	Non Connector	2	6
MDOT	Chicago Dr SW	EB Chicago/WB Chicago TURN	1003' East	0.54	0.80	2045	Moderate	1.84	Severe	No	State Trunkline	0.19	3	Other Principal Arterial	Non Connector	2	6
MDOT	Chicago Dr SW	Chicago Drive Turnaround	1003' East	0.42	0.80	2045	Moderate	1.77	Moderate	Yes	State Trunkline	0.20	3	Other Principal Arterial	Non Connector	4	6
MDOT	Chicago Dr SW	135' West of Main	Main	0.42	0.80	2045	Moderate	1.78	Moderate	Yes	State Trunkline	0.03	3	Other Principal Arterial	Non Connector	2	6
MDOT	Chicago Dr SW	Main	Chicago/W I 196	0.62	0.88	2025	Moderate	1.86	Severe	Yes	State Trunkline	0.11	3	Other Principal Arterial	Non Connector	8	6
MDOT	Chicago Dr SW	Chicago/W I 196	W I 196/Chicago	0.88	1.25	2015	Severe	1.86	Severe	No	State Trunkline	0.01	3	Other Principal Arterial	Non Connector	5	6
MDOT	Chicago/E I 196 RAMP	Chicago Dr SW	RAMP/Chicago Cutoff	0.63	0.80	2045	Moderate	1.26	None	No	State Trunkline	0.10	1	Interstate	Non Connector	1	5
MDOT	Chicago/E I 196 RAMP	RAMP/Chicago Cutoff	E I 196	0.72	0.91	2015	Moderate	1.53	Moderate	No	State Trunkline	0.23	1	Interstate	Non Connector	1	5
MDOT	College/W I 196 RAMP	Hastings St NE & W I 196/College RAMP & Col	W I 196	0.86	0.93	2020	Moderate	1.90	Severe	No	State Trunkline	0.14	1	Interstate	Non Connector	1	9
MDOT	E Beline Ave NE SB/M 37	E Fulton St & E Beltline Ave SE	Michigan St	0.72	0.93	2015	Moderate	2.23	Severe	No	State Trunkline	0.43	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beline Ave NE SB/M 44	W I 96/Beltline RAMP	399' North	0.83	1.00	2015	Severe	2.01	Severe	No	State Trunkline	0.08	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beline Ave NE SB/M 44	386' South of Bradford	Bradford St NE	0.83	1.00	2015	Severe	2.01	Severe	No	State Trunkline	0.07	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beline Ave NE SB/M 44	Bradford St NE	Cornerstone College Dr NE	0.75	0.88	2015	Moderate	2.01	Severe	No	State Trunkline	0.25	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beline Ave NE SB/M 44	Cornerstone College Dr NE	Leonard St NE	0.83	0.96	2015	Moderate	2.01	Severe	No	State Trunkline	0.25	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beline Ave NE SB/M 44	Leonard St NE	Waters Cir NE	0.78	0.95	2015	Moderate	2.67	Severe	No	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beline Ave NE SB/M 44	Waters Cir NE	Waters Cir NE	0.73	0.93	2025	Moderate	2.67	Severe	No	State Trunkline	0.08	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beline Ave NE SB/M 44	Waters Cir NE	City/Twp Line	0.73	0.94	2025	Moderate	2.67	Severe	No	State Trunkline	0.05	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beline Ave NE SB/M 44	Windcrest Dr NE	Ledgestone Dr	0.73	0.94	2025	Moderate	2.67	Severe	No	State Trunkline	0.08	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beline Ave NE SB/M 44	Eagle Crest Dr NE	Kent Skills Center Dr NE &	0.75	0.96	2015	Moderate	3.43	Severe	No	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beline Ave NE SB/M 44	Eagle Crest Dr NE	Kent Skills Center Dr NE &	0.73	0.94	2025	Moderate	3.43	Severe	No	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beline Ave NE SB/M 44	Kent Skills Center Dr NE &	Kent Skills Center Dr NE	0.75	0.96	2015	Moderate	3.43	Severe	No	State Trunkline	0.08	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beline Ave NE SB/M 44	Kent Skills Center Dr NE	Grand Ridge Dr NE	0.67	0.86	2025	Moderate	3.43	Severe	No	State Trunkline	0.05	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beline Ave NE SB/M 44	Grand Ridge Dr NE	NB E Beltline/SB E Beltline TURN	0.67	0.86	2025	Moderate	3.43	Severe	No	State Trunkline	0.22	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beline Ave NE SB/M 44	NB E Beltline/SB E Beltline TURN	Knapp St NE	0.70	0.91	2015	Moderate	3.43	Severe	No	State Trunkline	0.16	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beline Ave NE SB/M 44	Knapp St NE	Main/Beltline cutoff NE	0.71	0.92	2015	Moderate	3.16	Severe	No	State Trunkline	0.14	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beline Ave NE SB/M 44	Main/Beltline cutoff NE	Main St NE	0.71	0.92	2015	Moderate	3.16	Severe	No	State Trunkline	0.02	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beline Ave SE SB/M 37	E Beltline Ave SE &	University Dr SE	0.71	0.84	2025	Moderate	2.63	Severe	No	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beline Ave SE SB/M 37	University Dr SE	Claystone St SE	0.73	0.85	2025	Moderate	2.63	Severe	No	State Trunkline	0.14	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beline Ave SE SB/M 37	University Dr SE	Claystone St SE	0.71	0.84	2025	Moderate	2.63	Severe	No	State Trunkline	0.14	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beline Ave SE SB/M 37	Claystone St SE	Burton St SE	0.83	0.99	2015	Moderate	2.63	Severe	No	State Trunkline	0.26	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beline Ave SE SB/M 37	Burton St SE	Calvin College Dr SE	0.88	0.99	2015	Moderate	2.64	Severe	No	State Trunkline	0.11	3	Other Principal Arterial	Non Connector	3	7
MDOT	E Beline Ave SE SB/M 37	Calvin College Dr Entrance	Calvin College Dr SE	0.78	0.91	2015	Moderate	2.64	Severe	No	State Trunkline	0.03	3	Other Principal Arterial	Non Connector	3	6
MDOT	E Beline Ave SE SB/M 37	Calvin College Dr SE	Calvin College Entrance	0.78	0.91	2015	Moderate	2.64	Severe	No	State Trunkline	0.17	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beline Ave SE SB/M 37	Calvin College Entrance	Lake Dr SE	0.78	0.91	2015	Moderate	2.64	Severe	No	State Trunkline	0.44	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beline Ave SE SB/M 37	Lake Dr SE	City/Twp Line	0.69	0.83	2025	Moderate	2.00	Severe	No	State Trunkline	0.23	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beline Ave SE SB/M 37	City/Twp Line	Reeds Lake Blvd SE	0.65	0.80	2045	Moderate	2.00	Severe	No	State Trunkline	0.17	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beline Ave SE SB/M 37	Reeds Lake Blvd SE	Cascade Rd SE	0.70	0.87	2025	Moderate	1.25	None	No	State Trunkline	0.94	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beline Ave SE SB/M 37	Cascade Rd SE	E Fulton St & E Beltline Ave SE	0.57	0.80	2045	Moderate	1.97	Severe	No	State Trunkline	0.43	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beline Ave SE/M 37	E Mall Dr SE	Lake Eastbrook Blvd SE	0.74	0.80	2045	Moderate	3.28	Severe	Yes	State Trunkline	0.18	3	Other Principal Arterial	Non Connector	5	8
MDOT	E Beline Ave SE/M 37	Lake Eastbrook Blvd SE	E Beltline Ave SE &	0.71	0.84	2025	Moderate	2.65	Severe	Yes	State Trunkline	0.04	3	Other Principal Arterial	Non Connector	5	8
MDOT	E Beltline Ave NE	3 Mile Rd NE	East Beltline Ln NE	0.59	0.84	2035	Moderate	1.41	Moderate	No	State Trunkline	0.16	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beltline Ave NE	East Beltline Ln NE	4 Mile Rd NE	0.57	0.83	2045	Moderate	1.15	None	No	State Trunkline	0.87	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beltline Ave NE NB/M 37	E Beltline Ave SE & E Fulton St	Michigan St	0.79	0.90	2015	Moderate	5.40	Severe	No	State Trunkline	0.44	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beltline Ave NE NB/M 44	786' South of Bradford	Bradford St NE	0.75	0.86	2035	Moderate	5.40	Severe	No	State Trunkline	0.15	3	Other Principal Arterial	Non Connector	2	8
MDOT	E Beltline Ave NE NB/M 44	Bradford St NE	Leonard St NE	0.68	0.80	2045	Moderate	2.91	Severe	No	State Trunkline	0.50	3	Other Principal Arterial	Non Connector	2	8
MDOT	E Beltline Ave NE NB/M 44	Leonard St NE	Waters Cir NE	0.76	0.91	2025	Moderate	1.36	Moderate	No	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	2	8
MDOT	E Beltline Ave NE NB/M 44	Waters Cir NE	Waters Cir NE	0.71	0.84	2035	Moderate	1.36	Moderate	No	State Trunkline	0.08	3	Other Principal Arterial	Non Connector	2	8
MDOT	E Beltline Ave NE NB/M 44	City/Twp Line	Eagle Crest Dr NE	0.71	0.84	2035	Moderate	1.36	Moderate	No	State Trunkline	0.11	3	Other Principal Arterial	Non Connector	2	8
MDOT	E Beltline Ave NE NB/M 44	Eagle Crest Dr NE	City/Twp Line	0.74	0.89	2035	Moderate	1.36	Moderate	No	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	2	8
MDOT	E Beltline Ave NE NB/M 44	City/Twp Line	Eagle Run Dr NE	0.74	0.89	2035	Moderate	1.36	Moderate	No	State Trunkline	0.01	3	Other Principal Arterial	Non Connector	2	8
MDOT	E Beltline Ave NE NB/M 44	Eagle Run Dr NE	Grand Ridge Dr NE	0.74	0.89	2035	Moderate	1.91	Severe	No	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	2	8
MDOT	E Beltline Ave NE NB/M 44	Grand Ridge Dr NE	NB E Beltline/SB E Beltline TURN	0.62	0.80	2045	Moderate	1.91	Severe	No	State Trunkline	0.21	3	Other Principal Arterial	Non Connector	2	8
MDOT	E Beltline Ave NE NB/M 44	NB E Beltline/SB E Beltline TURN	Knapp St NE	0.66	0.81	2045	Moderate	1.91	Severe	No	State Trunkline	0.17	3	Other Principal Arterial	Non Connector	2	8
MDOT	E Beltline Ave NE/M 37	E Beltline Ave NE &	Michigan St NE	0.79	0.93	2015	Moderate	3.76	Severe	Yes	State Trunkline	0.01	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beltline Ave NE/M 37	Grand Rapids Eastern Railroad	E I 96/Beltline RAMP	0.74	0.99	2015	Moderate	3.76	Severe	Yes	State Trunkline	0.11	3	Other Principal Arterial	Non Connector	5	5
MDOT	E Beltline Ave NE/M 37	E I 96/Beltline RAMP	Deposit Dr NE	0.95	1.12	2015	Severe	3.76	Severe	Yes	State Trunkline	0.01	3	Other Principal Arterial	Non Connector	2	5
MDOT	E Beltline Ave NE/M 37	Deposit Dr NE	Beltline/E I 96 RAMP	0.95	1.12	2015	Severe	3.76	Severe	Yes	State Trunkline	0.04	3	Other Principal Arterial	Non Connector	5	5
MDOT	E Beltline Ave NE/M 44	E I 96	W I 96	0.95	1.12	2015	Severe	3.76	Severe	Yes	State Trunkline	0.02	3	Other Principal Arterial	Non Connector	5	5
MDOT	E Beltline Ave NE/M 44	Beltline/W I 96 RAMP	Beltline/W I 96 RAMP	0.68	0.82	2045	Moderate	3.76	Severe	Yes	State Trunkline	0.09	3	Other Principal Arterial	Non Connector	5	8

GVMC 2045 MTP Congestion Deficiencies List

Government Unit	Road Name	From Description	To Description	DAILY_VOC	PK_VOC	YearCong	Cong. Severity	PK PTI	Reliability Def.	Safety Def.	Legal System	Length Miles	NFC	NFC Description	NHS Designation	Lanes	PASER 2019
MDOT	E Beltline Ave NE/M 44	Beltline/W I 96 RAMP	Beltline/W I 96 RAMP	0.68	0.82	2045	Moderate	3.76	Severe	Yes	State Trunkline	0.09	3	Other Principal Arterial	Non Connector	5	8
MDOT	E Beltline Ave NE/M 44	Beltline/W I 96 RAMP	W I 96/Beltline RAMP	0.85	1.03	2015	Severe	3.76	Severe	Yes	State Trunkline	0.03	3	Other Principal Arterial	Non Connector	5	8
MDOT	E Beltline Ave NE/M 44	W I 96/Beltline RAMP	200' North	0.83	1.00	2015	Severe	3.76	Severe	Yes	State Trunkline	0.01	3	Other Principal Arterial	Non Connector	2	8
MDOT	E Beltline Ave SE NB/M 37	E Beltline Ave SE &	Springbrook Pkwy SE	0.72	0.83	2035	Moderate	2.66	Severe	Yes	State Trunkline	0.18	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beltline Ave SE NB/M 37	E Beltline Ave SE &	Springbrook Pkwy SE	0.70	0.80	2045	Moderate	2.66	Severe	Yes	State Trunkline	0.18	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beltline Ave SE NB/M 37	E Beltline Ave SE &	Springbrook Pkwy SE	0.70	0.80	2045	Moderate	2.66	Severe	Yes	State Trunkline	0.18	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beltline Ave SE NB/M 37	Springbrook Pkwy SE	Burton Ridge Rd SE	0.71	0.80	2045	Moderate	2.66	Severe	Yes	State Trunkline	0.14	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beltline Ave SE NB/M 37	Springbrook Pkwy SE	Burton Ridge Rd SE	0.78	0.84	2015	Moderate	2.66	Severe	Yes	State Trunkline	0.08	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beltline Ave SE NB/M 37	Springbrook Pkwy SE	Burton Ridge Rd SE	0.79	0.87	2015	Moderate	2.66	Severe	Yes	State Trunkline	0.08	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beltline Ave SE NB/M 37	Burton Ridge Rd SE	Burton St SE	0.90	0.97	2015	Moderate	2.66	Severe	Yes	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	3	6
MDOT	E Beltline Ave SE NB/M 37	Burton St SE	Calvin College Entrance	0.79	0.86	2015	Moderate	1.56	Moderate	Yes	State Trunkline	0.32	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beltline Ave SE NB/M 37	Burton St SE	Calvin College Entrance	0.88	0.97	2015	Moderate	1.56	Moderate	Yes	State Trunkline	0.32	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beltline Ave SE NB/M 37	Calvin College Dr SE	Lake Dr SE	0.79	0.86	2015	Moderate	1.56	Moderate	Yes	State Trunkline	0.35	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beltline Ave SE NB/M 37	Lake Dr SE	City/Twp Line	0.68	0.80	2045	Moderate	1.31	None	No	State Trunkline	0.23	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beltline Ave SE NB/M 37	City/Twp Line	Windshire Dr SE	0.64	0.80	2045	Moderate	1.31	None	No	State Trunkline	0.15	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beltline Ave SE NB/M 37	Windshire Dr SE	Reeds Crossing Dr SE	0.70	0.80	2045	Moderate	1.31	None	No	State Trunkline	0.21	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beltline Ave SE NB/M 37	Reeds Crossing Dr SE	Cascade Rd SE	0.66	0.80	2045	Moderate	2.76	Severe	No	State Trunkline	0.74	3	Other Principal Arterial	Non Connector	2	7
MDOT	E Beltline Ave SE NB/M 37	Cascade Rd SE	Midland Dr SE	0.68	0.80	2045	Moderate	4.19	Severe	No	State Trunkline	0.21	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Beltline Ave SE NB/M 37	Midland Dr SE	E Fulton St & E Beltline Ave NE	0.81	0.94	2015	Moderate	4.19	Severe	No	State Trunkline	0.22	3	Other Principal Arterial	Non Connector	2	6
MDOT	E Fulton St SE	610' West of Pettis Ave	Pettis Ave	0.49	0.89	2025	Moderate	1.46	Moderate	Yes	State Trunkline	0.12	4	Minor Arterial	Not On NHS	2	6
MDOT	E Fulton St SE	Morningside Dr SE	City/Twp Line	0.62	0.88	2025	Moderate	2.33	Severe	Yes	State Trunkline	0.03	3	Other Principal Arterial	Non Connector	2	3
MDOT	E Fulton St SE	Ada Dr SE	Ada BAS	0.55	1.00	2015	Severe	1.46	Moderate	No	State Trunkline	0.18	4	Minor Arterial	Not On NHS	5	7
MDOT	E Fulton St SE	Ada BAS	1548' East	0.55	1.00	2015	Severe	1.46	Moderate	No	State Trunkline	0.29	4	Minor Arterial	Not On NHS	4	8
MDOT	E Fulton St SE	1629' West of Bennett St	Bennett St SE	0.66	1.02	2015	Severe	1.08	None	No	State Trunkline	0.31	4	Minor Arterial	Not On NHS	2	4
MDOT	E Fulton St SE	Bennett St SE	Sargent Ave SE	0.57	0.84	2025	Moderate	1.08	None	No	State Trunkline	1.14	4	Minor Arterial	Not On NHS	2	4
MDOT	E Fulton St SE	Sargent Ave SE	Hawthorne Hills Dr SE	0.59	0.86	2025	Moderate	1.08	None	No	State Trunkline	0.14	4	Minor Arterial	Not On NHS	2	4
MDOT	E I 196	Baldwin/E I 196 RAMP	Baldwin/E I 196 RAMP	0.81	0.91	2015	Moderate	3.96	Severe	No	State Trunkline	0.24	1	Interstate	Non Connector	3	9
MDOT	E I 196	I 196 Crossover	E I 196/28th RAMP	0.68	0.80	2045	Moderate	2.85	Severe	No	State Trunkline	0.24	1	Interstate	Non Connector	3	7
MDOT	E I 196	E I 196/28th RAMP	Wilson Ave SW	0.89	1.02	2015	Severe	2.85	Severe	No	State Trunkline	0.17	1	Interstate	Non Connector	2	8
MDOT	E I 196	E I 196/28th RAMP	W I 196/28th RAMP	0.81	0.92	2015	Moderate	2.12	Severe	No	State Trunkline	0.19	1	Interstate	Non Connector	2	7
MDOT	E I 196	I 196 Crossover	E I 196/Chicago	0.95	1.06	2015	Severe	1.56	Moderate	No	State Trunkline	1.10	1	Interstate	Non Connector	2	7
MDOT	E I 196	Chicago/W I 196	I 196 Crossover	0.94	1.06	2015	Severe	1.15	None	No	State Trunkline	1.04	1	Interstate	Non Connector	2	7
MDOT	E I 196	E I 196/Market RAMP	Market/E I 196 RAMP	0.79	0.88	2015	Moderate	1.20	None	No	State Trunkline	0.21	1	Interstate	Non Connector	2	7
MDOT	E I 196	I 196 Crossover	Butterworth St SW	0.82	0.90	2015	Moderate	2.58	Severe	No	State Trunkline	0.38	1	Interstate	Non Connector	2	6
MDOT	E I 196	E I 196/Lake Michigan RAMP	Lake Michigan/E I 196 RAMP	0.68	0.80	2045	Moderate	3.05	Severe	No	State Trunkline	0.18	1	Interstate	Non Connector	2	6
MDOT	E I 196	Fulton/W I 196 RAMP	Bridge St NW	0.87	0.97	2015	Moderate	2.62	Severe	No	State Trunkline	0.39	1	Interstate	Non Connector	2	5
MDOT	E I 196	48th Ave	I 196 Crossover	0.83	0.95	2015	Moderate	1.04	None	No	State Trunkline	1.48	1	Interstate	Non Connector	2	5
MDOT	E I 196	Lane Ave NW	1st/E I 196 RAMP	0.75	0.85	2015	Moderate	2.81	Severe	No	State Trunkline	0.22	1	Interstate	Non Connector	2	6
MDOT	E I 196	N US 131	S US 131	0.67	0.82	2035	Moderate	2.61	Severe	No	State Trunkline	0.05	1	Interstate	Non Connector	2	6
MDOT	E I 196	Grand River & N US 131/E I 196 RAMP	S US 131/E I 196 RAMP	0.60	0.80	2045	Moderate	2.61	Severe	No	State Trunkline	0.01	1	Interstate	Non Connector	2	8
MDOT	E I 196	S US 131/E I 196 RAMP	Monroe Ave NW	0.77	0.89	2020	Moderate	2.36	Severe	No	State Trunkline	0.16	1	Interstate	Non Connector	2	8
MDOT	E I 196	E I 196/32nd RAMP	32nd Ave	0.73	0.82	2045	Moderate	1.86	Severe	No	State Trunkline	0.39	1	Interstate	Non Connector	2	5
MDOT	E I 196	I 196 Crossover	City/Twp Line	0.95	1.04	2015	Severe	1.11	None	No	State Trunkline	0.29	1	Interstate	Non Connector	2	5
MDOT	E I 196/28th RAMP	E I 196	Wilson Ave SW	0.65	0.82	2045	Moderate	8.58	Severe	No	State Trunkline	0.19	1	Interstate	Non Connector	1	6
MDOT	E I 196/College RAMP	E I 196	College Ave NE & College/E I 196 RAMP	1.00	1.09	2015	Severe	3.11	Severe	No	State Trunkline	0.17	1	Interstate	Non Connector	2	8
MDOT	E I 196/Fuller RAMP	E I 196	Fuller Ave NE & Fuller/E I 196 RAMP	1.14	1.21	2015	Severe	1.92	Severe	No	State Trunkline	0.17	1	Interstate	Non Connector	4	9
MDOT	E I 196/Market RAMP	E I 196/Market RAMP & E I 196	E I 196/Market RAMP & Market Ave SW	0.72	0.87	2025	Moderate	1.55	Moderate	No	State Trunkline	0.34	1	Interstate	Non Connector	1	8
MDOT	E I 196/Ottawa RAMP	E I 196	Ottawa Ave NW & W I 196/Ottawa RAMP	1.04	1.18	2015	Severe	2.12	Severe	No	State Trunkline	0.13	1	Interstate	Non Connector	1	8
MDOT	E I 96	Walker Rest Area RAMP	Walker Rest Area RAMP	0.59	0.82	2045	Moderate	1.13	None	No	State Trunkline	0.30	1	Interstate	Non Connector	2	9
MDOT	E I 96	Walker Rest Area RAMP	E I 96/Fruit Ridge RAMP	0.59	0.82	2045	Moderate	1.13	None	No	State Trunkline	0.67	1	Interstate	Non Connector	2	8
MDOT	E I 96	E I 96/Fruit Ridge RAMP	Fruit Ridge/E I 96 RAMP	0.55	0.80	2045	Moderate	1.17	None	No	State Trunkline	0.23	1	Interstate	Non Connector	2	8
MDOT	E I 96	Fruit Ridge Ave NW	Fruit Ridge/E I 96 RAMP	0.57	0.80	2045	Moderate	1.22	None	No	State Trunkline	0.35	1	Interstate	Non Connector	2	8
MDOT	E I 96	Fruit Ridge/E I 96 RAMP	Coopersville and Marne Railway	0.70	0.91	2025	Moderate	1.23	None	No	State Trunkline	0.99	1	Interstate	Non Connector	2	8
MDOT	E I 96	E I 96/Walker RAMP	Walker Ave NW & Walker/E I 96 RAMP	0.65	0.80	2045	Moderate	1.24	None	No	State Trunkline	0.24	1	Interstate	Non Connector	2	8
MDOT	E I 96	Walker Ave NW & Walker/E I 96 RAMP	Walker/E I 96 RAMP	0.69	0.81	2045	Moderate	1.53	Moderate	No	State Trunkline	0.40	1	Interstate	Non Connector	2	8
MDOT	E I 96	Bristol Ave NW	I 96 Crossovers	0.82	0.96	2015	Moderate	1.56	Moderate	No	State Trunkline	0.24	1	Interstate	Non Connector	2	8
MDOT	E I 96	E I 96/Alpine RAMP	Alpine/E I 96 RAMP	0.74	0.88	2025	Moderate	3.08	Severe	No	State Trunkline	0.21	1	Interstate	Non Connector	2	4
MDOT	E I 96	Marquette Rail	W River Dr NW	0.75	0.83	2035	Moderate	1.30	None	No	State Trunkline	0.05	1	Interstate	Non Connector	2	9
MDOT	E I 96	Coit Ave NE	Cheney Ave NE	0.78	0.91	2015	Moderate	1.30	None	No	State Trunkline	0.37	1	Interstate	Non Connector	2	8
MDOT	E I 96	Dean Lake Ave NE	3 Mile Rd NE	0.58	0.80	2045	Moderate	1.44	Moderate	No	State Trunkline	0.24	1	Interstate	Non Connector	2	8
MDOT	E I 96	City/Twp Line	E I 96/Leonard RAMP	0.58	0.80	2045	Moderate	2.06	Severe	No	State Trunkline	0.30	1	Interstate	Non Connector	2	7
MDOT	E I 96	Leonard/E I 96 RAMP	W I 196	0.59	0.83	2035	Moderate	3.42	Severe	No	State Trunkline	0.30	1	Interstate	Non Connector	2	7
MDOT	E I 96	E I 196	E I 96/Beltline RAMP	1.05	1.10	2020	Severe	2.46	Severe	No	State Trunkline	0.20	1	Interstate	Non Connector	4	7
MDOT	E I 96	E I 96/Beltline RAMP	Beltline/E I 96 RAMP	0.70	0.86	2025	Moderate	2.31	Severe	No	State Trunkline	0.24	1	Interstate	Non Connector	3	7
MDOT	E I 96	E Beltline Ave NE	City/Twp Line	0.70	0.86	2025	Moderate	1.80	Severe	No	State Trunkline	0.29	1	Interstate	Non Connector	3	7
MDOT	E I 96	Grand Rapids Eastern Railroad	E I 96/Fulton RAMP	0.73	0.86	2025	Moderate	1.80	Severe	No	State Trunkline	0.07	1	Interstate	Non Connector	2	7
MDOT	E I 96	E I 96/Fulton RAMP	E Fulton St	0.89	1.05	2015	Severe	1.34	None	No	State Trunkline	0.44	1	Interstate	Non Connector	2	7
MDOT	E I 96	I 96 Crossover	24th Ave	0.66	0.85	2025	Moderate	1.07	None	No	State Trunkline	2.58	1	Interstate	Non Connector	2	0
MDOT	E I 96	E Fulton St	I 96 Crossover	0.89	1.05	2015	Severe	1.17	None	No	State Trunkline	0.55	1	Interstate	Non Connector	2	7
MDOT	E I 96	I 96 Crossover	E I 96/E Cascade RAMP	0.66	0.80	2045	Moderate	1.09	None	No	State Trunkline	0.43	1	Interstate	Non Connector	2	7
MDOT	E I 96	E I 96/E Cascade RAMP	Cascade Rd SE	0.66	0.80	2045	Moderate	1.06	None	No	State Trunkline	0.25	1	Interstate	Non Connector	2	7
MDOT	E I 96	E I 96/W Cascade RAMP	Cascade/E I 96 RAMP	0.66	0.80	2045	Moderate	1.06	None	No	State Trunkline	0.23	1	Interstate	Non Connector	2	7

GVMC 2045 MTP Congestion Deficiencies List

Government Unit	Road Name	From Description	To Description	DAILY_VOC	PK_VOC	YearCong	Cong. Severity	PK PTI	Reliability Def.	Safety Def.	Legal System	Length Miles	NFC	NFC Description	NHS Designation	Lanes	PASER 2019
MDOT	E I 96	Cascade/E I 96 RAMP	City/Thw Line	0.66	0.80	2045	Moderate	1.03	None	No	State Trunkline	0.11	1	Interstate	Non Connector	2	7
MDOT	E I 96	I 96 Crossover	Forest Hill Ave SE	0.77	0.89	2020	Moderate	1.03	None	No	State Trunkline	0.69	1	Interstate	Non Connector	2	7
MDOT	E I 96	Forest Hill Ave SE	City/Thw Line	0.77	0.89	2020	Moderate	1.04	None	No	State Trunkline	0.72	1	Interstate	Non Connector	2	7
MDOT	E I 96	Burton St SE	E I 96/E 28th RAMP	0.77	0.89	2020	Moderate	1.04	None	No	State Trunkline	0.55	1	Interstate	Non Connector	2	7
MDOT	E I 96	E I 96/16th RAMP	16th/E I 96 RAMP	0.66	0.84	2025	Moderate	1.07	None	Yes	State Trunkline	0.21	1	Interstate	Non Connector	2	8
MDOT	E I 96	16th/E I 96 RAMP	1545' East	0.48	0.80	2045	Moderate	1.08	None	No	State Trunkline	0.29	1	Interstate	Non Connector	3	8
MDOT	E I 96	4 Mile Rd	City/Thw Line	0.56	0.80	2045	Moderate	1.08	None	No	State Trunkline	0.26	1	Interstate	Non Connector	2	8
MDOT	E I 96	4 Mile/E I 96 RAMP	I 96 Crossover	0.59	0.82	2045	Moderate	1.08	None	No	State Trunkline	0.45	1	Interstate	Non Connector	2	9
MDOT	E I 96	I 96 Crossover	Morse Lake Ave SE	0.81	0.84	2025	Moderate	1.03	None	No	State Trunkline	0.98	1	Interstate	Non Connector	2	8
MDOT	E I 96/36th RAMP	E I 96	W I 96/36th RAMP & I 96/36th RAMP	0.48	0.87	2035	Moderate	1.19	None	No	State Trunkline	0.35	1	Interstate	Non Connector	1	9
MDOT	E I 96/36th RAMP	E I 96/36th RAMP & W I 96/36th RAMP	W I 96/E I 96 TURN	0.53	0.82	2045	Moderate	N/A	N/A	No	State Trunkline	0.07	3	Interstate	Non Connector	1	9
MDOT	E I 96/36th RAMP	W I 96/E I 96 TURN & I 96/36th RAMP	36th St SE & I 96/36th RAMP	0.53	0.82	2045	Moderate	1.27	None	No	State Trunkline	0.07	3	Other Principal Arterial	Non Connector	1	9
MDOT	E I 96/Alden Nash RAMP	E I 96	Alden Nash Ave SE	1.03	1.30	2015	Severe	N/A	N/A	No	State Trunkline	0.22	1	Interstate	Non Connector	1	7
MDOT	E I 96/Beltline RAMP	E I 96	E Beltline Ave NE	0.88	1.00	2015	Severe	2.99	Severe	No	State Trunkline	0.34	1	Interstate	Non Connector	2	5
MDOT	E I 96/E 28th RAMP	E I 96	28th St SE	1.00	1.21	2015	Severe	2.32	Severe	No	State Trunkline	0.13	1	Interstate	Non Connector	2	6
MDOT	E I 96/EB Fulton RAMP	E I 96	E I 96/EB Fulton RAMP & E I 96/WB Fulton RAMP	1.03	1.20	2015	Severe	1.19	None	No	State Trunkline	0.14	1	Interstate	Non Connector	1	7
MDOT	E I 96/EB Fulton RAMP	E I 96/Fulton RAMP & E I 96/WB Fulton RAMP	E Fulton St	0.86	0.87	2015	Moderate	1.13	None	No	State Trunkline	0.26	1	Interstate	Non Connector	5	8
MDOT	E I 96/Leonard RAMP	E I 96	Leonard St NE & Leonard/E I 96 RAMP	0.68	0.82	2045	Moderate	N/A	N/A	No	State Trunkline	0.22	1	Interstate	Non Connector	1	6
MDOT	E I 96/Leonard RAMP	E I 96	Leonard St NE & Leonard/E I 96 RAMP	0.68	0.82	2045	Moderate	N/A	N/A	No	State Trunkline	0.22	1	Interstate	Non Connector	1	6
MDOT	E I 96/Plainfield RAMP	E I 96	E I 96/S Plainfield RAMP & E I 96/N Plainfield RAMP	0.84	0.92	2015	Moderate	2.07	Severe	No	State Trunkline	0.18	1	Interstate	Non Connector	2	5
MDOT	E I 96/W 28th RAMP	E I 96	28th St SE	0.62	0.80	2035	Moderate	1.56	Moderate	No	State Trunkline	0.31	1	Interstate	Non Connector	1	5
MDOT	E M 6	Wilson Ave SW	N Wilson/E M 6 RAMP	0.66	0.87	2025	Moderate	1.08	None	No	State Trunkline	0.41	2	Other Freeway	Non Connector	2	9
MDOT	E M 6	M 6 Crossover	Ivanrest Ave SW	0.75	0.98	2015	Moderate	1.08	None	No	State Trunkline	0.06	2	Other Freeway	Non Connector	2	6
MDOT	E M 6	E M 6/Byron Center RAMP	S Byron Center/E M 6 RAMP	0.62	0.83	2035	Moderate	1.08	None	No	State Trunkline	0.37	2	Other Freeway	Non Connector	2	6
MDOT	E M 6	Byron Center Ave SW	N Byron Center/E M 6 RAMP	0.77	1.00	2015	Severe	1.08	None	No	State Trunkline	0.43	2	Other Freeway	Non Connector	2	7
MDOT	E M 6	Hanna Lake Ave SE	M 6 Crossover	0.63	0.81	2045	Moderate	1.10	None	No	State Trunkline	0.12	2	Other Freeway	Non Connector	2	6
MDOT	E M 6/Kalamazoo RAMP	E M 6	E M 6/NB Kalamazoo RAMP & E M 6/SB Kalamazoo RAMP	0.84	0.94	2015	Moderate	1.39	Moderate	No	State Trunkline	0.30	2	Other Freeway	Non Connector	2	8
MDOT	E M 6/M 37 RAMP	Patterson Ave SE	Broadmoor Ave SE	0.75	0.89	2015	Moderate	2.05	Severe	No	State Trunkline	0.42	2	Other Freeway	Non Connector	2	8
MDOT	E M 6/W I 96 RAMP	W I 96	W I 96	0.47	0.85	2035	Moderate	1.08	None	No	State Trunkline	0.50	1	Interstate	Non Connector	2	6
MDOT	Fuller/W I 196 RAMP	W I 196/Fuller RAMP & Fuller Ave NE	W I 196	1.01	1.04	2015	Severe	1.42	Moderate	No	State Trunkline	0.20	1	Interstate	Non Connector	1	9
MDOT	Fuller/W I 96 RAMP	E Fulton St	W I 96	0.90	0.99	2015	Moderate	1.27	None	No	State Trunkline	0.39	1	Interstate	Non Connector	1	7
MDOT	Ionia/E I 196 RAMP	Ionia Ave NW	E I 196 & Ionia Ave NW	0.91	1.05	2015	Severe	1.85	Severe	No	State Trunkline	0.11	1	Interstate	Non Connector	1	8
MDOT	Ionia/W I 196 RAMP	Ottawa Ave NW	W I 196	0.98	1.10	2015	Severe	2.14	Severe	No	State Trunkline	0.08	1	Interstate	Non Connector	1	6
MDOT	Ironwood Dr	E I 96	Hayes St	0.79	0.87	2015	Moderate	N/A	N/A	No	State Trunkline	0.28	1	Interstate	Non Connector	1	6
MDOT	Lake Michigan Dr NW/ M 45	1004' West of Valley View Ave	Valley View Ave & Lake Michigan/Valley View T	0.73	0.82	2045	Moderate	N/A	N/A	No	State Trunkline	0.19	3	Other Principal Arterial	Non Connector	2	4
MDOT	Lake Michigan Dr NW/ M 45	Lasalle Ave NW	Macomb Ave NW	0.59	0.80	2045	Moderate	1.68	Moderate	Yes	State Trunkline	0.06	3	Other Principal Arterial	Non Connector	5	3
MDOT	Lake Michigan Dr NW/ M 45	Macomb Ave NW	Ferndale Ave NW	0.60	0.80	2045	Moderate	1.68	Moderate	Yes	State Trunkline	0.06	3	Other Principal Arterial	Non Connector	5	7
MDOT	Lake Michigan Dr NW/ M 45	Ferndale Ave NW	Wilson Ave NW	0.60	0.80	2045	Moderate	1.68	Moderate	Yes	State Trunkline	0.19	3	Other Principal Arterial	Non Connector	5	7
MDOT	Lake Michigan Dr NW/ M 45	Marsh Ridge Dr NW	Alewa Dr NW	0.58	0.80	2045	Moderate	1.29	None	No	State Trunkline	0.09	3	Other Principal Arterial	Non Connector	5	6
MDOT	Lake Michigan Dr NW/ M 45	Alewa Dr NW	Collindale Ave NW	0.58	0.80	2045	Moderate	1.29	None	No	State Trunkline	0.09	3	Other Principal Arterial	Non Connector	2	6
MDOT	Lake Michigan Dr NW/ M 45	52nd Ave & Lake Michigan/52nd TURN	Lake Michigan/52nd TURN	0.63	0.86	2035	Moderate	1.36	Moderate	Yes	State Trunkline	0.08	3	Other Principal Arterial	Non Connector	2	5
MDOT	Lake Michigan Dr NW/ M 45	Collindale Ave NW	Marne Ave NW	0.60	0.81	2045	Moderate	N/A	N/A	No	State Trunkline	0.09	3	Other Principal Arterial	Non Connector	5	6
MDOT	Lake Michigan Dr NW/ M 45	Lake Michigan/52nd TURN	Lake Michigan/Boyne TURN	0.63	0.86	2035	Moderate	1.36	Moderate	Yes	State Trunkline	0.03	3	Other Principal Arterial	Non Connector	2	5
MDOT	Lake Michigan Dr NW/ M 45	Lake Michigan/Boyne TURN	Lake Michigan/Boyne TURN	0.63	0.86	2035	Moderate	1.36	Moderate	Yes	State Trunkline	0.10	3	Other Principal Arterial	Non Connector	2	5
MDOT	Lake Michigan Dr NW/ M 45	Lake Michigan/Boyne TURN	Lake Michigan/Radcliff TURN	0.63	0.86	2035	Moderate	1.36	Moderate	Yes	State Trunkline	0.03	3	Other Principal Arterial	Non Connector	2	5
MDOT	Lake Michigan Dr NW/ M 45	Lake Michigan/Radcliff TURN	Oakhurst Ave NW	0.60	0.81	2045	Moderate	N/A	N/A	No	State Trunkline	0.06	3	Other Principal Arterial	Non Connector	5	6
MDOT	Lake Michigan Dr NW/ M 45	Lake Michigan/Radcliff TURN	Radcliff Dr	0.63	0.86	2035	Moderate	1.36	Moderate	Yes	State Trunkline	0.11	3	Other Principal Arterial	Non Connector	2	6
MDOT	Lake Michigan Dr NW/ M 45	Oakhurst Ave NW	Charlotte Ave NW & Thornridge Dr NW	0.61	0.81	2045	Moderate	N/A	N/A	No	State Trunkline	0.06	3	Other Principal Arterial	Non Connector	5	6
MDOT	Lake Michigan Dr NW/ M 45	Charlotte Ave NW & Thornridge Dr NW	Fairfield Ave NW	0.64	0.81	2045	Moderate	N/A	N/A	No	State Trunkline	0.07	3	Other Principal Arterial	Non Connector	5	6
MDOT	Lake Michigan Dr NW/ M 45	Radcliff Dr	Lake Michigan/Radcliff TURN	0.63	0.86	2035	Moderate	1.36	Moderate	Yes	State Trunkline	0.02	3	Other Principal Arterial	Non Connector	2	5
MDOT	Lake Michigan Dr NW/ M 45	Lake Michigan/Radcliff TURN	Lake Michigan/48th TURN	0.63	0.86	2035	Moderate	1.36	Moderate	Yes	State Trunkline	0.03	3	Other Principal Arterial	Non Connector	2	5
MDOT	Lake Michigan Dr NW/ M 45	Lake Michigan/48th TURN	48th Ave	0.65	0.83	2045	Moderate	1.36	Moderate	No	State Trunkline	0.10	3	Other Principal Arterial	Non Connector	2	4
MDOT	Lake Michigan Dr NW/ M 45	Fairfield Ave NW	Oakleigh Rd NW	0.64	0.81	2045	Moderate	N/A	N/A	No	State Trunkline	0.16	3	Other Principal Arterial	Non Connector	5	6
MDOT	Lake Michigan Dr NW/ M 45	48th Ave	Lake Michigan/48th TURN	0.65	0.83	2045	Moderate	1.26	None	Yes	State Trunkline	0.11	3	Other Principal Arterial	Non Connector	2	4
MDOT	Lake Michigan Dr NW/ M 45	Oakleigh Rd NW	Bona Vista Dr NW	0.64	0.85	2025	Moderate	N/A	N/A	No	State Trunkline	0.07	3	Other Principal Arterial	Non Connector	5	6
MDOT	Lake Michigan Dr NW/ M 45	Bona Vista Dr NW	Nordberg Ave NW	0.63	0.81	2045	Moderate	N/A	N/A	No	State Trunkline	0.11	3	Other Principal Arterial	Non Connector	5	6
MDOT	Lake Michigan Dr NW/ M 45	Nordberg Ave NW	Newberg Ave NW	0.63	0.80	2045	Moderate	N/A	N/A	No	State Trunkline	0.05	3	Other Principal Arterial	Non Connector	5	6
MDOT	Lake Michigan Dr NW/ M 45	Newberg Ave NW	Edison Park Ave NW	0.63	0.80	2045	Moderate	N/A	N/A	No	State Trunkline	0.05	3	Other Principal Arterial	Non Connector	5	6
MDOT	Lake Michigan Dr NW/ M 45	Edison Park Ave NW	Winona Ave NW	0.63	0.80	2045	Moderate	N/A	N/A	No	State Trunkline	0.04	3	Other Principal Arterial	Non Connector	5	6
MDOT	Lake Michigan Dr NW/ M 45	Winona Ave NW	Bridge St NW	0.63	0.80	2045	Moderate	N/A	N/A	No	State Trunkline	0.13	3	Other Principal Arterial	Non Connector	5	6
MDOT	Lake Michigan Dr NW/ M 45	Bridge St NW	Covell Ave NW	0.51	0.80	2045	Moderate	1.49	Moderate	No	State Trunkline	0.05	3	Other Principal Arterial	Non Connector	4	6
MDOT	Lake Michigan Dr NW/ M 45	Covell Ave NW	Woodcrest Dr NW	0.61	0.80	2045	Moderate	1.49	Moderate	No	State Trunkline	0.27	3	Other Principal Arterial	Non Connector	5	6
MDOT	Lake Michigan Dr NW/ M 45	Lake Michigan/Campus TURN	Lake Michigan/Campus TURN	0.62	0.85	2045	Moderate	1.57	Moderate	Yes	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	2	4
MDOT	Lake Michigan Dr NW/ M 45	Lake Michigan/Campus TURN	Lake Michigan/40th TURN	0.59	0.98	2025	Moderate	1.12	None	No	State Trunkline	0.03	3	Other Principal Arterial	Non Connector	2	4
MDOT	Lake Michigan Dr NW/ M 45	Lake Michigan/40th TURN	Lake Michigan/40th TURN	0.59	0.98	2025	Moderate	1.12	None	No	State Trunkline	0.15	3	Other Principal Arterial	Non Connector	2	4
MDOT	Lake Michigan Dr NW/ M 45	Woodcrest Dr NW	Oswego St NW	0.61	0.80	2045	Moderate	1.49	Moderate	No	State Trunkline	0.13	3	Other Principal Arterial	Non Connector	5	6
MDOT	Lake Michigan Dr NW/ M 45	Lake Michigan/40th TURN	City/Thw Line	0.52	0.86	2035	Moderate	1.12	None	No	State Trunkline	0.45	3	Other Principal Arterial	Non Connector	2	4
MDOT	Lake Michigan Dr NW/ M 45	Oswego St NW	Oswego St NW	0.64	0.82	2045	Moderate	1.49	Moderate	No	State Trunkline	0.02	3	Other Principal Arterial	Non Connector	5	6
MDOT	Lake Michigan Dr NW/ M 45	Oswego St NW	Graham Rd NW	0.70	0.91	2015	Moderate	1.49	Moderate	No	State Trunkline	0.08	3	Other Principal Arterial	Non Connector	5	6
MDOT	Lake Michigan Dr NW/ M 45	Graham Rd NW	Lake Michigan/E I 196 RAMP	0.72	0.91	2015	Moderate	1.49	Moderate	No	State Trunkline	0.02	3	Other Principal Arterial	Non Connector	5	4
MDOT	Lake Michigan Dr NW/ M 45	Lake Michigan/E I 196 RAMP	W I 196/Lake Michigan RAMP	0.72	0.87	2025	Moderate	1.49	Moderate	No	State Trunkline	0.03	3	Other Principal Arterial	Non Connector	1	4
MDOT	Lake Michigan Dr NW/ M 45	Lake Michigan/Linden TURN	Linden Dr	0.52	0.86	2035	Moderate	1.06	None	No	State Trunkline	0.11	3	Other Principal Arterial	Non Connector	2	4

GVMC 2045 MTP Congestion Deficiencies List

Government Unit	Road Name	From Description	To Description	DAILY_VOC	PK_VOC	YearCong	Cong. Severity	PK PTI	Reliability Def.	Safety Def.	Legal System	Length Miles	NFC	NFC Description	NHS Designation	Lanes	PASER 2019
MDOT	Lake Michigan Dr NW/ M 45	14th Ave	12th Ave NW	0.56	0.85	2035	Moderate	1.07	None	No	State Trunkline	0.10	3	Other Principal Arterial	Non Connector	5	4
MDOT	Lake Michigan Dr NW/ M 45	10th Ave NW	8th Ave	0.57	0.87	2035	Moderate	1.27	None	No	State Trunkline	0.56	3	Other Principal Arterial	Non Connector	5	4
MDOT	Lake Michigan Dr NW/ M 45	Tallmadge Woods Dr NW	Mountain Ash Ave NW	0.58	0.80	2045	Moderate	1.37	Moderate	Yes	State Trunkline	0.31	3	Other Principal Arterial	Non Connector	5	4
MDOT	Lake Michigan Dr NW/ M 45	3rd Ave	2nd Ave	0.58	0.80	2045	Moderate	1.94	Severe	Yes	State Trunkline	0.11	3	Other Principal Arterial	Non Connector	5	4
MDOT	Lake Michigan Dr NW/ M 45	2nd Ave	1st Ave	0.59	0.80	2045	Moderate	1.94	Severe	Yes	State Trunkline	0.13	3	Other Principal Arterial	Non Connector	5	4
MDOT	Lake Michigan Dr NW/ M 45	1st Ave	Lake Michigan Dr NW	0.59	0.80	2045	Moderate	1.68	Moderate	Yes	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	5	4
MDOT	Lake Michigan Dr NW/ M 45	Red Hawk Ln	1330' East	0.73	0.86	2045	Moderate	N/A	N/A	No	State Trunkline	0.25	3	Other Principal Arterial	Non Connector	2	2
MDOT	Lake Michigan DR NW/ M45 /E	Lake Michigan Dr NW	Lake Michigan/W I 196 RAMP	1.25	1.33	2015	Severe	2.16	Severe	No	State Trunkline	0.05	1	Interstate	Non Connector	7	6
MDOT	Leonard St NW	Grand Rapids Eastern Railroad	Front Ave NW	0.65	0.81	2045	Moderate	2.62	Severe	No	State Trunkline	0.19	3	Other Principal Arterial	Non Connector	4	5
MDOT	Leonard/E I 96 RAMP	E I 96/Leonard RAMP & Leonard St NE	E I 96	0.60	0.80	2045	Moderate	1.64	Moderate	No	State Trunkline	0.26	1	Interstate	Non Connector	1	7
MDOT	Market/N US 131 RAMP	Oakes St SW	N US 131	0.77	0.91	2025	Moderate	2.12	Severe	No	State Trunkline	0.13	2	Other Freeway	Non Connector	1	7
MDOT	N I 296/Alpine RAMP	N US 131/W I 96	Alpine Ave NW	0.94	0.98	2015	Moderate	N/A	N/A	No	State Trunkline	0.37	1	Interstate	Non Connector	2	4
MDOT	N I 296/Ann RAMP	N US 131	Ann St NW	0.99	1.07	2015	Severe	N/A	N/A	No	State Trunkline	0.19	1	Interstate	Non Connector	1	9
MDOT	N I 296/Scribner RAMP	N US 131	Scribner Ave NW	1.06	1.11	2015	Severe	N/A	N/A	No	State Trunkline	0.17	1	Interstate	Non Connector	1	7
MDOT	N US 131	N US 131 Crossover	N US 131/84th RAMP	0.85	0.94	2015	Moderate	1.06	None	No	State Trunkline	0.89	2	Other Freeway	Non Connector	2	8
MDOT	N US 131	84th St SW	84th/N US 131 RAMP	0.76	0.82	2020	Moderate	1.05	None	No	State Trunkline	0.17	2	Other Freeway	Non Connector	2	8
MDOT	N US 131	US 131 Crossover	N US 131/76th RAMP	0.92	0.98	2015	Moderate	1.07	None	No	State Trunkline	0.44	2	Other Freeway	Non Connector	2	8
MDOT	N US 131	76th St SW	76th/N US 131 RAMP	0.90	0.97	2015	Moderate	1.06	None	No	State Trunkline	0.14	2	Other Freeway	Non Connector	3	8
MDOT	N US 131	N US 131 CD	N US 131/54th RAMP	0.61	0.80	2045	Moderate	1.17	None	No	State Trunkline	0.27	2	Other Freeway	Non Connector	4	8
MDOT	N US 131	N US 131/54th RAMP	54th/N US 131 RAMP	0.71	0.82	2045	Moderate	1.12	None	No	State Trunkline	0.26	2	Other Freeway	Non Connector	3	8
MDOT	N US 131	54th St SW	N US 131/54th RAMP	0.79	0.88	2015	Moderate	1.12	None	No	State Trunkline	0.21	2	Other Freeway	Non Connector	2	8
MDOT	N US 131	N US 131/54th RAMP	N US 131/44th RAMP	0.86	0.95	2015	Moderate	1.52	Moderate	No	State Trunkline	0.85	2	Other Freeway	Non Connector	3	8
MDOT	N US 131	E 44th/N US 131 RAMP	44th/N US 131 RAMP	0.76	0.85	2025	Moderate	2.23	Severe	No	State Trunkline	0.24	2	Other Freeway	Non Connector	3	7
MDOT	N US 131	44th/N US 131 RAMP	N US 131/36th RAMP	0.67	0.80	2045	Moderate	4.00	Severe	No	State Trunkline	0.64	2	Other Freeway	Non Connector	4	7
MDOT	N US 131	N US 131/36th RAMP	36th St SW	0.78	0.87	2015	Moderate	4.57	Severe	No	State Trunkline	0.13	2	Other Freeway	Non Connector	3	7
MDOT	N US 131	36th/N US 131 RAMP	32nd St SW	0.93	1.01	2015	Severe	4.25	Severe	No	State Trunkline	0.38	2	Other Freeway	Non Connector	3	7
MDOT	N US 131	N US 131/28th RAMP	28th/N US 131 RAMP	0.84	0.93	2015	Moderate	5.39	Severe	No	State Trunkline	0.16	2	Other Freeway	Non Connector	3	7
MDOT	N US 131	28th St SW	28th/N US 131 RAMP	0.86	0.94	2015	Moderate	5.82	Severe	No	State Trunkline	0.32	2	Other Freeway	Non Connector	3	5
MDOT	N US 131	City/Twp Line	N US 131/Burton RAMP	0.94	1.01	2015	Severe	5.33	Severe	No	State Trunkline	0.26	2	Other Freeway	Non Connector	3	7
MDOT	N US 131	Burton St SW	Burton/N US 131 RAMP	0.82	0.89	2015	Moderate	5.33	Severe	No	State Trunkline	0.16	2	Other Freeway	Non Connector	3	5
MDOT	N US 131	Burton/N US 131 RAMP	N US 131/Hynes RAMP	0.95	1.04	2015	Severe	N/A	N/A	No	State Trunkline	0.26	2	Other Freeway	Non Connector	3	5
MDOT	N US 131	N US 131/Hynes RAMP	N US 131/Hall RAMP	0.95	1.04	2015	Severe	4.90	Severe	No	State Trunkline	0.41	2	Other Freeway	Non Connector	3	5
MDOT	N US 131	N US 131/Hall RAMP	Hall St SW	0.91	0.98	2015	Moderate	4.50	Severe	No	State Trunkline	0.15	2	Other Freeway	Non Connector	3	5
MDOT	N US 131	Hall/N US 131 RAMP	N US 131/Franklin RAMP	0.99	1.06	2015	Severe	3.65	Severe	No	State Trunkline	0.25	2	Other Freeway	Non Connector	3	5
MDOT	N US 131	Franklin/N US 131 RAMP	Franklin St SW	0.93	0.98	2015	Moderate	3.65	Severe	No	State Trunkline	0.17	2	Other Freeway	Non Connector	3	5
MDOT	N US 131	CSX Transportation	N US 131/Division RAMP	1.03	1.09	2015	Severe	2.95	Severe	No	State Trunkline	0.14	2	Other Freeway	Non Connector	3	5
MDOT	N US 131	N US 131/Division RAMP	N US 131/Wealthy RAMP	0.93	0.97	2015	Moderate	N/A	N/A	No	State Trunkline	0.02	2	Other Freeway	Non Connector	2	5
MDOT	N US 131	Wealthy St SW	Wealthy/N US 131 RAMP	0.84	0.88	2015	Moderate	N/A	N/A	No	State Trunkline	0.19	2	Other Freeway	Non Connector	4	5
MDOT	N US 131	Grandville Ave SW	Market Ave SW	0.72	0.80	2045	Moderate	3.86	Severe	No	State Trunkline	0.08	2	Other Freeway	Non Connector	4	8
MDOT	N US 131	Market/N US 131 RAMP	Front Ave SW	0.82	0.90	2020	Moderate	3.86	Severe	No	State Trunkline	0.11	2	Other Freeway	Non Connector	4	8
MDOT	N US 131	W Fulton St	Front St	0.82	0.90	2015	Moderate	4.75	Severe	No	State Trunkline	0.09	2	Other Freeway	Non Connector	4	8
MDOT	N US 131	Pearl St NW	N US 131/E I 196 RAMP	0.71	0.80	2045	Moderate	4.84	Severe	No	State Trunkline	0.15	2	Other Freeway	Non Connector	4	8
MDOT	N US 131	N US 131/E I 196 RAMP	Bridge St NW	0.81	0.90	2015	Moderate	N/A	N/A	No	State Trunkline	0.12	2	Other Freeway	Non Connector	8	7
MDOT	N US 131	N US 131/W I 196 RAMP	N US 131 CD RAMP & W I 196/S US 131 RAMP	0.70	0.80	2045	Moderate	5.51	Severe	No	State Trunkline	0.03	2	Other Freeway	Non Connector	1	6
MDOT	N US 131	S US 131	E I 196	0.77	0.87	2015	Moderate	5.08	Severe	No	State Trunkline	0.12	2	Interstate	Non Connector	5	6
MDOT	N US 131	S US 131/E I 196 RAMP	W I 196/N US 131 RAMP	0.75	0.85	2025	Moderate	5.08	Severe	No	State Trunkline	0.08	2	Interstate	Non Connector	4	6
MDOT	N US 131	W I 196/N US 131 RAMP	E I 196/N US 131 RAMP	0.94	1.06	2015	Severe	3.85	Severe	No	State Trunkline	0.05	1	Interstate	Non Connector	4	6
MDOT	N US 131	6th St NW	N I 296/Scribner RAMP	0.82	0.90	2015	Moderate	2.66	Severe	No	State Trunkline	0.29	1	Interstate	Non Connector	4	6
MDOT	N US 131	Leonard St NW	Scribner/N I 296 RAMP	0.94	1.05	2015	Severe	1.90	Severe	No	State Trunkline	0.28	1	Interstate	Non Connector	4	6
MDOT	N US 131	Scribner/N I 296 RAMP	Richmond St NW	0.79	0.89	2015	Moderate	1.41	Moderate	No	State Trunkline	0.22	1	Interstate	Non Connector	4	9
MDOT	N US 131	Richmond St NW	Grand Rapids Eastern Railroad	0.77	0.87	2015	Moderate	1.41	Moderate	No	State Trunkline	0.13	1	Interstate	Non Connector	4	9
MDOT	N US 131	Ann/N I 296 RAMP	N US 131/I 96	0.71	0.82	2045	Moderate	1.19	None	No	State Trunkline	0.75	1	Interstate	Non Connector	4	9
MDOT	N US 131	N US 131/I 96	US 131 Crossover	0.65	0.80	2045	Moderate	2.08	Severe	No	State Trunkline	0.61	2	Other Freeway	Non Connector	2	9
MDOT	N US 131	W I 96	W I 96/N US 131 RAMP	0.75	0.93	2015	Moderate	2.05	Severe	No	State Trunkline	0.16	2	Other Freeway	Non Connector	2	9
MDOT	N US 131	US 131 Crossover	Ball Park Dr NE	0.59	0.80	2020	Moderate	2.09	Severe	No	State Trunkline	0.59	2	Other Freeway	Non Connector	3	8
MDOT	N US 131	N US 131/River RAMP	River/N US 131 RAMP	0.68	0.86	2025	Moderate	2.15	Severe	No	State Trunkline	0.47	2	Other Freeway	Non Connector	2	8
MDOT	N US 131	Pine Island Dr NE	US 131 Crossover	0.76	0.94	2015	Moderate	2.15	Severe	No	State Trunkline	1.17	2	Other Freeway	Non Connector	2	8
MDOT	N US 131	N US 131/Post RAMP	Post Dr NE	0.67	0.81	2035	Moderate	2.99	Severe	No	State Trunkline	0.40	2	Other Freeway	Non Connector	2	8
MDOT	N US 131	Post/N US 131 RAMP	US 131 Crossover	0.74	0.90	2015	Moderate	3.41	Severe	No	State Trunkline	0.95	2	Other Freeway	Non Connector	2	8
MDOT	N US 131 CD	City/Twp Line	N US 131	0.76	0.91	2025	Moderate	1.16	None	No	State Trunkline	0.19	2	Other Freeway	Non Connector	1	8
MDOT	N US 131 CD RAMP	N US 131/E I 196 RAMP	Michigan St NW	0.77	0.96	2015	Moderate	N/A	N/A	No	State Trunkline	0.06	2	Other Freeway	Non Connector	1	7
MDOT	N US 131/10 Mile RAMP	N US 131	10 Mile/N US 131 RAMP & 10 Mile Rd NE	0.92	1.02	2015	Severe	N/A	N/A	No	State Trunkline	0.41	2	Other Freeway	Non Connector	1	8
MDOT	N US 131/14 Mile RAMP	N US 131	14 Mile Rd NE & 14 Mile/N US 131 RAMP	0.73	0.96	2015	Moderate	2.01	Severe	No	State Trunkline	0.41	2	Other Freeway	Non Connector	1	10
MDOT	N US 131/17 Mile RAMP	N US 131	17 Mile/N US 131 RAMP	0.62	0.88	2025	Moderate	3.02	Severe	No	State Trunkline	0.39	2	Other Freeway	Non Connector	1	9
MDOT	N US 131/28th RAMP	N US 131	28th St SW	0.82	0.82	2015	Moderate	2.94	Severe	No	State Trunkline	0.24	2	Other Freeway	Non Connector	1	3
MDOT	N US 131/36th RAMP	N US 131	36th St SW	0.79	0.87	2025	Moderate	N/A	N/A	No	State Trunkline	0.14	2	Other Freeway	Non Connector	2	8
MDOT	N US 131/54th RAMP	N US 131	54th St SW	0.75	0.82	2035	Moderate	N/A	N/A	No	State Trunkline	0.32	2	Other Freeway	Non Connector	1	3
MDOT	N US 131/Burton RAMP	N US 131	Burton St SW & Burton/N US 131 RAMP	0.83	0.88	2025	Moderate	2.69	Severe	No	State Trunkline	0.13	2	Other Freeway	Non Connector	1	6
MDOT	N US 131/Division RAMP	Wealthy St SW	Bus US 131	0.74	0.83	2025	Moderate	1.78	Moderate	No	State Trunkline	0.25	2	Other Freeway	Non Connector	2	7
MDOT	N US 131/E I 196 RAMP	N US 131/E I 196 RAMP & Scribner/N US 131	N US 131/E I 196 RAMP & N US 131 CD RAMP	0.76	0.83	2025	Moderate	N/A	N/A	No	State Trunkline	0.03	2	Other Freeway	Non Connector	2	7
MDOT	N US 131/E I 196 RAMP	Michigan St NW	Scribner Ave NW	0.82	0.85	2020	Moderate	3.31	Severe	No	State Trunkline	0.18	1	Interstate	Non Connector	1	6
MDOT	N US 131/Pearl RAMP	N US 131	Pearl St NW	0.98	1.07	2015	Severe	2.89	Severe	No	State Trunkline	0.13	2	Other Freeway	Non Connector	2	9

GVMC 2045 MTP Congestion Deficiencies List

Government Unit	Road Name	From Description	To Description	DAILY_VOC	PK_VOC	YearCong	Cong. Severity	PK PTI	Reliability Def.	Safety Def.	Legal System	Length Miles	NFC	NFC Description	NHS Designation	Lanes	PASER 2019
MDOT	N US 131/River RAMP	N US 131	W River Dr NE	1.00	1.11	2015	Severe	3.68	Severe	No	State Trunkline	0.31	2	Other Freeway	Non Connector	1	8
MDOT	N US 131/W I 96	N US 131	S US 131	0.89	0.96	2015	Moderate	1.10	None	No	State Trunkline	0.19	1	Interstate	Non Connector	2	9
MDOT	N US 131/W I 96	N US 131/I 96 & N US 131/E I 96 RAMP	E I 96	0.69	0.80	2045	Moderate	1.10	None	No	State Trunkline	0.19	1	Interstate	Non Connector	2	8
MDOT	N US 131/Wealthy RAMP	N US 131	Wealthy/N US 131 RAMP & Wealthy St SW	0.79	0.85	2015	Moderate	N/A	N/A	No	State Trunkline	0.12	2	Other Freeway	Non Connector	1	5
MDOT	Northland Dr NE	W River Dr NE	Rogue River Rd NE	0.67	1.06	2015	Severe	2.75	Severe	No	State Trunkline	0.49	3	Other Principal Arterial	Non Connector	2	7
MDOT	Northland Dr NE	Rogue River Rd NE	Mesa Dr NE	0.55	0.91	2025	Moderate	1.71	Moderate	No	State Trunkline	0.28	3	Other Principal Arterial	Non Connector	2	6
MDOT	Northland Dr NE	Mesa Dr NE	Wolverine Blvd NE	0.54	0.80	2045	Moderate	1.71	Moderate	No	State Trunkline	0.43	3	Other Principal Arterial	Non Connector	2	6
MDOT	Northland Dr NE	Northland/Plainfield Cutoff	Northland/Plainfield Cutoff & Northland Dr NE	0.63	0.87	2025	Moderate	2.75	Severe	No	State Trunkline	0.06	3	Other Principal Arterial	Non Connector	5	6
MDOT	Northland Dr NE	Webber Ave NE & Northland/Plainfield Cutoff	Versluis Park Dr NE	0.61	0.92	2015	Moderate	2.26	Severe	No	State Trunkline	0.22	3	Other Principal Arterial	Non Connector	5	6
MDOT	Northland Dr NE	Versluis Park Dr NE	Walnut Park Dr NE	0.67	0.98	2015	Moderate	2.26	Severe	No	State Trunkline	0.19	3	Other Principal Arterial	Non Connector	5	6
MDOT	Northland Dr NE	Walnut Park Dr NE	W River Dr NE	0.67	0.98	2015	Moderate	2.26	Severe	No	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	4	9
MDOT	Northland Dr NE	W River Dr NE & Cannonsburg Rd NE	N M 44/West River RAMP	0.72	0.98	2025	Moderate	1.53	Moderate	No	State Trunkline	0.01	3	Other Principal Arterial	Non Connector	2	2
MDOT	Northland Dr NE	N M 44/West River RAMP	Rogue River Rd NE & 7 Mile Rd NE	0.68	0.96	2025	Moderate	1.53	Moderate	No	State Trunkline	0.48	3	Other Principal Arterial	Non Connector	2	6
MDOT	Pearl/S US 131 RAMP	Pearl St NW	S US 131	0.90	0.93	2015	Moderate	1.78	Moderate	No	State Trunkline	0.13	2	Other Freeway	Non Connector	1	7
MDOT	Plainfield Ave NE	W I 96/Plainfield RAMP	N Plainfield/W I 96 RAMP	0.78	0.96	2015	Moderate	2.52	Severe	Yes	State Trunkline	0.01	3	Other Principal Arterial	Non Connector	2	6
MDOT	Plainfield Ave NE	N Plainfield/W I 96 RAMP	S Plainfield/W I 96 RAMP	0.67	0.85	2035	Moderate	2.09	Severe	Yes	State Trunkline	0.05	3	Other Principal Arterial	Non Connector	5	5
MDOT	Plainfield Ave NE	S Plainfield/W I 96 RAMP	Elmdale St NE	0.68	0.91	2025	Moderate	2.09	Severe	Yes	State Trunkline	0.20	3	Other Principal Arterial	Non Connector	5	5
MDOT	Plainfield Ave NE	Elmdale St NE	Rupert St NE & Salerno Dr NE	0.58	0.84	2035	Moderate	2.09	Severe	Yes	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	5	5
MDOT	Plainfield Ave NE	City/Twp Line	4 Mile Rd NE	0.58	0.84	2035	Moderate	2.09	Severe	Yes	State Trunkline	0.15	3	Other Principal Arterial	Non Connector	5	5
MDOT	Plainfield/E I 96 RAMP	Plainfield Ave NE	E I 96	0.56	0.85	2025	Moderate	1.49	Moderate	No	State Trunkline	0.35	1	Interstate	Non Connector	1	5
MDOT	Plainfield/W I 96 RAMP	Plainfield Ave NE	Plainfield/W I 96 RAMP & N Plainfield/W I 96 R	0.98	1.00	2015	Severe	1.34	None	No	State Trunkline	0.08	1	Interstate	Non Connector	1	10
MDOT	River/S US 131 RAMP	W River Dr NE & Ball Park Dr NE	S US 131	0.88	1.03	2015	Severe	N/A	N/A	No	State Trunkline	0.27	2	Other Freeway	Non Connector	1	8
MDOT	S Division Ave	Crescent St NW	Michigan St NE	0.49	0.81	2045	Moderate	N/A	N/A	Yes	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	3	2
MDOT	S Division Ave	E I 196	W I 196	0.49	0.81	2045	Moderate	N/A	N/A	Yes	State Trunkline	0.01	3	Other Principal Arterial	Non Connector	3	7
MDOT	S Division Ave	W I 196	W I 196/Ottawa RAMP	0.68	0.97	2025	Moderate	N/A	N/A	Yes	State Trunkline	0.08	3	Other Principal Arterial	Non Connector	3	7
MDOT	S Division Ave	W I 196	W I 196/Ottawa RAMP	0.64	0.92	2025	Moderate	N/A	N/A	Yes	State Trunkline	0.08	3	Other Principal Arterial	Non Connector	3	7
MDOT	S Division Ave	W I 196/Ottawa RAMP	Newberry St NW	0.64	0.92	2025	Moderate	N/A	N/A	Yes	State Trunkline	0.26	3	Other Principal Arterial	Non Connector	3	7
MDOT	S I 296/Turner RAMP	S US 131	Turner Ave NW	0.81	0.97	2015	Moderate	N/A	N/A	No	State Trunkline	0.14	1	Interstate	Non Connector	1	9
MDOT	S US 131	W Fulton St	SB Peal St Ramp	0.83	0.93	2020	Moderate	3.13	Severe	No	State Trunkline	0.01	2	Major Collector	Non Connector	3	6
MDOT	S US 131	S I 296/Turner RAMP	Turner RAMP/S I 296	0.91	1.04	2015	Severe	1.62	Moderate	No	State Trunkline	0.01	1	Other Principal Arterial	Non Connector	5	8
MDOT	S US 131	US 131 Crossover	84th/S US 131 RAMP	0.84	0.91	2015	Moderate	1.07	None	No	State Trunkline	0.88	2	Other Freeway	Non Connector	2	7
MDOT	S US 131	84th St SW	S US 131/84th RAMP	0.74	0.81	2045	Moderate	1.07	None	No	State Trunkline	0.17	2	Other Freeway	Non Connector	2	7
MDOT	S US 131	US 131 Crossover	76th/S US 131 RAMP	0.91	0.98	2015	Moderate	1.07	None	No	State Trunkline	0.44	2	Other Freeway	Non Connector	2	7
MDOT	S US 131	76th St SW	S US 131/76th RAMP	0.89	0.97	2015	Moderate	1.07	None	No	State Trunkline	0.19	2	Other Freeway	Non Connector	2	8
MDOT	S US 131	54th/S US 131 RAMP	54th St SW	0.73	0.80	2045	Moderate	1.09	None	No	State Trunkline	0.20	2	Other Freeway	Non Connector	3	8
MDOT	S US 131	54th/S US 131 RAMP	S US 131/54th RAMP	0.69	0.80	2045	Moderate	1.03	None	No	State Trunkline	0.28	2	Other Freeway	Non Connector	3	8
MDOT	S US 131	54th/S US 131 RAMP	S US 131/54th RAMP	0.69	0.80	2045	Moderate	1.03	None	No	State Trunkline	0.28	2	Other Freeway	Non Connector	3	8
MDOT	S US 131	S US 131/54th RAMP	44th/S US 131 RAMP	0.80	0.88	2015	Moderate	1.05	None	No	State Trunkline	0.75	2	Other Freeway	Non Connector	3	8
MDOT	S US 131	44th/S US 131 RAMP	W 44th/S US 131 RAMP	0.69	0.80	2045	Moderate	1.07	None	No	State Trunkline	0.19	2	Other Freeway	Non Connector	3	7
MDOT	S US 131	S US 131/44th RAMP	36th/S US 131 RAMP	0.68	0.80	2045	Moderate	1.09	None	No	State Trunkline	0.70	2	Other Freeway	Non Connector	4	6
MDOT	S US 131	36th/S US 131 RAMP	36th St SW	0.80	0.85	2020	Moderate	1.07	None	No	State Trunkline	0.19	2	Other Freeway	Non Connector	3	7
MDOT	S US 131	S US 131/36th RAMP	32nd St SW	0.92	0.97	2015	Moderate	1.07	None	No	State Trunkline	0.39	2	Other Freeway	Non Connector	3	7
MDOT	S US 131	28th/S US 131 RAMP	28th St SW	0.90	0.94	2015	Moderate	1.07	None	No	State Trunkline	0.27	2	Other Freeway	Non Connector	3	7
MDOT	S US 131	28th/S US 131 RAMP	S US 131/28th RAMP	0.82	0.89	2015	Moderate	1.09	None	No	State Trunkline	0.15	2	Other Freeway	Non Connector	3	6
MDOT	S US 131	City/Twp Line	Burton/S US 131 RAMP	0.93	0.99	2015	Moderate	1.13	None	No	State Trunkline	0.32	2	Other Freeway	Non Connector	3	7
MDOT	S US 131	Burton/S US 131 RAMP	S US 131/E Burton RAMP	0.82	0.86	2015	Moderate	1.13	None	No	State Trunkline	0.10	2	Other Freeway	Non Connector	3	6
MDOT	S US 131	Burton St SW	S US 131/W Burton RAMP	0.85	0.89	2015	Moderate	1.17	None	No	State Trunkline	0.10	2	Other Freeway	Non Connector	3	6
MDOT	S US 131	S US 131/W Burton RAMP	Century/S US 131 RAMP	0.95	1.01	2015	Severe	1.18	None	No	State Trunkline	0.68	2	Other Freeway	Non Connector	3	6
MDOT	S US 131	Century/S US 131 RAMP	Hall St SW	0.91	0.95	2015	Moderate	1.18	None	No	State Trunkline	0.20	2	Other Freeway	Non Connector	3	6
MDOT	S US 131	S US 131/Century RAMP	S US 131/Century RAMP	1.01	1.05	2015	Severe	1.25	None	No	State Trunkline	0.42	2	Other Freeway	Non Connector	3	6
MDOT	S US 131	Franklin St SW	S US 131/Century RAMP	0.95	0.96	2015	Moderate	1.94	Severe	No	State Trunkline	0.11	2	Other Freeway	Non Connector	3	6
MDOT	S US 131	S US 131/Century RAMP	CSX Transportation	1.02	1.06	2015	Severe	2.32	Severe	No	State Trunkline	0.17	2	Other Freeway	Non Connector	3	6
MDOT	S US 131	Wealthy/S US 131 RAMP	Division/S US 131 RAMP	0.95	1.01	2015	Severe	2.32	Severe	No	State Trunkline	0.10	2	Other Freeway	Non Connector	3	5
MDOT	S US 131	Wealthy St SW	S US 131/Wealthy RAMP	0.84	0.93	2015	Moderate	2.32	Severe	No	State Trunkline	0.19	2	Other Freeway	Non Connector	3	8
MDOT	S US 131	Grandville Ave SW	Market Ave SW	0.73	0.81	2045	Moderate	3.35	Severe	No	State Trunkline	0.09	2	Other Freeway	Non Connector	4	6
MDOT	S US 131	S US 131/Market RAMP	Front Ave SW	0.83	0.93	2020	Moderate	3.29	Severe	No	State Trunkline	0.12	2	Other Freeway	Non Connector	4	6
MDOT	S US 131	Pearl St NW	E I 196/S US 131 RAMP	0.71	0.81	2045	Moderate	3.29	Severe	No	State Trunkline	0.14	2	Other Freeway	Non Connector	4	6
MDOT	S US 131	E I 196/S US 131 RAMP	Bridge St NW	0.90	1.03	2015	Severe	3.29	Severe	No	State Trunkline	0.13	2	Other Freeway	Non Connector	1	6
MDOT	S US 131	S US 131 CD RAMP & N US 131/W I 196 RAMP	N US 131	0.78	0.90	2015	Moderate	3.29	Severe	No	State Trunkline	0.01	2	Interstate	Non Connector	1	6
MDOT	S US 131	W I 196	N US 131	0.76	0.88	2015	Moderate	2.49	Severe	No	State Trunkline	0.12	2	Interstate	Non Connector	3	6
MDOT	S US 131	E I 196/N US 131 RAMP	S US 131/W I 196 RAMP	0.76	0.88	2015	Moderate	2.49	Severe	No	State Trunkline	0.11	2	Interstate	Non Connector	4	6
MDOT	S US 131	S US 131/W I 196 RAMP	S US 131/E I 196 RAMP	0.95	1.07	2015	Severe	2.49	Severe	No	State Trunkline	0.01	1	Interstate	Non Connector	2	6
MDOT	S US 131	6th St NW	Turner/S I 296 RAMP	0.81	0.91	2015	Moderate	1.85	Severe	No	State Trunkline	0.26	1	Interstate	Non Connector	4	6
MDOT	S US 131	S I 296/Turner RAMP	Richmond St NW	0.77	0.88	2015	Moderate	2.09	Severe	No	State Trunkline	0.21	1	Interstate	Non Connector	3	7
MDOT	S US 131	Richmond St NW	Grand Rapids Eastern Railroad	0.75	0.86	2015	Moderate	2.09	Severe	No	State Trunkline	0.13	1	Interstate	Non Connector	4	8
MDOT	S US 131	City/Twp Line	S I 296/Turner RAMP	0.86	1.00	2015	Severe	2.09	Severe	No	State Trunkline	0.18	1	Interstate	Non Connector	3	8
MDOT	S US 131	S I 296/Turner RAMP	E I 96/S US 131	0.70	0.81	2045	Moderate	2.89	Severe	No	State Trunkline	0.57	1	Interstate	Non Connector	4	8
MDOT	S US 131	N US 131/I 96	US 131 Crossover	0.79	0.96	2015	Moderate	3.74	Severe	No	State Trunkline	0.45	2	Other Freeway	Non Connector	2	8
MDOT	S US 131	S US 131/E I 96 RAMP	E I 96	0.92	1.12	2015	Severe	3.74	Severe	No	State Trunkline	0.16	2	Other Freeway	Non Connector	2	8
MDOT	S US 131	W I 96/S US 131 RAMP	S US 131/W I 96 RAMP	0.76	0.97	2015	Moderate	3.90	Severe	No	State Trunkline	0.18</					

GVMC 2045 MTP Congestion Deficiencies List

Government Unit	Road Name	From Description	To Description	DAILY_VOC	PK_VOC	YearCong	Cong. Severity	PK PTI	Reliability Def.	Safety Def.	Legal System	Length Miles	NFC	NFC Description	NHS Designation	Lanes	PASER 2019
MDOT	S US 131	River/S US 131 RAMP	S US 131/River RAMP	0.66	0.89	2015	Moderate	3.60	Severe	No	State Trunkline	0.30	2	Other Freeway	Non Connector	2	8
MDOT	S US 131	Pine Island Dr NE	US 131 Crossover	0.74	0.96	2015	Moderate	2.25	Severe	No	State Trunkline	1.14	2	Other Freeway	Non Connector	2	8
MDOT	S US 131	Post Dr NE	S US 131/Post RAMP	0.68	0.86	2015	Moderate	2.05	Severe	No	State Trunkline	0.44	2	Other Freeway	Non Connector	2	8
MDOT	S US 131	S US 131/Post RAMP	US 131 Crossover	0.76	0.99	2015	Moderate	1.43	Moderate	No	State Trunkline	0.86	2	Other Freeway	Non Connector	2	8
MDOT	S US 131	10 Mile/S US 131 RAMP	W 10 Mile/S US 131 RAMP	0.60	0.80	2045	Moderate	1.32	None	No	State Trunkline	0.37	2	Other Freeway	Non Connector	2	8
MDOT	S US 131 CD RAMP	S US 131 & S US 131 CD RAMP & N US 131/W	E I 196/S US 131 And Pearl RAMP & S US 131 C	0.87	0.99	2015	Moderate	N/A	N/A	No	State Trunkline	0.03	2	Other Freeway	Non Connector	1	6
MDOT	S US 131/100th RAMP	S US 131	100th/S US 131 RAMP	0.96	1.07	2015	Moderate	N/A	N/A	No	State Trunkline	0.17	2	Other Freeway	Non Connector	1	9
MDOT	S US 131/36th RAMP	S US 131	36th St SW & 36th/S US 131 RAMP	0.91	0.92	2015	Moderate	N/A	N/A	No	State Trunkline	0.12	2	Other Freeway	Non Connector	3	5
MDOT	S US 131/44th RAMP	S US 131	S US 131/E 44th RAMP	0.76	0.80	2035	Moderate	3.53	Severe	No	State Trunkline	0.10	2	Other Freeway	Non Connector	3	8
MDOT	S US 131/44th RAMP	S US 131/E 44th RAMP	44th/S US 131 RAMP & 44th St SW & Aldrich Av	0.90	0.90	2015	Moderate	4.89	Severe	No	State Trunkline	0.05	2	Other Freeway	Non Connector	1	9
MDOT	S US 131/Market RAMP	S US 131	800' South	0.82	0.86	2015	Moderate	N/A	N/A	No	State Trunkline	0.19	2	Other Freeway	Non Connector	1	8
MDOT	S US 131/68th RAMP	E M 6/68th RAMP	68th St SW & 68th/S US 131 RAMP	0.93	1.02	2015	Severe	N/A	N/A	No	State Trunkline	0.17	2	Other Freeway	Non Connector	1	7
MDOT	S US 131/76th RAMP	S US 131	76th St SW & 76th/S US 131 RAMP	0.68	0.88	2025	Moderate	N/A	N/A	No	State Trunkline	0.18	2	Other Freeway	Non Connector	2	9
MDOT	S US 131/84th RAMP	S US 131	84th/S US 131 RAMP & 84th St SW	0.80	0.99	2015	Moderate	N/A	N/A	No	State Trunkline	0.17	2	Other Freeway	Non Connector	1	9
MDOT	S US 131/Market RAMP	S US 131	Market Ave SW	0.97	1.11	2015	Severe	2.73	Severe	No	State Trunkline	0.14	2	Other Freeway	Non Connector	1	7
MDOT	S US 131/Pearl RAMP	S US 131 CD RAMP & E I 196/S US 131 RAMP	Mount Vernon Ave NW	0.89	1.00	2015	Severe	1.04	None	No	State Trunkline	0.17	2	Other Freeway	Non Connector	1	7
MDOT	S US 131/W Burton RAMP	S US 131	Century Ave SW	0.71	0.87	2035	Moderate	1.12	None	No	State Trunkline	0.07	2	Other Freeway	Non Connector	1	6
MDOT	S US 131/Wealthy RAMP	S US 131	Wealthy St SW & Wealthy/S US 131 RAMP	0.85	0.96	2015	Moderate	N/A	N/A	No	State Trunkline	0.19	2	Other Freeway	Non Connector	1	8
MDOT	Scribner/N I 296 RAMP	Scribner Ave NW	N US 131	0.64	0.81	2045	Moderate	N/A	N/A	No	State Trunkline	0.19	1	Interstate	Non Connector	1	9
MDOT	Turner Ave NW	Turner/S I 296 RAMP	Leonard St NW	0.69	0.82	2045	Moderate	1.61	Moderate	No	State Trunkline	0.09	5	Major Collector	Not On NHS	2	8
MDOT	Turner/S I 296 RAMP	Turner Ave NW	S US 131	0.97	1.03	2015	Severe	1.63	Moderate	No	State Trunkline	0.21	1	Interstate	Non Connector	1	6
MDOT	Turner/S I 296 RAMP	Turner Ave NW	City/Twp Line	0.81	0.89	2015	Moderate	1.04	None	No	State Trunkline	0.11	1	Interstate	Non Connector	1	8
MDOT	W Fulton St	Mount Vernon Ave NW	Mount Vernon Ave SW	0.51	0.80	2045	Moderate	1.44	Moderate	Yes	State Trunkline	0.11	3	Other Principal Arterial	Non Connector	4	3
MDOT	W Fulton St	Mount Vernon Ave SW	S US 131	0.49	0.86	2035	Moderate	1.44	Moderate	Yes	State Trunkline	0.03	3	Other Principal Arterial	Non Connector	4	4
MDOT	W Fulton St	Front Ave NW	CS End	0.49	0.86	2035	Moderate	1.44	Moderate	Yes	State Trunkline	0.16	3	Other Principal Arterial	Non Connector	4	8
MDOT	W Fulton St	Front Ave NW	CS End	0.49	0.86	2035	Moderate	1.44	Moderate	Yes	State Trunkline	0.16	3	Other Principal Arterial	Non Connector	4	8
MDOT	W I 196	Baldwin/E I 196 RAMP	W I 196/Baldwin RAMP	0.79	0.82	2045	Moderate	1.06	None	No	State Trunkline	0.19	1	Interstate	Non Connector	3	8
MDOT	W I 196	W I 196/Baldwin RAMP	I 196 Crossover	0.66	0.80	2045	Moderate	1.06	None	No	State Trunkline	0.31	1	Interstate	Non Connector	3	8
MDOT	W I 196	Wilson Ave SW	W I 196/28th RAMP	0.82	0.88	2025	Moderate	1.78	Moderate	No	State Trunkline	0.46	1	Interstate	Non Connector	2	8
MDOT	W I 196	I 196 Crossover	Chicago/W I 196	0.96	1.02	2015	Severe	1.78	Moderate	No	State Trunkline	1.04	1	Interstate	Non Connector	2	8
MDOT	W I 196	I 196 Crossover	City/Twp Line	0.91	0.98	2015	Moderate	2.37	Severe	No	State Trunkline	1.04	1	Interstate	Non Connector	2	8
MDOT	W I 196	Market/W I 196 RAMP	W I 196/Market RAMP	0.74	0.80	2045	Moderate	3.20	Severe	No	State Trunkline	0.14	1	Interstate	Non Connector	2	8
MDOT	W I 196	Market Ave SW	I 196 Crossover	0.77	0.83	2045	Moderate	3.88	Severe	No	State Trunkline	0.47	1	Interstate	Non Connector	2	8
MDOT	W I 196	Lake Michigan/W I 196 RAMP	Lake Michigan/E I 196 RAMP	0.70	0.80	2045	Moderate	1.93	Severe	No	State Trunkline	0.17	1	Interstate	Non Connector	2	6
MDOT	W I 196	Fulton/W I 196 RAMP	W I 196/Lake Michigan RAMP	0.64	0.80	2045	Moderate	1.93	Severe	No	State Trunkline	0.14	1	Interstate	Non Connector	2	6
MDOT	W I 196	W I 196/Lake Michigan RAMP	Bridge St NW	0.86	0.89	2015	Moderate	1.51	Moderate	No	State Trunkline	0.32	1	Interstate	Non Connector	2	6
MDOT	W I 196	48th Ave	I 196 Crossover	0.80	0.88	2025	Moderate	1.11	None	No	State Trunkline	1.44	1	Interstate	Non Connector	2	8
MDOT	W I 196	Lane Ave NW	W I 196/2nd RAMP	0.77	0.81	2045	Moderate	1.77	Moderate	No	State Trunkline	0.22	1	Interstate	Non Connector	2	5
MDOT	W I 196/28th RAMP	E I 196	28th/E I 196 RAMP & Wilson Ave SW & 28th St	0.68	0.80	2035	Moderate	2.45	Severe	No	State Trunkline	0.25	1	Interstate	Non Connector	1	9
MDOT	W I 196/2nd RAMP	W I 196	2nd St NW	1.09	1.17	2015	Severe	2.79	Severe	No	State Trunkline	0.14	1	Interstate	Non Connector	1	7
MDOT	W I 196/32nd RAMP	W I 196	32nd/W I 196 RAMP	1.02	1.09	2015	Severe	2.53	Severe	No	State Trunkline	0.38	1	Interstate	Non Connector	1	3
MDOT	W I 196/Baldwin RAMP	W I 196	Baldwin/E I 196 RAMP & Baldwin St	0.96	1.11	2015	Severe	1.08	None	No	State Trunkline	0.24	1	Interstate	Not On NHS	2	8
MDOT	W I 196/Chicago RAMP	W I 196	County Line	1.00	1.09	2015	Severe	2.34	Severe	No	State Trunkline	0.14	1	Interstate	Non Connector	1	7
MDOT	W I 196/College RAMP	W I 196	Hastings St NE & College Ave NE & College/W I	0.88	1.05	2015	Severe	3.33	Severe	No	State Trunkline	0.10	1	Interstate	Non Connector	2	9
MDOT	W I 196/Lake Michigan RAMP	W I 196	Bristol Ave NW	1.04	1.10	2015	Severe	1.20	None	No	State Trunkline	0.18	1	Interstate	Non Connector	1	6
MDOT	W I 196/Ottawa RAMP	W I 196	N Division Ave	0.87	1.01	2015	Severe	1.84	Severe	No	State Trunkline	0.13	1	Interstate	Non Connector	1	9
MDOT	W I 196/Ottawa RAMP	Ionia/W I 196 RAMP	W I 196	0.87	1.01	2015	Severe	1.84	Severe	No	State Trunkline	0.02	1	Interstate	Non Connector	2	9
MDOT	W I 196/S US 131 RAMP	E I 196	N US 131 CD RAMP & N US 131	0.78	0.88	2020	Moderate	3.25	Severe	No	State Trunkline	0.15	1	Interstate	Non Connector	1	6
MDOT	W I 196/S US 131 RAMP	N US 131/W I 196 RAMP	S US 131	0.78	0.88	2020	Moderate	3.25	Severe	No	State Trunkline	0.02	1	Interstate	Non Connector	1	6
MDOT	W I 96	36th/W I 96 RAMP	W I 96/36th RAMP	0.64	0.80	2045	Moderate	1.13	None	No	State Trunkline	0.32	1	Interstate	Non Connector	2	8
MDOT	W I 96	W I 96/Fruit Ridge RAMP	Coopersville and Marne Railway	0.71	0.85	2035	Moderate	1.04	None	No	State Trunkline	1.03	1	Interstate	Non Connector	2	8
MDOT	W I 96	Walker Ave NW	W I 96/Walker RAMP	0.65	0.80	2045	Moderate	1.09	None	No	State Trunkline	0.28	1	Interstate	Non Connector	2	8
MDOT	W I 96	Bristol Ave NW	I 96 Crossovers	0.82	0.93	2015	Moderate	1.11	None	No	State Trunkline	0.24	1	Interstate	Non Connector	2	8
MDOT	W I 96	Coit Ave NE	Cheney Ave NE	0.78	0.89	2025	Moderate	1.30	None	No	State Trunkline	0.37	1	Interstate	Non Connector	2	7
MDOT	W I 96	W I 96	Beltline/W I 96 RAMP	0.72	0.83	2035	Moderate	2.45	Severe	No	State Trunkline	0.28	1	Interstate	Non Connector	3	7
MDOT	W I 96	E Fulton St	E Fulton St	0.88	1.01	2015	Severe	2.40	Severe	No	State Trunkline	0.11	1	Interstate	Non Connector	2	7
MDOT	W I 96	I 96 Crossover	Cascade/W I 96 RAMP	0.88	1.01	2015	Severe	3.59	Severe	No	State Trunkline	0.40	1	Interstate	Non Connector	2	7
MDOT	W I 96	Cascade/W I 96 RAMP	W I 96/E Cascade RAMP	0.65	0.80	2045	Moderate	4.62	Severe	No	State Trunkline	0.25	1	Interstate	Non Connector	2	8
MDOT	W I 96	Cascade Rd SE	W I 96/W Cascade RAMP	0.65	0.80	2045	Moderate	4.62	Severe	No	State Trunkline	0.17	1	Interstate	Non Connector	2	7
MDOT	W I 96	W I 96/W Cascade RAMP	City/Twp Line	0.65	0.80	2045	Moderate	3.59	Severe	No	State Trunkline	0.22	1	Interstate	Non Connector	2	7
MDOT	W I 96	I 96 Crossover	Forest Hill Ave SE	0.77	0.87	2025	Moderate	3.59	Severe	No	State Trunkline	0.66	1	Interstate	Non Connector	2	7
MDOT	W I 96	Forest Hill Ave SE	City/Twp Line	0.77	0.87	2025	Moderate	3.08	Severe	No	State Trunkline	0.72	1	Interstate	Non Connector	2	6
MDOT	W I 96	Burton St SE & Little Plaster Creek	28th/W I 96 RAMP	0.77	0.87	2025	Moderate	3.23	Severe	No	State Trunkline	0.45	1	Interstate	Non Connector	2	6
MDOT	W I 96	W I 96/16th RAMP	W M 11	0.73	0.88	2025	Moderate	1.04	None	No	State Trunkline	0.82	1	Interstate	Non Connector	2	8
MDOT	W I 96	W I 96/36th RAMP	I 96 crossover	0.51	0.80	2045	Moderate	1.05	None	No	State Trunkline	0.28	1	Interstate	Non Connector	2	9
MDOT	W I 96	Thornapple River Dr SE	E M 6/W I 96 RAMP	0.76	0.95	2015	Moderate	1.04	None	No	State Trunkline	0.36	1	Interstate	Non Connector	2	5
MDOT	W I 96	I 96 Crossover	Morse Lake Ave SE	0.85	0.89	2015	Moderate	1.04	None	No	State Trunkline	0.98	1	Interstate	Non Connector	2	7
MDOT	W I 96/48th RAMP	W I 96	48th Ave	0.78	0.96	2015	Moderate	N/A	N/A	No	State Trunkline	0.20	1	Interstate	Non Connector	1	0
MDOT	W I 96/Alpine RAMP	W I 96	Alpine Ave NW	0.78	0.85	2025	Moderate	1.51	Moderate	No	State Trunkline	0.38	1	Interstate	Non Connector	1	4
MDOT	W I 96/Fruit Ridge RAMP	W I 96	Fruit Ridge Ave NW	0.71	0.84	2025	Moderate	2.95	Severe	No	State Trunkline	0.32	1	Interstate	Non Connector	1	2
MDOT	W I 96/Plainfield RAMP	W I 96	Plainfield Ave NE	0.70	0.89	2025	Moderate	3.41	Severe	No	State Trunkline	0.23	1	Interstate	Non Connector	1	6
MDOT	W I 96/Walker RAMP	W I 96	Walker/W I 96 RAMP & Walker Ave NW	0.84	1.00	2015	Severe	2.30	Severe	No	State Trunkline	0.31	1	Interstate	Non Connector	2	8

GVMC 2045 MTP Congestion Deficiencies List

Government Unit	Road Name	From Description	To Description	DAILY_VOC	PK_VOC	YearCong	Cong. Severity	PK PTI	Reliability Def.	Safety Def.	Legal System	Length Miles	NFC	NFC Description	NHS Designation	Lanes	PASER 2019
MDOT	W M 11	W I 96	E I 96	0.72	0.81	2045	Moderate	1.10	None	No	State Trunkline	0.21	1	Interstate	Non Connector	1	6
MDOT	W M 6	Ivanrest Ave SW	M 6 Crossover	0.73	0.81	2045	Moderate	1.34	None	No	State Trunkline	0.14	2	Other Freeway	Non Connector	2	7
MDOT	W M 6 CD	W M 6/N US 131 RAMP	W M 6	0.75	0.82	2045	Moderate	N/A	N/A	No	State Trunkline	0.15	2	Other Freeway	Non Connector	1	9
MDOT	W M 6/8th Avenue RAMP	W M 6	8th Ave	0.78	0.94	2015	Moderate	N/A	N/A	No	State Trunkline	0.52	2	Other Freeway	Non Connector	1	9
MDOT	W M 6/Byron Center RAMP	W M 6	S Byron Center/W M 6 RAMP & Byron Center A	0.87	0.96	2015	Moderate	N/A	N/A	No	State Trunkline	0.38	2	Other Freeway	Non Connector	1	8
MDOT	W M 6/Kalamazoo RAMP	W M 6	W M 6/NB Kalamazoo RAMP & W M 6/SB Kalam	0.75	0.83	2025	Moderate	2.20	Severe	No	State Trunkline	0.27	2	Other Freeway	Non Connector	1	8
MDOT	W M 6/Wilson RAMP	W M 6	Wilson/W M 6 RAMP	0.83	0.95	2025	Moderate	N/A	N/A	No	State Trunkline	0.46	2	Other Freeway	Non Connector	1	8
MDOT	Wilson Ave NW/M 11	Remembrance	Leonard St NW	0.76	0.86	2025	Moderate	1.48	Moderate	Yes	State Trunkline	1.48	3	Other Principal Arterial	Non Connector	2	8
MDOT	Wilson Ave NW/M 11	Leonard St NW	Waybury St NW	0.76	0.86	2025	Moderate	1.48	Moderate	Yes	State Trunkline	0.50	3	Other Principal Arterial	Non Connector	2	8
MDOT	Wilson Ave NW/M 11	Waybury St NW	W Grand Blvd NW	0.76	0.86	2025	Moderate	2.59	Severe	Yes	State Trunkline	0.12	3	Other Principal Arterial	Non Connector	2	7
MDOT	Wilson Ave NW/M 11	W Grand Blvd NW	Chesterfield Blvd NW	0.76	0.86	2025	Moderate	2.59	Severe	Yes	State Trunkline	0.15	3	Other Principal Arterial	Non Connector	3	7
MDOT	Wilson Ave NW/M 11	Chesterfield Blvd NW	Warrington St NW	0.38	0.80	2045	Moderate	2.59	Severe	Yes	State Trunkline	0.19	3	Other Principal Arterial	Non Connector	3	7
MDOT	Wilson Ave NW/M 11	Warrington St NW	Lake Michigan Dr NW	0.38	0.80	2045	Moderate	2.59	Severe	Yes	State Trunkline	0.05	3	Other Principal Arterial	Non Connector	3	7
MDOT	Wilson Ave SW/M 11	Lake Michigan Dr NW	O Brien Rd SW & Wilson Ave NW	0.67	0.80	2045	Moderate	1.55	Moderate	No	State Trunkline	1.00	3	Other Principal Arterial	Non Connector	2	8
MDOT	Wilson Ave SW/M 11	O Brien Rd SW & Wilson Ave NW	Fennessey St SW	0.82	0.96	2015	Moderate	1.74	Moderate	No	State Trunkline	0.15	3	Other Principal Arterial	Non Connector	3	8
MDOT	Wilson Ave SW/M 11	Drakewood SW	Hall St SW	0.79	0.84	2015	Moderate	1.76	Moderate	No	State Trunkline	0.68	3	Other Principal Arterial	Non Connector	2	7
MDOT	Wilson Ave SW/M 11	Hall St SW	Riverbend Dr SW	0.81	0.87	2015	Moderate	1.89	Severe	No	State Trunkline	0.53	3	Other Principal Arterial	Non Connector	3	7
MDOT	Wilson Ave SW/M 11	Riverbend Dr SW	Walleye Dr SW	0.88	1.08	2015	Severe	2.01	Severe	No	State Trunkline	0.21	3	Other Principal Arterial	Non Connector	2	7
MDOT	Wilson Ave SW/M 11	Walleye Dr SW	Burton St SW	0.78	0.86	2025	Moderate	2.01	Severe	No	State Trunkline	0.29	3	Other Principal Arterial	Non Connector	2	7
MDOT	Wilson Ave SW/M 11	Burton St SW	Johnson Park SW	0.79	0.87	2025	Moderate	1.65	Moderate	No	State Trunkline	0.72	3	Other Principal Arterial	Non Connector	3	6
MDOT	Wilson Ave SW/M 11	Johnson Park SW	Butterworth St SW	0.87	0.95	2015	Moderate	2.35	Severe	No	State Trunkline	0.25	3	Other Principal Arterial	Non Connector	3	6
MDOT	Wilson Ave SW/M 11	City/Twp Line	Indian Mounds Dr SW	0.54	0.80	2045	Moderate	2.35	Severe	Yes	State Trunkline	0.09	3	Other Principal Arterial	Non Connector	4	8
MDOT	Wilson Ave SW/M 11	Indian Mounds Dr SW	Indian Mounds Dr SW & 28th/W I 196 RAMP	0.54	0.80	2045	Moderate	2.35	Severe	Yes	State Trunkline	0.02	3	Other Principal Arterial	Non Connector	5	8
Jamestown Twp	8th Ave	Quincy	Bridge 13024	0.48	0.82	2045	Moderate	1.22	None	No	County Primary	0.29	5	Major Collector	Not On NHS	2	5
Grand Rapids Twp	Cascade Rd SE	East Paris Ave SE	Cascade Rd / E I 96	0.66	0.89	2025	Moderate	1.52	Moderate	No	County Primary	0.05	4	Minor Arterial	Not On NHS	4	9
Grand Rapids Twp	Dean Lake Ave NE	3 Mile Rd NE	Bridge 4734	0.62	0.81	2045	Moderate	1.46	Moderate	Yes	County Primary	0.12	5	Major Collector	Not On NHS	3	6
Grand Rapids Twp	Dean Lake Ave NE	Garrett Dr NE	Elmer Dr NE	0.62	0.81	2045	Moderate	1.46	Moderate	Yes	County Primary	0.09	5	Major Collector	Not On NHS	2	6
Grand Rapids Twp	Robinson Rd SE	Lakeside Dr SE	Mercer Dr SE	0.72	0.80	2045	Moderate	N/A	N/A	Yes	County Primary	0.13	5	Major Collector	Not On NHS	2	7
Grand Rapids Twp	Robinson Rd SE	Mercer Dr SE	Maryland Ave SE	0.72	0.80	2045	Moderate	N/A	N/A	Yes	County Primary	0.21	5	Major Collector	Not On NHS	2	7
Grand Rapids Twp	Robinson Rd SE	N Reeds Lake Arm Blvd SE	Cascade Rd SE	0.82	0.95	2015	Moderate	N/A	N/A	Yes	County Primary	0.05	5	Major Collector	Not On NHS	2	4
Georgetown Twp	44th St	Gleneagle Highlands Dr	8th	0.57	0.85	2025	Moderate	1.31	None	No	County Primary	0.18	4	Minor Arterial	Not On NHS	5	8
Georgetown Twp	Baldwin St	Cottonwood Dr	Riverview Dr	0.72	1.02	2015	Severe	1.56	Moderate	No	County Primary	0.04	4	Minor Arterial	Not On NHS	5	8
Georgetown Twp	Baldwin St	Riverview Dr	Cottonwood	0.72	1.02	2015	Severe	1.56	Moderate	No	County Primary	0.12	4	Minor Arterial	Not On NHS	5	8
Georgetown Twp	Baldwin St	Riverview Dr	Cottonwood	0.75	1.06	2015	Severe	1.56	Moderate	No	County Primary	0.12	4	Minor Arterial	Not On NHS	5	8
Georgetown Twp	Cottonwood Dr	Port Sheldon	Chicago Dr	0.65	0.84	2025	Moderate	N/A	N/A	No	County Primary	0.38	4	Minor Arterial	Not On NHS	4	5
Georgetown Twp	Cottonwood Dr	Port Sheldon	Chicago Dr	0.64	0.80	2045	Moderate	N/A	N/A	No	County Primary	0.38	4	Minor Arterial	Not On NHS	4	5
Georgetown Twp	Cottonwood Dr	Summerset Dr	Village Ln	0.57	0.88	2025	Moderate	1.76	Moderate	Yes	County Primary	0.10	4	Minor Arterial	Not On NHS	4	10
Georgetown Twp	Cottonwood Dr	Village Ln	Carriage	0.57	0.88	2025	Moderate	1.76	Moderate	Yes	County Primary	0.11	4	Minor Arterial	Not On NHS	4	10
Georgetown Twp	Cottonwood Dr	Carriage	Riverview Dr	0.57	0.88	2025	Moderate	1.76	Moderate	Yes	County Primary	0.17	4	Minor Arterial	Not On NHS	4	10
Georgetown Twp	Cottonwood Dr	Riverview Dr	Baldwin	0.57	0.88	2025	Moderate	1.76	Moderate	Yes	County Primary	0.12	4	Minor Arterial	Not On NHS	4	10
Georgetown Twp	Port Sheldon St	Center Industrial	CSX Transportation	0.62	0.83	2035	Moderate	N/A	N/A	No	County Primary	0.12	4	Minor Arterial	Not On NHS	5	7
Georgetown Twp	Port Sheldon St	44th	18th	0.57	0.83	2035	Moderate	1.31	None	Yes	County Primary	0.16	4	Minor Arterial	Not On NHS	5	3
Georgetown Twp	Rosewood St	192' West of Southwood	Southwood	0.64	0.88	2025	Moderate	N/A	N/A	No	County Primary	0.04	5	Major Collector	Not On NHS	2	7
Georgetown Twp	Tyler St SW	Cottonwood Dr	Grand Village Ln SW	0.68	0.96	2025	Moderate	N/A	N/A	No	County Primary	0.08	4	Minor Arterial	Not On NHS	2	5
Georgetown Twp	Tyler St SW	Grand Village Ln SW	Kenowa	0.68	0.97	2025	Moderate	N/A	N/A	No	County Primary	0.17	4	Minor Arterial	Not On NHS	2	4
Georgetown Twp	Tyler St SW	Grand Village Ln SW	Kenowa	0.68	0.96	2025	Moderate	N/A	N/A	No	County Primary	0.17	4	Minor Arterial	Not On NHS	2	4
Gaines Twp	68th St SE	Hanna Lake Ave SE	Dutton Ave SE	0.61	0.87	2045	Moderate	N/A	N/A	Yes	County Primary	0.19	4	Minor Arterial	Not On NHS	3	7
Gaines Twp	68th St SE	Dutton Ave SE	Hammond Ave SE	0.60	0.87	2045	Moderate	N/A	N/A	Yes	County Primary	0.09	4	Minor Arterial	Not On NHS	3	7
Gaines Twp	Kalamazoo Ave SE	68th St SE	Marketplace Dr SE	0.64	0.82	2045	Moderate	1.81	Severe	Yes	County Primary	0.26	3	Other Principal Arterial	Non Connector	5	6
Gaines Twp	Kalamazoo Ave SE	68th St SE	Marketplace Dr SE	0.64	0.82	2045	Moderate	1.81	Severe	Yes	County Primary	0.26	3	Other Principal Arterial	Non Connector	5	6
Gaines Twp	Kalamazoo Ave SE	Marketplace Dr SE	E M 6/Kalamazoo RAMP	0.67	0.87	2045	Moderate	1.81	Severe	Yes	County Primary	0.09	3	Other Principal Arterial	Non Connector	6	8
Gaines Twp	Kalamazoo Ave SE	E M 6/Kalamazoo RAMP	NB Kalamazoo/E M 6 RAMP	0.64	0.87	2045	Moderate	1.81	Severe	Yes	County Primary	0.01	3	Other Principal Arterial	Non Connector	6	8
Gaines Twp	Kalamazoo Ave SE	W M 6/NB Kalamazoo RAMP	SB Kalamazoo/W M 6 RAMP	0.70	0.88	2025	Moderate	1.81	Severe	Yes	County Primary	0.03	3	Other Principal Arterial	Non Connector	5	8
Gaines Twp	Kalamazoo Ave SE	SB Kalamazoo/W M 6 RAMP	Auditorium Dr	0.70	0.88	2025	Moderate	1.81	Severe	Yes	County Primary	0.11	3	Other Principal Arterial	Non Connector	6	8
Courtland Twp	10 Mile Rd NE	Courtland Dr NE	Courtland Dr NE	0.66	0.90	2025	Moderate	1.39	Moderate	No	County Primary	0.11	5	Major Collector	Not On NHS	4	8
Courtland Twp	10 Mile Rd NE	Shaner Ave NE	Pleasant Mdws NE	0.60	0.80	2045	Moderate	N/A	N/A	No	County Primary	0.37	5	Major Collector	Not On NHS	2	8
Courtland Twp	10 Mile Rd NE	Myers Lake Ave NE	Bush Dr NE	0.70	0.90	2015	Moderate	N/A	N/A	Yes	County Primary	0.50	5	Major Collector	Not On NHS	2	5
Courtland Twp	10 Mile Rd NE	Charley Ln NE	Brower Lake Rd NE	0.70	0.90	2015	Moderate	N/A	N/A	Yes	County Primary	0.26	5	Major Collector	Not On NHS	2	5
City of Wyoming	32nd St SW	Prospect Ave SE	Madison Ave SE	0.60	0.81	2045	Moderate	N/A	N/A	Yes	City Major	0.06	4	Minor Arterial	Not On NHS	5	6
City of Wyoming	44th St SW	Crooked Tree Rd SW	Yorkton Ave SW	0.67	0.82	2045	Moderate	1.72	Moderate	Yes	City Major	0.04	3	Other Principal Arterial	Non Connector	4	8
City of Wyoming	44th St SW	Yorkton Ave SW	Stonebridge Dr SW	0.59	0.80	2045	Moderate	1.72	Moderate	Yes	City Major	0.13	3	Other Principal Arterial	Non Connector	4	8
City of Wyoming	44th St SW	Byron Center Ave SW	Carol Ave SW	0.66	0.80	2045	Moderate	1.72	Moderate	Yes	City Major	0.16	3	Other Principal Arterial	Non Connector	4	8
City of Wyoming	52nd St SW	Olsen Springs Ct	Clyde Park Ave SW	0.60	0.80	2045	Moderate	1.44	Moderate	No	City Major	0.16	4	Minor Arterial	Not On NHS	2	7
City of Wyoming	54th St SW	Clyde Park Ave SW	S US 131/54th RAMP	0.73	0.85	2035	Moderate	3.54	Severe	Yes	City Major	0.11	3	Other Principal Arterial	Non Connector	4	5
City of Wyoming	54th St SW	S US 131/54th RAMP	54th/S US 131 RAMP	0.79	0.90	2025	Moderate	2.67	Severe	Yes	City Major	0.01	3	Other Principal Arterial	Non Connector	2	6
City of Wyoming	54th St SW	54th/S US 131 RAMP	54th/S US 131 RAMP	0.79	0.90	2025	Moderate	2.67	Severe	Yes	City Major	0.06	3	Other Principal Arterial	Non Connector	6	6
City of Wyoming	54th St SW	S US 131	N US 131	0.69	0.81	2045	Moderate	2.26	Severe	Yes	City Major	0.01	3	Other Principal Arterial	Non Connector	5	8
City of Wyoming	54th St SW	N US 131/54th RAMP	54th/N US 131 RAMP	0.76	0.85	2035	Moderate	2.26	Severe	Yes	City Major	0.05	3	Other Principal Arterial	Non Connector	5	6
City of Wyoming	54th St SW	54th/N US 131 RAMP	N US 131/54th RAMP	0.76	0.85	2035	Moderate	2.26	Severe	Yes	City Major	0.01	3	Other Principal Arterial	Non Connector	2	7
City of Wyoming	56th St SW	Tendercare Ct SW	Kent Trl	0.42	0.84	2045	Moderate	N/A	N/A	No	City Major	0.08	4	Minor Arterial	Not On NHS	2	10
City of Wyoming	56th St SW	Fieldstone Dr SW	Bayberry Farms Dr SW	0.42	0.84	2045	Moderate	N/A	N/A	No	City Major	0.12	4	Minor Arterial	Not On NHS	2	10
City of Wyoming	Godfrey Ave SW	Chicago Dr SW	Ellen Ave SW	0.57	0.81	2025	Moderate	N/A	N/A	No	City Major	0.13	5	Major Collector	Not On NHS	2	7

GVMC 2045 MTP Congestion Deficiencies List

Government Unit	Road Name	From Description	To Description	DAILY_VOC	PK_VOC	YearCong	Cong. Severity	PK PTI	Reliability Def.	Safety Def.	Legal System	Length Miles	NFC	NFC Description	NHS Designation	Lanes	PASER 2019
City of Wyoming	Godfrey Ave SW	Ellen Ave SW	Plastico Ave SW	0.57	0.81	2025	Moderate	N/A	N/A	No	City Major	0.03	5	Major Collector	Not On NHS	2	7
City of Wyoming	Godfrey Ave SW	Plastico Ave SW	City/Twp Line	0.58	0.92	2025	Moderate	N/A	N/A	No	City Major	0.21	5	Major Collector	Not On NHS	2	7
City of Wyoming	Godfrey Ave SW	Olympia St SW	Liberty St SW	0.58	0.92	2025	Moderate	N/A	N/A	No	City Major	0.06	5	Major Collector	Not On NHS	2	7
City of Walker	Fruit Ridge Ave NW	3 Mile Rd NW	Fruit Ridge/E I 96 RAMP	0.78	0.90	2025	Moderate	N/A	N/A	No	City Major	0.04	3	Other Principal Arterial	Non Connector	2	4
City of Walker	Fruit Ridge Ave NW	Fruit Ridge/E I 96 RAMP	Fruit Ridge/E I 96 RAMP	0.78	0.90	2025	Moderate	1.97	Severe	No	City Major	0.05	3	Other Principal Arterial	Non Connector	2	4
City of Walker	Fruit Ridge Ave NW	E I 96	W I 96	0.73	0.85	2045	Moderate	1.97	Severe	No	City Major	0.04	3	Other Principal Arterial	Non Connector	2	4
City of Rockford	10 Mile Rd NE	Wolverine Blvd NE	City/Twp Line	0.86	1.00	2015	Severe	1.39	Moderate	Yes	County Primary	0.10	5	Major Collector	Not On NHS	4	8
City of Rockford	10 Mile Rd NE	Wolverine Blvd NE	City/Twp Line	0.91	1.05	2015	Severe	1.39	Moderate	Yes	County Primary	0.10	5	Major Collector	Not On NHS	4	8
City of Rockford	10 Mile Rd NE	Hillview Pl NE	City/Twp Line	0.86	1.00	2015	Severe	1.39	Moderate	Yes	County Primary	0.01	5	Major Collector	Not On NHS	4	8
City of Rockford	10 Mile Rd NE	City/Twp Line	Atlanta	0.86	1.00	2015	Severe	1.39	Moderate	Yes	County Primary	0.07	5	Major Collector	Not On NHS	4	8
City of Rockford	10 Mile Rd NE	Atlanta	Courtland Dr NE	0.66	0.83	2025	Moderate	1.39	Moderate	Yes	County Primary	0.04	5	Major Collector	Not On NHS	4	8
City of Lowell	Lincoln Lake Ave NE	Grand River Dr SE	1250' North	0.67	0.94	2025	Moderate	N/A	N/A	No	County Primary	0.14	4	Minor Arterial	Not On NHS	3	8
City of Lowell	Lincoln Lake Ave NE	Bowes Rd SE	750' South`	0.65	0.90	2025	Moderate	N/A	N/A	No	County Primary	0.12	4	Minor Arterial	Not On NHS	3	8
City of Kentwood	29th St SE	Shaffer Ave SE	Broadmoor Ave SE	0.75	0.81	2045	Moderate	N/A	N/A	No	City Major	0.29	5	Major Collector	Not On NHS	5	4
City of Kentwood	29th St SE	Shaffer Ave SE	Broadmoor Ave SE	0.81	0.88	2015	Moderate	N/A	N/A	No	City Major	0.29	5	Major Collector	Not On NHS	5	4
City of Kentwood	32nd St SE	Hampton Downs Dr SE	Westminster Dr SE	0.66	0.81	2035	Moderate	N/A	N/A	No	City Major	0.17	4	Minor Arterial	Not On NHS	2	3
City of Kentwood	32nd St SE	Birch Creek Ct SE	Coach Ln SE	0.66	0.81	2035	Moderate	N/A	N/A	No	City Major	0.07	4	Minor Arterial	Not On NHS	2	3
City of Kentwood	32nd St SE	Coach Ln SE	Shaffer Ave SE	0.67	0.85	2035	Moderate	N/A	N/A	No	City Major	0.15	4	Minor Arterial	Not On NHS	2	3
City of Kentwood	44th St SE	East Paris Ave SE	Broadmoor Ave SE	0.73	0.92	2025	Moderate	1.85	Severe	Yes	City Major	0.07	3	Other Principal Arterial	Non Connector	4	9
City of Kentwood	52nd St SE	256' West of Primrose Ave SE	Primrose Ave SE	0.72	0.81	2045	Moderate	1.32	None	Yes	City Major	0.05	4	Minor Arterial	Not On NHS	3	6
City of Kentwood	52nd St SE	Primrose Ave SE	Madison Ave SE	0.72	0.81	2045	Moderate	1.32	None	Yes	City Major	0.19	4	Minor Arterial	Not On NHS	3	5
City of Kentwood	52nd St SE	Southglow Ct SE	Mildred Ave SE	0.70	0.80	2045	Moderate	1.43	Moderate	Yes	City Major	0.12	4	Minor Arterial	Not On NHS	3	9
City of Kentwood	Breton Rd SE	52nd St SE	Rum Creek Dr SE	0.59	0.86	2025	Moderate	N/A	N/A	No	City Major	0.19	4	Minor Arterial	Not On NHS	3	6
City of Kentwood	Breton Rd SE	52nd St SE	Rum Creek Dr SE	0.57	0.82	2035	Moderate	N/A	N/A	No	City Major	0.19	4	Minor Arterial	Not On NHS	3	6
City of Kentwood	Breton Rd SE	52nd St SE	Rum Creek Dr SE	0.57	0.82	2035	Moderate	N/A	N/A	No	City Major	0.19	4	Minor Arterial	Not On NHS	3	6
City of Kentwood	East Paris Ave SE	Sparks Dr SE	29th St	0.63	0.80	2045	Moderate	N/A	N/A	No	City Major	0.34	4	Minor Arterial	Not On NHS	5	6
City of Kentwood	East Paris Ave SE	N Rosebud Dr SE	Old Elm Dr SE	0.64	0.87	2035	Moderate	N/A	N/A	No	City Major	0.15	4	Minor Arterial	Not On NHS	3	6
City of Kentwood	East Paris Ave SE	Old Elm Dr SE	461' North	0.63	0.84	2035	Moderate	N/A	N/A	No	City Major	0.09	4	Minor Arterial	Not On NHS	3	6
City of Hudsonville	32nd Ave	Enterprise Dr	Corporate Grove	0.89	1.07	2025	Severe	2.29	Severe	No	City Major	0.14	4	Minor Arterial	Not On NHS	3	9
City of Grandville	36th St SW	E I 196	McClow Dr SW	0.36	0.81	2045	Moderate	N/A	N/A	No	City Major	0.10	4	Minor Arterial	Not On NHS	3	3
City of Grandville	36th St SW	All Pine Ct	Fairlanes Ave SW	0.36	0.81	2045	Moderate	N/A	N/A	No	City Major	0.09	4	Minor Arterial	Not On NHS	3	3
City of Grandville	44th St SW	Kenowa Ave SW	44th/W I 196 RAMP & W I 196/44th RAMP	0.73	0.97	2015	Moderate	1.81	Severe	Yes	City Major	0.11	3	Other Principal Arterial	Non Connector	6	4
City of Grandville	44th St SW	44th/W I 196 RAMP & W I 196/44th RAMP	44th/W I 196 RAMP	0.80	1.04	2015	Severe	1.75	Moderate	Yes	City Major	0.10	3	Other Principal Arterial	Non Connector	5	4
City of Grandville	44th St SW	44th/E I 196 RAMP	44th/E I 196 RAMP	0.80	1.04	2015	Severe	1.75	Moderate	Yes	City Major	0.11	3	Other Principal Arterial	Non Connector	5	4
City of Grandville	44th St SW	44th/E I 196 RAMP	Rivertown Pkwy SW	0.59	0.80	2045	Moderate	1.75	Moderate	No	City Major	0.15	3	Other Principal Arterial	Non Connector	7	4
City of Grandville	44th St SW	Macatawa Dr & Karona Dr SW	Spartan Industrial Dr SW	0.68	0.82	2045	Moderate	1.72	Moderate	No	City Major	0.20	3	Other Principal Arterial	Non Connector	5	3
City of Grandville	44th St SW	Spartan Industrial Dr SW	City/Twp Line	0.68	0.82	2045	Moderate	1.72	Moderate	No	City Major	0.12	3	Other Principal Arterial	Non Connector	4	6
City of Grandville	Potomac Ave SW	Century Center St SW	Rivertown Pkwy EB	0.85	0.96	2015	Moderate	N/A	N/A	No	City Major	0.06	5	Major Collector	Not On NHS	5	3
City of Grandville	Prairie Pkwy SW	Ivanrest Ave SW	Dixie Ave SW	0.64	0.84	2025	Moderate	N/A	N/A	Yes	City Major	0.32	4	Minor Arterial	Not On NHS	3	3
City of Grand Rapids	1st St NW	E I 196/1st RAMP	Lane Ave NW	0.93	1.09	2015	Severe	1.59	Moderate	No	City Major	0.04	5	Major Collector	Not On NHS	2	7
City of Grand Rapids	1st St NW	Lane Ave NW	1st/E I 196 RAMP	1.15	1.35	2015	Severe	1.89	Severe	Yes	City Major	0.01	5	Major Collector	Not On NHS	2	7
City of Grand Rapids	29th St SE	Breton Rd SE	City/Twp Line	0.64	0.82	2035	Moderate	N/A	N/A	No	City Major	0.48	5	Major Collector	Not On NHS	2	3
City of Grand Rapids	2nd St NW	Lane Ave NW	Fremont Ave NW	0.83	0.91	2015	Moderate	2.16	Severe	No	City Major	0.07	5	Major Collector	Not On NHS	1	8
City of Grand Rapids	2nd St NW	Fremont Ave NW	W I 196/2nd RAMP	1.22	1.33	2015	Severe	1.30	None	No	City Major	0.01	5	Major Collector	Non Connector	1	8
City of Grand Rapids	Breton Rd SE	28th St SE	Woodmeadow Dr SE	0.70	0.84	2035	Moderate	N/A	N/A	No	City Major	0.22	4	Minor Arterial	Not On NHS	4	7
City of Grand Rapids	Brtidge St NW	Lexington Ave NW	Seward Ave NW	0.67	0.83	2025	Moderate	1.50	Moderate	Yes	City Major	0.06	4	Minor Arterial	Not On NHS	3	8
City of Grand Rapids	Brtidge St NW	Seward Ave NW	CSX Transportation	0.66	0.89	2015	Moderate	1.50	Moderate	Yes	City Major	0.04	4	Minor Arterial	Not On NHS	2	8
City of Grand Rapids	Brtidge St NW	Alabama Ave NW	Winter Ave NW	0.77	1.00	2015	Severe	1.50	Moderate	Yes	City Major	0.04	4	Minor Arterial	Not On NHS	2	7
City of Grand Rapids	Brtidge St NW	Winter Ave NW	Broadway Ave NW	0.73	0.84	2025	Moderate	2.16	Severe	Yes	City Major	0.04	4	Minor Arterial	Not On NHS	2	8
City of Grand Rapids	Brtidge St NW	Broadway Ave NW	Summer Ave NW	0.83	1.01	2015	Severe	2.16	Severe	Yes	City Major	0.01	4	Minor Arterial	Not On NHS	2	6
City of Grand Rapids	Brtidge St NW	Summer Ave NW	Mount Vernon Ave NW	0.83	1.01	2015	Severe	2.16	Severe	Yes	City Major	0.05	4	Minor Arterial	Not On NHS	2	6
City of Grand Rapids	Brtidge St NW	S US 131 CD RAMP	S US 131	0.48	0.80	2045	Moderate	2.16	Severe	No	City Major	0.01	4	Minor Arterial	Not On NHS	5	8
City of Grand Rapids	Brtidge St NW	N US 131 CD RAMP	N US 131/E I 196 RAMP	0.95	1.51	2015	Severe	2.16	Severe	No	City Major	0.01	4	Minor Arterial	Not On NHS	5	8
City of Grand Rapids	Burton St SE	Kalamazoo Ave SE	Giddings Ave SE	0.85	1.03	2015	Severe	1.77	Moderate	Yes	City Major	0.04	3	Other Principal Arterial	Non Connector	3	4
City of Grand Rapids	Burton St SW	Clyde Park Ave SW	McKee Ave SW	0.64	0.89	2025	Moderate	2.49	Severe	Yes	City Major	0.07	4	Minor Arterial	Not On NHS	5	7
City of Grand Rapids	Burton St SW	McKee Ave SW	Ruth Ave SW	0.64	0.89	2025	Moderate	2.49	Severe	Yes	City Major	0.04	4	Minor Arterial	Not On NHS	5	7
City of Grand Rapids	Burton St SW	Reton Rd SE	East Beltline Ave SE	0.69	0.82	2045	Moderate	1.48	Moderate	Yes	City Major	1.23	3	Other Principal Arterial	Non Connector	5	9
City of Grand Rapids	Burton St SW	Towner Ave SW	Jerome Ave SW	0.79	1.01	2015	Severe	2.06	Severe	Yes	City Major	0.06	3	Other Principal Arterial	Non Connector	3	7
City of Grand Rapids	Burton St SW	Jerome Ave SW	Stafford Ave SW	0.69	0.82	2045	Moderate	2.06	Severe	Yes	City Major	0.06	3	Other Principal Arterial	Non Connector	3	7
City of Grand Rapids	Burton St SW	Plymouth Ave SE	Breton Rd SE	0.69	0.82	2045	Moderate	1.48	Moderate	Yes	City Major	0.74	3	Other Principal Arterial	Non Connector	5	7
City of Grand Rapids	Century Ave SW	Century/S US 131 RAMP	Hall/S US 131 Connector & S US 131/Century R	0.72	0.96	2025	Moderate	1.03	None	No	City Major	0.01	4	Minor Arterial	Not On NHS	3	3
City of Grand Rapids	Cherry St SW	Bus US 131 & Division/S US 131 RAMP	N US 131/Division RAMP	1.07	1.19	2020	Severe	1.63	Moderate	Yes	City Major	0.01	4	Minor Arterial	Not On NHS	3	9
City of Grand Rapids	Cherry St SW	N US 131/Division RAMP	Ionia Ave SW	0.91	1.10	2020	Severe	2.02	Severe	Yes	City Major	0.05	4	Minor Arterial	Not On NHS	3	8
City of Grand Rapids	College Ave NE	Michigan St NE	E I 196/College RAMP	0.80	0.95	2015	Moderate	2.90	Severe	No	City Major	0.07	4	Minor Arterial	Not On NHS	5	3
City of Grand Rapids	Diamond Ave NE	Lyon St NE	Innes St NE	0.66	0.84	2035	Moderate	N/A	N/A	No	City Major	0.03	5	Major Collector	Not On NHS	2	5
City of Grand Rapids	Diamond Ave NE	Lyon St NE	Innes St NE	0.66	0.83	2035	Moderate	N/A	N/A	No	City Major	0.02	5	Major Collector	Not On NHS	2	5
City of Grand Rapids	Diamond Ave NE	Innes St NE	Crescent St NE	0.66	0.82	2035	Moderate	N/A	N/A	No	City Major	0.07	5	Major Collector	Not On NHS	2	5
City of Grand Rapids	Diamond Ave NE	Crescent St NE	Michigan St NE	0.66	0.82	2035	Moderate	N/A	N/A	No	City Major	0.06	5	Major Collector	Not On NHS	2	7
City of Grand Rapids	E Fulton St	Arthur Ave NE	Carlton Ave SE	0.65	0.91	2035	Moderate	1.85	Severe	No	City Major	0.03	3	Other Principal Arterial	Non Connector	2	4
City of Grand Rapids	E Fulton St	Plymouth Ave NE	Woodward Ln SE	0.65	0.80	2045	Moderate	1.72	Moderate	Yes	City Major	0.13	3	Other Principal Arterial	Non Connector	3	8
City of Grand Rapids	E Fulton St	Lakeside Dr NE	Lakeside Dr SE	0.66	0.90	2025	Moderate	1.57	Moderate	Yes	City Major	0.05	3	Other Principal Arterial	Non Connector	3	7
City of Grand Rapids	E Fulton St	Bel Air Dr NE	Maryland Ave SE	0.55	0.85	2045	Moderate	1.57	Moderate	Yes	City Major	0.06	3	Other Principal Arterial	Non Connector	3	9

GVMC 2045 MTP Congestion Deficiencies List

Government Unit	Road Name	From Description	To Description	DAILY_VOC	PK_VOC	YearCong	Cong. Severity	PK PTI	Reliability Def.	Safety Def.	Legal System	Length Miles	NFC	NFC Description	NHS Designation	Lanes	PASER 2019
City of Grand Rapids	Eastern Ave SE	28th St SE	Everglade Dr SE	0.37	0.80	2045	Moderate	1.59	Moderate	No	City Major	0.07	4	Minor Arterial	Not On NHS	5	8
City of Grand Rapids	Eastern Ave SE	Everglade Dr SE	Walsh St SE	0.74	0.81	2045	Moderate	1.59	Moderate	No	City Major	0.06	4	Minor Arterial	Not On NHS	3	8
City of Grand Rapids	Eastern Ave SE	Walsh St SE	Walsh St SE	0.74	0.81	2045	Moderate	1.59	Moderate	No	City Major	0.01	4	Minor Arterial	Not On NHS	3	8
City of Grand Rapids	Eastern Ave SE	Walsh St SE	Reynard St SE	0.74	0.81	2045	Moderate	1.59	Moderate	No	City Major	0.06	4	Minor Arterial	Not On NHS	3	8
City of Grand Rapids	Eastern Ave SE	Reynard St SE	Billantau St SE	0.74	0.81	2045	Moderate	1.59	Moderate	No	City Major	0.05	4	Minor Arterial	Not On NHS	3	8
City of Grand Rapids	Eastern Ave SE	Billantau St SE	Mayhew Wood Dr SE	0.75	0.81	2045	Moderate	1.59	Moderate	No	City Major	0.02	4	Minor Arterial	Not On NHS	3	8
City of Grand Rapids	Eastern Ave SE	Mayhew Wood Dr SE	Nevada St SE	0.75	0.81	2045	Moderate	1.59	Moderate	No	City Major	0.05	4	Minor Arterial	Not On NHS	3	8
City of Grand Rapids	Eastern Ave SE	Mulford Dr SE	Alger St SE	0.80	0.87	2015	Moderate	1.59	Moderate	No	City Major	0.13	4	Minor Arterial	Not On NHS	3	8
City of Grand Rapids	Eastern Ave SE	Burton St SE	Ardmore St SE	0.81	0.91	2025	Moderate	1.31	None	Yes	City Major	0.06	4	Minor Arterial	Not On NHS	4	5
City of Grand Rapids	Eastern Ave SE	Ardmore St SE	Elliott St SE	0.81	0.92	2025	Moderate	1.31	None	Yes	City Major	0.06	4	Minor Arterial	Not On NHS	2	6
City of Grand Rapids	Eastern Ave SE	Elliott St SE	Griggs St SE	0.80	0.87	2025	Moderate	1.31	None	Yes	City Major	0.09	4	Minor Arterial	Not On NHS	2	6
City of Grand Rapids	Eastern Ave SE	Evergreen St SE	Oakdale St SE	0.77	0.84	2025	Moderate	1.31	None	Yes	City Major	0.06	4	Minor Arterial	Not On NHS	2	6
City of Grand Rapids	Eastern Ave SE	Oakdale St SE	Adams St SE	0.77	0.84	2035	Moderate	1.31	None	Yes	City Major	0.06	4	Minor Arterial	Not On NHS	2	9
City of Grand Rapids	Eastern Ave SE	Adams St SE	Temple St SE	0.75	0.84	2035	Moderate	1.31	None	Yes	City Major	0.07	4	Minor Arterial	Not On NHS	2	8
City of Grand Rapids	Eastern Ave SE	Temple St SE	Hancock St SE	0.75	0.84	2035	Moderate	1.31	None	Yes	City Major	0.07	4	Minor Arterial	Not On NHS	2	9
City of Grand Rapids	Eastern Ave SE	Alexander St SE	Delaware St SE	0.78	0.86	2035	Moderate	1.32	None	Yes	City Major	0.03	4	Minor Arterial	Not On NHS	3	3
City of Grand Rapids	Eastern Ave SE	Delaware St SE	Watkins St SE	0.77	0.84	2035	Moderate	1.32	None	Yes	City Major	0.03	4	Minor Arterial	Not On NHS	3	3
City of Grand Rapids	Eastern Ave SE	Watkins St SE	Watkins St SE	0.77	0.84	2035	Moderate	1.32	None	Yes	City Major	0.02	4	Minor Arterial	Not On NHS	3	3
City of Grand Rapids	Eastern Ave SE	Watkins St SE	Prince St SE	0.77	0.84	2035	Moderate	1.32	None	Yes	City Major	0.05	4	Minor Arterial	Not On NHS	3	3
City of Grand Rapids	Eastern Ave SE	Prince St SE	Worden St SE	0.77	0.84	2035	Moderate	1.32	None	Yes	City Major	0.06	4	Minor Arterial	Not On NHS	3	3
City of Grand Rapids	Eastern Ave SE	Worden St SE	Franklin St SE	0.77	0.82	2035	Moderate	1.32	None	Yes	City Major	0.06	4	Minor Arterial	Not On NHS	3	3
City of Grand Rapids	Eastern Ave SE	Franklin St SE	Bates St SE	0.81	0.87	2025	Moderate	1.65	Moderate	Yes	City Major	0.06	4	Minor Arterial	Not On NHS	3	6
City of Grand Rapids	Eastern Ave SE	Franklin St SE	Bates St SE	0.81	0.87	2025	Moderate	1.65	Moderate	Yes	City Major	0.06	4	Minor Arterial	Not On NHS	3	6
City of Grand Rapids	Eastern Ave SE	Bates St SE	Thomas St SE	0.81	0.87	2025	Moderate	1.65	Moderate	Yes	City Major	0.06	4	Minor Arterial	Not On NHS	2	6
City of Grand Rapids	Eastern Ave SE	Thomas St SE	Dunham St SE	0.81	0.87	2025	Moderate	1.65	Moderate	Yes	City Major	0.06	4	Minor Arterial	Not On NHS	3	6
City of Grand Rapids	Eastern Ave SE	Dunham St SE	Sherman St SE	0.81	0.87	2025	Moderate	1.65	Moderate	Yes	City Major	0.07	4	Minor Arterial	Not On NHS	3	6
City of Grand Rapids	Eastern Ave SE	Sherman St SE	Baxter St SE	0.81	0.87	2025	Moderate	1.65	Moderate	Yes	City Major	0.05	4	Minor Arterial	Not On NHS	3	6
City of Grand Rapids	Eastern Ave SE	Baxter St SE	Bemis St SE	0.81	0.87	2025	Moderate	1.65	Moderate	Yes	City Major	0.03	4	Minor Arterial	Not On NHS	3	6
City of Grand Rapids	Eastern Ave SE	Vanderveen Ct SE	Logan St SE	0.81	0.87	2025	Moderate	1.65	Moderate	Yes	City Major	0.04	4	Minor Arterial	Not On NHS	3	6
City of Grand Rapids	Eastern Ave SE	Logan St SE	Sigsbee St SE	0.81	0.87	2025	Moderate	1.65	Moderate	Yes	City Major	0.06	4	Minor Arterial	Not On NHS	2	7
City of Grand Rapids	Eastern Ave SE	Sigsbee St SE	Wealthy St SE	0.81	0.87	2025	Moderate	1.65	Moderate	Yes	City Major	0.07	4	Minor Arterial	Not On NHS	2	7
City of Grand Rapids	Eastern Ave SE	Cherry St SE	Kellogg St SE	0.78	0.81	2045	Moderate	1.65	Moderate	No	City Major	0.06	4	Minor Arterial	Not On NHS	2	8
City of Grand Rapids	Eastern Ave SE	Kellogg St SE	Lake Dr SE	0.78	0.81	2045	Moderate	1.65	Moderate	No	City Major	0.04	4	Minor Arterial	Not On NHS	3	8
City of Grand Rapids	Franklin St SE	CSX Transportation	CS Break	0.74	0.86	2045	Moderate	1.43	Moderate	No	City Major	0.04	3	Other Principal Arterial	Non Connector	3	8
City of Grand Rapids	Franklin St SE	S Division Ave	Cornwall Ave SE & Rinquette Pl SE	0.74	0.81	2045	Moderate	1.43	Moderate	Yes	City Major	0.04	4	Minor Arterial	Not On NHS	3	6
City of Grand Rapids	Fuller Ave NE	Michigan St NE	Grand Rapids Eastern Railroad	0.62	0.85	2045	Moderate	2.94	Severe	Yes	City Major	0.09	3	Other Principal Arterial	Non Connector	5	5
City of Grand Rapids	Fuller Ave NE	Race St NE	E I 196/Fuller RAMP	0.64	0.87	2035	Moderate	2.94	Severe	Yes	City Major	0.04	3	Other Principal Arterial	Non Connector	5	6
City of Grand Rapids	Fuller Ave NE	W I 196	Fuller/W I 196 Ramp	0.77	0.91	2025	Moderate	3.16	Severe	Yes	City Major	0.05	3	Other Principal Arterial	Non Connector	7	8
City of Grand Rapids	Fuller Ave NE	Fuller Ave NE	Fuller/W I 196 Ramp	0.63	0.84	2035	Moderate	1.62	Moderate	Yes	City Major	0.15	3	Other Principal Arterial	Non Connector	4	6
City of Grand Rapids	Fuller Ave NE	Malta St NE	Bradford St NE	0.63	0.83	2045	Moderate	1.62	Moderate	Yes	City Major	0.09	3	Other Principal Arterial	Non Connector	4	6
City of Grand Rapids	Fuller Ave NE	Bradford St NE	Short St NE	0.62	0.81	2045	Moderate	1.62	Moderate	Yes	City Major	0.01	3	Other Principal Arterial	Non Connector	4	6
City of Grand Rapids	Fuller Ave NE	Short St NE	Mason St NE	0.62	0.81	2045	Moderate	1.62	Moderate	Yes	City Major	0.05	3	Other Principal Arterial	Non Connector	4	6
City of Grand Rapids	Fuller Ave NE	Mason St NE	Maybelle St NE	0.62	0.81	2045	Moderate	1.62	Moderate	Yes	City Major	0.04	3	Other Principal Arterial	Non Connector	4	6
City of Grand Rapids	Godfrey Ave SW	City/Twp Line	Hall St SW	0.52	0.88	2025	Moderate	N/A	N/A	Yes	City Major	0.14	5	Major Collector	Not On NHS	2	2
City of Grand Rapids	Grandville Ave SW	Ellsworth Ave SW	Williams St SW	0.44	0.90	2035	Moderate	1.57	Moderate	Yes	City Major	0.02	4	Minor Arterial	Not On NHS	2	8
City of Grand Rapids	Grandville Ave SW	Cherry St SW	Cherry St SW	0.45	0.88	2045	Moderate	1.57	Moderate	Yes	City Major	0.07	4	Minor Arterial	Not On NHS	2	8
City of Grand Rapids	Grandville Ave SW	S US 131	N US 131	0.52	0.91	2025	Moderate	N/A	N/A	No	City Major	0.01	4	Minor Arterial	Not On NHS	2	8
City of Grand Rapids	Hall St SE	Sheridan Ave SW	Hall/S US 131 Connector	0.66	0.82	2045	Moderate	N/A	N/A	Yes	City Major	0.04	3	Other Principal Arterial	Non Connector	2	3
City of Grand Rapids	Hall St SE	S Division Ave	Euclid Ave SE	0.70	0.80	2045	Moderate	N/A	N/A	No	City Major	0.06	4	Minor Arterial	Not On NHS	5	6
City of Grand Rapids	Hall St SE	Euclid Ave SE	Sheldon Ave SE	0.70	0.80	2045	Moderate	N/A	N/A	No	City Major	0.03	4	Minor Arterial	Not On NHS	3	6
City of Grand Rapids	Hall St SE	Eastern Ave SE	Van Haften Pl SE	0.78	0.83	2015	Moderate	1.27	None	Yes	City Major	0.04	4	Minor Arterial	Not On NHS	2	7
City of Grand Rapids	Hall St SE	Van Haften Pl SE	Marshall Ave SE	0.78	0.83	2015	Moderate	1.27	None	Yes	City Major	0.07	4	Minor Arterial	Not On NHS	2	7
City of Grand Rapids	Hall St SE	Marshall Ave SE	Marshall Ave SE	0.78	0.83	2015	Moderate	1.27	None	Yes	City Major	0.00	4	Minor Arterial	Not On NHS	2	7
City of Grand Rapids	Hall St SE	Marshall Ave SE	Cromwell Ave SE	0.78	0.83	2015	Moderate	1.27	None	Yes	City Major	0.05	4	Minor Arterial	Not On NHS	2	7
City of Grand Rapids	Hall St SE	Cromwell Ave SE	Butler Ave SE	0.78	0.83	2015	Moderate	1.27	None	Yes	City Major	0.04	4	Minor Arterial	Not On NHS	2	7
City of Grand Rapids	Hall St SE	Butler Ave SE	Kalamazoo Ave SE	0.84	1.00	2015	Severe	1.27	None	Yes	City Major	0.01	4	Minor Arterial	Not On NHS	2	7
City of Grand Rapids	Ionia Ave SW	Cherry St SW	Oakes St SW	0.78	0.84	2045	Moderate	N/A	N/A	No	City Major	0.09	4	Minor Arterial	Not On NHS	2	8
City of Grand Rapids	Ionia Ave SW	Michigan St NW	Ionia/E I 196 RAMP	1.07	1.24	2015	Severe	1.47	Moderate	Yes	City Major	0.01	4	Minor Arterial	Not On NHS	3	10
City of Grand Rapids	Kalamazoo Ave SE	Ardmore St SE	Elliott St SE	0.72	0.81	2045	Moderate	1.33	None	Yes	City Major	0.05	4	Minor Arterial	Not On NHS	2	6
City of Grand Rapids	Kalamazoo Ave SE	Elliott St SE	Elliott St SE	0.72	0.81	2045	Moderate	1.33	None	Yes	City Major	0.03	4	Minor Arterial	Not On NHS	2	6
City of Grand Rapids	Kalamazoo Ave SE	Elliott St SE	Johnston St SE	0.72	0.81	2045	Moderate	1.33	None	Yes	City Major	0.07	4	Minor Arterial	Not On NHS	2	6
City of Grand Rapids	Kalamazoo Ave SE	Johnston St SE	Griggs St SE	0.72	0.81	2045	Moderate	1.33	None	Yes	City Major	0.07	4	Minor Arterial	Not On NHS	2	6
City of Grand Rapids	Lake Dr SE	Carlton Ave SE	Carlton Ave SE	0.78	0.91	2025	Moderate	N/A	N/A	Yes	City Major	0.01	4	Minor Arterial	Not On NHS	2	6
City of Grand Rapids	Lake Dr SE	Carlton Ave SE	Robinson Rd SE	0.85	1.07	2015	Severe	N/A	N/A	Yes	City Major	0.03	4	Minor Arterial	Not On NHS	3	6
City of Grand Rapids	Lake Dr SE	Robinson Rd SE	Richard Ter SE	0.72	0.82	2035	Moderate	N/A	N/A	Yes	City Major	0.02	4	Minor Arterial	Not On NHS	3	6
City of Grand Rapids	Lake Dr SE	125' Southeast of Richard Terrace	Genessee St SE	0.71	0.82	2035	Moderate	N/A	N/A	Yes	City Major	0.04	4	Minor Arterial	Not On NHS	2	9
City of Grand Rapids	Lake Dr SE	Genessee St SE	Atlas Ave SE	0.71	0.82	2035	Moderate	N/A	N/A	Yes	City Major	0.01	4	Minor Arterial	Not On NHS	2	9
City of Grand Rapids	Lake Michigan Dr NW	Lake Michigan Dr NW	Summer Ave NW	0.78	0.96	2015	Moderate	1.53	Moderate	Yes	City Major	0.06	4	Minor Arterial	Not On NHS	3	5
City of Grand Rapids	Lake Michigan Dr NW	Summer Ave NW	Mount Vernon Ave NW	0.81	1.02	2015	Severe	1.53	Moderate	Yes	City Major	0.05	4	Minor Arterial	Not On NHS	3	4
City of Grand Rapids	Lake Michigan Dr NW	Lake Michigan Dr NW	CSX Transportation	0.74	0.95	2015	Moderate	1.53	Moderate	Yes	City Major	0.06	4	Minor Arterial	Not On NHS	3	3
City of Grand Rapids	Leonard St NW	Lancaster Ave NW	Rosalie Ave NW	0.60	0.84	2045	Moderate	1.26	None	No	City Major	0.03	3	Other Principal Arterial	Non Connector	3	8
City of Grand Rapids	Leonard St NW	Lamont Ave NW	Clovercrest Ave NW	0.60	0.84	2045	Moderate	1.26	None	No	City Major	0.06	3	Other Principal Arterial	Non Connector	3	8

GVMC 2045 MTP Congestion Deficiencies List

Government Unit	Road Name	From Description	To Description	DAILY_VOC	PK_VOC	YearCong	Cong. Severity	PK PTI	Reliability Def.	Safety Def.	Legal System	Length Miles	NFC	NFC Description	NHS Designation	Lanes	PASER 2019
City of Grand Rapids	Leonard St NW	Barber Ter NW	Hillburn Ave NW	0.60	0.84	2045	Moderate	1.26	None	No	City Major	0.08	3	Other Principal Arterial	Non Connector	3	8
City of Grand Rapids	Leonard St NW	Hillburn Ave NW	Collindale Ave NW	0.60	0.84	2045	Moderate	1.26	None	No	City Major	0.06	3	Other Principal Arterial	Non Connector	3	8
City of Grand Rapids	Leonard St NW	Broadway Ave NW	Turner Ave NW	0.85	0.92	2015	Moderate	1.98	Severe	Yes	City Major	0.06	3	Other Principal Arterial	Non Connector	3	7
City of Grand Rapids	Market Ave SW	Market/E I 196 RAMP	E I 196/Market RAMP	0.67	0.82	2045	Moderate	N/A	N/A	No	City Major	0.01	4	Minor Arterial	Not On NHS	3	2
City of Grand Rapids	Market Ave SW	E I 196/Market RAMP	350' NE	0.67	0.82	2045	Moderate	1.14	None	No	City Major	0.07	4	Minor Arterial	Not On NHS	4	2
City of Grand Rapids	Market Ave SW	Godfrey Ave SW	Wealthy St SW	0.70	0.88	2035	Moderate	N/A	N/A	No	City Major	0.17	4	Minor Arterial	Not On NHS	4	4
City of Grand Rapids	Market Ave SW	S US 131/Market RAMP	S US 131	0.65	0.84	2045	Moderate	N/A	N/A	No	City Major	0.07	3	Other Principal Arterial	Non Connector	4	7
City of Grand Rapids	Maryland Ave NE	W I 196	Peachwood Dr NE	0.68	0.91	2025	Moderate	1.33	None	No	City Major	0.26	5	Major Collector	Not On NHS	2	4
City of Grand Rapids	Maryland Ave NE	Peachwood Dr NE	Orchard View Dr NE	0.68	0.91	2025	Moderate	1.33	None	No	City Major	0.14	5	Major Collector	Not On NHS	2	4
City of Grand Rapids	Maryland Ave NE	Orchard View Dr NE	Leonard St NE	0.64	0.81	2045	Moderate	1.33	None	No	City Major	0.12	5	Major Collector	Not On NHS	2	4
City of Grand Rapids	Michigan St NE	Michigan Pl NE	Dudley Pl NE	0.74	0.82	2045	Moderate	1.73	Moderate	Yes	City Major	0.02	3	Other Principal Arterial	Non Connector	2	8
City of Grand Rapids	Michigan St NE	Union Ave NE	Benson Ave NE	0.74	0.82	2045	Moderate	1.73	Moderate	Yes	City Major	0.07	3	Other Principal Arterial	Non Connector	2	8
City of Grand Rapids	Michigan St NE	Fuller Ave NE	Mayfield Ave NE	0.79	0.89	2015	Moderate	1.73	Moderate	Yes	City Major	0.34	4	Minor Arterial	Not On NHS	5	6
City of Grand Rapids	Michigan St NE	Mayfield Ave NE	Baynton Ave NE	0.79	0.89	2015	Moderate	1.73	Moderate	Yes	City Major	0.06	4	Minor Arterial	Not On NHS	5	6
City of Grand Rapids	Monroe Ave NW	Pearl St NW	Lyon St NW	0.73	0.86	2045	Moderate	1.60	Moderate	No	City Major	0.06	3	Other Principal Arterial	Non Connector	5	8
City of Grand Rapids	Monroe Ave NW	Michigan St NW	E I 196	0.74	1.00	2025	Severe	N/A	N/A	No	City Major	0.11	4	Minor Arterial	Not On NHS	4	8
City of Grand Rapids	Monroe Ave NW	Michigan St NW	E I 196	0.74	0.98	2025	Moderate	N/A	N/A	No	City Major	0.11	4	Minor Arterial	Not On NHS	4	8
City of Grand Rapids	Monroe Ave NW	274' South of Trowbridge St	Trowbridge St NW	0.74	1.00	2025	Severe	N/A	N/A	Yes	City Major	0.05	4	Minor Arterial	Not On NHS	2	8
City of Grand Rapids	N Park St NE	Monroe Ave NE	Briggs Blvd NE	0.69	0.90	2025	Moderate	N/A	N/A	No	City Major	0.05	4	Minor Arterial	Not On NHS	2	8
City of Grand Rapids	Pearl St NW	Mount Vernon Ave NW	Pearl/S US 131 RAMP	0.60	0.80	2045	Moderate	1.76	Moderate	Yes	City Major	0.01	3	Other Principal Arterial	Non Connector	3	4
City of Grand Rapids	Pearl St NW	N US 131/Pearl RAMP	Scribner Ave NW	0.75	1.03	2015	Severe	1.76	Moderate	Yes	City Major	0.00	3	Other Principal Arterial	Non Connector	5	9
City of Grand Rapids	Plainfield Ave NE	Carrier St NE	Lister Ct NE	0.71	0.91	2025	Moderate	1.53	Moderate	Yes	City Major	0.04	3	Other Principal Arterial	Non Connector	3	9
City of Grand Rapids	Plainfield Ave NE	Page St NE	Shanahan St NE	0.62	0.84	2025	Moderate	1.53	Moderate	Yes	City Major	0.06	3	Other Principal Arterial	Non Connector	3	8
City of Grand Rapids	Plainfield Ave NE	Page St NE	Shanahan St NE	0.62	0.84	2025	Moderate	1.53	Moderate	Yes	City Major	0.06	3	Other Principal Arterial	Non Connector	3	8
City of Grand Rapids	Plainfield Ave NE	Page St NE	Shanahan St NE	0.64	0.88	2025	Moderate	1.53	Moderate	Yes	City Major	0.06	3	Other Principal Arterial	Non Connector	3	8
City of Grand Rapids	Plainfield Ave NE	Shanahan St NE	Grove St NE	0.62	0.84	2025	Moderate	1.53	Moderate	Yes	City Major	0.02	3	Other Principal Arterial	Non Connector	3	8
City of Grand Rapids	Plainfield Ave NE	Grove St NE	Spencer St NE	0.62	0.84	2025	Moderate	1.53	Moderate	Yes	City Major	0.07	3	Other Principal Arterial	Non Connector	3	8
City of Grand Rapids	Plainfield Ave NE	Grove St NE	Spencer St NE	0.62	0.84	2025	Moderate	1.53	Moderate	Yes	City Major	0.07	3	Other Principal Arterial	Non Connector	3	8
City of Grand Rapids	Plainfield Ave NE	Grove St NE	Spencer St NE	0.64	0.88	2025	Moderate	1.53	Moderate	Yes	City Major	0.07	3	Other Principal Arterial	Non Connector	3	8
City of Grand Rapids	Plainfield Ave NE	Spencer St NE	Caledonia St NE	0.60	0.84	2025	Moderate	1.53	Moderate	Yes	City Major	0.03	3	Other Principal Arterial	Non Connector	3	8
City of Grand Rapids	Plainfield Ave NE	Caledonia St NE	Coit Ave NE	0.63	0.88	2025	Moderate	1.53	Moderate	Yes	City Major	0.01	3	Other Principal Arterial	Non Connector	3	8
City of Grand Rapids	Plymouth Ave NE	E I 196	W I 196	0.59	1.06	2025	Severe	N/A	N/A	No	City Major	0.02	4	Minor Arterial	Not On NHS	3	8
City of Grand Rapids	Plymouth Ave NE	Service Rd NE	Bradford St NE	0.46	0.82	2045	Moderate	N/A	N/A	No	City Major	0.02	4	Minor Arterial	Not On NHS	3	7
City of Grand Rapids	Plymouth Ave NE	Bradford St NE	Mason St NE	0.46	0.82	2045	Moderate	N/A	N/A	No	City Major	0.05	4	Minor Arterial	Not On NHS	3	7
City of Grand Rapids	Plymouth Ave NE	Mason St NE	Mason St NE	0.46	0.82	2045	Moderate	N/A	N/A	No	City Major	0.02	4	Minor Arterial	Not On NHS	3	7
City of Grand Rapids	Plymouth Ave NE	Mason St NE	Matilda St NE	0.48	0.82	2045	Moderate	N/A	N/A	No	City Major	0.06	4	Minor Arterial	Not On NHS	3	7
City of Grand Rapids	Stocking Ave NW	E I 196	W I 196	0.67	0.90	2025	Moderate	N/A	N/A	No	City Major	0.01	4	Minor Arterial	Not On NHS	2	6
City of Grand Rapids	Stocking Ave NW	2nd St	3rd St NW	0.67	0.88	2025	Moderate	N/A	N/A	No	City Major	0.03	4	Minor Arterial	Not On NHS	3	7
City of Grand Rapids	Stocking Ave NW	3rd St NW	4th St NW	0.66	0.82	2035	Moderate	N/A	N/A	No	City Major	0.09	4	Minor Arterial	Not On NHS	2	8
City of Grand Rapids	Turner Ave NW	SB US 131 RAMP	Lake Michigan Dr NW	0.78	1.04	2025	Severe	N/A	N/A	Yes	City Major	0.03	5	Major Collector	Not On NHS	5	5
City of Grand Rapids	Turner Ave NW	Bridge St NW	1st St NW	0.34	0.84	2045	Moderate	1.17	None	No	City Major	0.08	5	Major Collector	Not On NHS	2	2
City of Grand Rapids	W Fulton St	CS End	Monroe Ave NW	0.46	0.80	2045	Moderate	1.44	Moderate	Yes	City Major	0.09	3	Other Principal Arterial	Non Connector	5	7
City of Grand Rapids	W Fulton St	Monroe Ave NW	Ottawa Alley	0.57	0.82	2045	Moderate	1.44	Moderate	Yes	City Major	0.02	3	Other Principal Arterial	Non Connector	5	8
City of Grand Rapids	W Fulton St	Ottawa Ave SW	Ottawa Ave NW	0.63	0.86	2035	Moderate	1.44	Moderate	Yes	City Major	0.01	3	Other Principal Arterial	Non Connector	5	8
City of Grand Rapids	Walker Ave NW	Richmond St NW	Richmond St NW	0.48	0.86	2045	Moderate	N/A	N/A	No	City Major	0.01	4	Minor Arterial	Not On NHS	2	5
City of Grand Rapids	Walker Ave NW	Covell Ave NW	Blueberry Dr NW	0.66	0.80	2045	Moderate	N/A	N/A	No	City Major	0.06	4	Minor Arterial	Not On NHS	2	6
City of Grand Rapids	Wealthy St SE	Roundabout	Jefferson Ave SE	0.95	0.97	2015	Moderate	N/A	N/A	Yes	City Major	0.03	4	Minor Arterial	Not On NHS	1	3
City of Grand Rapids	Wealthy St SE	Straight Ave SW	400' W of Front Avenue	0.64	0.94	2025	Moderate	N/A	N/A	No	City Major	0.08	4	Minor Arterial	Not On NHS	2	3
City of Grand Rapids	Wealthy St SE	S US 131	Division/S US 131 RAMP	0.66	0.81	2045	Moderate	2.38	Severe	No	City Major	0.01	3	Other Principal Arterial	Non Connector	4	6
City of Grand Rapids	Wealthy St SE	N US 131/Division RAMP	Ionia Ave SW	0.85	1.06	2015	Severe	2.38	Severe	No	City Major	0.05	3	Other Principal Arterial	Non Connector	4	6
City of Grand Rapids	Wealthy St SE	Commerce Ave SW	S Division Ave	0.73	0.83	2045	Moderate	2.38	Severe	No	City Major	0.04	3	Other Principal Arterial	Non Connector	4	9
City of Grand Rapids	Wealthy St SE	Roundabout	Jefferson Ave SE	0.75	0.84	2025	Moderate	N/A	N/A	Yes	City Major	0.03	4	Minor Arterial	Not On NHS	1	3
City of Grand Rapids	Wealthy St SE	Lake Dr SE	Norwood Ave SE	0.65	0.86	2015	Moderate	N/A	N/A	Yes	City Major	0.02	5	Major Collector	Not On NHS	2	4
City of East Grand Rapids	Lake Dr SE	Plymouth Ave SE	Cardinal Dr SE	0.69	0.90	2015	Moderate	N/A	N/A	No	City Major	0.11	4	Minor Arterial	Not On NHS	2	8
City of East Grand Rapids	Lake Dr SE	Locust Ave SE	Laurel Cir & Laurel Ave SE	0.69	0.90	2015	Moderate	N/A	N/A	No	City Major	0.07	4	Minor Arterial	Not On NHS	2	8
City of East Grand Rapids	Plymouth Ave SE	San Lu Rae Dr SE	Lake Dr SE	0.70	0.81	2035	Moderate	1.07	None	No	City Major	0.25	5	Major Collector	Not On NHS	2	8
City of Coopersville	48th Ave	48th/W I 96 RAMP	Ironwood Dr	0.76	0.96	2025	Moderate	N/A	N/A	No	County Primary	0.23	5	Major Collector	Not On NHS	2	0
Cascade Twp	28th St SE/M 11	W I 96/W 28th RAMP	486' East	0.83	0.93	2015	Moderate	1.51	Moderate	Yes	County Primary	0.09	4	Minor Arterial	Not On NHS	6	7
Cascade Twp	28th St SE/M 11	Meijer Dr SE	300' East	0.72	0.80	2035	Moderate	1.51	Moderate	Yes	County Primary	0.06	4	Minor Arterial	Not On NHS	6	7
Cascade Twp	Burton St SE	Patterson Ave SE	E I 96	0.62	0.87	2025	Moderate	2.07	Severe	Yes	County Primary	0.14	4	Minor Arterial	Not On NHS	2	6
Cascade Twp	Burton St SE	Little Plaster Creek	S Quail Crest Dr SE	0.62	0.87	2025	Moderate	2.07	Severe	Yes	County Primary	0.15	4	Minor Arterial	Not On NHS	2	6
Cascade Twp	Cascade Rd SE	Orange Ave SE	Orange Ave SE	0.55	0.86	2035	Moderate	1.49	Moderate	Yes	County Primary	0.03	4	Minor Arterial	Not On NHS	5	6
Cascade Twp	Cascade Rd SE	Orange Ave SE	Thornapple River	0.55	0.86	2035	Moderate	1.49	Moderate	Yes	County Primary	0.08	4	Minor Arterial	Not On NHS	5	6
Cascade Twp	Cascade Rd SE	Thornapple River	Thorncrest Dr SE	0.48	0.82	2045	Moderate	1.49	Moderate	No	County Primary	0.12	4	Minor Arterial	Not On NHS	5	6
Cascade Twp	Cascade Rd SE	2279' West of Hidden Hills Ave	Hidden Hills Ave SE	0.59	0.88	2025	Moderate	1.17	None	Yes	County Primary	0.43	4	Minor Arterial	Not On NHS	3	8
Cascade Twp	Patterson Ave SE	South Complex Dr SE	CSX Transportation	0.73	0.82	2035	Moderate	N/A	N/A	No	County Primary	0.16	3	Other Principal Arterial	Airport Connector	5	6
Cascade Twp	Patterson Ave SE	37th St SE	36th St SE	0.73	0.81	2045	Moderate	N/A	N/A	No	County Primary	0.13	3	Other Principal Arterial	Airport Connector	5	6
Cascade Twp	Thornapple River Dr SE	48th St SE	1100' North	0.45	0.82	2045	Moderate	N/A	N/A	No	County Primary	0.54	4	Minor Arterial	Not On NHS	2	8
Cannon Twp	Cannonsburg Rd NE	Chauncey Dr NE	Bear Creek Trl NE & Blakely Dr NE	0.57	0.80	2045	Moderate	N/A	N/A	Yes	County Primary	0.39	5	Major Collector	Not On NHS	2	6
Cannon Twp	Cannonsburg Rd NE	Bear Creek Trl NE & Blakely Dr NE	Pettis	0.58	0.80	2045	Moderate	N/A	N/A	Yes	County Primary	0.65	5	Major Collector	Not On NHS	2	6
Cannon Twp	Cannonsburg Rd NE	Shawkoto Trl NE	Egypt Valley Ave NE	0.58	0.89	2025	Moderate	N/A	N/A	Yes	County Primary	0.61	5	Major Collector	Not On NHS	2	6
Cannon Twp	Cannonsburg Rd NE	Egypt Valley Ave NE	Myers Lake Ave NE	0.55	0.92	2025	Moderate	N/A	N/A	Yes	County Primary	0.51	5	Major Collector	Not On NHS	2	6

GVMC 2045 MTP Congestion Deficiencies List

Government Unit	Road Name	From Description	To Description	DAILY_VOC	PK_VOC	YearCong	Cong. Severity	PK PTI	Reliability Def.	Safety Def.	Legal System	Length Miles	NFC	NFC Decsription	NHS Designation	Lanes	PASER 2019
Blendon Twp	Port Sheldon St	Van Dam Ave	48th Ave	0.73	0.85	2035	Moderate	1.48	Moderate	No	County Primary	0.27	4	Minor Arterial	Not On NHS	2	8
Alpine Twp	4 Mile Rd NW	Hendershot Ave NW	Peach Ridge Ave NW	0.67	0.83	2045	Moderate	1.17	None	No	County Primary	0.50	4	Minor Arterial	Not On NHS	2	8
Alpine Twp	4 Mile Rd NW	Peach Ridge Ave NW	Indian Creek RDG NW	0.67	0.83	2045	Moderate	1.44	Moderate	No	County Primary	0.26	4	Minor Arterial	Not On NHS	2	8
Alpine Twp	4 Mile Rd NW	Bristol Ave NW	Cordes	0.68	0.82	2045	Moderate	1.43	Moderate	No	County Primary	0.49	4	Minor Arterial	Not On NHS	2	8
Alpine Twp	4 Mile Rd NW	York View Dr NW	Oakridge Ave NW	0.74	0.85	2035	Moderate	1.52	Moderate	No	County Primary	0.05	4	Minor Arterial	Not On NHS	3	6
Alpine Twp	4 Mile Rd NW	Oakridge Ave NW	Milla Ave NW	0.72	0.83	2045	Moderate	1.52	Moderate	No	County Primary	0.11	4	Minor Arterial	Not On NHS	3	6
Alpine Twp	4 Mile Rd NW	Milla Ave NW	City/Twp Line	0.72	0.83	2045	Moderate	1.52	Moderate	No	County Primary	0.16	4	Minor Arterial	Not On NHS	3	6
Algoma Twp	10 Mile Rd NW	Algoma Ave NE	10 Mile/S US 131 RAMP	0.76	1.00	2015	Severe	1.36	Moderate	No	County Primary	0.06	4	Minor Arterial	Not On NHS	4	4
Algoma Twp	10 Mile Rd NW	10 Mile/S US 131 RAMP	W 10 Mile/S US 131 RAMP	0.70	0.80	2045	Moderate	N/A	N/A	No	County Primary	0.09	3	Other Principal Arterial	Non Connector	4	4
Algoma Twp	10 Mile Rd NW	N US 131	N US 131/10 Mile RAMP	0.87	1.09	2015	Severe	2.07	Severe	No	County Primary	0.13	3	Other Principal Arterial	Non Connector	5	4
Algoma Twp	10 Mile Rd NW	N US 131/10 Mile RAMP	Belmont Ave NE	0.92	1.13	2015	Severe	1.77	Moderate	No	County Primary	0.06	3	Other Principal Arterial	Non Connector	6	3
Algoma Twp	10 Mile Rd NW	Belmont Ave NE	1780' East	0.59	0.82	2045	Moderate	1.77	Moderate	No	County Primary	0.34	3	Other Principal Arterial	Non Connector	5	9
Algoma Twp	10 Mile Rd NW	1808' West of Windstone Dr NE	Windstone Dr NE	0.59	0.82	2045	Moderate	1.19	None	No	County Primary	0.34	3	Other Principal Arterial	Non Connector	5	8
Algoma Twp	10 Mile Rd NW	Wolven Ave NE	Rogue Ridge Dr NE	0.59	0.82	2045	Moderate	1.19	None	No	County Primary	0.34	3	Other Principal Arterial	Non Connector	5	8
Ada Twp	Ada Dr SE	Thornapple River Dr SE	Headley St SE	0.75	1.06	2015	Severe	1.95	Severe	No	County Primary	0.05	4	Minor Arterial	Not On NHS	3	8
Ada Twp	Ada Dr SE	Thornapple Village Dr SE	E Fulton St SE	0.65	0.97	2015	Moderate	1.95	Severe	No	County Primary	0.11	4	Minor Arterial	Not On NHS	3	9
Ada Twp	Knapp St NE	Grand River Dr NE	Shady Dr NE	0.42	0.93	2025	Moderate	1.72	Moderate	No	County Primary	0.35	4	Minor Arterial	Not On NHS	3	9
Ada Twp	Knapp St NE	Grand River Dr NE	Shady Dr NE	0.42	0.93	2025	Moderate	1.72	Moderate	No	County Primary	0.35	4	Minor Arterial	Not On NHS	3	9
Ada Twp	Knapp St NE	Shady Dr NE	Watercrest Dr	0.42	0.93	2025	Moderate	1.73	Moderate	No	County Primary	0.19	4	Minor Arterial	Not On NHS	3	9
Ada Twp	Knapp St NE	Grand Valley Dr NE	Pettis Ave NE	0.42	0.82	2025	Moderate	1.73	Moderate	No	County Primary	0.22	4	Minor Arterial	Not On NHS	3	9
Ada Twp	Pettis Ave NE	Fulton	Vergennes St SE	0.58	1.20	2015	Severe	N/A	N/A	No	County Primary	0.06	4	Minor Arterial	Not On NHS	4	7

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Needs Analyses and Discussions

Pavement Condition Needs Assessment

The GVMC needs for pavement condition were assessed by comparing four financial scenarios. Each scenario, optimized by using a mix of fixes, has a timeline out to 2045. An additional analyses using deterioration curves and treatment techniques highlighted in the scenario graphs below were grown out to 2030.

The network used for this analysis includes all MPO Federal Aid Roads with the omission of MDOT facilities. MDOT facilities were omitted as budgets vastly change annually depending on the scope of projects selected for our region. The budget for this chosen network includes federal, state, and local dollars. As such, our annual investment for 2019 was 41 Million dollars, which was used as the baseline for defining various financial scenarios for future analysis. Please note, this figure includes all local expenditures outside of the programmed Transportation Improvement Program (TIP) that our maintenance jurisdictions spend on the Federal Aid Network.

Quality pavement management comes in the form of a “mix of fixes”. With multiple jurisdictions represented in the analysis area it was difficult to define an exact dollar figure for each improvement. Changes in road width and improvements made in the right of way vary greatly depending on the location of the facility. Input was provided at the State, County, and City level to determine a reasonable cost for various treatments.

Cost Assumptions & Trigger Settings

Within the Roadsoft software, PASER (Pavement Surface Evaluation & Rating) ratings determine at what point a road surface type will be triggered and applied a fix to extend the service life of the facility. Below is an outline of fixes, costs, and PASER triggers used to apply our scenario analysis out to 2030.

Table 1 – Working Pavement Management Strategies

Asphalt Standard	Cost Per Lane-Mile
Reconstruct – (down to dirt)	\$1,200,000
Mill and Fill – 3”	\$300,000
Mill and Fill – 1 ½”	\$150,000
Cape/Fog/Chip Seal	\$25,000
Crack Sealing	\$4,000
Asphalt Composite	
Reconstruct – (down to dirt)	\$1,500,000
Heavy Overlay – w/ milling and basework	\$408,000
Capeseal	\$25,000
Crack Sealing	\$4,000
Concrete	
Reconstruct – (down to dirt)	\$2,000,000
Heavy CPM (joint repair and slab replacement)	\$180,000
Sealcoat Standard	
Reconstruct to all season	\$600,000
Sealcoat	\$25,000

Table 2 – Analysis Improvement PASER Trigger Settings

Asphalt & Composite (2,750 lane-miles)	Min Rating	Max Rating	Reset
Crack Sealing	6	7	7
Sealcoat	5	6	8
Overlay	4	4	9
Reconstruct	1	3	10
Concrete (94 lane-miles)			
Heavy CPM	5	5	8
Reconstruct	1	4	10
Sealcoat – Standard (20 lane-miles)			
Sealcoat	5	6	8
Reconstruct	1	4	10

System Deterioration/Deterioration Curves

Every pavement from the day it is placed will deteriorate at a given pace depending upon construction methods, materials, weather, traffic load and a number of other factors. To analyze system deterioration for multiple investment scenarios the deterioration curves used within the Roadsoft Program were used. These curves are based upon the pavement deterioration rates within the GVMC Federal Aid network and allows tracking of deterioration over time.

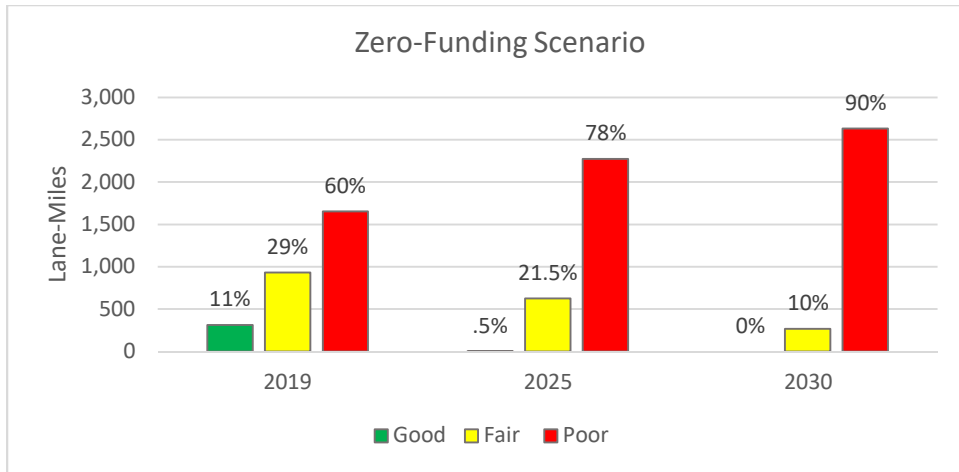
Investment Scenarios

As mentioned above, \$41 million was the baseline used to determine how changing the investment level could affect the condition of the regional road network. This \$41 million includes about \$20 million in local revenues that GVMC maintenance jurisdictions use either for match for federal funding or use for 100% locally funded projects on the federal aid system. Some of these local revenues come from millages or other sources that have end dates that will need to be addressed within the horizon year of this plan. However, for the sake of this analysis, it was assumed that they will continue.

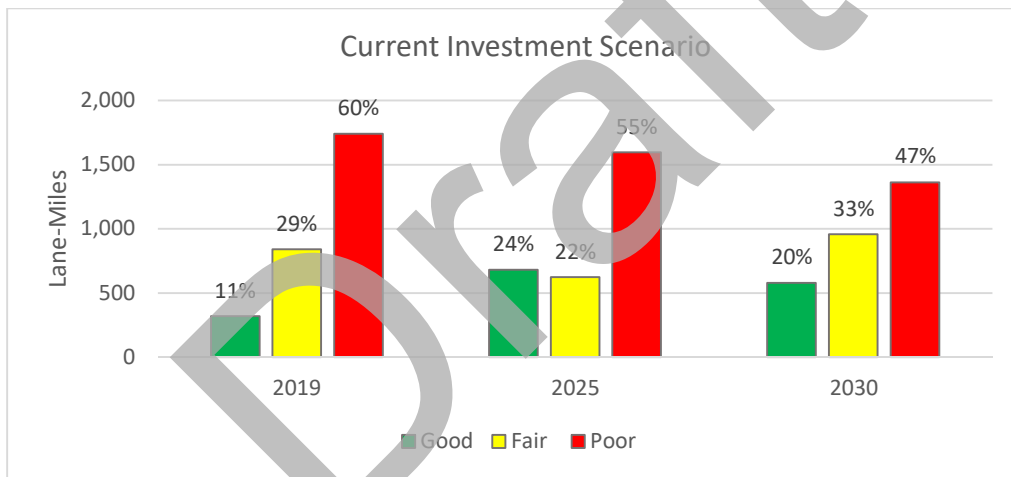
The results of the four funding scenarios are summarized in the charts below. Each alternative is organized by year for Good, Fair, and Poor conditions, identified by the PASER system.

PASER Maintenance Defined
Good (PASER Rating 10-8) – no maintenance necessary
Fair (PASER Rating 7-5) – in need of preventative maintenance
Poor (PASER Rating 4-1) – in need of reconstruction

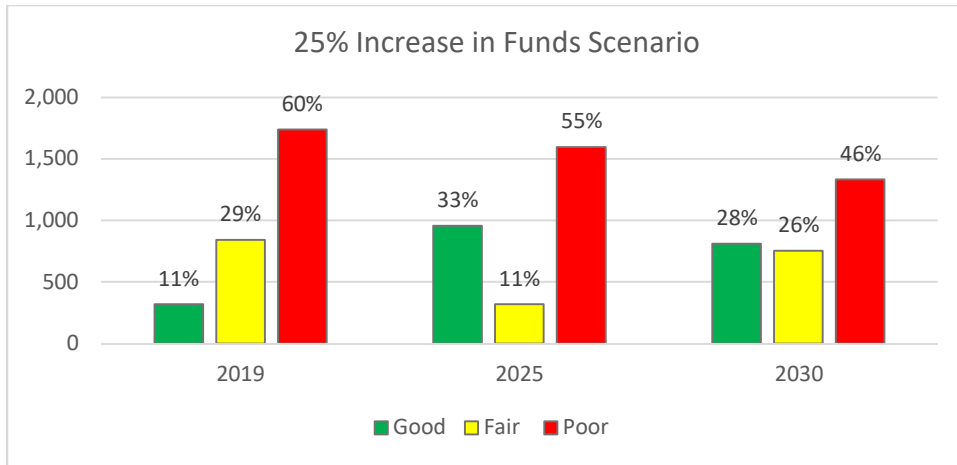
The first alternative is a do nothing scenario--where if tomorrow there was no money available to fix the roads. In this scenario the system would deteriorate quickly taking the region’s average PASER rating down to 2.05 in 2030.



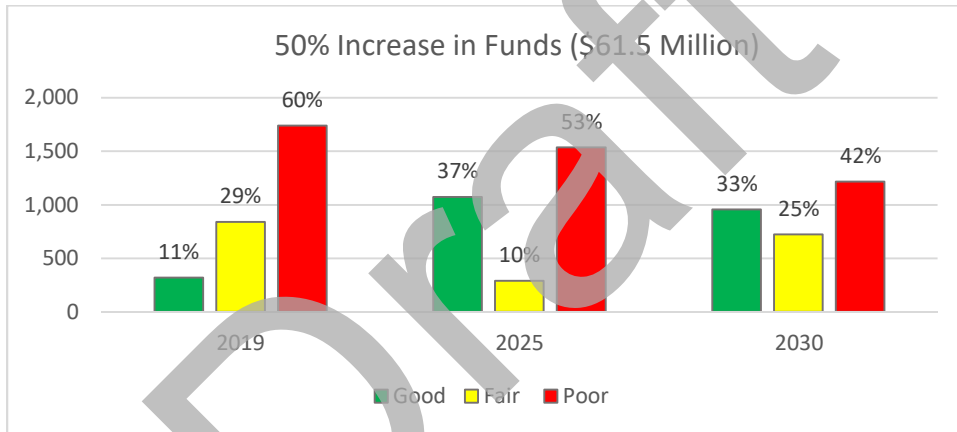
The second alternative is a scenario where the current levels of funding (\$41 million annually) would be maintained with 4% inflation for costs and 2% increase in funds per year. As seen in the graph below, the system would remain in poor condition by lane miles, but the average PASER rating would be maintained at 4.5 in 2030.



The third alternative is a scenario where we would have a 25% increase in current levels (\$51 million annually) with 4% annual inflation and a 2% increase in funds per year. This is the threshold where we will be able to maintain and start to gain on the existing average PASER rating out to 2030.

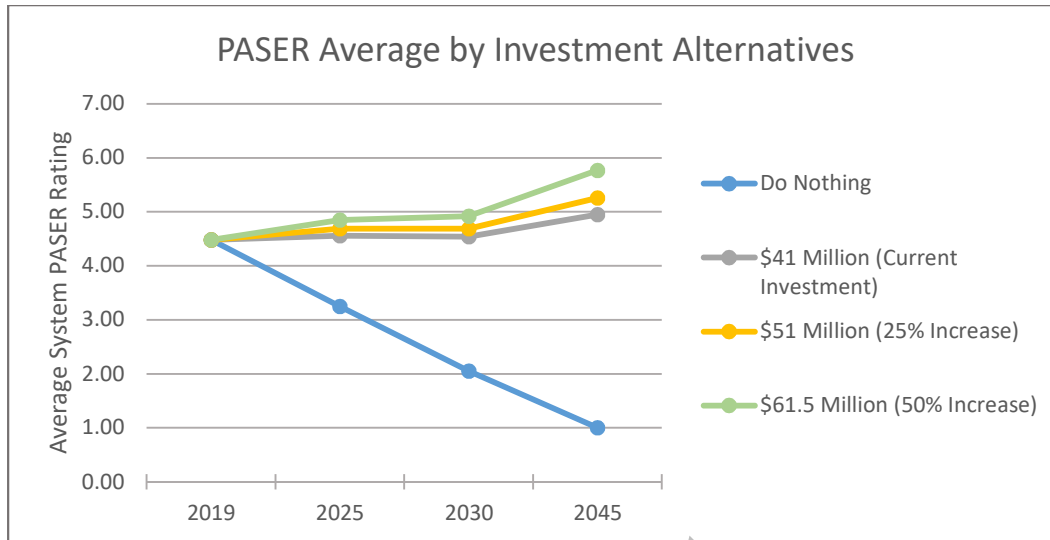


The final alternative is a scenario where we would increase current levels of funding by 50% to \$61.5 million annually with a 4% annual inflation rate and 2% increase in funds per year. This is the threshold where we will be able to maintain a PASER rating of 5.0 out to the year 2030.



Summary/Results

While it is nearly impossible to predict infrastructure conditions long term with certainty, some conclusions can be drawn from this analysis. The average condition/PASER rating of the local federal aid system in the GVMC area will remain stagnant without a significant increase in investment and optimal timing of improvements. If the level of investment declines, the system condition could decline significantly. The graph below depicts growth using the previous financial levels to get an average PASER rating by investment to 2045.



Additional Safety Needs Assessment

Intersection and Corridor Safety

Though safety deficiencies were defined above based on the federal performance measures and targets, the top 50 intersections and corridors as ranked by the number of fatalities and serious injuries from 2013-2017 have been identified to provide some additional context beyond what the federal performance measures can provide. These intersections and corridors are listed in the tables below, while the top 100 fatality and serious injury intersections and corridors are displayed in the maps that follow.

In the past GVMC and its member communities partnered with Wayne State University, AAA, and the Michigan OHSP to complete intersection safety studies. Many of the suggested solutions identified during these efforts were low cost solutions that have been implemented by local jurisdictions using local funding sources. Higher cost improvements have either been put on hold waiting for funding or have been completed on a minimal basis using competitive statewide STP Safety funding administered through MDOT.

To proactively address intersection issues, GVMC could work with safety partners as was done in the past to determine intersections and corridors that require additional attention through a regional safety study and/or road safety audits. A focused intersection safety study could be undertaken periodically that would identify a small number (6-8) of intersections that exhibited characteristics that warranted safety related improvements. Additionally, funding could be dedicated to implement solutions to address issues identified in the study process.

This approach of having funding dedicated to solutions would lead to more efficient alleviation of identified intersection safety issues.

Table 3 – Intersection Ranking by Number of Fatalities and Serious Injuries from 2013-2017

Rank	Intersection Name	Jurisdiction	Total Crashes	No. of Fatal and Serious Injury Crashes	No. of Pedestrian Crashes	No. of Fatalities	No. of Serious Injuries	Total Fatalities and Serious Injuries
1	28th Ave & Baldwin St	Georgetown	69	4	0	0	10	10
2	E M 6 & E I 196	Georgetown	10	2	0	1	8	9
3	Lake Michigan Dr & 8th Ave	Tallmadge	82	5	0	0	8	8
4	Buchanan Ave SW & 32nd St SW	Wyoming	31	4	0	0	8	8
5	60th St SE & East Paris Ave SE	Gaines	43	5	0	1	7	8
6	15 Mile Rd NW & M 37 NW	Sparta	12	4	0	2	5	7
7	28th St SE & Eastern Ave SE	Grand Rapids	228	7	6	0	7	7
8	Northland Dr NE & 14 Mile Rd NE	Algoma	55	4	0	2	4	6
9	6 Mile Rd NW & Fruit Ridge Ave NW	Alpine	16	3	0	2	4	6
10	3 Mile Rd NE & E Beltline Ave NE	Grand Rapids TWP	25	3	0	0	6	6
11	Knapp St NE & E Beltline Ave NE	Grand Rapids	115	6	2	1	5	6
12	Madison Ave SE & 28th St SE	Grand Rapids	144	6	1	0	6	6
13	Burlingame Ave SW & 28th St SW	Wyoming	179	4	2	1	5	6
14	Michael Ave SW & 36th St SW & Milan Ave SW	Wyoming	60	5	3	0	6	6
15	60th St SE & Patterson Ave SE	Gaines	33	5	0	1	5	6
16	Egner Ave NE & Cedar Springs Ave NE	Solon	2	1	0	2	3	5
17	17 Mile Rd NE & Pine Island Dr NE	Solon	17	5	0	1	4	5
18	Podunk Ave NE & 14 Mile Rd NE	Oakfield	16	4	0	2	3	5
19	Belding Rd NE & Ramsdell Dr NE	Cannon	31	4	0	0	5	5
20	6 Mile Rd NW & Baumhoff Ave NW	Alpine	8	4	1	1	4	5
21	Wilson Ave NW & Remembrance Rd NW	Walker	80	3	0	1	4	5
22	28th St SW & Buchanan Ave SW	Wyoming	164	4	5	0	5	5
23	E Fulton St SE & Birmingham Rd	Lowell	7	3	0	0	5	5
24	44th St SE & Eastern Ave SE	Grand Rapids	187	2	1	0	5	5
25	Kalamazoo Ave SE & 60th St SE	Gaines	101	4	2	0	5	5
26	Adams St & 32nd Ave	Jamestown	17	2	0	0	5	5
27	Myers Lake Ave NE & 18 Mile Rd NE	Nelson	14	4	1	2	2	4
28	14 Mile Rd NE & Myers Lake Ave NE	Courtland	33	3	0	1	3	4
29	14 Mile Rd NE & Lincoln Lake Ave NE	Oakfield	29	3	0	0	4	4
30	15 Mile Rd NE & Myers Lake Ave NE	Courtland	5	1	0	0	4	4
31	10 Mile Rd NW & M 37 NW	Sparta	29	2	0	0	4	4

Rank	Intersection Name	Jurisdiction	Total Crashes	No. of Fatal and Serious Injury Crashes	No. of Pedestrian Crashes	No. of Fatalities	No. of Serious Injuries	Total Fatalities and Serious Injuries
32	Juneview Dr NE & Childsdale Ave NE	Plainfield	5	1	0	0	4	4
33	N US 131 & E I 96/N US 131 RAMP	Walker	22	3	0	0	4	4
34	8th Ave & Ironwood Dr	Tallmadge	43	4	0	0	4	4
35	Alpine Ave NW & N I 296/Alpine RAMP	Walker	187	1	0	1	3	4
36	Fuller Ave NE & Sweet St NE	Grand Rapids	25	3	1	0	4	4
37	N US 131/Wealthy RAMP & N US 131	Grand Rapids	79	3	1	0	4	4
38	Breton Rd SE & 28th St SE	Grand Rapids	245	3	2	0	4	4
39	28th St SW & Byron Center Ave SW	Wyoming	128	4	0	0	4	4
40	28th St SW & 28th St SE & S Division Ave	Grand Rapids	195	4	1	0	4	4
41	28th St SW & Clyde Park Ave SW	Wyoming	163	4	2	1	3	4
42	Century/S US 131 RAMP & S US 131	Grand Rapids	16	1	1	0	4	4
43	44th St SW & W I 196/44th RAMP & 44th/W I 196 RAMP	Grandville	116	3	0	0	4	4
44	Chicago Dr & Port Sheldon St	Georgetown	68	4	0	0	4	4
45	36th St SE & Eastern Ave SE	Wyoming	70	3	1	0	4	4
46	Pratt Lake Ave SE & 64th St SE	Bowne	2	1	0	2	2	4
47	32nd Ave & Riley St	Jamestown	25		0	1	3	4
48	Byron Rd & 8th Ave	Jamestown	30	4	0	0	4	4
49	Patterson Ave SE & 68th St SE	Caledonia	33	4	0	1	3	4
50	20 Mile Rd NW & Tyrone Ave NW	Tyrone	7	1	0	1	2	3

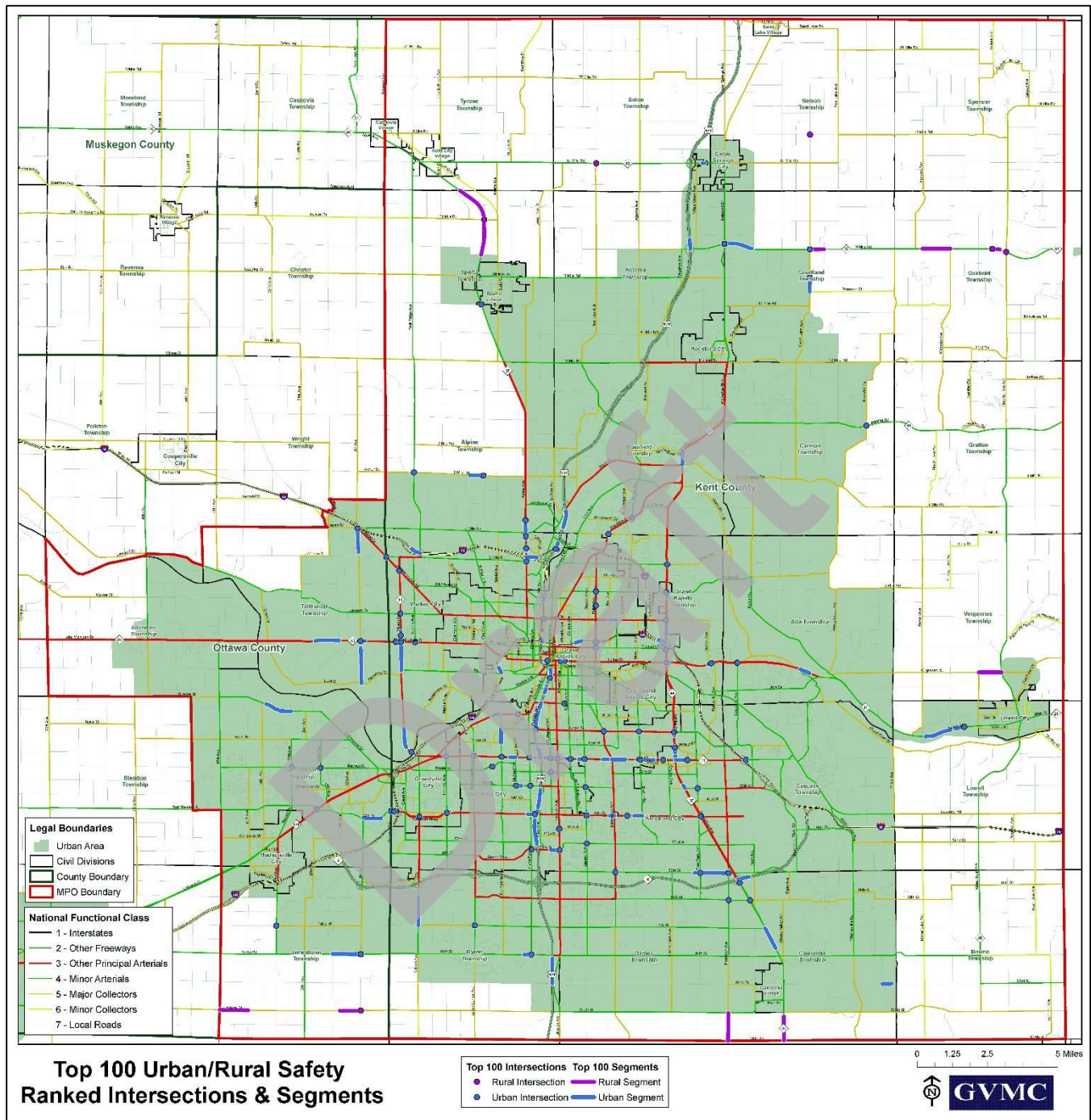
Table 4 –Segment Ranking by Number of Fatalities and Serious Injuries from 2013-2017

Rank	Segment	From	To	Length	Jurisdiction	Total Crashes	No. of Fatal and Serious Injury Crashes	No. of Pedestrian Crashes	No. of Fatalities	No. of Serious Injuries	Total Fatalities and Serious Injuries
1	60th St SE	East Paris Ave	Patterson Ave	1.001	Kentwood	42	5	0	0	10	10
2	E I 196	E M 6	W M 6	0.342	Georgetown	9	3	0	1	8	9
3	M 37 NW	15 Mile Rd	City/Twp Line	1.413	Sparta	13	5	0	2	7	9
4	Cherry Valley Ave	N M 37 & 108th St	Kinsey Ave SE	0.855	Caledonia	26	5	0	4	5	9
5	W I 196	Butterworth St SW	I 196 Crossover	0.186	Grand Rapids	73	7	0	3	5	8
6	28th Ave	Baldwin St	Lark St	0.095	Georgetown	13	3	0	0	8	8
7	14 Mile Rd	Lappley Ave	Wabasis Ave	0.999	Oakfield	23	7	0	1	7	8
8	28th St SE	City/Twp Line	Eastern Ave SE	0.198	Grand Rapids	156	7	4	1	6	7
9	M 37 NW	Oconnor St	15 Mile Rd NW	1.264	Sparta	19	5	0	3	4	7
10	Broadmoor Ave SE	Valley Point West Dr SE	76th St SE	0.795	Caledonia	56	4	0	0	6	6
11	E Fulton St SE	Hawthorne Hills Dr SE	City/Twp Line	0.454	Ada	13	2	0	0	6	6
12	Wilson Ave	Burton St	Johnson Park	0.72	Walker	60	6	0	2	4	6
13	28th St SW	Buchanan Ave SW	28th St SE & Division Ave	0.25	Wyoming	195	6	6	1	5	6
14	28th St SE	Jefferson Ave SE	Madison Ave	0.175	Grand Rapids	69	6	5	2	4	6
15	Buchanan Ave	Avonlea St	32nd St SW	0.063	Wyoming	10	2	0	0	6	6
16	Coit Ave	Hubbard St	Elmdale St NE	0.132	Grand Rapids	6	1	0	0	6	6
17	S US 131	Century/S US 131	Hall St SW	0.2	Grand Rapids	38	3	1	0	6	6
18	S US 131	US 131 Crossover	Ball Park Dr NE	0.558	Plainfield	75	3	0	0	6	6
19	Lake Michigan Dr	8th Ave	Tallmadge Woods Dr	0.141	Tallmadge	45	3	0	0	6	6

Rank	Segment	From	To	Length	Jurisdiction	Total Crashes	No. of Fatal and Serious Injury Crashes	No. of Pedestrian Crashes	No. of Fatalities	No. of Serious Injuries	Total Fatalities and Serious Injuries
20	14 Mile Rd NE	Northland Dr	14 Mile Ct	0.99	Courtland	37	5	0	3	3	6
21	14 Mile Rd NE	Henrietta Dr & Holmden	Wellman Ave	0.191	Oakfield	3	3	0	1	5	6
22	W I 96	Morse Lake Ave SE	I 96 Crossover	1.322	Lowell	36	2	0	0	6	6
23	N US 131	N US 131/Wealthy RAMP	Wealthy St SW	0.119	Grand Rapids	153	5	0	0	6	6
24	N US 131	10 Mile Rd NE	10 Mile/N US 131 RAMP	0.36	Algoma	19	2	0	0	6	6
25	E Beltline Ave NE	Bradford St NE	Leonard St NE	0.498	Grand Rapids	205	5	0	0	5	5
26	E Fulton St	Crahen Ave	Forest Hill Ave	0.119	Grand Rapids	45	4	0	0	5	5
27	E Fulton St SE	Veronica St	Birmingham Rd	0.321	Lowell	18	3	0	0	5	5
28	Wilson Ave NW	W Grand Blvd NW	Chesterfield Blvd NW	0.145	Walker	18	4	3	1	4	5
29	28th St SE	Broadmoor Ave SE	Lake Eastbrook Blvd SE	0.424	Grand Rapids	245	4	2	0	5	5
30	36th St SW	Michael Ave SW	Dunbar Ave SW	0.189	Wyoming	32	4	1	0	5	5
31	Cedar Springs Ave	Egner Ave	20 Mile Rd NE	0.257	Solon	2	2	0	2	3	5
32	Myers Lake Ave NE	14 Mile Rd	15 Mile Rd NE	1.006	Courtland	17	2	0	0	5	5
33	Lake Michigan Dr	Cheyenne	14th Ave	0.844	Tallmadge	36	4	0	0	5	5
34	N I 296/Alpine RAMP	N I 296/Alpine RAMP	Alpine Ave & N I 296	0.37	Walker	162	3	0	1	4	5
35	44th St SW	Kenowa Ave	W I 196/44th RAMP	0.114	Grandville	80	4	0	0	4	4
36	W I 196	Grand Rapids Eastern Railroad	Eastern Ave NE	0.226	Grand Rapids	44	3	0	0	4	4

Rank	Segment	From	To	Length	Jurisdiction	Total Crashes	No. of Fatal and Serious Injury Crashes	No. of Pedestrian Crashes	No. of Fatalities	No. of Serious Injuries	Total Fatalities and Serious Injuries
37	Byron Rd	16th Ave	8th Ave	1.01	Jamestown	15	4	0	0	4	4
38	E Beltline Ave	3 Mile Rd NE	East Beltline Ln	0.16	Grand Rapids	11	2	0	0	4	4
39	E Fulton St SE	Bronson St SE	Headley St SE	0.349	Ada	31	4	0	0	4	4
40	28th St SW	Hook Ave SW	Dehoop Ave SW	0.203	Wyoming	140	3	2	0	4	4
41	28th St SE	Breton Rd SE	Woodlawn Ave	0.485	Grand Rapids	203	3	2	0	4	4
42	Chicago Dr	Laville Ave SW	Blandford Ave	0.219	Wyoming	17	3	0	0	4	4
43	Riley St	8th Ave	Coronation Ct	0.72	Jamestown Twp	3	1	0	0	4	4
44	Childsdale Ave	Kuttshill Dr NE	Juneview Dr NE	0.18	Plainfield Twp	10	1	0	0	4	4
45	84th St SW	Centre Industrial Dr SW	Clyde Park Ave	0.259	Byron Twp	32	4	0	1	3	4
46	W M 6	Broadmoor Ave	W M 6/M 37 RAMP	0.395	Caledonia	17	3	0	0	4	4
47	8th Ave	Luce St SW	Fox Run	1.243	Tallmadge	8	4	1	0	4	4
48	8th Ave	Meyer Ln	Ironwood Dr	0.849	Tallmadge	29	4	0	0	4	4
49	Vergennes St	Alden Nash Ave	Lincoln Lake Ave SE	0.815	Vergennes	11	4	0	2	2	4
50	Vinton Ave	9 Mile Rd NW	Bluebird Acres Dr NW	0.699	Alpine	2	2	0	1	3	4

Figure 2 –Top 100 Urban/Rural Safety Ranked Intersections and Segments



Bicycle and Pedestrian Safety

One of the federal performance measures for safety is the number of nonmotorized fatalities and serious injuries. In 2018, 148 crashes involved bicyclists in the GVMC region and two of those crashes resulted in fatalities and 11 resulted in suspected serious injuries. In the same year, 197 crashes involved pedestrians with eight resulting in fatalities and 45 resulting in suspected serious injuries. While nonmotorized crashes comprise a small portion of all crashes in the region (there were over 24,000 in 2018), nonmotorized users are significantly more likely to

suffer injuries or death as a result of a crash with a vehicle. Therefore, in locations where bicycle and pedestrian crashes occur, safety interventions should be investigated. The following tables show the top 20 fatality/serious injury intersections and roadway segments for bicycles and pedestrians from 2013-2017. These locations could be studied further to determine if interventions could be made to improved nonmotorized safety.

Table 5 – Top 20 Pedestrian Fatality/Serious Injury Intersections (2013-2017)

Rank	Intersection	Number of Fatalities and Serious Injuries
1	Ransom Ave NE & E Fulton St	2
2	Chesterfield Blvd NW & Wilson Ave NW	2
3	28th St SE & Eastern Ave SE	2
4	Sally Dr & Baldwin St	1
5	Oakwood Ave NE & Ann St NE	1
6	Fuller Ave NE & Maybelle St NE	1
7	Prospect Ave NE & E Fulton St & Prospect Ave SE	1
8	Grandville Ave SW & Stone St SW	1
9	Franklin St SE & Major PI SE	1
10	White Ave NW & Morgan St NW	1
11	Byron Center Ave SW & Holliday Dr SW	1
12	S Division Ave & Home St SE & Home St SW	1
13	Jefferson Ave SE & Wealthy St SE	1
14	48th St SE & Madison Ave SE	1
15	Madison Ave SE & Hall St SE	1
16	Madison Ave SE & Brown St SE	1
17	44th St SE & S Division Ave & 44th St SW	1
18	Michigan St NE & Fuller Ave NE	1
19	Cascade Rd SE & Hall St SE	1
20	Mount Vernon Ave NW & W Fulton St & Mount Vernon Ave SW	1

Table 6 - Top 20 Pedestrian Fatality/Serious Injury Segments (2013-2017)

Rank	Segment	From	To	Number of Fatalities and Serious Injuries
1	28th St	Madison Ave	Jefferson Ave	4
2	Leonard St	Ball Ave	Plymouth Ave	3
3	28th St	Eastern Ave	Plaster Creek Trail	3
4	Wilson Ave	Chesterfield Blvd	W Grand Blvd	3
5	Alpine Ave	4 mile Rd	Alpenhorn Dr	2
6	East Beltline Ave	E Mall Dr	Lake Eastbrook Blvd	2
7	Fulton St	Mt. Vernoon Ave	Watson St	2
8	28th St	Division Ave	Buchanan Ave	2
9	54th St	Division Ave	Haughey Ave	2
10	Adams St	40th Ave	48th Ave	2

Rank	Segment	From	To	Number of Fatalities and Serious Injuries
11	Fulton St	Ransom Ave	Jefferson Ave	2
12	44th St	Canal	Kenowa	1
13	Ottawa Ave	Lyon St	Pearl St	1
14	Snow Ave	Cascade Rd	36th st	1
15	Breton Rd	29th St	29 St	1
16	Madison Ave	Dickinson St	Brown St	1
17	Kellogg Woods Dr	52th ST	54 St	1
18	Division Ave	Home St	Rena St SW	1
19	Madison Ave	Hall St		1
20	Scribner Ave	Pearl St		1

Table 7 - Top 20 Bicycle Fatality/Serious Injury Intersections (2013-2017)

Rank	Intersection	Number of Fatalities and Serious Injuries
1	Lafayette Ave NE & E Fulton St & Lafayette Ave SE	2
2	Knapp St NW & Monroe Ave NW	2
3	W River Dr NE & Unlabeled Roadway & Ball Park Dr NE	1
4	Fuller Ave NE & Unlabeled Roadway	1
5	92nd St SE & Hanna Lake Ave SE	1
6	Ransom Ave NE & Fountain St NE	1
7	13 Mile Rd NE & High Lake Dr NE	1
8	Leonard St NW & Powers Ave NW	1
9	Kalamazoo Ave SE & Lancashire Dr SE	1
10	36th St SW & Hubal Ave SW	1
11	S Division Ave & 60th St SE & 60th St SW	1
12	100th St SE & Alaska Ave SE	1
13	S Division Ave & 28th St SE & 28th St SW	1
14	Balsam Dr & Oak St	1
15	20th Ave & Baldwin St	1
16	Kenowa Ave SW & 44th St SW & 44th St	1
17	Crofton St SW & Roosevelt Ave SW	1
18	Prospect Ave NE & E Fulton St & Prospect Ave SE	1
19	Madison Ave SE & Delaware St SE	1
20	44th St SW & Spartan Industrial Dr SW	1

Table 8 – Top 20 Bicycle Fatality/Serious Injury Segments (2013-2017)

Rank	Segment	From	To	Number of Fatalities and Serious Injuries
1	54th St	Division Ave	Haughey Ave	2
2	Fulton St	Laffayette Ave	Prospect Ave	2
3	28th St	Birchcrest Dr		1
4	54th St	Haughey Ave	Averill Ave	1
5	Monroe Ave	Knapp St	Elmwood St	1
6	Stafford Ave	Burton St	Griggs St	1
7	Fulton St	Jefferson	Ransom	1
8	52nd St	Stauffer Ave	Pillar Creek Ave	1
9	64th Ave	Pierce St	Allendale Public School	1
10	Plainfield Ave	Rockvalley Dr	Rockhill Dr	1
11	Cannonsburg Rd	Chauney Dr	Bear Creek Trail	1
12	Division Ave	Newberry St	Fairbanks St	1
13	Belding Rd	Fox Meadow Dr	Barkley Creek Dr	1
14	36th St	Clay Ave	N US 131 Ramp	1
15	3rd St	Seward Ave	Davis Ave	1
16	Front Ave	Leonard St	10th St	1
17	Hanna Lake Ave	92nd St	100th St	1
18	Kalamazoo Ave	32nd St	Lancashire	1
19	Broadview Dr	Ronson Ave	Hollyhock Dr	1
20	Baldwin St	20th Ave	Fairlawn Ave	1

While infrastructure improvements should be investigated to improve nonmotorized safety, additional public education campaigns may also help reduce crash, fatality, and injury rates. The City of Grand Rapids, through the help of a federal grant sponsored by the Michigan Department of Transportation (MDOT), partnered with G&M Marketing to study, develop and implement a bicycle safety education campaign that would educate both motorists and bicyclists about new bicycle infrastructure and the new bike laws. As part of this effort a “playbook” was created to help other municipalities or organizations implement programs of their own by providing guidance for moving through the process. This playbook could be further utilized in the GVMC region to continue educating the public on this important safety topic.

Impaired/Distracted Driving

GVMC will need to determine if this area is an area where GVMC would like to expend federal resources. An awareness program could be established to bring a localized presence to this area. On average, drunk driving takes 17 lives in the GVMC study area per year. In addition, the rising use of the latest technologies (cell phones, GPS, DVD players), are cause for concern as distracted driving appears to be contributing to more and more crashes. There were 8 fatalities that resulted from distracted driving in the GVMC area in the year of 2016 and 2017.

Senior Mobility and Safety

This transportation issue will become more and more apparent as the driving population ages. The primary focus for GVMC can be to emphasize improved signage along major corridors. In combination with the revised MUTCD requirements, GVMC can invest federal funding in the identification and replacement of substandard signage. Long considered one of the primary elements of a comprehensive asset management plan, many jurisdictions already have a sign inventory and a methodology for substandard sign replacement. This effort would ensure that appropriate resources are available to all agencies to bring this aspect of the transportation system up to standards and keep them there.

In 2016, AARP researchers conducted a survey of adults age 50-plus living in the City of Grand Rapids. Topics included their perceptions of the community on features and services related to the eight Domains of Livability, as well as demographic questions. Transportation and outdoor spaces and buildings were among the topics covered and 54% of respondents indicated that they walk and bike in the community and 21% said safe and accessible sidewalks were fair/poor. Poorly maintained streets and speed limit enforcement were other transportation issues with safety implications that survey respondents indicated concern about.

Bridge Needs

The Federal Highway Administration (FHWA) requires that State DOTs and MPOs establish 2-year and 4-year targets for a 4-year performance period for the condition of infrastructure assets including bridges on the National Highway System (NHS).

The two performance measures for assessing bridge condition are:

- Percent of NHS bridge deck area in Good Condition; and
- Percent of NHS bridge deck area in Poor Condition.

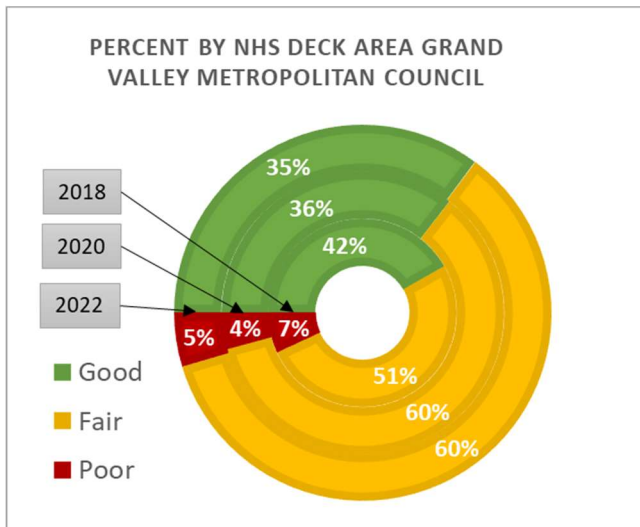
The minimum penalty threshold requires that no more than 10% of NHS bridges measured by deck area be classified as structurally deficient. MDOT set the following targets in coordination with MPOs, and GVMC elected to support State targets for this reporting period.

Table 9 – State Bridge Performance Targets

	2-year Target	4-Year Target
Percent of NHS Bridge deck area in Good Condition	27%	26%
Percent of NHS Bridge deck area in Poor Condition	7%	7%

MDOT also projected bridge performance measures by MPO area. These short-term projections for GVMC bridges are shown below.

Figure 3 – Short-term Bridge Condition Projections



Bridges in the GVMC region are in better condition than the state as whole. However, maintaining and improving bridge condition in the region through the horizon of this plan is dependent on local jurisdictions receiving local bridge funding, which is a MDOT-run program. Therefore, it will be important to monitor this program moving forward.

Transit Priorities and Needs

The Rapid

The Rapid operates 27 fixed route bus lines throughout their service area along with paratransit service and vanpool/rideshare programs. Looking toward the future of their transit service identifying needs and priorities, The Rapid has completed or is in the process of completing multiple studies including the Align Study (2018), a comprehensive operations analysis (COA) (ongoing) and a transit oriented development (TOD) study (upcoming).

The Align Study was a year-long study that identified and prioritized opportunities to improve and expand transit service in the urbanized area. Based on input from the public and regional stakeholders as well as The Rapid's current opportunities and challenges, the following strategies to meet short- and long-term transit needs emerged:

- Leverage investment in existing BRT Corridors.
- Invest in amenities and service upgrades in the high-ridership, high frequency network.
- Move toward and strengthen core system based around more of an all-day/all-week service model.
- Provide new connections and service types to key growing travel markets, including expansion areas.

The first implementation task set for in the Align Study was completing a comprehensive operations analysis (COA), which is currently underway in the data collection phase. Looking at where jobs and household growth is happening, all transportation options will be analyzed, from minor tweaking of existing routes to a complete system redesign. Additionally, new service modes will be evaluated including mobility on demand options.

The Rapid also received a federal discretionary grant to conduct a transit oriented development (TOD) planning study along the Silver Line Corridor to encourage TOD along the route, building on its success. This will be an 18-

month process involving a steering committee with regional stakeholders. Potential outcomes include impacts to capital improvement plans for the communities involved and land use/zoning implications.

Challenges to meeting regional transit needs identified by The Rapid include struggling with the balance between serving new employment sites that don't currently have transit service and serving the densifying urban area and environmental justice/opportunity areas where the core ridership is. Townships outside the current service area have expressed interest in service expansion, but in addition to the operational costs associated with expanded service it is also limited by the current bus fleet size, which is fully utilized during the afternoon/evening peak period. Adding to the fleet could help expand service, but would also necessitate facility expansion and more regional facilities. The Rapid also needs an off-site training facility for bus operators.

The Rapid also sees first mile/last mile service as a need and has been piloting a project in the southeast portion of their service area that provides this service for GoBus eligible riders.

There is also interest in establishing a mode shift goal for the region, potentially as part of a future planning effort.

West Michigan Express

Spearheaded by the City of Hudsonville, studies are ongoing for a potential commuter transit line (West Michigan Express – WMX) between Holland and Grand Rapids along Chicago Drive. The Rapid is working with the WMX task force, exploring the potential for a 3-year pilot program and developing routing options and capital and operational costs.

Nonmotorized Needs

Nonmotorized needs are identified in GVMC's Nonmotorized Plan. The needs list is updated at least annually and includes about 200 projects that would cost over \$76.5 million to construct. These projects would add over 174 miles to the nonmotorized network in the region in the form of sidepaths/shared use paths, multi-use trails, bike lanes/paved shoulders, pedestrian bridges, sidewalks, pedestrian improvements, etc. On average, the total amount spent (including local match) leveraging GVMC TAP and MDOT TAP funds in the region is about \$3.5 million; at that rate, using only these sources of funding, it will take over 20 years to implement all the projects on the needs list (not including maintenance costs or additional needs that emerge).

In addition to GVMC's Nonmotorized Plan, MDOT completed the Grand Region Nonmotorized Plan in 2018 and GVMC participated on the Core Plan Team. This plan identified nonmotorized needs for the Grand Region as a whole, which includes 13 counties in West Michigan, as well as needs and priorities by county. The following needs and priorities were identified during that planning process.

Table 10 – Needs and Priorities from MDOT's Grand Region Nonmotorized Plan

Grand Region as a Whole
A coordinated and consistent nonmotorized wayfinding system
Expansion of the "Driving Change" education program
Communication and support regarding nonmotorized issues
On-going and Long-term maintenance of the nonmotorized geographic information systems (GIS) Database
Measurement of progress
Nonmotorized improvements on non-freeway State trunklines
Kent and Eastern Ottawa Counties (GVMC Region)
Interurban/River to River Trail

Connect Fred Meijer Kenowa Trail to the Fred Meijer M-6 and Kent Trails
Improve surface condition of Fred Meijer Flat River Valley Trail north of Lowell
Improve connectivity of Fred Meijer Grand River Valley Rail Trail to downtown Lowell and Fred Meijer Flat River Valley Rail Trail
Plainfield Township trail millage goal of over 30 miles of nonmotorized facilities connecting to the White Pine State Trail and more.
Connecting Fred Meijer Standale Trail to Fred Meijer Pioneer Trail in Walker
Connecting Fred Meijer Pioneer Trail to Fred Meijer White Pine Trail in Walker
Modify route of North Country Trail to increase the amount of trail that is off-road
Nonmotorized bridge and/or nonmotorized facilities on the Forest Hill Ave bridge over I-96 in Kentwood
Determine primary east-west nonmotorized corridor(s) between Grand Rapids and Lowell
Idema Explorers Trail along the Grand River in Ottawa County
Connecting North Bank Trail across Ottawa County connecting Spring Lake to Grand Rapids
4-foot wide paved shoulders along Leonard St/Dr from 24th Ave to 148th Ave
North-south connection between Kenowa Trail in Jamestown Twp and Allegan

Passenger Rail Needs

WESTRAIN

Passenger rail issues are currently being monitored by the WESTRAIN Collaborative. The WESTRAIN Collaborative is a group of agencies working to identify passenger rail service issues in West Michigan.

Participants include the Michigan Department of Transportation, the Grand Valley Metropolitan Council, the Macatawa Area Coordinating Council, Michigan Association of Railroad Passengers (MARP), the Cornerstone Chamber of Commerce, Sharp Marketing, the City of Bangor, the Rapid, Van Buren County Public Transit, and the Southwest Michigan Planning Commission. The focus of WESTRAIN is to secure and maintain passenger rail service from Grand Rapids to communities along the Pere Marquette line to Chicago, Illinois, and beyond. The WESTRAIN Collaborative has also worked closely with Amtrak on a number of initiatives to increase awareness of and traffic on the Pere Marquette rail line. Utilizing special promotions, giveaways, and other marketing strategies, WESTRAIN serves to continue to help attract new riders to the passenger rail experience.

WESTRAIN supports building a rail connection in New Buffalo that would connect CSX tracks to Amtrak tracks which would allow Pere Marquette trains to operate on Amtrak-owned 100 mph service tracks between New Buffalo and Porter, Indiana, where the service would continue on to Chicago. This new connection will allow the Pere Marquette passengers to switch to the Wolverine/Blue Water services to access points east in Michigan and west to Chicago and for Wolverine/Blue Water passengers to access destinations along Michigan's west coast to Grand Rapids. The first step is a feasibility and engineering study that is currently unfunded.

It is also worth noting that the Midwest Regional Rail Initiative (described below) shows significant change to the current Amtrak service between Holland/Grand Rapids and Chicago, routing the service via Kalamazoo. Under this scenario, the Pere Marquette line south of Holland may be eliminated, including the St. Joseph and Bangor passenger rail stations. WESTRAIN supports continued intercity passenger rail service by Amtrak at the existing Pere Marquette Amtrak station communities linking Chicago, St. Joseph, Bangor, Holland, and Grand Rapids.

Midwest Regional Rail Initiative

The Midwest Regional Rail Initiative (MWRRI) is a cooperative effort between Amtrak, the Federal Railroad Administration (FRA), and nine states—Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Nebraska, Ohio, and Wisconsin—to develop an improved and expanded passenger rail system in the Midwest. In September

2004, MWRRRI released a report conducted by their consultant, Transportation Economics & Management Systems, Inc., which outlines a new vision for passenger rail travel in the Midwest.

This vision is a transportation plan known as the Midwest Regional Rail System (MWRRS), a 3,000-mile rail network serving nearly 60 million people. MWRRS would operate as a hub-and-spoke system providing through-service in Chicago to locations throughout the Midwest. Trains operating at speeds up to 110 mph would link Chicago with Milwaukee, Madison and Minneapolis; Des Moines and Omaha; St. Louis and Kansas City; Indianapolis and Cincinnati; Grand Rapids and Detroit; Toledo and Cleveland; as well as many smaller cities and towns. Increased speeds and service efficiencies would reduce travel times dramatically. The Chicago-Detroit trip, for example, would drop from the current five hours, thirty-six minutes to less than four, Chicago-Twin Cities from the current eight plus to less than six, and St. Louis-Kansas City from five hours and 40 minutes to just over four hours. The nearly eight-plus-hour Chicago-Cincinnati trip would be cut in half.

The total capital investment for the MWRRS, including infrastructure and rolling stock, is estimated to be \$7.7 billion (in 2002 dollars). The rolling stock for the entire system will cost approximately \$1.1 billion. Infrastructure improvements required to implement the MWRRS are estimated to cost \$6.6 billion, or about \$2 million per mile. This compares favorably with typical highway costs of \$10 million per mile. The funding plan consists of a mix of funding sources, including federal loans and grants, state funding, general funds, and capital and revenue generated from system-related activities, such as joint development proceeds. Federal funding will be the primary source of capital funds. MWRRS funding is based on the establishment of an 80/20 federal/state funding program similar to those that already exist for highways; implementation will remain the responsibility of the states. The State of Michigan would contribute \$873 million for infrastructure and \$234 million for train equipment. As of 2019, the MWRRRI is still an active initiative. However, most recently, states have been focused on completing work that has been awarded through FRA's High Speed Intercity Passenger Rail Grant Program.

As noted in the previous section, rail passenger service from between Grand Rapids and Chicago would be routed through Kalamazoo. This service could begin in Holland, operate to Grand Rapids and then to Kalamazoo. This would provide improved access to the Accelerated Rail Service both east and west out of Kalamazoo, providing additional higher speed connections from Grand Rapids and Holland. This routing could also support local efforts to establish commuter rail service between Holland and Grand Rapids, and is being evaluated by the West Michigan Express (WMX) Task Force.

Coast-to-Coast Initiative

In late 2016, a feasibility study known as the Coast-to-Coast initiative concluded that the re-establishment of rail passenger service between Detroit, Lansing, Grand Rapids, and Holland is a concept worth pursuing. The study examined three different routes from Detroit to Holland via Lansing and Grand Rapids that could be established by upgrading existing rail. The first route passes through Ann Arbor and Jackson; the second passes through Ann Arbor and Howell; and the third bypasses Ann Arbor, heading from Wayne to Howell. The study concluded that the routes that pass through Ann Arbor are viable options that merit further study. The route through Jackson showed the greatest potential ridership and revenue, while the route through Ann Arbor and Howell promised the greatest return on investment. The study also looked at the cost of establishing basic, 79-mph service on the route through Ann Arbor and Howell and establishing 110-mph service. While the 110-mph service would require greater capital investment, it would yield higher ridership that would allow the service to potentially recover its operating costs. The next major step toward establishing Coast-to-Coast passenger rail service is a full feasibility study to include environmental impact analyses, an implementation plan, and a review of public-private partnership options. These next steps are currently unfunded.

Freight Needs

On Wednesday, September 25, 2019 the Freight Subcommittee, which included representatives from many area industries as well as GVMC, MDOT, the Grand Rapids Chamber of Commerce and The Right Place, met to discuss current issues in shipping and receiving freight.

The results of the meeting and the issues identified are below.

It was noted that the City of Grand Rapids has grown significantly in number of jobs versus residents, which has resulted in additional commuters in and out of the city and therefore more congestion. Currently, there are no secondary routes. **Areas where bottlenecks consistently occur causing driver delays and loss of profit include:**

- East Beltline/WB I-196/96 interchange backups due to construction
- I-96 between Cascade Road and I-196
- Northbound US-131 to Cedar Springs
- The need for a new bridge on Freeman Ave. over the CSX line/yard between Hall St. and Market Ave. (primarily for truck traffic)
- US-131 between 28th and the S-Curve (has the oldest pavement in Grand Rapids and the highest traffic volumes per day outside of Detroit); the Hall/Franklin/Wealthy area needs to be reconfigured due to closely placed interchanges and congestion issues
- Work may need to be done to accommodate the new Amazon Distribution Center in Gaines Twp. as bottlenecks may occur there in the future

Safety and operational concerns included:

- Sixty trucks/day travel from US-131 to Hall to Godfrey alongside an elementary school. The City of Grand Rapids is trying to redirect truck traffic away from Grandville Ave. in this area, way limits routing options
- Clearing incidents on US-131 can cause delays also
- Limitation on when refuse/waste trucks can access new residential areas in downtown Grand Rapids

Freight rail issues included:

- The Grand Elk railyard along Hynes Ave., east of US-131, is at capacity more often than not, and the railyard is landlocked by US-131 and businesses. Therefore, additional yard capacity is needed to accommodate growth.
- The Genesee Wyoming (Grand Rapids Eastern RR) line from Lowell to Grand Rapids is under new ownership and may result in service changes.
- There was a need for more intermodal rail service from Grand Rapids, vs Chicago or Ohio.

Challenges to resolving the issues identified above include:

- The US-131 freeway between 28th St. and the S-curve project is cost prohibitive at current funding levels.
- CSX is a large company and sees Grand Rapids as the end of a spoke versus a hub, which could make it difficult to enhance intermodal service options in Grand Rapids. The Committee expressed interest in reaching out to the intermodal department at CSX and speaking to them directly. The Chamber of Commerce is open to facilitating these conversations, but needs a strong case and buy-in from the business community. It was noted that CSX has 40 acres of property on Market Street that is not currently in use, and there may be opportunity there for an intermodal shipping terminal.

- The downside of vital streets (complete streets) is that they often result in road diets being used and a loss of lanes, which makes it difficult for bus and truck traffic to navigate, especially when a bus and truck are traveling the same segment at the same time. The result is pushing the truck traffic to highways, which can lead to congestion and more travel time delays for all traffic.
- Waste haulers start at 3:00 am for garbage pickup to reduce congestion from vehicles traveling behind them. However, some locations have noise ordinances in place that restrict operating times, which can make it difficult for waste haulers to avoid hauling trash at peak times.

The Gerald R. Ford airport also submitted a separate list of needs from their Master Plan (attached).

Draft

4.4 OFF-AIRPORT TRANSPORTATION CONSIDERATIONS

The Airport currently has one primary access point for passengers which is via Oostema Boulevard. During peak demand, this access point can become congested, which may increase delays. An additional access route is necessary to open up development areas for future development. It will also address safety issues along the roadway from merging traffic (Michigan turns), vehicle accidents at the Patterson / Oostema intersection, and to separate West Michigan Aviation Academy traffic from airport traffic. A new access road will improve capacity or reduce delays. However, as previously mentioned, the existing capacity of Oostema Boulevard is sufficient to handle airport traffic. In particular, if there is an accident on Oostema Boulevard at the intersection with Patterson Avenue, the primary access point to GFIA is blocked leaving Van Laar Drive as the only access point to the airport. Therefore, an additional access point to the passenger terminal would be beneficial and is desirable. In addition, a new access road will allow for access to development areas north and east of the Patterson Avenue and Oostema Boulevard intersection. The additional access point would provide some redundancy of the facilities and increase the resiliency of the Airport. The new access point to GFIA should be located along Patterson Avenue north of Oostema Boulevard just south of Danvers Drive.

The Grand Rapids metropolitan area has experienced success with the Silver Line, a bus rapid transit (BRT) line currently in operation in Grand Rapids. Bus rapid transit has grown significantly in the United States in recent years and is continuing to grow. Although no demand currently exists at GFIA for additional bus service or rail, for future planning purposes, additional modes should be considered. This has a benefit of reducing congestion region-wide and improve air quality.

4.5 AIR CARGO CAPACITY AND REQUIREMENTS

Air cargo facility requirements will address building square footage, and aircraft apron square yardage needs and access to the air cargo area via an additional access point to Thornapple River Drive.

Most often air cargo facility efficiency is measured through the amount of total air cargo handled per square foot. The most operationally efficient cargo facilities operate approximately one metric ton of cargo per square foot of building. Major cargo airports including Los Angeles International Airport and Hong Kong International Airport approach this level of efficiency. Smaller airports that do not have specialized cargo equipment or buildings typically approach 2.0 square feet per annual ton. Based on on-site evaluation of the building and analyzing cargo movements for air cargo activity at GFIA, the Airport currently operates around 1.2 square feet per annual ton. This rate is used to determine building space requirements.

At current annual cargo tonnage of 38,438 tons, GFIA requires 52,000 square feet of building space. Existing air cargo space is 174,400 square feet. The forecast for the Airport for 2021 is slightly greater than 2016, requiring 53,000 square feet. At 2026 and 2031, the Airport needs 56,000 and 60,000 square feet. At the end of the planning horizon in 2036, the Airport is expected to need 64,000 square feet of building space. Throughout the planning period, the Airport is expected to meet and exceed requirements.

The current fleet mix includes one wide-body, two narrow-body and six small cargo aircraft. Within the planning horizon, GFIA is expected to transition to various combinations of wide- and narrow-body aircraft but never exceed three jet aircraft at one time. Six small cargo aircraft will remain throughout the planning

period. Current and expected tenants use the Airbus A-300 (A-300) and A-310 (A-310), Boeing B-757 (B-757), and Boeing B-767 (B-767). The A-300, A-310 and B-757 require 8,000 square yards (SY) of apron space while the B-767 requires 9,200 square yards. Together, the six small cargo aircraft require 8,900 square yards of apron.

The current fleet of the A-310, two B-757 and six small cargo aircraft requires 32,900 square yards of apron which GFIA greatly exceeds. In 2021, the expected fleet includes an A-310, a B-757, a B-767 and six small cargo aircraft for a required space of 34,100 square yards. The forecast adjusts to two B-767s and six small cargo aircraft requiring 27,300 square yards, as FedEx phases out the A-310 aircraft. This fleet remains until 2036 when the fleet mix changes to three B-767s and six small cargo aircraft requiring 36,500 square yards. GFIA currently has 92,000 square yards available for cargo operations which far exceeds the requirements.

While there are no current aircraft using the UPS apron, the forecast for the cargo apron requirement for the 20 year planning horizon does not exceed current capacity.

While the existing landside requirements for the air cargo area far exceeds the requirements, there is limited truck parking at the FedEx facility. Potential for expansion exists by building truck parking positions in other adjacent locations.

Access to the air cargo area is via Air Cargo Drive from Thornapple River Drive. Due to the bridge over the CSX railroad north of this intersection, visibility is limited for drivers turning from Air Cargo Drive onto Thornapple River Drive. This sometime creates a difficult turning maneuver as a result of unanticipated fast moving vehicles appearing over the bridge. Within the next five years, a safety project is anticipated to improve access to the air cargo area by construction of a new connector from the vicinity of FedEx with Thornapple River Drive. This new road is sufficiently south of the intersection of Air Cargo Road with Thornapple River Drive to permit safer turns onto the roadway, especially for large trucks.

Table 4-58 provides the facility requirements for air cargo.

TABLE 4-58
CARGO REQUIREMENTS

	Existing	Forecast				
		2016/ 1.3 MEP	2021/ 1.6 MEP	2026/ 1.8 MEP	2031/ 2.0 MEP	2036/ 2.2 MEP
Freight (pounds)	82,594,482	86,100,000	88,700,000	94,200,000	100,000,000	106,100,000
Freight (tons)	36,873	38,438	39,598	42,054	44,643	47,366
Cargo Building (SF)	174,400	52,000	53,000	56,000	60,000	64,000
Aircraft (Peak Demand)	1 A-310 1 B-757 6 C-208	1 A-310 2 B-757 6 C-208	1 B-767 1 A-310 1 B-757 6 C-208	2 B-767 6 C-208	2 B-767 6 C-208	3 B-767 6 C-208
Apron (SY)	92,000	32,900	34,100	27,300	27,300	36,500
Landside (SY)	43,800	15,046	15,336	16,204	17,361	18,519
Building Frontage (lf)	998	433	442	467	500	533

Source: RS&H, Inc. Analysis, 2017

Notes: Currently UPS does not operate air cargo aircraft at GFIA and only FedEx is included in this analysis. Blue text indicates demand exceeds capacity.

4.6 UTILITY CAPACITY AND REQUIREMENTS

With the exception of communications that can be accommodated, the existing utility infrastructure for the terminal core and airfield can accommodate future demand. However, utilities are recommended to be upgraded in order to allow for a compressed natural gas filling station and electrical charging stations should the industry shift towards alternative fuels.

Section 4.9.1, On-Airport Land Use Planning will identify the need for consideration of utility requirements for undeveloped Airport parcels. Future consideration will also be given to expected and planned utility infrastructure upgrade as utilities begin to age.

4.7 GENERAL AVIATION REQUIREMENTS

General Aviation (GA) is well developed at GFIA and plays a significant role in the economy of Grand Rapids. Virtually every type of GA service offered exists at the Airport.

4.7.1 Background

Discussion of GA Facility Requirements will be addressed in two primary topics. The first is Fixed Base Operator (FBO) that will include aircraft maintenance, flight training, and T-hangars. Also, this category includes Charter and Aircraft Management Services that provides fractional, aircraft sales, brokerage, and consulting services. This category services large airport tenants that serve aircraft owned by many different aircraft owners. An example tenant at GFIA is Northern Jet Management.

The second primary topic is corporate aviation. Corporate aviation is differentiated from FBO and Charter and Aircraft Management Services as these are individual companies that build hangars to store their own aircraft. Corporate aviation is significant at GFIA and is poised for further expansion.

Gerald R. Ford International Airport Authority

Aviation Activity Report

	12/2017	12/2016	Percent Change	01/2017 - 12/2017	01/2016 - 12/2016	Percent Change
<u>Passenger Activity</u>						
Enplaned Passengers	117,561	108,926	7.93	1,413,310	1,333,956	5.95
Deplaned Passengers	116,141	107,091	8.45	1,398,312	1,319,674	5.96
Passenger Totals	<u>233,702</u>	<u>216,017</u>	<u>8.19</u>	<u>2,811,622</u>	<u>2,653,630</u>	<u>5.95</u>
<u>Aircraft Operations</u>						
Air Carrier	2,087	1,970	5.94	25,546	24,276	5.23
Commuter & Air Taxi	1,556	1,496	4.01	16,788	17,747	-5.40
Military	85	56	51.79	899	1,023	-12.12
General Aviation						
Itinerant	1,524	1,458	4.53	25,119	25,791	-2.61
Local	876	934	-6.21	14,080	12,721	10.68
Total G.A.	<u>2,400</u>	<u>2,392</u>	<u>0.33</u>	<u>39,199</u>	<u>38,512</u>	<u>1.78</u>
Total Operations	<u>6,128</u>	<u>5,914</u>	<u>3.62</u>	<u>82,432</u>	<u>81,558</u>	<u>1.07</u>
<u>Cargo Activity</u>						
Mail						
Enplaned Mail	0	0	0.00	0	4	-100.00
Deplaned Mail	0	0	0.00	0	0	0.00
Mail Totals	<u>0</u>	<u>0</u>	<u>-100.00</u>	<u>0</u>	<u>4</u>	<u>-100.00</u>
Freight						
Enplaned Freight	3,717,799	3,656,491	1.68	42,810,242	42,003,178	1.92
Deplaned Freight	3,909,220	4,112,528	-4.94	45,475,606	44,077,688	3.17
Freight Totals	<u>7,627,019</u>	<u>7,769,019</u>	<u>-1.83</u>	<u>88,285,848</u>	<u>86,080,866</u>	<u>2.56</u>
Cargo Totals (Mail, Freight)	<u>7,627,019</u>	<u>7,769,019</u>	<u>-1.83</u>	<u>88,285,848</u>	<u>86,080,870</u>	<u>2.56</u>

Gerald R. Ford International Airport Authority

Aviation Activity Report

	12/2018	12/2017	Percent Change	01/2018 - 12/2018	01/2017 - 12/2017	Percent Change
<u>Passenger Activity</u>						
Enplaned Passengers	139,299	117,561	18.49	1,641,019	1,413,310	16.11
Deplaned Passengers	136,382	116,141	17.43	1,624,223	1,398,312	16.16
Passenger Totals	<u>275,681</u>	<u>233,702</u>	<u>17.96</u>	<u>3,265,242</u>	<u>2,811,622</u>	<u>16.13</u>
<u>Aircraft Operations</u>						
Air Carrier	2,741	2,087	31.34	30,975	25,546	21.25
Commuter & Air Taxi	1,348	1,556	-13.37	15,821	16,788	-5.76
Military	81	85	-4.71	1,375	899	52.95
General Aviation						
Itinerant	1,630	1,524	6.96	24,329	25,119	-3.15
Local	776	876	-11.42	11,523	14,080	-18.16
Total G.A.	<u>2,406</u>	<u>2,400</u>	<u>0.25</u>	<u>35,852</u>	<u>39,199</u>	<u>-8.54</u>
Total Operations	<u>6,576</u>	<u>6,128</u>	<u>7.31</u>	<u>84,023</u>	<u>82,432</u>	<u>1.93</u>
<u>Cargo Activity</u>						
Mail						
Enplaned Mail	0	0	0.00	0	0	0.00
Deplaned Mail	0	0	0.00	0	0	0.00
Mail Totals	<u>0</u>	<u>0</u>	<u>-100.00</u>	<u>0</u>	<u>0</u>	<u>-100.00</u>
Freight						
Enplaned Freight	3,509,844	3,717,799	-5.59	44,988,424	42,810,242	5.09
Deplaned Freight	3,921,485	3,909,220	0.31	46,055,523	45,475,606	1.28
Freight Totals	<u>7,431,329</u>	<u>7,627,019</u>	<u>-2.57</u>	<u>91,043,947</u>	<u>88,285,848</u>	<u>3.12</u>
Cargo Totals (Mail, Freight)	<u>7,431,329</u>	<u>7,627,019</u>	<u>-2.57</u>	<u>91,043,947</u>	<u>88,285,848</u>	<u>3.12</u>

Gerald R. Ford International Airport Authority

Aviation Activity Report

	08/2019	08/2018	Percent Change	01/2019 - 08/2019	01/2018 - 08/2018	Percent Change
<u>Passenger Activity</u>						
Enplaned Passengers	158,159	147,459	7.26	1,203,926	1,089,123	10.54
Deplaned Passengers	156,402	144,676	8.11	1,202,408	1,087,402	10.58
Passenger Totals	<u>314,561</u>	<u>292,135</u>	<u>7.68</u>	<u>2,406,334</u>	<u>2,176,525</u>	<u>10.56</u>
<u>Aircraft Operations</u>						
Air Carrier	0	2,690	-100.00	19,383	20,134	-3.73
Commuter & Air Taxi	0	1,504	-100.00	8,359	10,515	-20.50
Military	0	64	-100.00	458	880	-47.95
General Aviation						
Itinerant	0	2,497	-100.00	13,469	16,539	-18.56
Local	0	648	-100.00	6,061	6,884	-11.96
Total G.A.	<u>0</u>	<u>3,145</u>	<u>-100.00</u>	<u>19,530</u>	<u>23,423</u>	<u>-16.62</u>
Total Operations	<u>0</u>	<u>7,403</u>	<u>-100.00</u>	<u>47,730</u>	<u>54,952</u>	<u>-13.14</u>
<u>Cargo Activity</u>						
Mail						
Enplaned Mail	0	0	0.00	0	0	0.00
Deplaned Mail	0	0	0.00	0	0	0.00
Mail Totals	<u>0</u>	<u>0</u>	<u>-100.00</u>	<u>0</u>	<u>0</u>	<u>-100.00</u>
Freight						
Enplaned Freight	4,265,813	4,103,613	3.95	30,922,044	30,016,426	3.02
Deplaned Freight	3,925,626	4,244,955	-7.52	30,872,021	30,404,909	1.54
Freight Totals	<u>8,191,439</u>	<u>8,348,568</u>	<u>-1.88</u>	<u>61,794,065</u>	<u>60,421,335</u>	<u>2.27</u>
Cargo Totals (Mail, Freight)	<u>8,191,439</u>	<u>8,348,568</u>	<u>-1.88</u>	<u>61,794,065</u>	<u>60,421,335</u>	<u>2.27</u>