

FY 2020-2023

Transportation Improvement Program  
For the Grand Rapids Metropolitan Area



Grand Valley Metropolitan Council  
9/26/2019

# FY2020-2023 Transportation Improvement Program For the Grand Rapids Metropolitan Area

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## DOCUMENT

Approved September 26, 2019

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Public notice of public participation activities and time established for public review of and comments on the TIP will satisfy the Program of Projects (POP) requirements for Section 5307 public involvement.

Disclaimer: This report was funded in part through grant[s] from the Federal Highway Administration [and Federal Transit Administration], U.S. Department of Transportation. The views and opinions of the authors [or agency] expressed herein do not necessarily state or reflect those of the U.S. Department of Transportation.

Cover photo by Kendell Joseph

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## INTRODUCTION

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This is the official Transportation Improvement Program (TIP) for the area served by the Grand Valley Metropolitan Council (GVMC) for fiscal year 2020, beginning October 1, 2019, through fiscal year 2023, ending September 30, 2023.

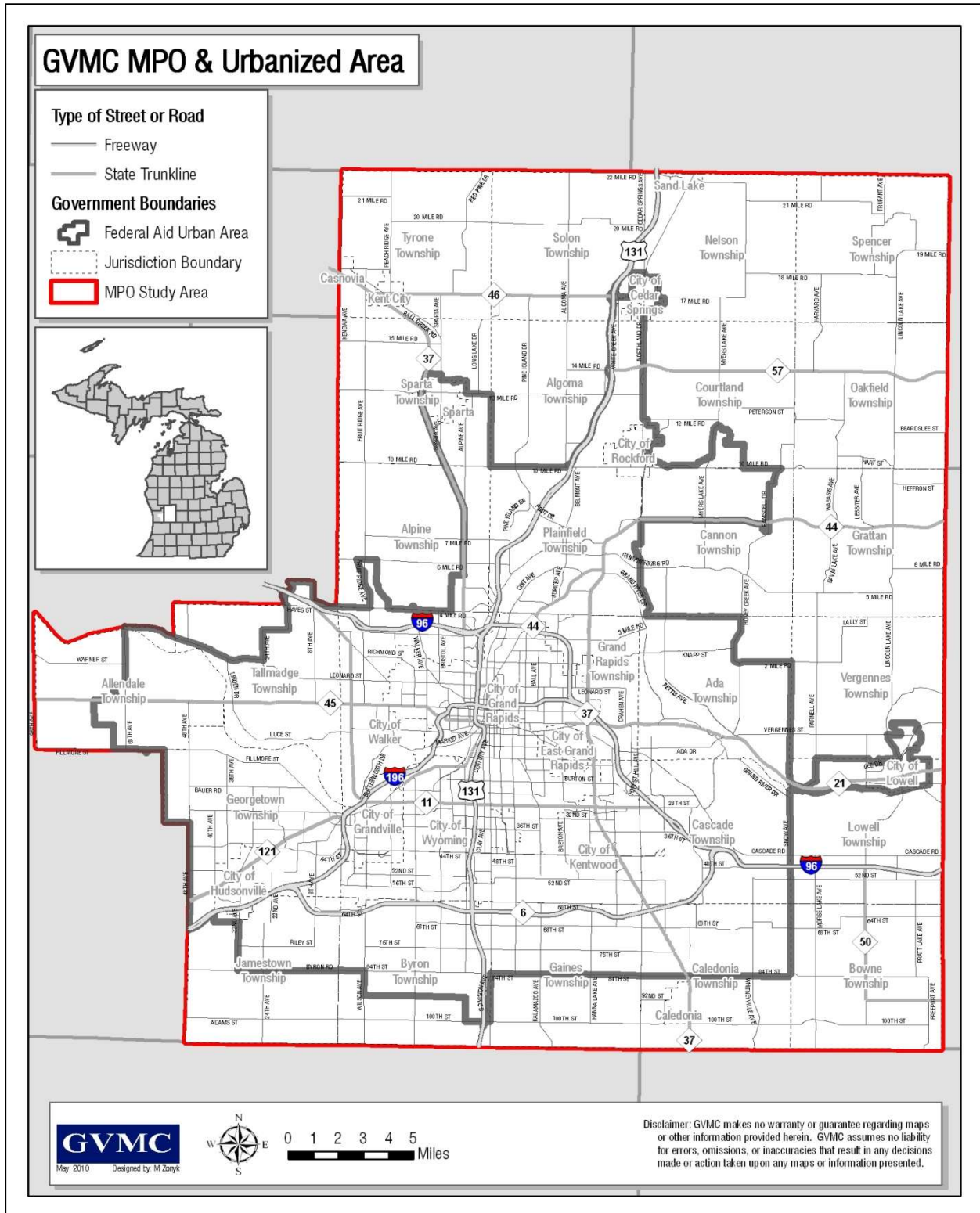
The Transportation Improvement Program (TIP) identifies proposed projects developed by local agencies in accordance with the joint regulations of the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). These regulations establish the TIP as the programming phase of the overall continuing, comprehensive, and cooperative (3C) planning process. This planning process includes local jurisdictions, transit agencies, and state and federal transportation officials. All federal monies returned to the Grand Rapids metro area from the federal fuel tax are distributed through this process.

The process for selecting multi-modal transportation projects was developed based on locally determined transportation needs and helps to ensure that programmed transportation improvements are consistent with expected revenues from federal, state and local sources.

The TIP, as required by federal regulations, addresses all projects proposed to use federal funding within the GVMC Study Area. It includes both highway/roadway projects (including non-motorized projects) and public transportation operations and expenditures. At the time of adoption, the FY 2020-2023 TIP contains 305 projects representing over \$275 million in investment in the region's transportation system.

The GVMC study area encompasses all of Kent County; as well as the City of Hudsonville; and Allendale, Georgetown, Jamestown and Tallmadge Townships in eastern Ottawa County. GVMC is the designated Metropolitan Planning Organization (MPO) for the Greater Grand Rapids area. See Figure 1 on the next page to view the GVMC study area.

Figure 1: GVMC Study Area



## STATUS OF FY2017-2020 TIP MAJOR PROJECTS

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23 CFR 450.324(l)(2) states that the TIP should list major projects from the previous TIP that were implemented and identify any significant delays in the planned implementation of major projects.

After a review of all projects listed in the FY2017-2020 TIP, it was determined all major projects that were regionally significant in the FY2017-2020 TIP are completed, underway, or have been moved to the FY 2020-2023 TIP.

### COMPLETED MAJOR PROJECTS

The following projects are complete as of April, 2019.

- US-131 Reconstruction from 14 Mile Rd to White Creek Ave, with long life pavement
- M-6 Reconstruction from Jackson Street to the East Branch of Rush Creek
- M-44 Reconstruction from Wolverine Blvd to Blakely Dr, and add center left-turn lane and resurface from Blakely Drive to Myers Lake Avenue
- I-96 Reconstruction and bridge repairs from West River Drive to Coit Avenue

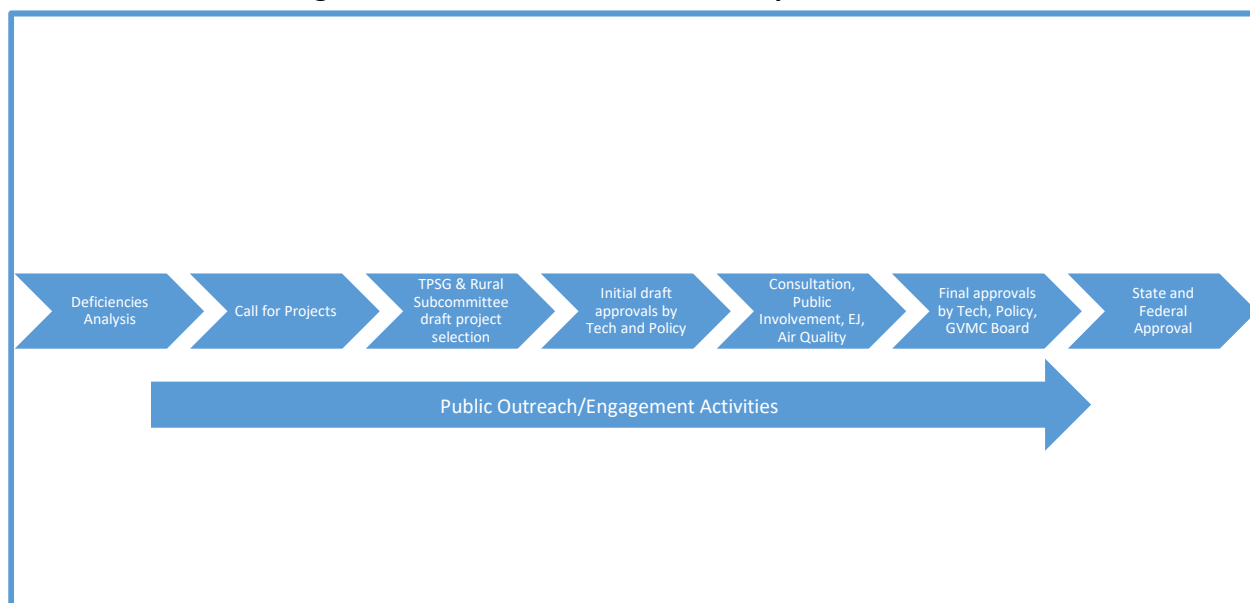
### PROJECTS DELAYED FROM ORIGINAL PLAN YEAR

- I-196 westbound over the Grand River, bridge deck replacement and westbound to southbound US-131 ramp extension in downtown Grand Rapids is currently under construction, but was delayed from 2017 due to environmental mitigation and project coordination issues.
- I-196 Reconstruction from Fuller Avenue to Maryland Avenue (near I-96) and I-196 bridge replacements over Plymouth Avenue is delayed from 2019 to 2021.

## TIP DEVELOPMENT PROCESS

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The process to develop the FY 2020-2023 TIP began in October 2018 and lasted about 11 months. This process is outlined below in Figure 2 and further explained throughout the rest of this chapter.

**Figure 2: Overview of the TIP Development Process**

In the early 2000s, in an effort to clearly define and document the process by which projects are programmed into the TIP, GVMC staff in collaboration with the Transportation Programming Study Group (TPSG) Subcommittee, and Technical and Policy Committees developed a guide for programming projects. This guide, named “Policies and Practices for Programming Projects,” has been continually updated as policies and regulations have changed, including the introduction of performance-based planning and programming at the federal level. It serves as a guide for programming projects with the goals of relieving roadway congestion deficiencies, pavement condition deficiencies, and safety deficiencies; improving transit; and developing improved non-motorized facilities in the area; as well as addressing other federal performance measures. (See Appendix E)

Applying these policies/practices, staff gathered information from a variety of sources – travel demand model, PASER data, Michigan Crash Facts, Regional Integrated Transportation Information System, etc. – and performed a deficiencies analysis, which produced a list of facilities in need of congestion relief; or reliability, pavement condition, or safety improvements. Information was also provided to show whether these facilities were located on a transit line and if there was a corresponding proposed non-motorized project in the Non-Motorized Plan project list.

This information was combined and sent to the local communities with the call for projects, where each local jurisdiction was asked to develop a list of potential projects with descriptions and costs from these deficiency lists that could be implemented in the years 2020 through 2023. These potential projects were collected by staff and a pool of projects was developed.

In December 2018, the TPSG Subcommittee and the Rural Subcommittee each met to prioritize a financially constrained project list, selecting projects from the pool of potential projects. The TIP project prioritization and selection process included factors such as deficiency and performance measures (condition, safety, capacity, etc.), regional equity, air quality improvement, and connectivity. Using this approach, it can be assured that all of the projects programmed in the FY 2017-2020 TIP will improve an identified transportation system deficiency. The result of that programming effort was reflected in the



initial list of proposed FY 2020-2023 projects, which included all local, ITP-The Rapid, and MDOT projects that were recommended and approved by the Technical and Policy Committees to move forward with public involvement, consultation, environmental justice (EJ) review, and air quality conformity analysis at their January 2019 Committee meetings. These processes will be summarized in the chapters that follow.

The final steps of the development process involved making any necessary changes resulting from the public involvement, consultation, EJ review, and air quality conformity processes and the recommendation and approval of the FY 2020-2023 TIP document and project list by the Technical and Policy Committees and the GVMC Board at their May and June 2019 meetings, respectively. The TIP was then sent to MDOT and FHWA/FTA for final approval.

## PUBLIC PARTICIPATION

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The Grand Valley Metropolitan Council (GVMC), as the Metropolitan Planning Organization (MPO), is required by the Fixing America's Surface Transportation (FAST) Act to explicitly set forth a Public Participation Plan (PPP) and process for transportation planning in order to receive transportation funds from the Federal Highway Administration and from the Federal Transit Administration. The actions and processes described in the PPP apply to transportation planning done by GVMC in conjunction with the work done by the transportation committees of the Council. The GVMC Public Participation Plan can be found at [gvmc.org/public-involvement](http://gvmc.org/public-involvement). The standards for this process are to be found in Title 23, Code of Federal Regulations, Part 450, and in Title 49, Code of Federal Regulations, Part 613 which requires that the public has reasonable opportunity to comment on transportation plans and programs.

### TIP PUBLIC PARTICIPATION PROCESS

Opportunity for public participation in the development of the FY2020-2023 Transportation Improvement Program (TIP) was in accordance with the GVMC Public Participation Plan (PPP). While public involvement was continuous throughout the development of the document, the PPP outlines three milestones when GVMC staff makes additional efforts to engage the public. These milestones occur at the following times:

- 1) Kickoff to TIP development
- 2) Draft project lists, environmental justice, and air quality results (if applicable) completed and available for public comment
- 3) Adoption of draft document

Specific outreach strategies used during each milestone as well as engagement rates, where applicable, are detailed below.

### MILESTONE 1: KICKOFF TO TIP DEVELOPMENT

GVMC staff placed a notice under "Latest Developments" on [gvmc.org](http://gvmc.org) on November 21, 2018, notifying the public that the TIP development process would begin in early December, 2018, with two Transportation Programming Study Group (TPSG) meetings scheduled for Monday, December 3 and Wednesday, December 5. The purpose of these meetings, as described in the posting, was to select projects for the FY2020-2023 TIP. The posting also included a link to GVMC's TIP page, [gvmc.org/tip](http://gvmc.org/tip), and encouraged the public to view maps of deficient transportation facilities that would be considered for improvement during the TIP development process. This same notice was also posted on the TIP page



itself, on GVMC's Twitter and Facebook page, and shared with the Rapid and Linc Up, a local community development organization. Both the Rapid and Linc Up shared the Facebook post with their followers.

Staff followed up this effort by sending an email with similar information through MailChimp to 1,736 individuals on the Interested Citizen/Agency list on Monday, November 26. This list includes individuals interested in transportation planning-related information and organizations identified as important stakeholders in the planning process, including social service agencies, transit service providers, local land use and environmental organizations, economic development organizations, major employers, Native American tribes, and other interested parties. The email was successfully sent to 1,673 people, and a total of 460 individuals opened it.

GVMC staff also sent a press release to the local media announcing the development of the TIP. The Grand Rapids Business Journal responded and published a story entitled "GVMC to Identify Funding Needs" online on November 30 and in print on December 3. This story was posted to the Grand Rapids Business Journal's Facebook and Twitter page on December 2. WZZM also aired a segment on December 3 entitled "GRBJ Michigan Roads Improvement Project," which was based on the story. The video is available here: [www.wzzm13.com/video/news/grbj-michigan-roads-improvement-project/69-8349491](http://www.wzzm13.com/video/news/grbj-michigan-roads-improvement-project/69-8349491).

## MILESTONE 2: DRAFT PROJECT LISTS, ENVIRONMENTAL JUSTICE, AND AIR QUALITY RESULTS (IF APPLICABLE) COMPLETED AND AVAILABLE FOR PUBLIC COMMENT

GVMC sent a second email to 2,158 individuals on the Interested Citizen/Agency list on Monday, March 11, notifying them that the draft fiscal year FY2020-2023 TIP project lists were available for public comment and inviting them to a public meeting to discuss the draft TIP project lists on Monday, March 25. The email was successfully delivered to 2,062 people, and of these, 466 opened the email. The public was also notified that the meeting would be live streamed on GVMC's Facebook page. These mailings were enhanced with posts on GVMC's Latest Development page and on the TIP page that contained information about how to comment on the project lists, with social media posts on GVMC's Twitter and Facebook pages that were also shared with the Rapid and Linc Up, and a press release that was sent to local media contacts. The Rapid and Linc Up shared the Facebook posts with their audiences. The web notices were placed online on March 7 and the press release was distributed through Mail Chimp to 41 agencies on March 11. Eleven of the media agencies opened the email, and none responded to the press release. The social media notices were also published on March 11.

Furthermore, GVMC staff developed ads for El Vocero, a local newspaper marketed toward the Spanish-speaking community in West Michigan, and The Grand Rapids Times, which is geared toward the African-American community in Grand Rapids. Both ads appeared in the March 15 edition of the papers. El Vocero posted GVMC's ad on their Facebook page and in print. Concurrently, a flyer about the public comment period and public meeting was developed and distributed for posting to all area libraries as well as all jurisdictions within the MPO area. Some of these entities highlighted the event on their own websites and social media platforms as well. Those who wished to comment on the draft project lists were encouraged to do so by Wednesday, April 17, 2019. (See Appendix B for examples.)

Also, on Monday, March 11, a separate informational postcard was sent to 12,863 people as part of GVMC's Environmental Justice review. This mailing informed the property resident/owner that their home or business may be impacted by a transportation improvement project scheduled to take place in their area between 2020 and 2023. The postcard also contained information about the public comment

period, which concluded on April 17, 2019, and the March 25<sup>th</sup> public meeting. (See Appendix B for examples.)

### MILESTONE #3: ADOPTION OF DRAFT DOCUMENT

GVMC staff placed a notice on [gvmc.org](http://gvmc.org) on April 24 advertising that an official public comment opportunity would be available at the Technical Committee meeting on May 1, the Policy Committee meeting on May 15, and at the GVMC Board meeting on June 6. Similar information was posted on GVMC's Twitter and Facebook page on the same day and shared with the Rapid and Linc Up. Please see Appendix B to view the announcements.

### NOTIFICATIONS

#### Notification of Transportation Programming Study Group (TPSG) Meetings

Notices of all TPSG meetings to program projects for the FY2020-2023 TIP were posted on GVMC's website in a timely manner. (See Appendix B.)

### PUBLIC MEETINGS

GVMC held a public meeting on Monday, March 25 at 5:30 pm at Rapid Central Station, located at 250 Grandville Ave SW, which, in addition to being convenient for transit riders, is handicapped accessible and within the delineated Environmental Justice area for the MPO. Public comment opportunities were also held at the May Technical and Policy Committee meetings, which were located at the Kent County Road Commission (1500 Scribner NW, Grand Rapids, MI 49504), and the June GVMC Board meeting, which was located at the Kent County Commission Chambers (300 Monroe Ave NW, Grand Rapids, MI 49503). These locations are also handicapped accessible and within the delineated Environmental Justice area for the MPO.

#### March 25th Public Meeting

Twenty-two individuals, including 13 members of the public and several staff members from GVMC, MDOT, and the Rapid, attended GVMC's March 25<sup>th</sup> public meeting. At this meeting, staff presented the following:

- The draft TIP list of projects and deficient road segments and corresponding maps
- The TIP development process
- The Environmental Justice (EJ) process
- The results of the air quality analysis for the proposed TIP project lists

At the end of the presentation, staff answered questions from members of the public. This meeting was also livestreamed on GVMC's Facebook page, with three viewers participating online. None of the online viewers submitted questions or comments. Several members of the public in attendance at the event asked questions and submitted comment forms.

#### Technical Committee meeting (May 1), Policy Committee meeting (May 15) and GVMC Board meeting (June 6)

No members of the public attended the Technical Committee meeting on May 1<sup>st</sup> or the Policy Committee meeting on May 15<sup>th</sup> or the GVMC Board meeting on June 6<sup>th</sup>.

## ADDITIONAL OUTREACH EFFORTS

On Friday, April 5, GVMC staff had a table at First Friday at Linc Up. First Friday is a networking event that features a blend of jazz, poetry and local art and is geared to reaching minority demographics. The event is held at 341 Hall St SE, Grand Rapids 49507, which is within the delineated Environmental Justice area for the MPO. Throughout the evening, staff engaged in conversations with a number of attendees, helped the guests identify if their residence would potentially be impacted by an upcoming project, and listened to their transportation needs and priorities. Three individuals filled out a comment form at the event.

## PUBLIC COMMENT PERIODS

The official public comment period for the FY2020-2023 TIP project lists was Saturday, March 16 – Wednesday, April 17, or a total of 33 days. During this time staff accepted and recorded 36 public comments from e-mails/web inquires and phone calls. These public comments, along with staff responses, are listed in Appendix B under Public Comments. All public comments received were provided to GVMC Transportation Committees for consideration, and in many cases the inquirer was directed to the respective road agency for specific project details.

Additionally, GVMC undertook a public comment period for the entire 2020-2023 Transportation Improvement Program document from May 1 – June 6, a total of 37 days. One phone call question was received during that time frame.

In addition to the public meeting on March 25, opportunities for public comment were/are available at monthly Technical Committee, Policy Committee, ad hoc Transportation Programming Study Group meetings, and GVMC Board Meetings. Agendas and minutes for these meetings are regularly posted on [gvmc.org](http://gvmc.org).

## CONSULTATION

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There are specific requirements that outline what types of agencies or stakeholders need to be consulted during the transportation planning process and the type of information that needs to be shared with these interested parties. It is suggested that contacts with State, local, Indian Tribes, and private agencies responsible for the following areas be contacted:

- Economic growth and development
- Environmental protection
- Airport operators
- Freight movement
- Land use management
- Natural resources
- Conservation
- Historical preservation
- Human Services Transportation Providers

The overarching goal of this process is to eliminate or minimize conflicts with other agencies' plans, programs or policies as they relate to the Transportation Improvement Program.

The consultation process that the Grand Valley Metro Council staff underwent was based on the recommendations of the Federal Highway Administration and the Michigan Department of Transportation.

GVMC's consultation list was converted from a direct mail to email list during the fall of 2018 and expanded upon to include contacts from several consultation organizations provided by the Michigan Department of Transportation and the Federal Highway Administration. This list is continuously updated to assure the most relevant organizations are contacted as part of the GVMC Consultation Process and currently contains 271 individual and business contacts. GVMC's consultation list is included in Appendix C.

## Information Sent

On Wednesday, February 6, GVMC staff sent an email to 253 individuals on our consultation list that included links to the draft project lists for the FY2020-2023 TIP, an interactive map, and background information about GVMC. This email requested that the consultation agencies compare the FY2020-2023 draft TIP project lists with the projects that their organizations had planned for the future. The purpose of the email was to generate a dialogue about the TIP document and project lists with the consulted organizations so that a cooperative understanding of potential impacts from transportation projects can be developed along with mitigation options. The email included an invitation for the consulted organizations to attend an open house on Wednesday, February 13 from 9:00 am – 12:00 pm at Grand Valley Metropolitan Council's office. The open house provided an opportunity for the consulted organizations to meet with GVMC staff to discuss the project lists, identify potential conflicts and address areas of concern. Consulted organizations were also invited to contact GVMC staff to schedule an individual meeting if they were unable to attend the open house or if that was their preference. No one attended the open house or requested an individual meeting with staff.

GVMC staff requested that the agencies complete their analysis of the draft TIP project lists and submit their comments by Friday, March 8, which resulted in a 31-day public comment period. In the event that the agencies didn't have any input to provide, staff asked the agencies to send a letter to that effect by the deadline as well.

This same email was also pushed through to our social media platforms—Facebook and Twitter—through Mailchimp, and staff posted similar information on the TIP page on the website as well. On Thursday, February 7, the consultation email was resent with corrections and updated information, and the information was also posted on the home page of our website under "latest developments." Staff also followed up personally with the Michigan State Police and flagged safety projects for their review, per their request. (See sample email, screen shots, etc. in Appendix C)

A reminder email was also sent on Monday, March 4, reminding the consultation organizations of the March 8<sup>th</sup> deadline to submit comments.

During the comment period, thirteen comments were received from the following organizations:

1. Gerald R. Ford International Airport
2. Kent County DPW
3. Eastown Community Association
4. Area Agency on Aging

5. City of Rockford
6. MDEQ Water Resources Division
7. Blandford Nature Center
8. Kent County Drain Commissioner
9. Army Corps of Engineers
10. Greater Grand Rapids Bicycle Coalition
11. Michigan Conservation Districts
12. MDEQ

It was noted in the letter that lack of comment will be viewed as endorsement of the proposed project lists and the TIP document.

Table 1, below, shows the engagement rates for the consultation emails.

**Table 1: Consultation Email Engagement Rates**

Email Description	Date	Open Rate	Clicks
<b>Original Consultation Email</b>	Wednesday, February 6	36.3%	8.6%
<b>Follow-up Consultation email</b>	Thursday, February 7	32.7%	9.0%
<b>Reminder email</b>	Monday, March 4	29.8%	6.5%

Consultation comments are documented in Appendix C.

## ENVIRONMENTAL JUSTICE REVIEW

The roadway and transit projects in the TIP must meet the principles of the 1994 Presidential Executive Order 12898 relating to Environmental Justice (EJ): *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. Specifically, the TIP must identify and address disproportionately high and adverse human health or environmental effects of its programs and policies on minority and low-income populations. Based on the spirit and intent of Environmental Justice, GVMC strives to identify, inform and engage two major sectors of the population: minority populations and low income residents.

The methodology used to analyze that ensures these principles are being met necessitated mapping areas of low-income and minority population concentrations, overlaying the TIP's proposed projects, and visually analyzing the potential impacts. The Environmental Justice Area map (see Appendix D) was instrumental in this process.

### IDENTIFICATION OF ENVIRONMENTAL JUSTICE AREAS

The Federal Office of Management and Budget's (OMB) 1997 Policy Directive 15, *Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity*, established five minimum categories for data on race. The same Directive 15 defines low-income as "a person whose household income... is at or below the U.S. Department of Health Services poverty guidelines." Therefore, to conduct the EJ analysis, GVMC used the following categories:

- Black
- Hispanic
- Asian
- American Indian and Alaskan Native
- Native Hawaiian or Other Pacific Islander
- Low-Income

For the 2040 Metropolitan Transportation Plan (MTP), Census (2010) data and American Community Survey (ACS) 5-year estimates (2007-2011) were analyzed utilizing Geographic Information Systems software to determine the makeup and concentration of these minority groups at the Census Block Group level for race and at the Census Tract level for low income. Environmental Justice (EJ) areas were designated based on the population of the targeted population group as it compares to the overall population of the entire metropolitan area. In the case of ethnic minorities, if any census Block Group exceeded the average population percentage for that minority group throughout the region as a whole, then that Block was flagged. For low-income identification, the same methodology was used as for the population groups, but census tract geographies from the ACS data were used to determine the above-average-percentage areas. The indicator used for income from ACS estimates was poverty status. In the ACS estimates, the population for whom poverty status is determined is broken up into four age groups. The age group that most applies for our EJ income analysis is that of those aged from 18 to 64 years since that is, most generally, the age range of workers. The tabular data within the data sets are presented as percentages of individuals per census tract that are at, or below, the poverty level. From this, areas with higher than average low income populations were flagged as EJ areas for low income. These defined areas were aggregated together to create a comprehensive geographic coverage constituting the EJ areas within the MPO. To remain consistent with the 2040 MTP, these same EJ areas were used for the EJ review for the FY2020-2023 TIP. (See the GVMC Environmental Justice Area Map in Appendix D)

## ANALYSIS OF IMPACTS

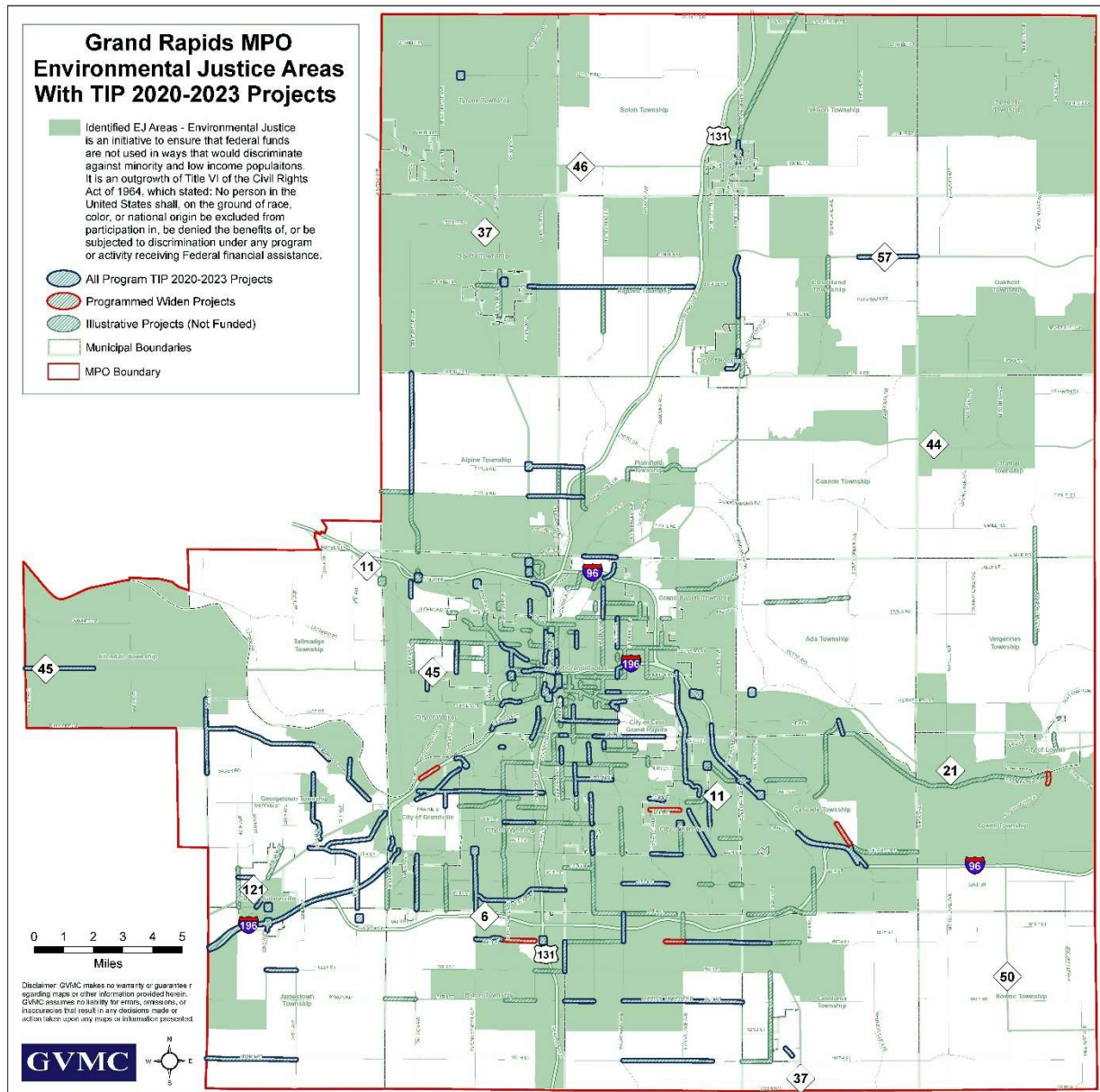
With the minority and low-income EJ areas delineated, an analysis of impacts could be completed. The analysis of potential impacts centers on three criteria:

1. Disproportionately high and adverse human health and environmental impacts to EJ areas
2. Minimizing/blocking access of EJ areas to the transportation system
3. Neglecting the transportation system in EJ areas or otherwise reducing or delaying the receipt of benefits to those areas

Using the delineated EJ areas from the 2040 MTP, GVMC staff was able to geographically overlay the 2020-2023 TIP projects on the EJ areas to determine what projects could have potential impacts based on our three defined criteria. The project was considered and flagged if it geographically intersected the EJ areas. There are 350 projects listed in the TIP document that had spatial reference characteristics and were used for EJ analysis. This figure also includes all illustrative projects presented in the plan. Figure 3 provides a map of the FY2020-2023 and illustrative projects with spatial reference characteristics overlaid on the GVMC EJ areas.



Figure 3: FY2020-2023 TIP Projects with EJ Area



**Disproportionately high and adverse human health and environmental impacts to EJ areas**

Of the 250 TIP projects, 315 projects, or 90% of TIP projects, are in EJ areas. These projects included all project categories; however, the majority of the projects fall into three categories: roadway resurfacing, roadway reconstruction, and roadway improve/expand widening projects. Some of the improve/expand widening projects are in residential areas within EJ boundaries. These projects primarily involve adding a center turn lane rather than adding additional through traffic lanes, are anticipated to have minimal (if any) impacts in terms of noise, right-of-way takings, or pollution. Resurfacing and reconstruction projects are also anticipated to have minimal, if any, adverse impacts. Therefore, it was determined that there are no disproportionately high or adverse human health impacts.



### Minimizing/blocking access of EJ areas to the transportation system

Minimizing access can be characterized as the permanent closing of streets or interchanges in order to accomplish the projects contained in the TIP. While temporary closures will be necessary as part of the construction process for many projects, no permanent closures are intended as a result of implementing the proposed projects. Therefore, it has been determined that there is no blockage of access to the transportation system or loss of mobility as a result of implementing the TIP projects.

### Neglecting the transportation system in EJ areas or otherwise reducing or delaying the receipt of benefits to those areas

The GVMC MPO area is approximately 1,015.68 square miles. The EJ areas mapped are approximately 495.91 square miles, or 49% of the entire GVMC MPO area. The Environmental Justice analysis found that 90% of the TIP projects (315 out of the total 350 projects) are located within the Environmental Justice areas and 10% of the projects fall outside Environmental Justice areas. Of the 315 projects that were located within the Environmental Justice areas, 65% were road resurfacing, 17% were road reconstruction projects, 2% were improve/expand widening projects, and the rest were miscellaneous capacity, non-motorized, intersection, bridge, and yet-to-be-determined projects (from the illustrative list) that varied in scope of work.

Access to public transit by residents in EJ areas was also analyzed as part of the [EJ and Transportation Accessibility Analysis](#) conducted by GVMC in September 2017. The public transit (ITP-The Rapid) fixed-route service area primarily includes the Cities of Grand Rapids, Walker, Kentwood, Wyoming, Grandville and East Grand Rapids, and provides at least one transit stop within 75% of the MPO EJ areas. The Go Bus demand response service, and other Paratransit Service agreements serve an even broader share of EJ areas. None of the projects contained in the TIP restrict residents' access to public transit services (fixed route or demand response). Because of the proportion of TIP projects planned for EJ areas and the factor that no TIP project will restrict access to public transportation, it has been determined that there is no neglect, reduction, or delay in the receipt of transportation benefits by those residing in EJ areas.

## ENVIRONMENTAL JUSTICE NOTIFICATION

In addition to the regular Public Participation process, GVMC also distributed an Environmental Justice based mailing. Once the 315 projects in EJ areas were identified, staff was able to perform an analysis to extract address information for the parcels that physically intersected the Environmental Justice areas adjacent to the projects. Geographic Information software was used to do this in coordination with land parcel data sets provided from Kent and Ottawa counties. A postcard that explained that there was a proposed improvement was mailed to these flagged parcels. It informed them of the March 25th TIP public meeting at Rapid Central Station and provided information about how and where to access more information. Residents/occupants were encouraged to comment on the projects by Monday, April 17, 2019. In sum, 12,863 EJ postcards were mailed March 11<sup>th</sup>, 2019. A total of 22 people attended the meeting, including 13 members of the public, five GVMC staff, and other stakeholders.

## CONCLUSION

The analyses of impacts on residents in EJ areas, as a result of implementing the projects contained in this TIP resulted in the following findings:

- No disproportionately high and adverse human health impacts
- No blockage/minimization of access to the transportation system or loss of mobility
- No neglect, reduction, or delay in the receipt of transportation benefits or restriction of public access to public transit services

Within the FY2020-2023 TIP, 85% of the projects within EJ areas were road resurfacing/reconstruction, and the MPO is investing the majority (90%) of our federal transportation dollars in projects in areas with higher than average numbers of minorities or people of low income status. This means that the benefits of increased federal investment in the road infrastructure are directed toward residents that are typically underserved, people of minority status, and those with low income levels. GVMC strives to reach out especially to those citizens in EJ areas adjacent to TIP projects through direct mailings to assure a high level of engagement for minority and low-income groups.

## AIR QUALITY CONFORMITY ANALYSIS

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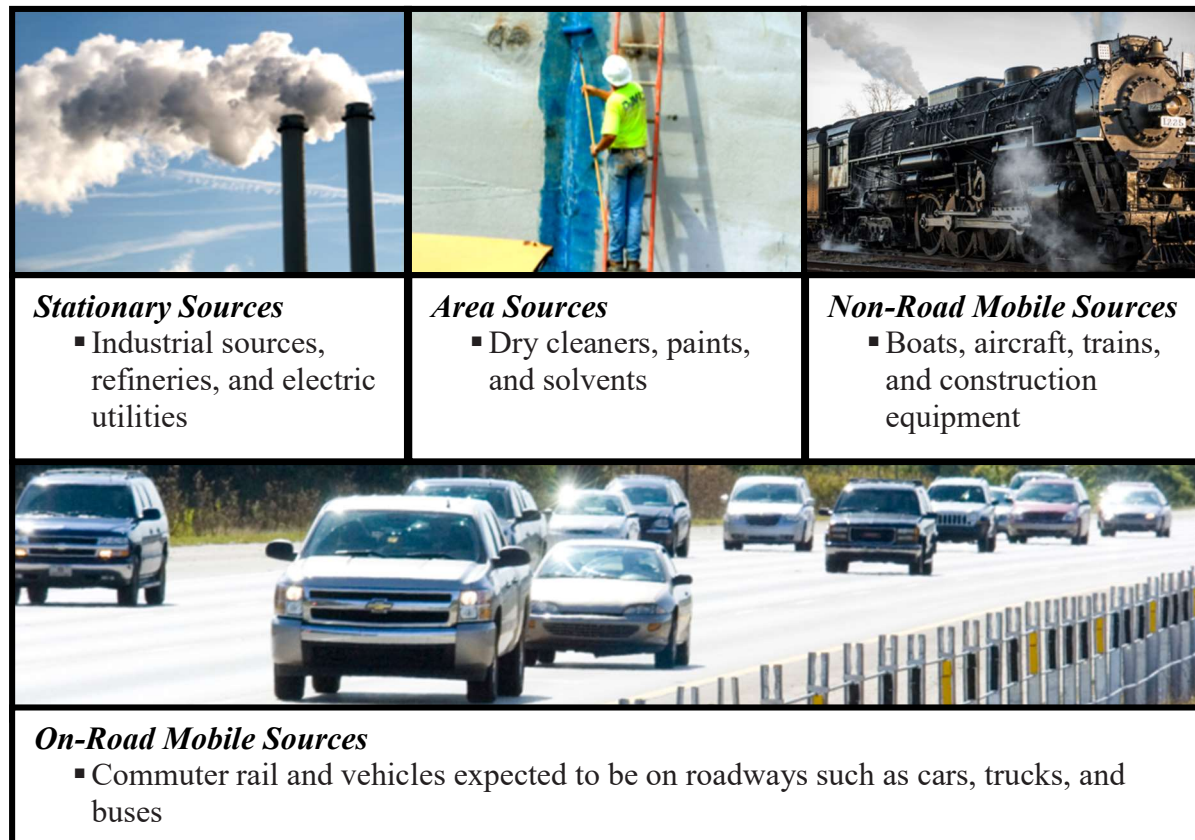
### TRANSPORTATION CONFORMITY

The Clean Air Act (CAA) was established to improve air quality and to protect public health and the environment. The CAA has been amended over the years, most significantly in the 1990s. The Act requires the U.S. Environmental Protection Agency (EPA) to set, review, and revise the National Ambient Air Quality Standards (NAAQS) periodically. There are six NAAQS pollutants:

- Ozone (O<sub>3</sub>)
- Nitrogen dioxide (NO<sub>2</sub>)
- Carbon monoxide (CO)
- Lead (Pb)
- Sulfur dioxide (SO<sub>2</sub>)
- Particulate matter (PM) is subdivided into particulate sizes:
  - Less than 10 micrometers in diameter (PM<sub>10</sub>)
  - Less than 2.5 micrometers in diameter (PM<sub>2.5</sub>)

Generators of air pollution are classified into four main types: stationary sources, area sources, non-road mobile sources, and on-road mobile sources. Examples of generators by source category are shown in Figure 4.

**Figure 4: Air Pollution Sources**



Source: MDOT Photography Unit

The CAA links together air quality planning and transportation planning through the transportation conformity process. Air quality planning is controlled by Michigan’s State Implementation Plan (SIP) which includes the state’s plans for attaining or maintaining the NAAQS. The primary transportation planning tools are the metropolitan Long Range Transportation Plan (LRTP) and Transportation Improvement Program (TIP) at both the metropolitan and state level. Transportation conformity ensures that federal funding and approval are given to highway and transit activities that are consistent with the SIP and that these activities will not affect Michigan’s ability to achieve the NAAQS.



Transportation activities that are subject to conformity are LRTPs, TIPs, and all non-exempt federal projects that receive Federal Highway or Federal Transit Administration funding or approval. The

conformity process ensures emissions from implementing the LRTP, TIP, and STIP projects are within acceptable levels specified within the SIP and meet the goals of the SIP.

Transportation conformity only applies to emissions from on-road sources for the following transportation-related pollutants:

- Ozone
- Particulate matter (particulate sizes 2.5 and 10)
- Nitrogen dioxide
- Carbon monoxide

In addition to emissions that are directly emitted, regulations specifically require certain precursor pollutants to be addressed. Precursor pollutants are those pollutants which contribute to the formation of other pollutants. For example, ozone is not directly emitted, but created when nitrogen oxides (NOx) and volatile organic compounds (VOCs) react with sunlight. Table 2 shows the transportation pollutants and associated precursors. Pollutants can be directly emitted or only formed due to precursors. Not all precursors are required to be analyzed for a pollutant; it depends on what is causing the pollutant to form in an area.

**Table 2: Transportation Pollutants and Precursor Emissions**

Transportation Pollutant	Direct Emissions	Precursor Emissions			
		Nitrogen Oxides	Volatile Organic Compounds	Ammonia	Sulfur Dioxide
Ozone		X	X		
Particulate Matter <sub>2.5</sub>	X	X	X		
Particulate Matter <sub>10</sub>	X	X	X	X	X
Nitrogen Dioxide		X			
Carbon Monoxide	X				

The Michigan Department of Environmental Quality (MDEQ) uses monitors throughout the state to measure pollutant levels to determine if concentrations exceed the NAAQS. For each pollutant, an area is classified as either:

- attainment (under the standard)
- nonattainment (area has more pollutant than allowed)
- unclassifiable/attainment (insufficient information to support an attainment or nonattainment classification; conformity requirements are the same as for an attainment area)

Once a nonattainment area has attained the standard for a determined time, the area is re-designated as a maintenance area. Transportation conformity is required for areas designated nonattainment or maintenance.

## ATTAINMENT STATUS HISTORY

On April 15, 2004, the EPA issued final designations of areas not attaining the 1997 ozone NAAQS (also referred to as the 1997 ozone standard). Kent and Ottawa Counties were designated as a nonattainment area. Please see Figure 5 below.

On May 16, 2007, the EPA redesignated the area attainment/maintenance, approving and finding adequate motor vehicle emissions budgets for VOC and NO<sub>x</sub> for the year 2018. Placing the area into maintenance required conformity emissions to be compared to the motor vehicle emission budgets contained in the SIP, referred to as SIP budgets.

On July 20, 2012, the EPA designated all of Michigan as attainment for the strengthened 2008 ozone NAAQS.

On July 20, 2013, the EPA partially revoked the 1997 ozone standard, revoking the requirement to do transportation conformity for areas that were in maintenance.

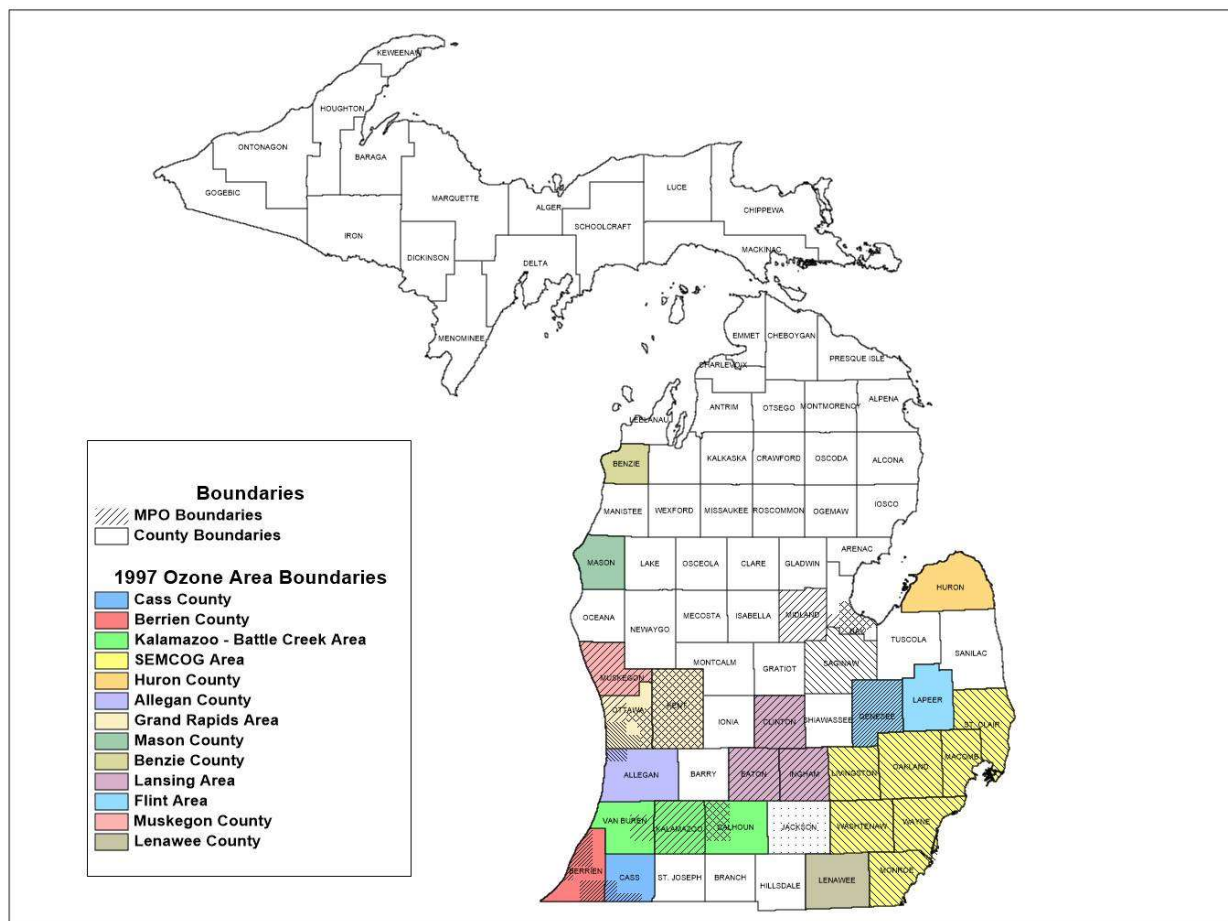
On April 6, 2015, the EPA completely revoked the 1997 ozone standard, which resulted in removal of all transportation conformity requirements.

In October 2015, the EPA lowered the ozone NAAQS to 0.070 parts per million (ppm).

On April 23, 2018, the FHWA, complying with the court's decision in *South Coast Air Quality Management District v. EPA*, started requiring areas in the country that were in maintenance for the 1997 ozone standard and attainment for the 2008 ozone standard to conduct conformity. Later, this was amended to require MPOs to have a conformity in place on February 16, 2019, and conduct conformity going forward.

On August 3, 2018, the EPA designated both Kent and Ottawa Counties as attainment for the strengthened 2015 ozone NAAQS (also referred to as the 2015 ozone standard). In West Michigan, Allegan and Muskegon Counties were designated as partial county nonattainment areas and all of Berrien County as a nonattainment area.

**Figure 5: 1997 Ozone Standard Conformity Area in Michigan**



Prepared by the Statewide Transportation Planning Division, MDOT

### CONFORMITY AREA AND REGIONAL CONFORMITY ANALYSIS

Transportation conformity requires Metropolitan Planning Organizations (MPOs) to make a determination that the LRTP, TIP, and projects conform to the SIP based on the findings of a regional emissions analysis. The determination affirms the regional emissions will not negatively impact the region’s ability to meet the NAAQS. Conformity has a two-step approval process. First, the MPOs must make a formal conformity determination through a resolution that the findings of a conformity analysis conform to the SIP; thus, emissions are at or below the budgets found in the SIP. Then FHWA, jointly with the FTA, after consultation with the EPA, issues a letter of concurrence with the determination.

The Grand Rapids conformity area consists of two counties: Kent and Ottawa. Within the boundary is the MPO of Grand Valley Metro Council (GVMC), parts of the West Michigan Metropolitan Transportation Planning Program (WestPlan) and Macatawa Area Coordinating Council (MACC), as well as the rural projects contained in the State Transportation Improvement Program (STIP).

MDOT conducted an air quality conformity analysis in March of 2019, evaluating projects in the 2040 LRTPs as well as projects in the following documents:

- GVMC 2020-2023 TIP

- WestPlan 2020-2023 TIP projects in Ottawa County
- MACC 2020-2023 TIP projects in Ottawa County
- STIP in Kent and Ottawa counties

The Table 3 below shows the results of the conformity analysis and demonstrates that the projected emissions are well within the SIP budget.

**Table 3: Conformity Analysis Results**

Analysis Year	Emissions (tons/day)	
	VOC	NOx
<b>SIP Budget</b>	40.7	97.87
<b>2020</b>	10.01	11.27
<b>2030</b>	6.13	5.20
<b>2040</b>	4.34	3.22

The staff of the GVMC, WestPlan, and MACC find that the L RTPs and FY2020-2023 TIPs conform to the SIP for the 1997 ozone standard based on the results of the conformity analyses. The complete conformity analysis can be found at [www.gvmc.org/air-quality](http://www.gvmc.org/air-quality).

## PERFORMANCE MEASURES AND THE TIP

A key feature of the Fixing America's Surface Transportation (FAST) Act is the establishment of a performance- and outcome-based program, originally introduced through the Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) Act. The objective of this program is for the investment of resources in projects that collectively make progress toward the achievement of national goals. 23 CFR 490 outlines the seven areas in which performance goals are required, which include: safety, infrastructure condition, congestion reduction, system reliability, freight movement, environmental sustainability, and reduced project delivery delays.

Federal legislation also mandated the Federal Transit Administration (FTA) to develop a rule establishing a strategic and systematic process of operating, maintaining, and improving public capital assets effectively through their entire life cycle. The Transit Asset Management (TAM) Final Rule 49 CFR part 625 became effective Oct. 1, 2016 and established performance measures for rolling stock, equipment, facilities, and infrastructure.

## PERFORMANCE TARGETS

### State Targets

Within one year of the US DOT final rule on performance measures, states are required to set performance targets in support of those measures. States may set different performance targets for urbanized and rural areas. To ensure consistency each state must, to the maximum extent practicable:



- Coordinate with an MPO when setting performance targets for the area represented by that MPO; and
- Coordinate with public transportation providers when setting performance targets in an urbanized area not represented by an MPO. [§1202; 23 USC 135(d)(2)(B)]

The Statewide Transportation Improvement Program (STIP), State asset management plans under the National Highway Performance Program (NHPP), and State performance plans under the Congestion Mitigation and Air Quality Improvement program are required to include performance targets. Additionally, State and MPO targets should be included in Statewide transportation plans. 23 CFR 50.326 (c) and (d) require that (c) the TIP shall be designed such that once implemented, it makes progress toward achieving the performance targets established under §450.306(d) and (d) the TIP shall include, to the maximum extent practicable, a description of the anticipated effect of the TIP toward achieving the performance targets identified in the metropolitan transportation plan, linking investment priorities to those performance targets.

### MPO Targets

Within 180 days of states or providers of public transportation setting performance targets, MAP-21/FAST Act requires MPOs to set performance targets in relation to the performance measures (where applicable). To ensure consistency, each MPO must, to the maximum extent practicable, coordinate with the relevant State and public transportation providers when setting performance targets.

Table 4, below, provides a summary of the performance measure areas and the current implementation status.

**Table 4: Summary of Performance Measures and Target Setting Status**

Area	Measures	Target Setting Status
<b>Safety Performance</b>	Number of fatalities; Rate of fatalities per 100 million VMT; Number of Serious Injuries; Rate of Serious Injuries per 100 million VMT; Number of Non-motorized Fatalities and Non-motorized Serious Injuries	Approved support of statewide 2019 targets (January 2019)
<b>Pavement and Bridge Asset Management</b>	Percent NHS bridges in good and poor condition; Percent Interstate pavement in good and poor condition; Percent Non-Interstate NHS pavement in good and poor condition	Approved support of statewide targets (September 2018)
<b>System Performance and Freight</b>	Interstate travel time reliability; Non-Interstate travel time reliability; Truck travel time reliability	Approved support of statewide targets (September 2018)
<b>Public Transportation</b>	State of Good Repair Targets (rolling stock, equipment, facilities, infrastructure); Public Transportation Agency Safety Plan	Regional State of Good Repair Targets adopted (May 2018)

<b>Congestion Mitigation &amp; Air Quality</b>	<i>Peak hour excessive delay per capita; Percent of non-single occupancy vehicle travel; Total emissions reduction</i>	<i>Not currently applicable to GVMC region (listed for information only)</i>
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The MPO targets provided in the sections that follow reflect the targets that were in place at the time the FY2020-2023 TIP was adopted. For the most up-to-date targets please visit the following website: <https://www.gvmc.org/performance-based-planning-and-programming>.

### Safety

The first performance measure for which specific targets were required is the safety category. On August 31, 2017, the Michigan Department of Transportation (MDOT) reported to Michigan's metropolitan planning organizations (MPOs) that it had set safety targets for calendar year 2018. MDOT and Michigan's MPOs had been meeting prior to this announcement over a period of several months to discuss the setting of these performance targets. The state establishment of safety targets set in motion the clock for MPOs to decide upon their MPO safety targets within 180 days after that date, or by February 27, 2018. GVMC completed an analysis of crash data in our area in 2018 to help the Committees make an informed decision about whether to support State safety targets for the initial 2018 performance period, which they did. At the January 2019 Committee meetings, the Technical and Policy Committees, again, resolved to support State Safety targets.

**Table 5: Michigan Crash Trends 2013-2017**

	2013	2014	2015	2016	2017
<b>Number of Fatalities</b>	947	901	967	1,064	1,028
<b>Fatalities Rate</b>	1.00	0.93	0.99	1.07	1.03
<b>Serious Injuries</b>	5,283	4,909	4,865	5,634	6,084
<b>Serious Injuries Rate</b>	5.56	5.04	4.97	5.68	6.08
<b>Non-Motorized Fatalities &amp; Serious Injuries</b>	743	687	755	736	797

**Table 6: Michigan Safety Targets for 2019**

Measure (5-year rolling average)	Baseline Condition (2013-2017)	2019 Targets (2015-2019)
<b>Number of Fatalities</b>	981.4	1023.2
<b>Rate of Fatalities per 100 million VMT</b>	1.00	1.02
<b>Number of Serious Injuries</b>	5,355.0	5,406.8
<b>Rate of Serious Injury per 100 million VMT</b>	5.47	5.41
<b>Number of Non-motorized(Pedestrians and Bicycle) Fatalities &amp; Serious Injuries</b>	743.6	759.8

While crash trends have indicated increases recently in fatalities and nonmotorized serious injuries, and declines in other serious injuries, GVMC is committed to striving to improve safety conditions and slow the growth of negative safety outcomes through supporting the statewide safety targets.

#### ***Pavement and Bridge Condition Performance***

The measures shown in Table 7 below, along with supporting information provided by MDOT and GVMC staff, were presented to the Technical and Policy Committees at their September 2018 meetings. Both Committees moved to support State targets for the current reporting period.

**Table 7: Michigan Pavement and Bridge Performance Targets**

<b>Performance Measure</b>	<b>State Target</b>
% of pavements on the Interstate system in "Good" condition	4-year: 9% decrease to 47.8%
% of pavements on the Interstate system in "Poor" condition	4-year: 4.8% increase to 10%
% of pavements on the non-Interstate NHS in "Good" condition	2-year: 3% decrease to 46.7% 4-year: 6 decrease to 43.7%
% of pavements on the non-Interstate NHS in "Poor" condition	2-year: 3% increase to 21.6% 4-year: 6% increase to 24.6%
% of NHS bridges classified as in "Good" condition	26.2%
% of NHS bridges classified as "Poor" condition	7.0%

#### ***System Performance/Freight Performance***

At the Technical and Policy Committee meetings in September 2018, staff recommended that the Committees support state targets. The GVMC area is currently performing well in these performance areas (see below), and thus could contribute to meeting State targets. The Committee members unanimously agreed to support state targets for the current performance period. The targets are listed in Table 8 below.

**Table 8: System Performance/Freight Targets**

<b>Performance Measure</b>	<b>Geographic Area</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2yr and 4yr Target</b>
<b>Level of Travel Time Reliability – Person Miles Interstate</b>	Statewide	85.1%	85.2%	84.9%	75%
	GVMC Area	95.1%	96.7%	98.7%	
<b>Level of Travel Time Reliability – Person Miles Non-Interstate NHS</b>	Statewide	---	86.1%	85.7%	70%
	GVMC Area	---	84.9%	84.3%	
<b>Truck Travel Time Index</b>	Statewide	1.47	1.38	1.5	1.75
	GVMC Area	1.61	1.51	1.56	

#### ***Transit Asset Management***

Though GVMC received agency-level State of Good Repair (SGR) targets from ITP-The Rapid in 2017 – which were approved and supported by the Technical and Policy Committees in September of 2017 –

staff began the coordination process to cooperatively develop a single set of regional SGR targets in early 2018 when GVMC received updated targets from ITP-The Rapid, as well as targets from MDOT (applicable to MDOT Section 5311 and 5310 subrecipients) and Hope Network. Through coordination with the regional transit agencies the following region-level targets were developed and presented to the Technical and Policy Committees at the May 2018 meetings where they were adopted.

**Table 9: GVMC MPO State of Good Repair Targets**

Asset Class	Sub-Class	MPO Target
<b>Rolling Stock</b>	Revenue Vehicles: Large Bus	Not more than 15% will meet or exceed FTA ULB
	Revenue Vehicles: Small Bus and Vans	Not more than 10% will meet or exceed FTA ULB
	Revenue Vehicles: Sedan/SUV	Not more than 10% will meet or exceed FTA ULB
<b>Equipment</b>	Service Vehicles	Not more than 20% will meet or exceed FTA ULB
	Maintenance Equipment	Not more than 20% will be below 3.0 on TERM Scale
	Building Subsystems	Not more than 10% will be below 3.0 on TERM Scale
<b>Facilities</b>	All fixed facilities	Not more than 10% will be below 3.0 on TERM Scale

## CURRENT TIP PROCEDURES FOR SELECTING/PROGRAMMING PROJECTS AND ADDRESSING PERFORMANCE MEASURES

GVMC has taken steps to ensure federal performance measures were considered in the project selection and programming process for the FY2020-2023 TIP by incorporating them in the updated “Policies and Practices” document (see Appendix E). The revision of this document in September of 2018 allowed for an opportunity to reevaluate GVMC’s project selection process and determine how GVMC can best meet federal performance measures and make progress toward the targets GVMC has adopted/supported. The following sections provide more detail on the incorporation of specific federal performance measures into the project prioritization/selection process. The MPO will also continue to work with other MPOs on best practices for performance-based programming of projects and analysis of performance measure data.

### Safety

As mentioned above, the MPO has revised its Policies and Practices for Programming Projects document to incorporate safety performance measures into the project selection process for the development of the FY2020-2023 TIP. For the development of the deficiencies list, which was sent out with the call for projects, staff performed a safety deficiency analysis and included safety information in the following fields in the deficiencies list:

- Total number of fatalities within the last five years
- Total number of bicycle and pedestrian injuries within the last five years
- Total number of bicycle and pedestrian fatalities within the last five years
- The average rate of traffic serious injuries per 100 million vehicle miles traveled on the road segment

- The average rate of traffic fatalities per 100 million vehicle miles traveled on the road segment
- Whether the roadway segment was considered safety deficient based on the fatality or serious injury rate being greater than 2018 state targets for those performance measures

This information was provided to member agencies to help them select their pool of proposed projects for the FY2020-2023 TIP and was also used by the TPSG Subcommittee during their programming discussions.

GVMC has maintained a safety plan or safety management system for many years. Currently, this plan lists the top 25 intersections ranked by the following safety criteria:

- Intersections Rank by Expected Excess Fatal and Injury Crash
- Intersections Ranking by Total Crash (2012-2016)
- Intersections Ranking by Fatal and Serious Injury Crash (2012-2016)
- Freeway Segments Ranking by Expected Excess Fatal and Injury Crash
- Non-Freeway Segments Ranking by Expected Excess Fatal and Injury Crash
- Segments Ranking by Total Crash (2012-2016)
- Segments Ranking by Fatal and Serious Injury Crash (2012-2016)
- Intersection Ranking by Expected Excess Fatal and Injury Pedestrian Crash
- Intersection Ranking by Pedestrian Crash (2012-2016)
- Intersection Ranking by Expected Excess Fatal and Injury Bicycle Crash

With each update to this plan (most recent being 2018), staff meets with jurisdictions, provides crash data and additional relevant information upon request.

GVMC also participated in the development of the West Michigan Traffic Safety plan (2017), which covered eight counties (Allegan, Barry, Ionia, Kent, Mecosta, Montcalm, Osceola, and Ottawa) in the West Michigan region.

Safety was considered during the project evaluation process for non-motorized projects currently listed in the current Non-Motorized Plan (last updated in 2014) as well. This includes awarding evaluation points if the projects help eliminate conflict points between vehicles and forms of non-motorized travel. Such projects should minimize the incidents of crashes, injuries, and fatalities as well. When the Non-Motorized Plan is updated, the Non-Motorized Subcommittee will be tasked with evaluating the evaluation criteria and scoring process to more directly link to the federal non-motorized safety performance measures.

The Policies and Practices document lists the federal performance measures and also identifies low, medium, and high deficiency rankings from the West Michigan Traffic Safety Plan. While GVMC has limited access to federal safety funds provided to the state, because they are managed by the state through a stateside grant pool, GVMC encourages local jurisdictions to submit safety deficiency project proposals to MDOT for consideration. The Policies and Practices document recommends prioritizing roadways, segments, intersections, and initiatives identified in both safety plans and, where possible, considering safety enhancements with reconstruction projects.

GVMC will continue to maintain a safety plan and will provide jurisdictions crash data for projects they wish to submit to MDOT for funding consideration. GVMC will also continue to program projects using all sources of funding that target identified intersections and corridors with high crash rates as well as

intersections and corridors with high fatalities and serious injuries, to make progress toward the safety targets the MPO has adopted/supported.

### Pavement and Bridge Condition Performance

For many years, GVMC has tracked pavement condition on all federal aid roads using the PASER system. GVMC staff coordinates with MDOT and the local jurisdictions to collect this data annually and then publishes a yearly pavement condition report. As stated above, these condition ratings serve as a primary basis for project eligibility.

New pavement condition metrics were introduced in the federal rule on this performance area. They require the use of IRI (international roughness index), cracking, rutting, and faulting when determining whether a segment of NHS is in good, fair, or poor condition. MDOT collects this data and GVMC staff participated on the target coordination committee that collaboratively developed the State targets for pavement performance. Staff was also involved in coordination meetings as the Bridge-specific performance measures were being developed. To incorporate these measures in to the prioritization and programming process for the FY2020-2023 TIP, staff included the IRI value and condition indicator (good, fair, poor - based on federal guidelines) for all NHS segments in the deficiencies list that was provided to local agencies during the call for projects for their consideration. These metrics were also used to inform and validate the project selection process. GVMC has a policy that projects receiving funding through the MPO process should be designed and constructed to ensure a long-lasting, improved condition.

GVMC supports efforts to meet bridge condition targets by encouraging local agencies to apply for local bridge funds, which are administered by MDOT, and including selected projects (along with MDOT bridge projects) in the TIP.

To further support the targets adopted/supported by the MPO, the MPO will periodically assess the program to determine if progress is being made locally and toward the statewide targets, based on the funding available, as outlined in the Policies and Practices document. If the MPO system is not within the parameters set by the targets, the MPO will adjust pavement and bridge strategies to the extent feasible and practical. To the extent of the MPO's ability, decisions related to bridge project funding will be made in the context of federal bridge performance requirements and support regional bridge condition performance targets.

### System Performance/Freight Performance

Like other performance measures, system performance and freight performance measures were incorporated into the Policies and Practices document. Reliability factors were added to the congestion criteria section and the MPO allows the use of federal funds, where eligible, to address identified freight constrained intersections, roadways and corridors. Peak planning time index and whether a NHS segment was considered deficient in terms of reliability was also provided on the deficiencies list sent to local jurisdictions with the call for projects and used to inform and validate the programming process.

In 2017, the MPO worked with MDOT to identify **Critical Urban and Rural Freight Corridors** within the MPO boundary, to support the **National Highway Freight Network**. Due to the limited mileage allowed for the Urban and Rural Freight Corridors in the FAST Act, the MPO worked with MDOT to identify candidate Freight routes, which serve critical local industries or provide connections to the formal Freight Network. These candidate routes could be formally designated if a project eligible for federal

Freight funding is identified and proposed in the future. Freight related projects and funding will target the formal and candidate MPO Freight Network corridors and applicable performance measure targets.

### Transit Asset Management

Through coordination with the region's transit providers, the MPO has adopted region-level targets for each of the transit asset management performance measures, which will be evaluated and updated, as necessary, during the MTP update process. GVMC has also adopted a policy that capital transit projects should be consistent with agency TAM requirements and contribute to meeting regional TAM targets.

### FY2020-2023 TIP PERFORMANCE MEASURE RELATED PROJECTS

Below is a listing of the total amount of money programmed in the original approved FY2020-2023 TIP that will make progress toward the performance measure categories.

Project Category	Amount Programmed	Percentage of Available funding	Anticipated Effect Toward Achieving Performance Targets
<b>Safety/Non-Motorized</b>	\$25,611,461	9.3%	Reduce potential for motor vehicle crashes and non-motorized crashes, injuries and fatalities
<b>Pavement Preservation</b>	\$130,286,923	47.3%	Improve surface condition and IRI, eliminate issues with cracking, rutting and faulting
<b>Transit</b>	\$62,480,423	22.7%	Reduce percentage of vehicles, equipment and facilities that are past useful life benchmark
<b>Bridges</b>	\$20,355,383	7.4%	Reduce the number of structurally deficient and functionally obsolete bridges
<b>System Performance/Congestion</b>	\$36,549,473	13.3%	Improve freight movement, reduce traffic congestion and associated user delay cost
<b>Total funding</b>	<b>\$275,283,663</b>	<b>100%</b>	

## 2040 MTP TRANSPORTATION PERFORMANCE TRACKING AND INVESTMENT STRATEGY

Although specific federal guidance on performance measures had not been established at the time the 2040 MTP was developed, GVMC has made every effort to include Transportation Performance Measures in the planning process for the FY 2020-2023 Transportation Improvement Program. Through



the GVMC prioritization and programming processes outlined in the Policies and Practices document, funding has been assigned that generally targets the performance measure areas specified through legislation. Like other MPOs statewide, GVMC has and continues to face limitations in funding resources at the local, state, and federal levels and has established goals and objectives in the MTP to guide project selection.

## **DETERMINATION OF HIGHEST PRIORITY**

The highest priority system needs are determined using various approaches during the MTP development. Taking into account all of the data that is available and public perception of need, the various committees developed a list of needs for the transportation system as a whole. When all of the needs were identified, the GVMC Technical and Policy Committees, with input from the MTP Steering Team, formed to guide the development of the MTP, developed a list of identified transportation investment priorities. Transportation investment priorities identify areas where future available transportation funds should be allocated. This allocation of funds determines future specific priorities that are included within the MTP Project List. After a thorough review of all available funding, it was determined that approximately \$505 million is available over the life of the 2040 MTP for discretionary projects. In other words, the MPO may use these funds for projects deemed to be of the highest priority for the region as a whole. GVMC has determined that the highest priority for all available flexible funding is for projects that contribute to the improvement of the regions' system pavement condition. Data in recent years has shown that pavement conditions in the region are falling and as time passes without funding to address these deficiencies, the system will only continue to deteriorate and the solutions will become increasingly more costly. The MTP Project List was developed to address the deficiencies and priorities identified.

## **IDENTIFIED NEED AND ILLUSTRATIVE VISION**

Throughout the development of this MTP, efforts were made to establish a basic vision of what the region collectively would like our transportation system to be in the year 2040. Issues related to the condition of the pavement, to the reliability of travel times, to the convenience of the local transit system, to the availability of alternate means of transportation, and the efficiency of moving freight throughout the system were all analyzed. The results of this analysis concluded that in order to greatly improve pavement condition from 64% good/fair up to 80% an additional \$665 million in dedicated funding would be necessary through the year 2040. To reduce the percent of congested non-trunkline roadways by 80% an additional \$30 million would be needed. To realize a completed non-motorized network, an additional \$25 million would be required. To fully implement the ITP Master Plan an additional \$206 million would be needed. To fully implement the needs identified in the GVMC Safety Plan an additional \$37 million is necessary. All tolled the illustrative list for local federal aid in the region totals \$963 million over and above the needs listed for area trunklines. GVMC and its member communities are dedicated to focusing future planning efforts in an effort to develop a strong vision of the future conditions of the transportation system in the region. The chart below depicts these needs.

Element	Identified Need	Dedicated Funding	Illustrative Balance
Congestion Mitigation	\$70,805,000.00	\$40,460,000.00	-\$30,345,000.00
Non-Motorized	\$56,704,125.00	\$31,532,500.00	-\$25,171,625.00
Pavement Condition	\$1,170,000,000.00	\$505,000,000.00	-\$665,000,000.00
Safety	\$54,840,000.00	\$18,075,000.00	-\$36,765,000.00
Transit	\$1,114,000,000.00	\$908,000,000.00	-\$206,000,000.00
<b>TOTAL</b>	<b>\$2,466,349,125.00</b>	<b>\$1,503,067,500.00</b>	<b>-\$963,281,625.00</b>

## FINANCIAL PLAN

The function of the TIP Financial Plan is to manage available federal-aid highway and transit resources in a cost-effective and efficient manner. Specifically, the Financial Plan details:

1. Available highway and transit funding (federal, state, and local);
2. Fiscal constraint (cost of projects cannot exceed revenues reasonably expected to be available);
3. Expected rate of change in available funding (unrelated to inflation);
4. Year of Expenditure (YOE) factor to adjust for predicted inflation;
5. Estimate of Operations and Maintenance (O and M) costs for the federal-aid highway system (FAHS).

### AVAILABLE HIGHWAY AND TRANSIT FUNDING

The majority of federal highway and transit funding is derived from federal motor fuel taxes, currently 18.4 cents per gallon on gasoline and 24.4 cents per gallon on diesel. These funds are deposited in the Highway Trust Fund (HTF). A portion of these funds is retained in the Mass Transit Account of the HTF for distribution to public transit agencies and states. In recent years, the HTF has seen large infusions of cash from the federal General Fund, due to declining collections from motor fuel taxes. This is mostly due to increased fuel efficiency in conventionally-powered vehicles, as well as a growing number of hybrid and fully-electric vehicles that require little to no motor fuel.

There are a number of federal highway programs serving different purposes. Appendix A contains a list of these programs. Federal highway funds are apportioned to the states (*apportionment* means distribution of funds according to formulas established by law) and then a portion is allocated to local agencies based on the population in each region. Local agencies within GVMC receive approximately \$14.5 million in federal-aid highway funding each year. In addition, The Michigan Department of Transportation (MDOT) spends approximately a fluctuating amount annually for capital needs on state-owned highways in the region (I-, US-, and M- roads).

Like the highway programs, there are a number of federal transit programs, the list of which can also be found in Appendix A. Transit funds are distributed according to a complex set of distribution formulas. ITP The Rapid receives approximately \$11 million in federal-aid transit funding each year.

State funding for transportation comes from vehicle registration fees and motor fuel taxes. The state also levies a six percent sales tax on the wholesale and federal tax portion of each gallon of motor fuel. Funding from motor fuel taxes and registration fees (but not the sales tax) is deposited in the Michigan Transportation Fund (MTF), which is analogous to the federal HTF. The Comprehensive Transportation Fund (CTF) within the MTF is used for transit.

Local funding is much more difficult to predict. There is a patchwork of transportation millages, special assessment districts, downtown development authorities, and other funding mechanisms throughout the region. Therefore, this Financial Plan does not attempt to quantify current non-federal funding or forecast future non-federal funding revenues, except for MTF and CTF.

## FISCAL CONSTRAINT AND PROJECT SELECTION

The most important financial consideration when creating and/or maintaining a S/TIP is *fiscal constraint*. This means that each year's list of projects cannot exceed the amount of funding reasonably expected to be available in the fiscal year. Funding is considered "reasonably expected to be available" if the federal, state, and local funding amounts are based on amounts received in past years, with rates of change developed cooperatively between MDOT, transportation planning agencies, and public transportation agencies. Note that these rates of change are *not* the same as inflation; rather, they are forecasts of the amount of funding that will be made available by the federal, state, and local governments. In Michigan, this cooperative process is facilitated by the Michigan Transportation Planning Association (MTPA), whose members include the aforementioned agencies, plus the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). The MTPA has determined that recent federal transportation funding shortfalls make it prudent to hold federal funding levels at a two percent annual rate of increase for all four years of the FY 2020 – FY 2023 TIP (see Appendix A).

In the GVMC region, a performance-based process that is outlined in GVMC's "Policies and Practices" document (See Appendix E and the TIP Development section above) is used for project selection. Using this process, local jurisdictions, MDOT, and transit agencies work together at the subcommittee/committee levels to identify projects that will best meet the goals and objectives of the GVMC Metropolitan Transportation Plan.

## YEAR OF EXPENDITURE (YOE)

When MDOT, local jurisdictions, and public transit agencies program their projects, they are expected to adjust costs using year of expenditure (YOE) dollars. YOE simply means that project costs have been adjusted for expected inflation. This is not the same as expected rates of funding change (see previous section). Each local jurisdiction has its own inflation factor(s), based on past experience. However, MDOT has developed YOE factors for itself and any agency that hasn't developed its own. See Appendix A for more details.

## SUMMARY: RESOURCES AVAILABLE FOR CAPITAL NEEDS ON THE FEDERAL-AID HIGHWAY SYSTEM

Table 10 contains a summary of the predicted resources that will be available for capital needs on the local federal-aid highway system within GVMC over fiscal years 2020 through 2023 based on what has been programmed during the development of this document. The only local (i.e., non-federal/state) funding included is funding required to match federal-aid funds. This is usually about 20 percent of the cost of each project.

**Table 10: Forecast of Resources Available for Capital Needs on the Federal-Aid Highway System within GVMC (millions of dollars).**

2020	2021	2022	2023
\$66.7	\$65.5	\$37.3	\$43.6

## ESTIMATE OF OPERATIONS AND MAINTENANCE COSTS FOR THE FEDERAL-AID HIGHWAY SYSTEM

Almost all federal-aid highway funding is restricted to capital costs; i.e., the cost to build and maintain the actual physical assets of the federal-aid highway system (essentially, all I-, US-, and M- designated roads, plus most public roads functionally classified as “collector” or higher). Operations and maintenance (O and M) costs, such as snow and ice removal, pothole patching, rubbish removal, electricity costs to operate streetlights and traffic signals, etc. are the responsibility of MDOT or local road agencies, depending on road ownership. Nevertheless, federal regulations require an estimate of O and M costs on the federal-aid highway system over the years covered by the TIP. Appendix A explains the method and assumptions used to formulate the estimate. Table 11 contains a summary O and M cost estimate for roads on the federal-aid highway system within GVMC. These funds are not shown in the TIP, because most highway operations and maintenance costs are not eligible for federal-aid. The amounts shown are increased by the agreed-upon estimated YOE (i.e., inflation) factors (see Appendix A for a discussion of YOE adjustments).

**Table 11. Forecast of Operations and Maintenance Costs on the Federal-Aid System within GVMC (millions of dollars).**

2020	2021	2022	2023
\$50.3	\$51.3	\$52.3	\$53.4

## SUMMARY: RESOURCES AVAILABLE FOR CAPITAL NEEDS OF PUBLIC TRANSIT AGENCIES

Transit agencies receive their funding from a variety of sources: federal, state, and local. Federal funding is distributed, in large part, according to the population of the urbanized area and/or state. For example, Section 5307 (Urbanized Area Formula Grant) is distributed directly to large transit agencies located within the GVMC Transportation Management Areas (TMAs; urbanized areas with more than 200,000 residents). Section 5307 funds are distributed to federally-specified transit agencies in urbanized areas between 100,000 and 199,999 residents. For areas under 100,000 population, the state can generally award funding at its discretion.

Other sources of funding are more specialized, such as Section 5310 (Transportation for Elderly and Persons with Disabilities) and Section 5311 (for rural areas). See Appendix A for more information on federal transit resources.

The State of Michigan, through the MDOT Office of Passenger Transportation (OPT), also distributes CTF funding to match federal-aid, for job access reverse commute (providing access to available employment for persons in low-income areas), and for local bus operating (LBO). LBO funds are very

important to the agencies as federal-aid funding for transit, like federal-aid funding for highways, is almost entirely for capital expenses.

Local funding can come from farebox revenues, a community’s general fund, millages, and other sources. As with local highway funding, local transit funding can be difficult to predict. Therefore, this chapter will only include federal and state resources available for transit.

Table 12 contains a summary of the predicted resources that will be available for capital needs (and some operations needs, depending on the program) for public transit agencies within GVMC during fiscal years 2020 through 2023. Federal funding reasonably expected to be available is included. CTF funding expected to be distributed by the MDOT Office of Passenger Transportation to public transit agencies within GVMC is also included.

**Table 12. Forecast of Resources Available for Public Transit Capital Needs within GVMC (millions of dollars).**

2020	2021	2022	2023
\$16.1	\$15.6	\$15.9	\$14.9

**DEMONSTRATION OF FINANCIAL CONSTRAINT, FY 2020 THROUGH FY 2023**

After determination of resources available for federal-aid highway and transit capital needs within GVMC from FY 2020 through FY 2023, and matching those available resources to specific needs, a four-year program of projects is created within the context of the region’s transportation policies as contained in the 2040 Regional Transportation Plan. The list must be adjusted to each year’s YOY factor and then fiscally constrained to available revenues (see Appendix A).

Table 13 contains a summary of the cost of highway and transit projects programmed over the four-year TIP period, matched to revenues available in that same period. This table shows that the FY 2020 through FY 2023 TIP is fiscally constrained. Note: Operations and maintenance costs of the federal-aid highway system are included in the text of this chapter. However, these costs are not included in the TIP itself, as nearly all highway operations and maintenance costs are ineligible for federal-aid funding.

**Table 13. Demonstration of fiscal constraint, FY 2020 through FY 2023 TIP (millions of dollars).**

	2020	2021	2022	2023
<b>Highway Funding</b>	\$66.7	\$65.5	\$37.3	\$43.6
<b>Highway Programmed</b>	\$66.7	\$65.5	\$37.3	\$43.6
<b>Transit Funding</b>	\$16.1	\$15.6	\$15.9	\$14.9
<b>Transit Programmed</b>	\$16.1	\$15.6	\$15.9	\$14.9
<b>Total Funding</b>	\$82.8	\$82.1	\$53.2	\$58.5
<b>Total Programmed</b>	\$82.8	\$82.1	\$53.2	\$58.5
Difference	\$0	\$0	\$0	\$0

## PROJECT LISTINGS

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### LIST OF PROGRAMMED PROJECTS

This following pages list all federally-funded/regionally significant projects planned for fiscal years 2020 through 2023 in the Grand Rapids Metropolitan Area. This list identifies all multimodal transportation investments in the metropolitan area, including transit, highway and non-motorized projects. The projects are listed by year and then by jurisdiction.

This four-year program has been updated every three years as required by the FAST Act and can be amended by majority vote from the GVMC TPSG, Technical, and Policy Committees

### ILLUSTRATIVE PROJECTS

The TIP may include, for illustrative purposes, additional projects that would be included in the approved TIP if reasonable additional resources beyond those identified in the financial plan were available.

Included after the list of programmed projects is an illustrative list of projects that were nominated to receive federal funding through various federal funding sources but was not programmed due to funding limitations for the projects in this current TIP. These projects will remain on these lists until:

1. More funding becomes available in a particular year;
2. A currently programmed project drops completely out of the TIP;
3. The development of the next TIP (FY2023 – FY2027), where these projects could potentially be programmed; or
4. the maintenance jurisdiction chooses to build the project with local funds.

### PROJECT MAP

Following the project listings is a map (see Figure 6) showing the locations of programmed and illustrative local and MDOT projects geographically placed on the map within the MPO area. This map is also available on the GVMC website at [www.gvmc.org/tip](http://www.gvmc.org/tip). Because the transit projects are capital improvement type projects with no associated specific locations, they were not geographically illustrated. A list of acronyms for funding categories is available in the Appendix I.

Fiscal Year	Job Type	County	Responsible Agency	Project Name	Limits	Length	Project Description	AC/ACC	ACC Year(s)	Phase	Fed Estimated Amount	State Estimated	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost
2020	Local	Kent	Grand Rapids	Plainfield Ave NE	Plainfield Ave from I-96 to 390' N or Salerno Dr	0.225	5ft Sidewalk both sides			CON	\$192,499	\$0	\$304,400	\$496,899	TAU	496,899
2020	Local	Kent	Grand Rapids	Hall St	Division Avenue to Jefferson Avenue	0.174	Rotomill and Resurface			CON	\$100,000	\$0	\$25,000	\$125,000	STU	125,000
2020	Local	Kent	Grand Rapids	Walker Ave	Walker Avenue/Seventh Street - Stocking Avenue to Leonard Street	1.072	Rotomill and Resurface			CON	\$580,000	\$0	\$145,000	\$725,000	STU	725,000
2020	Local	Kent	Grand Rapids	Madison Ave	28th Street to Alger Street	0.507	Rotomill and Resurface			CON	\$284,000	\$0	\$71,000	\$355,000	STU	355,000
2020	Local	Kent	Grand Rapids	Alger St	Madison Avenue to Eastern Avenue	0.501	Reconstruction/rotomill/resurface			CON	\$532,000	\$0	\$133,000	\$665,000	STU	665,000
2020	Local	Kent	Grand Rapids	Ottawa Ave	Fullton Street to Michigan Street	0.532	Rotomill and Resurface			CON	\$284,000	\$0	\$71,000	\$355,000	STU	355,000
2020	Local	Kent	Grand Rapids	Eastern Ave	Ardmore Street to Oakdale Street	0.626	Rotomill and Resurface			CON	\$500,000	\$0	\$125,000	\$625,000	STU	625,000
2020	Local	Kent	Grand Rapids	Lake Dr SE	Lake Drive - Atlas Ave to ECL	0.273	Rotomill and Resurface			CON	\$400,000	\$0	\$100,000	\$500,000	STU	500,000
2020	Local	Kent	Grand Rapids	Market Ave	various locations	0.001	Signal detection install/upgrades var locations			CON	\$142,000	\$0	\$58,000	\$200,000	CM	200,000
2020	Local	Kent	Grand Rapids	Market Ave	Various	0.001	Signal optimization @ up to 120 Fed aid locations			CON	\$213,000	\$0	\$87,000	\$300,000	CM	300,000
2020	Local	Kent	Grand Rapids	Market Ave	Areawide	0.001	Regional Signal System TMS Operations			EPE	\$528,000	\$0	\$132,000	\$660,000	CM	660,000
2020	Local	Kent	Grand Rapids	East Paris Avenue SE	East Paris Avenue SE at Burton Street SE, city of Grand Rapids	0.052	Traffic signal modernization			CON	\$162,400	\$0	\$40,600	\$203,000	HSIP	203,000
2020	Local	Kent	Grand Rapids	Fuller Avenue NE	Fuller Ave at Malta, Short, Bradford, and Sweet St. city of Grand Rapids	0.068	Traffic signal modernization, pedestrian hybrid beacon			CON	\$331,155	\$0	\$36,795	\$367,950	HSIP	367,950
2020	Local	Kent	Grand Rapids	Fuller Avenue NE	Fuller Ave at Leonard, Knapp, Averdeen, and 3 Mile Rd, city of Grand Rapids	0.114	Traffic signal modernization			CON	\$476,203	\$0	\$52,912	\$529,115	HSIP	529,115
2020	Local	Kent	Grand Rapids	Leonard St NW	Leonard Street at Scriber Avenue, city of Grand Rapids	0.029	Traffic signal modernization			CON	\$219,600	\$0	\$24,400	\$244,000	HSIP	244,000
2020	Local	Kent	Grand Rapids	Hall St	Fuller Avenue to Colorado Avenue	0.298	Reconstruction			CON	\$400,000	\$0	\$100,000	\$500,000	STU	500,000
2020	Local	Kent	Grand Rapids	Hall St	Kalamazoo Avenue to Fuller Avenue	0.289	Reconstruction			CON	\$400,000	\$0	\$100,000	\$500,000	STU	500,000
2020	Local	Kent	Grand Rapids	Division Ave	Wealthy Street to Cherry Street	0.248	Reconstruction	ACC	2020	CON	\$127,709			\$127,709	STU	3,080,892
2020	Local	Kent	Grand Rapids	Alger St	Eastern Avenue to Kalamazoo Avenue	0.732	Reconstruction			CON	\$981,250	\$0	\$268,750	\$1,250,000	STU	1,250,000
2020	Local	Kent	GVMC	Front Ave	Areawide	0.001	Clean Air Action Days			CON	\$80,000	\$0	\$20,000	\$100,000	CM	100,000
2020	Local	Kent	GVMC	Areawide	Areawide	0.000	Planning Studies			EPE	\$150,000	\$0	\$37,500	\$187,500	STU	187,500
2020	Multi-Modal	Kent	Hope Network, Inc.	Transit Operations	Areawide	0.000	Enhanced Mobility of Seniors and individuals with disabilities			NI	\$306,400	\$76,600	\$0	\$383,000	5310	383,000
2020	Local	Ottawa	Hudsonville	New Holland St	New Holland Street North Side of street, City of Hudsonville	0.274	10' wide Non-motorized Pathway N of New Holland St, E of Buttermilk Creek			CON	\$151,200	\$0	\$125,146	\$276,346	TAU	276,346
2020	Local	Ottawa	Hudsonville	32nd Ave	I-196 Bridge to Corporate Grove Drive	0.245	Left Turn Lane			CON	\$280,000	\$0	\$70,000	\$350,000	STU	350,000
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1803-planning/studies			NI	\$400,000	\$100,000	\$0	\$500,000	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1802-capital cost of contracting			NI	\$720,000	\$180,000	\$0	\$900,000	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1801-preventative maintenance			NI	\$960,000	\$240,000	\$0	\$1,200,000	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1303-bus shelter purchase			NI	\$8,160	\$2,040	\$0	\$10,200	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1410-misc. support equipment (explanation must be provided in work detail)			NI	\$16,000	\$4,000	\$0	\$20,000	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1403-office equipment (copier, office furniture, etc.)			NI	\$40,800	\$10,200	\$0	\$51,000	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1409-administrative vehicle			NI	\$61,200	\$15,300	\$0	\$76,500	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1408-maintenance equipment (hoists, tools, etc.)			NI	\$76,000	\$19,000	\$0	\$95,000	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1207-architect and engineer			NI	\$81,600	\$20,400	\$0	\$102,000	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1805-contingency			NI	\$81,600	\$20,400	\$0	\$102,000	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1302-bus shelter improvements			NI	\$41,052	\$10,263	\$0	\$51,315	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1406-security equipment - facilities			NI	\$139,830	\$34,957	\$0	\$174,787	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1807-traffic signals (prioritization, upgrades, etc.)			NI	\$259,147	\$64,787	\$0	\$323,934	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1402-fare collection			NI	\$382,035	\$95,509	\$0	\$477,544	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1102-30-34 foot replacement bus with or without lift			NI	\$389,524	\$97,381	\$0	\$486,905	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1401-bus equipment (spare, tires, windshields, lifts, bus wraps, bike rack, ADA)			NI	\$1,019,586	\$254,897	\$0	\$1,274,483	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1404-computers (hardware and software)			NI	\$1,264,744	\$316,186	\$0	\$1,580,930	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1203-admin/maintenance facility improvements			NI	\$1,309,998	\$327,500	\$0	\$1,637,498	5307	12,793,079
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift			NI	\$2,983,186	\$745,797	\$0	\$3,728,983	5307	12,793,079



Fiscal Year	Job Type	County	Responsible Agency	Project Name	Limits	Length	Project Description	AC/ACC	ACC Year(s)	Phase	Fed Estimated Amount	State Estimated	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1702-ozone action			NI	\$40,000	\$10,000	\$0	\$50,000	CM	50,000
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift			NI	\$966,419	\$241,605	\$0	\$1,208,024	5339	1,208,024
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift			NI	\$1,070,000	\$267,500	\$0	\$1,337,500	CM	1,337,500
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1105-van replacement, any size with or without lift			NI	\$100,000	\$25,000	\$0	\$125,000	CM	125,000
2020	Multi-Modal	Kent	ITP-The Rapid	Transit Operating	Areawide	0.000	SP1701-rideshare			NI	\$165,454	\$0	\$0	\$165,454	CMG	165,454
2020	Local	Kent	Kent County	Burton St SE	Burton St from Patterson Avenue to Highridge Hills Lane (Pvt.), Cascade Twp	0.364	Burton Street Trail from Patterson Avenue to Highridge Hills Lane (Pvt.)			CON	\$1,286,669	\$0	\$692,821	\$1,979,490	TA	1,979,490
2020	Local	Kent	Kent County	Fruit Ridge Avenue	6 Mile Road to 10 Mile Road	4.000	Full depth resurface			CON	\$877,000	\$0	\$323,000	\$1,200,000	STL	1,200,000
2020	Local	Kent	Kent County	68th St SW	Byron Center Avenue to Burlingame Avenue	1.032	Resurface			CON	\$646,500	\$0	\$253,500	\$900,000	EDCF	900,000
2020	Local	Kent	Kent County	Segwun Ave SE	South of Segwun Avenue to Grand River Drive	0.347	Widen to 3 Lanes			CON	\$0	\$713,014	\$178,254	\$891,268	EDC	891,268
2020	Local	Kent	Kent County	84th St	Division Avenue to Eastern Avenue	0.975	Reconstruct to 3 lane			CON	\$0	\$1,040,261	\$260,065	\$1,300,326	EDC	1,300,326
2020	Local	Kent	Kent County	84th St	Kalamazoo Avenue to Breton Avenue	1.004	Reconstruction			CON	\$1,120,000	\$0	\$280,000	\$1,400,000	STU	1,400,000
2020	Local	Kent	Kent County	68th St SW	From Burlingame Avenue to Clyde Park Avenue	1.004	Widening from 2 to 3 Lanes			CON	\$566,500	\$0	\$233,500	\$800,000	EDCF	800,000
2020	Local	Kent	Kentwood	44th St SE	Breton Avenue to Shaffer Avenue	1.002	Mill and Resurface			CON	\$500,000	\$0	\$125,000	\$625,000	STU	853,750
2020	Local	Kent	Kentwood	44th St SE	Breton Avenue to Shaffer Avenue	1.002	Mill and Resurface			CON	\$183,000	\$0	\$45,750	\$228,750	NH	853,750
2020	Local	Kent	Kentwood	Burton St	Burton/East Paris Intersection	0.001	Add right turn lanes on NE and NW quads			CON	\$184,600	\$0	\$75,400	\$260,000	CM	260,000
2020	Trunkline	Ottawa	MDOT	I-196 (EB)	West of 32nd Avenue east to East of the Ottawa/Kent County Line	5.303	Reconstruction			CON	\$19,800,000	\$2,200,000	\$0	\$22,000,000	IM	22,000,000
2020	Trunkline	Ottawa	MDOT	I-196	I-196 from 32nd Ave to 44th St.	4.839	Traffic Surveillance Cameras			CON	\$409,250	\$90,750	\$0	\$500,000	ST	500,000
2020	Trunkline	Kent	MDOT	M-37	Lake Eastbrook Boulevard north to I-96	3.665	Full Depth Concrete Pavement Repairs, ADA Ramps			CON	\$1,327,198	\$294,302	\$0	\$1,621,500	NH,HIPU	1,711,500
2020	Trunkline	Kent	MDOT	M-37	44th Street north to 32nd Street	1.771	Milling and One Course Asphalt Overlay, ADA Ramps			CON	\$713,732	\$140,463	\$17,805	\$872,000	NH	932,000
2020	Trunkline	Kent	MDOT	Regionwide	I196 EB OFF RAMP @ 44TH ST I-196 WB OFF-RAMP @ 44TH ST I196BS (CHICAGO DR) @ BURLINGAME (Sue survey ordered) US131 NB OFF RAMP @ PEARL,SCRIBNER	0.000	Traffic Signal Modernizations; connected vehicle installations.			CON	\$784,944	\$0	\$0	\$784,944	STG	2,108,084
2020	Trunkline	Kent	MDOT	I-196	The Grand River east to Lane Avenue	2.501	Concrete Joint Repairs and High Friction Surface Treatment			CON	\$3,870,000	\$430,000	\$0	\$4,300,000	IM	4,475,000
2020	Trunkline	Ottawa	MDOT	M-45	96th Ave to 68th Ave	6.095	Milling & One Course Asphalt Overlay			CON	\$660,920	\$145,080	\$0	\$806,000	NH	1,560,000
2020	Trunkline	Kent	MDOT	US-131	At the Rockford Rest Area	0.000	Rehabilitate sanitary drain field			CON	\$223,946	\$49,659	\$0	\$273,605	ST	309,293
2020	Trunkline	Kent	MDOT	Grand Regionwide Longitudinal Pavement Markings	All of GVMC MPO	1.332	Longitudinal pavement marking application in Grand Region			PE	\$1,653	\$184	\$0	\$1,837	HSIP	2,692,500
2020	Trunkline	Kent	MDOT	Grand Regionwide Longitudinal Pavement Markings	All of GVMC MPO	1.332	Longitudinal pavement marking application in Grand Region			CON	\$592,043	\$65,783	\$0	\$657,825	HSIP	2,692,500
2020	Trunkline	Kent	MDOT	Grand Regionwide Special Pavement Markings	All of GVMC MPO	3.634	Special marking application on trunkline routes in Grand Region			PE	\$1,653	\$184	\$0	\$1,837	HSIP	742,500
2020	Trunkline	Kent	MDOT	Grand Regionwide Special Pavement Markings	All of GVMC MPO	3.634	Special marking application on trunkline routes in Grand Region			CON	\$162,068	\$18,008	\$0	\$180,075	HSIP	742,500
2020	Trunkline	Kent	MDOT	Grand Regionwide Pvmt Mrkg Retro Readings	All of GVMC MPO	2.113	Pvmt mrkg retroreflectivity readings on trunklines in Grand Region			CON	\$3,749	\$417	\$0	\$4,165	HSIP	17,000
2020	Trunkline	Kent	MDOT	M-37 N	M37 (Alpine) @ 7 Mile Rd. M37 (Alpine) @ N Center Dr, Old Orchard M37 (ALPINE) @ CENTER DR, K MART DR M21 (FULTON) @ SPAULDING US-131 SB OFF RAMP @ 68TH ST US-131 SB OFF-RAMP @ MARKET AVE / CHERRY ST US131 NB OFF RAMP @ 68TH ST I96 EB OFF RAMP @ LEONA	0.000	Traffic Signal Modernization; connected vehicle installations			ROW	\$5,000	\$0	\$0	\$5,000	STG	2,709,872

Fiscal Year	Job Type	County	Responsible Agency	Project Name	Limits	Length	Project Description	AC/ACC	ACC Year(s)	Phase	Fed Estimated Amount	State Estimated	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost
2020	Trunkline	Kent	MDOT	I-196	I-196 EB over M-45 WB ramp	0.000	Shallow ovrlly, beam rprs			CON	\$1,530,000	\$170,000	\$0	\$1,700,000	IM	1,924,700
2020	Trunkline	Kent	MDOT	I-196 EB	I-196 EB over M-45	0.000	Shallow ovrlly, substr repr			CON	\$1,530,000	\$170,001	\$0	\$1,700,000	IM	1,923,352
2020	Trunkline	Ottawa	MDOT	I-196 EB	over 32nd Avenue	0.000	Deck patch, epoxy overlay			CON	\$224,777	\$24,975	\$0	\$249,752	IM	249,752
2020	Trunkline	Kent	MDOT	Regionwide	Grand Region	0.000	Overband Crack Fill (FPVS)			CON	\$470,638	\$104,363	\$0	\$575,000	NH	595,000
2020	Trunkline	Kent	MDOT	I-96 WB	At M-21	0.001	I-96 WB Weave-Merge lane and add M-21 WB off ramp			CON	\$1,526,503	\$338,498	\$0	\$1,865,000	CM	2,849,000
2020	Trunkline	Kent	MDOT	Regionwide	Various locations in Grand Region	0.000	2020 WMTOC Control Room Operations			EPE	\$662,985	\$147,015	\$0	\$810,000	CM	810,000
2020	Trunkline	Kent	MDOT	Front Ave NW	Various locations in Grand Region	0.000	2020 ITS maintenance & operations in Grand Region			EPE	\$806,223	\$178,778	\$0	\$985,000	CM	985,000
2020	Trunkline	Kent	MDOT	Regionwide	Regionwide	0.000	Road Weather information Systems			EPE	\$193,149	\$42,830	\$0	\$235,979	ST	4,704,006
2020	Trunkline	Kent	MDOT	Regionwide	Regionwide	0.000	Road Weather information Systems			PE	\$463,557	\$102,793	\$0	\$566,350	ST	4,704,006
2020	Trunkline	Kent	MDOT	M-6	M-6 WB and US-131 SB	0.000	Electrical service for six (6) existing VDS			CON	\$50,798	\$11,264	\$0	\$62,062	NH	62,062
2020	Trunkline	Kent	MDOT	US-131	7 locations in Kent County	4.977	ITS camera and VDS installation			PE	\$139,327	\$30,895	\$0	\$170,222	NH	1,342,860
2020	Local	Ottawa	Ottawa County	12th Ave	10th Ave/Golfside to 12th Avenue, Georgetown Twp	1.608	Grand River Greenway Trail Phase III (Cottonwood Drive to Bend Area)			CON	\$260,007	\$0	\$173,338	\$433,345	TA	433,345
2020	Local	Ottawa	Ottawa County	Adams Street	48th Avenue to 24th Avenue	3.022	Asphalt Overlay and shoulder widening			CON	\$0	\$73,179	\$0	\$73,179	EDD	1,450,000
2020	Local	Ottawa	Ottawa County	Adams Street	48th Avenue to 24th Avenue	3.022	Asphalt Overlay and shoulder widening			CON	\$1,107,867	\$0	\$268,954	\$1,376,821	STL	1,450,000
2020	Local	Ottawa	Ottawa County	Port Sheldon St	44th Street to Main Street	2.493	Resurface			CON	\$620,000	\$0	\$450,000	\$1,070,000	STU	1,070,000
2020	Local	Ottawa	Ottawa County	44th St	Chicago Drive to 8th Avenue	1.685	Resurface			CON	\$400,000	\$0	\$440,000	\$840,000	STU	840,000
2020	Local	Kent	Rockford	Courtland St NE	Courtland/Northland from Monroe to Wolverine	0.887	Resurface			CON	\$396,000	\$0	\$99,000	\$495,000	STU	495,000
2020	Local	Kent	Walker	Sunset Hills Ave NW	Lake Michigan Drive to Jason Ridge Lane	0.604	Resurface			CON	\$320,000	\$0	\$80,000	\$400,000	STU	400,000
2020	Local	Kent	Walker	Three Mile Road	Walker Avenue at 3 Mile Road	0.001	Add dual lefts from EB 3 Mile Road to NB Walker	ACC	2020	CON	\$320,000			\$320,000	CM	867,811
2020	Local	Kent	Wyoming	Byron Center Ave	South City Limit to 44th Street	2.028	Rotomill and Resurface			CON	\$520,000	\$0	\$130,000	\$650,000	NH	1,340,000
2020	Local	Kent	Wyoming	Byron Center Ave	South City Limit to 44th Street	2.028	Rotomill and Resurface			CON	\$550,000	\$0	\$140,000	\$690,000	STU	1,340,000
2020	Local	Kent	Wyoming	Byron Center Ave	At 44th Street	0.001	Add NB RT Only Lane			CON	\$142,000	\$0	\$58,000	\$200,000	CM	200,000
2021	Local	Kent	Caledonia	Kinsey Ave SE	Main Street to Maple Street	0.341	Asphalt Reconstruct with sidewalk			CON	\$283,111	\$0	\$91,889	\$375,000	STU	375,000
2021	Local	Kent	Cedar Springs	N Main St NE	N Main Street over Cedar Creek, Str# 5185, City of Cedar Springs	0.000	Bridge Replacement			CON	\$1,171,200	\$219,600	\$73,200	\$1,464,000	BRT	1,464,000
2021	Local	Kent	East Grand Rapids	Hall St SE	Wilshire Drive to Lake Drive	1.051	Cold Mill HMA Surface and HMA Resurface			CON	\$641,718	\$0	\$208,282	\$850,000	STU	850,000
2021	Local	Kent	Grand Rapids	Madison Ave SE	Alger Street to Burton Street	0.499	Milling and Asphalt Overlay			CON	\$254,800	\$0	\$82,700	\$337,500	STU	337,500
2021	Local	Kent	Grand Rapids	Hall St SE	Sylvan Avenue to 1,275' East of Plymouth Avenue	0.505	Milling and two course asphalt resurfacing			CON	\$245,363	\$0	\$79,637	\$325,000	STU	325,000
2021	Local	Kent	Grand Rapids	Market Ave SW	Market Avenue	0.088	Signal optimization at up to 120 fed aid locations			CON	\$240,000	\$0	\$60,000	\$300,000	CM	300,000
2021	Local	Kent	Grand Rapids	Market Ave SW	Market Avenue	0.055	Regional Signal System TMS Operations			OPS	\$264,000	\$0	\$396,000	\$660,000	CM	660,000
2021	Local	Kent	Grand Rapids	E Fulton St	Arthur to Wallinwood	0.402	Reconstruction			CON	\$537,910	\$0	\$174,590	\$712,500	STU	712,500
2021	Local	Kent	Grand Rapids	Godfrey Ave SW	Liberty Street to Oxford Street	0.501	Reconstruction			CON	\$358,607	\$0	\$116,393	\$475,000	STU	475,000
2021	Local	Kent	Grand Rapids	Godfrey Ave SW	Oxford Street to Market Avenue	0.553	Asphalt Reconstruct			CON	\$358,607	\$0	\$116,393	\$475,000	STU	475,000
2021	Local	Kent	Grand Rapids	Hall St SE	Colorado Avenue to Sylvan Avenue	0.181	Asphalt Reconstruct			CON	\$377,481	\$0	\$122,519	\$500,000	STU	500,000
2021	Local	Kent	Grand Rapids	Lake Eastbrook Blvd SE	East Beltline to 28th Street	0.799	Asphalt Reconstruct			CON	\$594,532	\$0	\$192,968	\$787,500	STU	787,500
2021	Local	Kent	Grand Rapids	Valley Ave NW	4th Street to Walker Avenue	0.520	Asphalt Reconstruction			CON	\$481,288	\$0	\$156,212	\$637,500	STU	637,500
2021	Local	Kent	Grand Rapids	Franklin St SE	Division to East City Limits	1.915	Resurface	AC	2022	CON	\$0	\$0	\$119,343	\$119,343	EDCF	1,670,000
2021	Local	Kent	Grand Rapids	Franklin St SE	Division to East City Limits	1.915	Resurface			CON	\$672,630	\$0	\$400,657	\$1,073,287	HIPU	1,670,000
2021	Local	Kent	GVMC	Front Ave NW	GVMC Planning Area	0.000	Planning Studies			NI	\$150,000	\$0	\$37,500	\$187,500	STU	187,500
2021	Local	Kent	GVMC	Front Ave NW	GVMC MPO Area Kent County	0.000	FY2021 Clean Air Program			NI	\$80,000	\$0	\$20,000	\$100,000	CM	100,000
2021	Local	Kent	Grandville	Wilson Ave SW	Rivertown Parkway to South City Limits	0.642	Milling and Asphalt Resurface			CON	\$218,939	\$0	\$71,061	\$290,000	STU	290,000
2021	Local	Ottawa	Hudsonville	Van Buren St	36th Avenue to City Limits	0.506	Milling and Asphalt Resurface			CON	\$296,700	\$0	\$96,300	\$393,000	STU	393,000
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1803-planning/studies			NI	\$400,000	\$100,000	\$0	\$500,000	5307	13,703,119
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1802-capital cost of contracting			NI	\$720,000	\$180,000	\$0	\$900,000	5307	13,703,119
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1801-preventative maintenance			NI	\$960,000	\$240,000	\$0	\$1,200,000	5307	13,703,119
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1303-bus shelter purchase			NI	\$8,323	\$2,081	\$0	\$10,404	5307	13,703,119
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1410-misc. support equipment (explanation must be provided in work detail)			NI	\$16,000	\$4,000	\$0	\$20,000	5307	13,703,119
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1403-office equipment (copier, office furniture, etc.)			NI	\$40,800	\$10,200	\$0	\$51,000	5307	13,703,119
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1408-maintenance equipment (hoists, tools, etc.)			NI	\$76,000	\$19,000	\$0	\$95,000	5307	13,703,119
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1302-bus shelter improvements			NI	\$41,873	\$10,468	\$0	\$52,341	5307	13,703,119
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1409-administrative vehicle			NI	\$62,424	\$15,606	\$0	\$78,030	5307	13,703,119

Fiscal Year	Job Type	County	Responsible Agency	Project Name	Limits	Length	Project Description	AC/ACC	ACC Year(s)	Phase	Fed Estimated Amount	State Estimated	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1207-architect and engineer			NI	\$83,232	\$20,808	\$0	\$104,040	5307	13,703,119
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1805-contingency			NI	\$83,232	\$20,808	\$0	\$104,040	5307	13,703,119
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1406-security equipment - facilities			NI	\$142,626	\$35,657	\$0	\$178,283	5307	13,703,119
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1807-traffic signals (prioritization, upgrades, etc.)			NI	\$174,160	\$43,540	\$0	\$217,700	5307	13,703,119
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1402-fare collection			NI	\$389,675	\$97,419	\$0	\$487,094	5307	13,703,119
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1203-admin/maintenance facility improvements			NI	\$844,386	\$211,096	\$0	\$1,055,482	5307	13,703,119
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1401-bus equipment (spare, tires, windshields, lifts, bus wraps, bike rack, ADA)			NI	\$1,026,378	\$256,595	\$0	\$1,282,973	5307	13,703,119
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1404-computers (hardware and software)			NI	\$1,266,759	\$316,690	\$0	\$1,583,449	5307	13,703,119
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift			NI	\$4,626,626	\$1,156,657	\$0	\$5,783,283	5307	13,703,119
2021	Multi-Modal	Kent	ITP-The Rapid	Bartlett St SW	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift			NI	\$980,916	\$245,229	\$0	\$1,226,145	5339	1,226,145
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift			NI	\$240,000	\$60,000	\$0	\$300,000	CM	300,000
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1105-van replacement, any size with or without lift			NI	\$100,000	\$25,000	\$0	\$125,000	CM	125,000
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Operating	Areawide	0.000	SP1701-rideshare			NI	\$206,207	\$0	\$0	\$206,207	CMG	206,207
2021	Multi-Modal	Kent	ITP-The Rapid	Transit Operating	Areawide	0.000	SP1702-ozone action			NI	\$60,000	\$15,000	\$0	\$75,000	CM	75,000
2021	Local	Kent	Kent County	20 Mile Rd NW	20 Mile Rd NW over Walter Creek, Str# 5037, Kent County	0.000	Miscellaneous Bridge Rehabilitation			CON	\$348,800	\$65,400	\$21,800	\$436,000	BO	436,000
2021	Local	Kent	Kent County	68th St SE	Hanna Lake Avenue to Kraft Avenue	2.931	Milling and Resurfacing			CON	\$849,332	\$0	\$275,668	\$1,125,000	STU	1,125,000
2021	Local	Kent	Kent County	Whitneyville Ave SE	I-96 to Cascade Road	0.957	Crush & Shape Asphalt Resurfacing			CON	\$188,740	\$0	\$61,260	\$250,000	STU	250,000
2021	Local	Kent	Kent County	13 Mile Rd NE	Grange Avenue to Edgerton Avenue	2.284	Crush and Shape Resurfacing			CON	\$770,000	\$0	\$230,000	\$1,000,000	EDCF	1,000,000
2021	Local	Kent	Kent County	7 Mile Rd NW	Alpine Avenue to Pine Island Drive	1.816	Crush and Shape Resurfacing			CON	\$462,000	\$0	\$138,000	\$600,000	EDCF	600,000
2021	Local	Kent	Kent County	S Division Ave	76th Street to 68th Street	1.005	Milling and Asphalt Resurfacing			CON	\$717,000	\$0	\$183,000	\$900,000	NH	900,000
2021	Local	Kent	Kent County	84th St SE	Breton Avenue to Hanna Lake Avenue	0.989	Asphalt Reconstruct			CON	\$981,450	\$0	\$318,550	\$1,300,000	STU	1,300,000
2021	Local	Kent	Kent County	100th St SE	Kalamazoo Avenue to East 1 Mile	1.403	Reconstruct			CON	\$895,000	\$0	\$305,000	\$1,200,000	STL	1,200,000
2021	Local	Kent	Kentwood	32nd St SE	Breton Avenue to Shaffer Avenue	1.000	Widen and Reconstruct adding Center Turn Lanes			CON	\$0	\$1,200,000	\$1,400,000	\$2,600,000	EDC	2,600,000
2021	Trunkline	Kent	MDOT	I-196	I-196 WB over Plymouth Avenue	0.000	Bridge replacement, widen, approach replacement			CON	\$2,025,869	\$225,097	\$0	\$2,250,966	IM	450,000
2021	Trunkline	Kent	MDOT	I 96 EB	At M-21	0.001	I-96 EB Weave-Merge lane and add M-21 EB On Ramp			CON	\$1,649,278	\$365,723	\$0	\$2,015,000	CM	2,665,000
2021	Trunkline	Kent	MDOT	M-57	Farland Ave East to Ramsdell Dr	2.010	Passing Relief Lanes			CON	\$3,827,700	\$425,300	\$0	\$4,253,000	HSIP	4,603,000
2021	Trunkline	Kent	MDOT	I-96	Thornapple River Drive east to West of Whitneyville Avenue	7.649	Concrete Inlay			CON	\$10,350,000	\$1,150,000	\$0	\$11,500,000	IM	12,995,000
2021	Trunkline	Kent	MDOT	I-196	over The Grand River	0.000	Deck Repl			CON	\$4,843,130	\$538,125	\$0	\$5,381,255	IM,IPD	6,083,158
2021	Trunkline	Kent	MDOT	I-96 E/W Cascade Ramp	I-96 from Kent Co Line to US-131	25.713	Freeway Signing Upgrade Project			CON	\$1,000,000	\$0	\$0	\$1,000,000	IMG	1,250,000
2021	Trunkline	Kent	MDOT	US-131 N	US-131 Kent County	43.162	Freeway Signing Update			CON	\$4,000,000	\$0	\$0	\$4,000,000	NHG	4,860,000
2021	Trunkline	Kent	MDOT	Grand Regionwide Longitudinal Pavement Markings	All of GVMC MPO	1.691	Longitudinal pavement marking application on trunklines in Grand Region			PE	\$2,205	\$245	\$0	\$2,450	HSIP	2,960,000
2021	Trunkline	Kent	MDOT	Grand Regionwide Longitudinal Pavement Markings	All of GVMC MPO	1.691	Longitudinal pavement marking application on trunklines in Grand Region			CON	\$650,475	\$72,275	\$0	\$722,750	HSIP	2,960,000
2021	Trunkline	Kent	MDOT	Grand Regionwide Special Pavement Markings	All of GVMC MPO	1.066	Longitudinal pavement marking application on trunklines in Grand Region			PE	\$2,205	\$245	\$0	\$2,450	HSIP	500,000
2021	Trunkline	Kent	MDOT	Grand Regionwide Special Pavement Markings	All of GVMC MPO	1.066	Longitudinal pavement marking application on trunklines in Grand Region			CON	\$108,045	\$12,005	\$0	\$120,050	HSIP	500,000
2021	Trunkline	Kent	MDOT	Grand Regionwide Retroreflectivity Readings	All of GVMC MPO	3.729	Pavement marking retroreflectivity readings on trunklines in Grand Region			CON	\$3,528	\$392	\$0	\$3,920	HSIP	16,000
2021	Trunkline	Kent	MDOT	Regionwide	Various locations in Grand Region	0.000	2021 WMTOC Control Room Operations			EPE	\$662,985	\$147,015	\$0	\$810,000	CM	810,000
2021	Trunkline	Kent	MDOT	Regionwide	various locations in Grand Region	0.000	2021 ITS maintenance & operations in Grand Region			EPE	\$806,223	\$178,778	\$0	\$985,000	CM	985,000
2021	Trunkline	Kent	MDOT	US-131	US-131 NB and SB	4.104	Queue management system			PE	\$203,400	\$22,600	\$0	\$226,000	HSIP	1,579,003

Fiscal Year	Job Type	County	Responsible Agency	Project Name	Limits	Length	Project Description	AC/ACC	ACC Year(s)	Phase	Fed Estimated Amount	State Estimated	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost
2021	Trunkline	Kent	MDOT	US-131	US-131 from North Park St. to 10 Mile Rd.	7.878	ITS devices and infrastructure			CON	\$2,439,348	\$540,918	\$0	\$2,980,266	NH	3,412,885
2021	Trunkline	Kent	MDOT	Regionwide	Regionwide	0.000	Road Weather information Systems			CON	\$3,193,523	\$708,154	\$0	\$3,901,677	ST	4,704,006
2021	Trunkline	Kent	MDOT	US-131	7 locations in Kent County	4.977	ITS camera and VDS installation			CON	\$959,804	\$212,834	\$0	\$1,172,638	NH	1,342,860
2021	Local	Ottawa	Ottawa County	48th Ave	Bauer Road to Pierce Street	2.499	Resurface 30 foot width			CON	\$839,895	\$0	\$272,605	\$1,112,500	STU	1,112,500
2021	Local	Ottawa	Ottawa County	8th Ave	Jackson Street to Port Sheldon Street	2.286	Resurface 42 Foot Width			CON	\$694,565	\$0	\$225,435	\$920,000	STU	920,000
2021	Local	Kent	Sparta	N Union St NW	N Union St NW over Nash Creek, Str# 5233, Village of Sparta	0.000	Miscellaneous Bridge Rehabilitation			CON	\$356,000	\$66,750	\$22,250	\$445,000	BHT	445,000
2021	Local	Kent	Walker	Kinney Ave	Three Mile to Waldorf	0.510	Reconstruct			CON	\$754,962	\$0	\$245,038	\$1,000,000	STU	1,000,000
2021	Local	Kent	Wyoming	Wilson Ave SW	South City Limits to North City Limits	2.979	Resurfacing			CON	\$0	\$984,000	\$246,000	\$1,230,000	EDC	1,230,000
2022	Local	Kent	Grand Rapids	29th St SE	Bretton to East City Limits	0.484	Road Rehabilitation			CON	\$243,536	\$0	\$81,464	\$325,000	STU	325,000
2022	Local	Kent	Grand Rapids	Butterworth St SW	O'Brien to Marion	0.694	road rehabilitation			CON	\$234,170	\$0	\$78,330	\$312,500	STU	312,500
2022	Local	Kent	Grand Rapids	Collindale Ave NW	Lake Michigan Drive to Leonard Street	1.003	road rehabilitation			CON	\$327,838	\$0	\$109,662	\$437,500	STU	437,500
2022	Local	Kent	Grand Rapids	S Division Ave	Quigley Street to Cottage Grove Street	0.500	road rehabilitation			CON	\$187,336	\$0	\$62,664	\$250,000	STU	250,000
2022	Local	Kent	Grand Rapids	Eastern Ave SE	400' North of 44th Street to 36th Street	0.877	road rehabilitation			CON	\$899,211	\$0	\$300,789	\$1,200,000	STU	1,200,000
2022	Local	Kent	Grand Rapids	Division Ave NE	Fountain Street to Michigan Street	0.117	Road Rehabilitation			CON	\$187,336	\$0	\$62,664	\$250,000	STU	250,000
2022	Local	Kent	Grand Rapids	Market Ave SW	Market Avenue	0.088	Signal Optimization			CON	\$240,000	\$0	\$60,000	\$300,000	CM	300,000
2022	Local	Kent	Grand Rapids	Market Ave SW	Market Ave.	0.080	Regional Signal System TMS Operations			OPS	\$264,000	\$0	\$396,000	\$660,000	CM	660,000
2022	Local	Kent	Grand Rapids	College Ave NE	Leonard to Sweet	0.500	reconstruction			CON	\$725,926	\$0	\$242,824	\$968,750	STU	968,750
2022	Local	Kent	Grand Rapids	Eastern Ave SE	36th Street to 28th Street	1.000	Rehab/Reconstruct			CON	\$913,262	\$0	\$305,488	\$1,218,750	STU	1,218,750
2022	Local	Kent	Grand Rapids	Franklin St SE	Division to East City Limits	1.915	Resurface	ACC	2022	CON	\$477,370	\$0	\$477,370	\$477,370	EDCF	1,670,000
2022	Local	Kent	GVMC	Front Ave NW	GVMC Planning Area	0.000	Planning Studies			NI	\$150,000	\$0	\$37,500	\$187,500	STU	187,500
2022	Local	Kent	GVMC	Front Ave NW	GVMC area--Kent and Eastern Ottawa County	0.000	Educational campaign for Clean Air Action program			NI	\$80,000	\$0	\$20,000	\$100,000	CM	100,000
2022	Local	Kent	Grandville	Chicago Dr SW	Wilson to east city limits	1.801	Resurface			CON	\$334,630	\$0	\$132,370	\$467,000	EDCF	467,000
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1803-planning/studies			NI	\$400,000	\$100,000	\$0	\$500,000	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1802-capital cost of contracting			NI	\$720,000	\$180,000	\$0	\$900,000	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1801-preventative maintenance			NI	\$960,000	\$240,000	\$0	\$1,200,000	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1303-bus shelter purchase			NI	\$8,490	\$2,122	\$0	\$10,612	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1410-misc. support equipment (explanation must be provided in work detail)			NI	\$16,000	\$4,000	\$0	\$20,000	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1403-office equipment (copier, office furniture, etc.)			NI	\$40,800	\$10,200	\$0	\$51,000	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1408-maintenance equipment (hoists, tools, etc.)			NI	\$76,000	\$19,000	\$0	\$95,000	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1302-bus shelter improvements			NI	\$42,710	\$10,678	\$0	\$53,388	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1409-administrative vehicle			NI	\$63,673	\$15,918	\$0	\$79,591	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1207-architect and engineer			NI	\$84,897	\$21,224	\$0	\$106,121	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1805-contingency			NI	\$84,897	\$21,224	\$0	\$106,121	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1105-van replacement, any size with or without lift			NI	\$100,478	\$25,120	\$0	\$125,598	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1406-security equipment - facilities			NI	\$145,478	\$36,370	\$0	\$181,848	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1102-30-34 foot replacement bus with or without lift			NI	\$154,998	\$38,749	\$0	\$193,747	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1402-fare collection			NI	\$397,469	\$99,367	\$0	\$496,836	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1401-bus equipment (spare, tires, windshields, lifts, bus wraps, bike rack, ADA)			NI	\$1,033,306	\$258,326	\$0	\$1,291,632	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1404-computers (hardware and software)			NI	\$1,068,814	\$267,204	\$0	\$1,336,018	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1203-admin/maintenance facility improvements			NI	\$1,853,393	\$463,348	\$0	\$2,316,741	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift			NI	\$3,914,524	\$978,631	\$0	\$4,893,155	5307	13,957,408
2022	Multi-Modal	Kent	ITP-The Rapid	Bartlett St SW	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift			NI	\$995,630	\$248,907	\$0	\$1,244,537	5339	1,244,537
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift			NI	\$240,000	\$60,000	\$0	\$300,000	CM	300,000
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1105-van replacement, any size with or without lift			NI	\$100,000	\$25,000	\$0	\$125,000	CM	125,000

Fiscal Year	Job Type	County	Responsible Agency	Project Name	Limits	Length	Project Description	AC/ACC	ACC Year(s)	Phase	Fed Estimated Amount	State Estimated	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Operating	Areawide	0.000	SP1702-ozone action			NI	\$80,000	\$20,000	\$0	\$100,000	CM	100,000
2022	Multi-Modal	Kent	ITP-The Rapid	Transit Operating	Areawide	0.000	SP1701-rideshare			NI	\$150,000	\$0	\$0	\$150,000	CMG	150,000
2022	Local	Kent	Kent County	13 Mile Rd NE	Sparta Village Line to Grange	3.480	resurface			CON	\$899,210	\$0	\$300,790	\$1,200,000	STU	1,200,000
2022	Local	Kent	Kent County	6 Mile Rd NW	Alpine to Pine Island	1.821	resurface			CON	\$749,343	\$0	\$250,657	\$1,000,000	STU	1,000,000
2022	Local	Kent	Kent County	4 Mile Rd NE	Coit to Plainfield	1.093	Resurface			CON	\$450,000	\$0	\$150,000	\$600,000	EDCF	600,000
2022	Local	Kent	Kent County	Kalamazoo Ave SE	68th to 60th	0.944	resurface			CON	\$731,000	\$0	\$182,750	\$913,750	NH	913,750
2022	Local	Kent	Kent County	84th St SE	Hanna Lake to East Paris	1.008	Reconstruct			CON	\$974,146	\$0	\$325,854	\$1,300,000	STU	1,300,000
2022	Local	Kent	Kent County	68th St SE	Plaster Creek to Hanna Lake Avenue	0.593	Widening			CON	\$0	\$1,200,000	\$300,000	\$1,500,000	EDC	1,500,000
2022	Local	Kent	Kent County	100th St SE	1 Mile East of Kalamazoo Avenue to Hanna Lake	0.607	Reconstruct			CON	\$913,000	\$0	\$337,000	\$1,250,000	STL	1,250,000
2022	Local	Kent	Kent County	Cascade Rd SE	36th to Whitneyville Avenue	0.813	Widening			CON	\$0	\$1,120,000	\$280,000	\$1,400,000	EDC	1,400,000
2022	Local	Kent	Kentwood	East Paris Avenue SE	28th Street to 36th Street	1.001	Mill and Resurface			CON	\$936,679	\$0	\$313,321	\$1,250,000	STU	1,250,000
2022	Local	Kent	Kentwood	East Paris Ave SE	East Paris Ave. at 28th St.	0.133	Add right turn lane			CON	\$128,000	\$0	\$32,000	\$160,000	CM	160,000
2022	Trunkline	Kent	MDOT	I-196 (WB)	M-11 East 0.74 Miles	0.733	Extend Off Ramp			CON	\$2,250,875	\$499,125	\$0	\$2,750,000	CM	2,950,000
2022	Trunkline	Kent	MDOT	regionwide	Various locations in Grand Region	0.000	2022 WMTOC Control Room Operations			EPE	\$695,725	\$154,275	\$0	\$850,000	CM	850,000
2022	Trunkline	Kent	MDOT	regionwide	Various routes in Grand Region	0.000	2022 ITS maintenance & operations in Grand Region			EPE	\$818,500	\$181,500	\$0	\$1,000,000	CM	1,000,000
2022	Trunkline	Ottawa	MDOT	I-196	48th Avenue to 32nd Avenue	6.874	Shoulder Widening and Median Crossovers for Maintenance of Traffic			CON	\$453,600	\$50,400	\$0	\$504,000	IM	2,200,000
2022	Trunkline	Kent	MDOT	I-296 SB	I-96 EB connector to I-296 SB over West River Drive and CSX RR	0.000	Deep overlay with barrier replacement.			CON	\$1,769,541	\$196,616	\$0	\$1,966,156	IM	2,239,708
2022	Trunkline	Kent	MDOT	M-44 E	Kent and Ottawa	0.000	Install traffic signal dilemma zone systems			PE	\$55,450	\$6,161	\$0	\$61,611	HSIP	722,541
2022	Trunkline	Ottawa	MDOT	I-96	I-96 in Ottawa and Kent	34.885	Rural Freeway Traffic Management systems			EPE	\$23,801	\$5,225	\$0	\$29,025	NH	3,514,626
2022	Trunkline	Ottawa	MDOT	I-96	I-96 in Ottawa and Kent	34.885	Rural Freeway Traffic Management systems			PE	\$57,121	\$12,539	\$0	\$69,660	NH	3,514,626
2022	Trunkline	Kent	MDOT	Grand Regionwide Retroreflectivity Readings	All of GVMC MPO	2.557	Pavement marking retroreflectivity readings on trunklines in Grand Region			CON	\$3,528	\$392	\$0	\$3,920	HSIP	16,000
2022	Trunkline	Kent	MDOT	M-37 N	M37 (Alpine) @ 7 Mile Rd. M37 (Alpine) @ N Center Dr, Old Orchard M37 (ALPINE) @ CENTER DR, K MART DR M21 (FULTON) @ SPAULDING US-131 SB OFF RAMP @ 68TH ST US-131 SB OFF-RAMP @ MARKET AVE / CHERRY ST US131 NB OFF RAMP @ 68TH ST I96 EB OFF RAMP @ LEON.	0.000	Traffic Signal Modernization; connected vehicle installations			CON	\$1,955,630	\$0	\$0	\$1,955,630	STG	2,709,872
2022	Trunkline	Kent	MDOT	Grand Regionwide Longitudinal Pavement Markings	All of GVMC MPO	1.486	Longitudinal pavement marking application on trunklines in Grand Region			PE	\$2,205	\$245	\$0	\$2,450	HSIP	3,010,000
2022	Trunkline	Kent	MDOT	Grand Regionwide Longitudinal Pavement Markings	All of GVMC MPO	1.486	Longitudinal pavement marking application on trunklines in Grand Region			CON	\$661,500	\$73,500	\$0	\$735,000	HSIP	3,010,000
2022	Trunkline	Kent	MDOT	Grand Regionwide Special Pavement Markings	All of GVMC MPO	1.845	Special pavement marking application on trunklines in Grand Region			PE	\$2,205	\$245	\$0	\$2,450	HSIP	850,000
2022	Trunkline	Kent	MDOT	Grand Regionwide Special Pavement Markings	All of GVMC MPO	1.845	Special pavement marking application on trunklines in Grand Region			CON	\$185,220	\$20,580	\$0	\$205,800	HSIP	850,000
2022	Trunkline	Kent	MDOT	I-96	Burton Street over I-96	0.000	Deep overlay			CON	\$990,504	\$110,056	\$0	\$1,100,560	BOI	1,275,560
2022	Trunkline	Kent	MDOT	US-131 SB	US-131 SB Over The Grand River & Fulton Street	0.000	Railing Replacement			CON	\$439,309	\$97,416	\$0	\$536,725	NH	636,725
2022	Trunkline	Kent	MDOT	M-11	Church Street east to US-131	4.203	Two Course Asphalt Resurfacing			CON	\$3,274,000	\$665,470	\$60,530	\$4,000,000	NH	4,173,000
2022	Trunkline	Kent	MDOT	Regionwide	Regionwide freeways	0.000	Freeway Enhanced Delineation			PE	\$44,751	\$4,972	\$0	\$49,723	HSIP	596,674
2022	Local	Ottawa	Ottawa County	Fillmore St	48th Avenue to Taylor Street	4.450	Resurface/Preservation			CON	\$1,300,000	\$0	\$658,000	\$1,958,000	STU	1,958,000
2022	Local	Ottawa	Ottawa County	Leonard St	Leonard St from 68th Ave to 48th Ave	2.650	Asphalt overlay 1-1.5 inches to include HMA resurfacing			CON	\$0	\$73,179	\$0	\$73,179	EDD	1,047,600
2022	Local	Ottawa	Ottawa County	Leonard St	Leonard St from 68th Ave to 48th Ave	2.650	Asphalt overlay 1-1.5 inches to include HMA resurfacing			CON	\$703,000	\$0	\$271,421	\$974,421	STL	1,047,600
2022	Local	Kent	Wyoming	36th St SW	Burlingame Avenue to Clyde Park Avenue	1.001	resurface			CON	\$562,007	\$0	\$187,993	\$750,000	STU	750,000
2023	Local	Kent	Cedar Springs	S Main St NE	Church Street to 18 Mile Road	0.737	Milling and Two Course Asphalt Resurfacing			CON	\$380,553	\$0	\$103,197	\$483,750	STU	483,750
2023	Local	Kent	Grand Rapids	Ball Ave NE	Leonard Street to Knapp Street	1.002	Milling an Asphalt Overlay (1.5 Inches)			CON	\$427,753	\$0	\$115,997	\$543,750	STU	543,750
2023	Local	Kent	Grand Rapids	Ball Ave NE	Michigan Street to Plymouth Avenue	0.543	Milling and Two Course Asphalt Resurfacing			CON	\$275,335	\$0	\$74,665	\$350,000	STU	350,000

Fiscal Year	Job Type	County	Responsible Agency	Project Name	Limits	Length	Project Description	AC/ACC	ACC Year(s)	Phase	Fed Estimated Amount	State Estimated	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost
2023	Local	Kent	Grand Rapids	Fuller Ave NE	Knapp Street to 3 Mile Road	0.989	Milling and Asphalt Overlay (1.5 Inches)			CON	\$427,753	\$0	\$115,997	\$543,750	STU	543,750
2023	Local	Kent	Grand Rapids	Turner Ave NW	6th Street to US-131 SB On Ramp and US-131 SB Off Ramp to Richmond Street	0.813	Milling and Asphalt Overlay (1.5 inches)			CON	\$344,169	\$0	\$93,331	\$437,500	STU	437,500
2023	Local	Kent	Grand Rapids	Market Ave SW	Market Avenue	0.088	Signal Optimization			CON	\$240,000	\$0	\$60,000	\$300,000	CM	300,000
2023	Local	Kent	Grand Rapids	Market Ave SW	Market Avenue	0.055	Regional Signal System TMS Operations			OPS	\$264,000	\$0	\$396,000	\$660,000	CM	660,000
2023	Local	Kent	Grand Rapids	Fuller Ave SE	Ramona Street to Adams Street	0.177	Asphalt Reconstruct			CON	\$344,169	\$0	\$93,331	\$437,500	STU	437,500
2023	Local	Kent	Grand Rapids	Ottawa Ave NW	Fairbanks Street to Mason Street and Walbridge Street to Monroe Avenue	0.371	Asphalt Reconstruct			CON	\$712,922	\$0	\$193,328	\$906,250	STU	906,250
2023	Local	Kent	Grand Rapids	Wealthy St SE	Ethel Avenue to East City Limit	0.159	Concrete Reconstruction (and Brick)			CON	\$786,672	\$0	\$213,328	\$1,000,000	STU	1,000,000
2023	Local	Kent	Grand Rapids	Robinson Rd SE	Youell Avenue to Plymouth Avenue	0.407	Reconstruct/Preventative Maintenance			CON	\$344,169	\$0	\$93,331	\$437,500	STU	437,500
2023	Local	Kent	GVMC	Front Ave NW	GVMC Planning Area	0.000	Planning Studies			NI	\$150,000	\$0	\$37,500	\$187,500	STU	187,500
2023	Local	Kent	GVMC	Front Ave NW	GVMC--Kent and Eastern Ottawa County	0.000	Clean Air Action educational campaign			NI	\$80,000	\$0	\$20,000	\$100,000	CM	100,000
2023	Local	Kent	Grandville	Ivanrest Ave SW	Parie Street to 28th Street	0.501	Milling and Asphalt Resurface			CON	\$220,268	\$0	\$59,732	\$280,000	STU	280,000
2023	Local	Ottawa	Hudsonville	32nd Ave	32nd Avenue	0.209	Left Turn Lane			CON	\$160,000	\$0	\$40,000	\$200,000	CM	200,000
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1803-planning/studies			NI	\$400,000	\$100,000	\$0	\$500,000	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1802-capital cost of contracting			NI	\$720,000	\$180,000	\$0	\$900,000	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1801-preventative maintenance			NI	\$960,000	\$240,000	\$0	\$1,200,000	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1303-bus shelter purchase			NI	\$8,659	\$2,165	\$0	\$10,824	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1410-misc. support equipment (explanation must be provided in work detail)			NI	\$16,000	\$4,000	\$0	\$20,000	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1302-bus shelter improvements			NI	\$43,565	\$10,891	\$0	\$54,456	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1403-office equipment (copier, office furniture, etc.)			NI	\$49,810	\$12,452	\$0	\$62,262	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1409-administrative vehicle			NI	\$66,245	\$16,561	\$0	\$82,806	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1408-maintenance equipment (hoists, tools, etc.)			NI	\$77,046	\$19,262	\$0	\$96,308	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1207-architect and engineer			NI	\$86,594	\$21,649	\$0	\$108,243	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1805-contingency			NI	\$86,594	\$21,649	\$0	\$108,243	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1105-van replacement, any size with or without lift			NI	\$120,382	\$30,095	\$0	\$150,477	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1406-security equipment - facilities			NI	\$148,388	\$37,097	\$0	\$185,485	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1102-30-34 foot replacement bus with or without lift			NI	\$209,716	\$52,429	\$0	\$262,145	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1402-fare collection			NI	\$405,418	\$101,355	\$0	\$506,773	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1401-bus equipment (spare, tires, windshields, lifts, bus wraps, bike rack, ADA)			NI	\$1,040,372	\$260,093	\$0	\$1,300,465	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1404-computers (hardware and software)			NI	\$1,070,910	\$267,728	\$0	\$1,338,638	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1203-admin/maintenance facility improvements			NI	\$1,587,265	\$396,816	\$0	\$1,984,081	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift			NI	\$3,248,266	\$812,066	\$0	\$4,060,332	5307	12,931,538
2023	Multi-Modal	Kent	ITP-The Rapid	Transit capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift			NI	\$1,010,564	\$252,641	\$0	\$1,263,205	5339	1,263,205
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1104-40 foot and greater replacement bus with or without lift			NI	\$240,000	\$60,000	\$0	\$300,000	CM	300,000
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Operating	Areawide	0.000	SP1701-rideshare			NI	\$186,207	\$0	\$0	\$186,207	CMG	186,207
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Capital	Areawide	0.000	SP1105-van replacement, any size with or without lift			NI	\$100,000	\$25,000	\$0	\$125,000	CM	125,000
2023	Multi-Modal	Kent	ITP-The Rapid	Transit Operating	Areawide	0.000	SP1702-ozone action			NI	\$80,000	\$20,000	\$0	\$100,000	CM	100,000
2023	Local	Kent	Kent County	Buttrick Ave SE	Thornapple River Drive to Grand River Drive	0.476	Crush and Shape Resurfacing			CON	\$236,002	\$0	\$63,998	\$300,000	STU	300,000
2023	Local	Kent	Kent County	Northland Dr NE	13 Mile Road to 14 Mile Road	1.224	Mill, Fill, and Resurface			CON	\$0	\$936,614	\$240,000	\$1,176,614	EDC	1,176,614
2023	Local	Kent	Kent County	Northland Dr NE	12 Mile Road to 13 Mile Road	1.004	Mill and Fill Resurface			CON	\$0	\$720,000	\$180,000	\$900,000	EDC	900,000
2023	Local	Kent	Kent County	84th St SE	Patterson Avenue to East Paris Avenue	0.999	Asphalt Reconstruct			CON	\$1,062,008	\$0	\$287,992	\$1,350,000	STU	1,350,000
2023	Local	Kent	Kent County	100th St SE	Hannah Lake to East Paris Avenue	1.002	Reconstruct			CON	\$931,000	\$0	\$319,000	\$1,250,000	STL	1,250,000
2023	Local	Kent	Kentwood	52nd St SE	Kalamazoo Avenue to Breton Avenue	1.502	3.5" Milling and Resurface			CON	\$1,455,344	\$0	\$394,656	\$1,850,000	STU	1,850,000
2023	Trunkline	Ottawa	MDOT	I-196	48th Avenue to 32nd Avenue	6.674	Reconstruction			CON	\$10,206,000	\$1,134,000	\$0	\$11,340,000	IM	43,800,000
2023	Trunkline	Kent	MDOT	I-196BS E	3 Bridges on I-196 Ramp Corridor from I-196 to Chicago Drive	0.000	Deep Overlay			CON	\$1,341,802	\$297,541	\$0	\$1,639,343	NH	1,867,426

Fiscal Year	Job Type	County	Responsible Agency	Project Name	Limits	Length	Project Description	AC/ACC	ACC Year(s)	Phase	Fed Estimated Amount	State Estimated	Local Estimated Amount	Total Estimated Amount	Fund Source	Total Job Cost
2023	Trunkline	Kent	MDOT	M-44 E	Kent and Ottawa	0.000	Install traffic signal dilemma zone systems			CON	\$345,020	\$38,336	\$0	\$383,355	HSIP	722,541
2023	Trunkline	Kent	MDOT	Grand Regionwide Longitudinal Pavement Markings	All of GVMC MPO	1.845	Longitudinal pavement marking application on trunklines in Grand Region			PE	\$2,205	\$245	\$0	\$2,450	HSIP	3,010,000
2023	Trunkline	Kent	MDOT	Grand Regionwide Longitudinal Pavement Markings	All of GVMC MPO	1.845	Longitudinal pavement marking application on trunklines in Grand Region			CON	\$661,500	\$73,500	\$0	\$735,000	HSIP	3,010,000
2023	Trunkline	Kent	MDOT	Grand Regionwide Special Pavement Markings	All of GVMC MPO	1.845	Special pavement marking application on trunklines in Grand Region			PE	\$2,205	\$245	\$0	\$2,450	HSIP	550,000
2023	Trunkline	Kent	MDOT	Grand Regionwide Special Pavement Markings	All of GVMC MPO	1.845	Special pavement marking application on trunklines in Grand Region			CON	\$119,070	\$13,230	\$0	\$132,300	HSIP	550,000
2023	Trunkline	Kent	MDOT	Grand Regionwide Retroreflectivity Readings	All of GVMC MPO	2.971	Pavement marking retroreflectivity readings on trunklines in Grand Region			CON	\$3,528	\$392	\$0	\$3,920	HSIP	16,000
2023	Trunkline	Kent	MDOT	I-96	Fruit Ridge Road Over I-96	0.000	Deep Overlay			CON	\$1,337,063	\$148,563	\$0	\$1,485,626	IM	1,692,322
2023	Trunkline	Kent	MDOT	I-96	Cascade Road east to M-11	3.025	Two Course Asphalt Resurfacing			CON	\$4,230,000	\$470,000	\$0	\$4,700,000	IM	4,775,000
2023	Trunkline	Kent	MDOT	Regionwide	Regionwide	0.000	2023 WMTOC Control Room Operations			OPS	\$736,650	\$163,350	\$0	\$900,000	CM	900,000
2023	Trunkline	Kent	MDOT	Regionwide	Regionwide	0.000	2023 ITS maintenance and operations in Grand Region			OPS	\$900,350	\$199,650	\$0	\$1,100,000	CM	1,100,000
2023	Trunkline	Kent	MDOT	US-131	US-131 NB and SB	4.104	Queue management system			CON	\$1,195,203	\$132,800	\$0	\$1,328,003	HSIP	1,579,003
2023	Trunkline	Kent	MDOT	Regionwide	Regionwide freeways	0.000	Freeway Enhanced Delineation			CON	\$492,256	\$54,695	\$0	\$546,951	HSIP	596,674
2023	Trunkline	Ottawa	MDOT	M-6	Grand Rapids/South Beltline W	0.000	Cold milling and one course asphalt overlay.			CON	\$65,481	\$14,521	\$0	\$80,000	ST	85,000
2023	Local	Ottawa	Ottawa County	18th Ave	Chicago Drive to Bauer Road	2.313	Asphalt Resurface			CON	\$767,005	\$0	\$207,995	\$975,000	STU	975,000
2023	Local	Ottawa	Ottawa County	Riley St	32nd Avenue to 24th Avenue	1.004	Resurface with 3' Paved Shoulders			CON	\$373,669	\$0	\$101,331	\$475,000	STU	475,000
2023	Local	Kent	Walker	Alpine Ave NW	Ann Street to Hillside Drive	0.503	Milling and Resurface			CON	\$629,338	\$0	\$170,662	\$800,000	STU	800,000
2023	Local	Kent	Wyoming	Gezon Pkwy SW	Byron Center Avenue to Clyde Park Avenue	2.170	Resurface			CON	\$1,280,000	\$0	\$320,000	\$1,600,000	EDCF	1,725,000
2023	Local	Kent	Wyoming	Gezon Pkwy SW	Byron Center Avenue to Clyde Park Avenue	2.170	Resurface			CON	\$98,334	\$0	\$26,666	\$125,000	STU	1,725,000
2023	Local	Kent	Wyoming	54th St SW	Clyde Park Avenue to Division Avenue	1.005	Resurface			CON	\$746,000	\$0	\$204,000	\$950,000	NH	1,510,000
2023	Local	Kent	Wyoming	54th St SW	Clyde Park Avenue to Division Avenue	1.005	Resurface			CON	\$440,536	\$0	\$119,464	\$560,000	STU	1,510,000



# Illustrative Candidate Projects for FY2020-2023 TIP

## STP-Rural Pool of Projects Unfunded

PROJECT	LIMITS	PROJECT SCOPE	JURISDICTION	LENGTH	FEDERAL/STATE	NON-FED	TOTAL
Northland Drive	Cedar Springs Limits to County Line	Mill & Fill	KCRC	4.50	\$ 880,000 \$	220,000 \$	1,100,000
Grand River Drive	Snow to Bewell	Crush & Shape	KCRC	2.50	\$ 640,000 \$	160,000 \$	800,000
Grand River Drive	Bewell to Segwun	Crush & Shape	KCRC	2.00	\$ 520,000 \$	130,000 \$	650,000
Lincoln Lake Avenue	McPhearson to 5 Mile	Crush & Shape	KCRC	4.00	\$ 960,000 \$	240,000 \$	1,200,000
Myers Lake Avenue	12 Mile to 13 Mile	Allseason	KCRC	1.00	\$ 1,000,000 \$	250,000 \$	1,250,000
Myers Lake Avenue	13 to 14 Mile	Allseason	KCRC	1.00	\$ 1,000,000 \$	250,000 \$	1,250,000

## STP-Urban Pool of Projects Unfunded

PROJECT	LIMITS	PROJECT SCOPE	JURISDICTION	LENGTH	FEDERAL/STATE	NON-FED	TOTAL
1st Street	Lincoln Avenue to Lane Avenue	Rotomill/resurface	City of GR	0.20	\$ 110,000 \$	27,500 \$	137,500
2nd Street	Valley Avenue to Stocking Avenue	Rotomill/resurface	City of GR	0.39	\$ 190,000 \$	47,500 \$	237,500
3 Mile Road	Monroe Avenue to Coit Avenue	Rotomill/resurface	City of GR	0.90	\$ 430,000 \$	107,500 \$	537,500
3rd Street	Davis Avenue to Seward Avenue McReynolds Avenue to Davis Avenue and Broadway Avenue to Scribner Avenue	Rotomill/resurface	City of GR	0.09	\$ 40,000 \$	10,000 \$	50,000
6th Street	Lincoln Avenue to Lane Avenue	Rotomill/resurface	City of GR	0.20	\$ 140,000 \$	35,000 \$	175,000
7th Street	Collindale Avenue to Covell Avenue	Rotomill/resurface	City of GR	1.01	\$ 610,000 \$	152,500 \$	762,500
Aberdeen Street	Fuller Avenue to ECL	Rotomill/resurface	City of GR	1.00	\$ 470,000 \$	117,500 \$	587,500
Alger Street	Division Avenue to Madison Avenue	Reconstruction	City of GR	0.45	\$ 1,050,000 \$	262,500 \$	1,312,500
Alpine Avenue	Leonard Street to Crosby Street	Rotomill/resurface	City of GR	0.13	\$ 60,000 \$	15,000 \$	75,000
Ann Street	Turner Avenue to Monroe Avenue	Rotomill/resurface	City of GR	0.40	\$ 180,000 \$	45,000 \$	225,000
Ann Street	Nason Avenue to Turner Avenue	Rotomill/resurface	City of GR	0.60	\$ 350,000 \$	87,500 \$	437,500
Ann Street	Monroe Avenue to Plainfield Avenue	Reconstruction	City of GR	0.55	\$ 1,500,000 \$	375,000 \$	1,875,000
Ball Avenue	Mason Street to Cedar Avenue	Rotomill/resurface	City of GR	0.16	\$ 70,000 \$	17,500 \$	87,500
Boston Street	Plymouth Avenue to ECL	Rotomill/resurface	City of GR	0.25	\$ 130,000 \$	32,500 \$	162,500
Boston Street	Fuller Avenue to Plymouth Avenue	Rotomill/resurface	City of GR	0.59	\$ 360,000 \$	90,000 \$	450,000
Breton Avenue	Burton Street to NCL	Rotomill/resurface	City of GR	0.79	\$ 460,000 \$	115,000 \$	575,000
Bridge Street	Valley Avenue to Broadway Avenue	Rotomill/resurface	City of GR	0.96	\$ 440,000 \$	110,000 \$	550,000
Bridge Street	Scott Avenue to Valley Avenue	Reconstruction	City of GR	0.18	\$ 530,000 \$	132,500 \$	662,500
Bristol Avenue	Richmond Street to NCL	Rotomill/resurface	City of GR	0.33	\$ 150,000 \$	37,500 \$	187,500
Buchanan Avenue	Burton Street to Stewart Street	Rotomill/resurface	City of GR	0.11	\$ 70,000 \$	17,500 \$	87,500
Buchanan Avenue	Corrine Street to Hall Street	Reconstruction	City of GR	0.53	\$ 1,130,000 \$	282,500 \$	1,412,500
Buchanan Avenue	Stewart Street to Corrine Street	Reconstruction	City of GR	0.28	\$ 590,000 \$	147,500 \$	737,500

## Illustrative Candidate Projects for FY2020-2023 TIP

Burton Street	Division Avenue to Eastern Avenue	Rotomill/resurface	City of GR	0.95	\$	590,000	\$	147,500	\$	737,500
Burton Street	Eastern Avenue to Kalamazoo Avenue	Rotomill/resurface	City of GR	0.68	\$	420,000	\$	105,000	\$	525,000
Burton Street	Kalamazoo Avenue to Plymouth Avenue	Rotomill/resurface	City of GR	0.50	\$	310,000	\$	77,500	\$	387,500
Burton Street	St. Charles Avenue to Division Avenue Hogaone Avenue to 150' East of Gold Avenue	Rotomill/resurface	City of GR	0.64	\$	390,000	\$	97,500	\$	487,500
Butterworth Avenue	Lane Avenue to Hogaone Avenue	Reconstruction	City of GR	0.31	\$	800,000	\$	200,000	\$	1,000,000
Butterworth Avenue	Marion Avenue to Lane Avenue	Reconstruction	City of GR	0.11	\$	300,000	\$	75,000	\$	375,000
Butterworth Avenue	3 Mile Road to Kendalwood Drive	Reconstruction	City of GR	0.13	\$	340,000	\$	85,000	\$	425,000
Coit Avenue	Cherry Street to Fulton Street	Rotomill/resurface	City of GR	0.48	\$	280,000	\$	70,000	\$	350,000
College Avenue	Bridge Street to Leonard Street	Rotomill/resurface	City of GR	0.25	\$	120,000	\$	30,000	\$	150,000
Covell Avenue	Knapp Street to NCL	Rotomill/resurface	City of GR	0.96	\$	440,000	\$	110,000	\$	550,000
Dean Lake Avenue	Eleanor Street to Aberdeen Street	Rotomill/resurface	City of GR	0.50	\$	300,000	\$	75,000	\$	375,000
Diamond Avenue	Heritage Street to Fulton Street and Fountain Street to Crescent Street	Rotomill/resurface	City of GR	0.25	\$	130,000	\$	32,500	\$	162,500
Diamond Avenue	Fountain Street to Crescent Street Michigan Street Alley to Mid Michigan RR	Rotomill/resurface	City of GR	0.40	\$	220,000	\$	55,000	\$	275,000
Diamond Avenue	Wealthy Street to Cherry Street	Rotomill/resurface	City of GR	0.14	\$	80,000	\$	20,000	\$	100,000
Diamond Avenue	28th Street to Alger Street	Rotomill/resurface	City of GR	0.28	\$	150,000	\$	37,500	\$	187,500
Division Avenue	Colrain Street to 28th Street	Rotomill/resurface	City of GR	0.43	\$	230,000	\$	57,500	\$	287,500
Division Avenue	Delaware Street to Buckley Street	Rotomill/resurface	City of GR	0.14	\$	70,000	\$	17,500	\$	87,500
Division Avenue	Detroit Street to Quigley Street	Rotomill/resurface	City of GR	0.49	\$	220,000	\$	55,000	\$	275,000
Division Avenue	Franklin Street to Wealthy Street	Rotomill/resurface	City of GR	0.50	\$	230,000	\$	57,500	\$	287,500
Division Avenue	Franklin Street to Wealthy Street	Rotomill/resurface	City of GR	0.50	\$	460,000	\$	115,000	\$	575,000
Fountain Street	Eastern Avenue to Diamond Avenue	Rotomill/resurface	City of GR	0.25	\$	130,000	\$	32,500	\$	162,500
Fountain Street	Grand Avenue to Eastern Avenue	Rotomill/resurface	City of GR	0.14	\$	70,000	\$	17,500	\$	87,500
Fountain Street	Ottawa Avenue to Winchester Place	Rotomill/resurface	City of GR	0.15	\$	70,000	\$	17,500	\$	87,500
Fountain Street	Winchester Place to Prospect Avenue	Rotomill/resurface	City of GR	0.36	\$	210,000	\$	52,500	\$	262,500
Franklin Street	Division Avenue to Fuller Avenue	Rotomill/resurface	City of GR	1.42	\$	650,000	\$	162,500	\$	812,500
Fuller Avenue	Evangeline Street to Michigan Street	Rotomill/resurface	City of GR	0.43	\$	230,000	\$	57,500	\$	287,500
Fuller Avenue	Hollis Drive to Plainfield Avenue	Rotomill/resurface	City of GR	0.24	\$	110,000	\$	27,500	\$	137,500
Fuller Avenue	Malta Street to Leonard Street	Rotomill/resurface	City of GR	0.56	\$	300,000	\$	75,000	\$	375,000
Fuller Avenue	Leonard Street to Knapp Street	Rotomill/resurface	City of GR	1.00	\$	460,000	\$	115,000	\$	575,000
Fuller Avenue	Wealthy Street to Lake Drive	Rotomill/resurface	City of GR	0.21	\$	90,000	\$	22,500	\$	112,500
Fulton Street	Diamond Avenue to Arthur Avenue	Rotomill/resurface	City of GR	0.35	\$	160,000	\$	40,000	\$	200,000
Fulton Street	Jefferson Avenue to Union Avenue	Rotomill/resurface	City of GR	0.47	\$	210,000	\$	52,500	\$	262,500
Fulton Street	Sunnybrook Avenue to Worcester Drive	Rotomill/resurface	City of GR	0.35	\$	160,000	\$	40,000	\$	200,000
Fulton Street	Wallinwood Avenue to Woodward Lane	Rotomill/resurface	City of GR	0.32	\$	150,000	\$	37,500	\$	187,500
Fulton Street	Worcester Drive to Maryland Avenue	Rotomill/resurface	City of GR	0.25	\$	110,000	\$	27,500	\$	137,500
Grandville Avenue	Beacon Street to Franklin Street	Reconstruction	City of GR	0.27	\$	760,000	\$	190,000	\$	950,000
Grandville Avenue	Clyde Park Avenue to Stolpe Street	Reconstruction	City of GR	0.22	\$	640,000	\$	160,000	\$	800,000

## Illustrative Candidate Projects for FY2020-2023 TIP

Grandville Avenue	Hall Street to Beacon Street	Reconstruction	City of GR	0.28	\$	790,000	\$	197,500	\$	987,500
Grandville Avenue	Stolpe Street to Hall Street	Reconstruction	City of GR	0.22	\$	640,000	\$	160,000	\$	800,000
Hall Street	Buchanan Avenue to Division Avenue	Rotomill/resurface	City of GR	0.25	\$	140,000	\$	35,000	\$	175,000
Hall Street	Grandville Avenue to US-131	Rotomill/resurface	City of GR	0.16	\$	90,000	\$	22,500	\$	112,500
Hall Street	Madison Avenue to Eastern Avenue	Rotomill/resurface	City of GR	0.50	\$	230,000	\$	57,500	\$	287,500
Hall Street	Jefferson Avenue to Madison Avenue	Rotomill/resurface	City of GR	0.25	\$	110,000	\$	27,500	\$	137,500
Hall Street	Union Avenue to Eastern Avenue	Rotomill/resurface	City of GR	0.25	\$	110,000	\$	27,500	\$	137,500
Hall Street	VanHaafden Place to Butler Avenue	Rotomill/resurface	City of GR	0.17	\$	80,000	\$	20,000	\$	100,000
Ionia Avenue	Franklin Street to Logan Street	Rotomill/resurface	City of GR	0.37	\$	140,000	\$	35,000	\$	175,000
Jefferson Avenue	Franklin Street to Logan Street	Reconstruction	City of GR	0.19	\$	130,000	\$	32,500	\$	162,500
Jefferson Avenue	Wealthy Street to Cherry Street	Rotomill/resurface	City of GR	0.19	\$	130,000	\$	32,500	\$	162,500
Kalamazoo Avenue	42nd Street to Stilesgate Street	Rotomill/resurface	City of GR	0.58	\$	270,000	\$	67,500	\$	337,500
Kalamazoo Avenue	44th Street to 42nd Street	Rotomill/resurface	City of GR	0.27	\$	120,000	\$	30,000	\$	150,000
Kalamazoo Avenue	Alger Street to Burton Street	Rotomill/resurface	City of GR	0.50	\$	270,000	\$	67,500	\$	337,500
Kalamazoo Avenue	Stilesgate Street to 32nd Street and Berkshire Drive to Shangrai La Drive	Rotomill/resurface	City of GR	0.78	\$	360,000	\$	90,000	\$	450,000
Knapp Street	Diamond Avenue to Fuller Avenue	Reconstruction	City of GR	0.25	\$	620,000	\$	155,000	\$	775,000
Knapp Street	Eastern Avenue to Diamond Avenue	Reconstruction	City of GR	0.25	\$	620,000	\$	155,000	\$	775,000
Knapp Street	Fuller Avenue to Wyndham Hill Drive	Rotomill/resurface	City of GR	0.81	\$	440,000	\$	110,000	\$	550,000
Knapp Street	Plainfield Avenue to Eastern Avenue	Reconstruction	City of GR	0.34	\$	850,000	\$	212,500	\$	1,062,500
Knapp Street	Wyndham Hill Drive to ECL	Rotomill/resurface	City of GR	0.69	\$	310,000	\$	77,500	\$	387,500
Lafayette Avenue	Fountain Street to Michigan Street	Reconstruction	City of GR	0.34	\$	730,000	\$	182,500	\$	912,500
Lafayette Avenue	Fulton Street to Fountain Street	Reconstruction	City of GR	0.16	\$	330,000	\$	82,500	\$	412,500
Lake Drive	1,250' West of EBL to ECL	Rotomill/resurface	City of GR	0.49	\$	220,000	\$	55,000	\$	275,000
Lake Drive	Union Avenue to E. of Carlton Avenue	Rotomill/resurface	City of GR	1.06	\$	480,000	\$	120,000	\$	600,000
Lake Michigan Drive	Valley Avenue to Garfield Avenue	Rotomill/resurface	City of GR	0.07	\$	60,000	\$	15,000	\$	75,000
Lexington Avenue and Seward Avenue	Butterworth Avenue to Watson Street and Watson Street to Fulton Street	Rotomill/resurface	City of GR	0.24	\$	130,000	\$	32,500	\$	162,500
Leffingwell Avenue	Leonard Street to NCL	Rotomill/resurface	City of GR	0.50	\$	270,000	\$	67,500	\$	337,500
Leonard Street	Alpine Avenue to Turner Avenue	Rotomill/resurface	City of GR	0.53	\$	240,000	\$	60,000	\$	300,000
Leonard Street	Ball Avenue to EBL	Rotomill/resurface	City of GR	1.79	\$	830,000	\$	207,500	\$	1,037,500
Leonard Street	Collindale Avenue to Oakleigh Avenue	Rotomill/resurface	City of GR	0.51	\$	230,000	\$	57,500	\$	287,500
Leonard Street	Oakleigh Avenue to Powers Avenue	Rotomill/resurface	City of GR	1.60	\$	740,000	\$	185,000	\$	925,000
Leonard Street	Remembrance Road to Hillburn Avenue	Rotomill/resurface	City of GR	0.43	\$	200,000	\$	50,000	\$	250,000
Madison Avenue	Adams Street to Franklin Street	Rotomill/resurface	City of GR	0.71	\$	380,000	\$	95,000	\$	475,000
Maryland Avenue	Michigan Street to Leonard Street	Rotomill/resurface	City of GR	1.00	\$	460,000	\$	115,000	\$	575,000
Michigan Street	College Avenue to Fuller Avenue	Rotomill/resurface	City of GR	0.87	\$	460,000	\$	115,000	\$	575,000
Michigan Street	Fuller Avenue to Plymouth Avenue	Rotomill/resurface	City of GR	0.74	\$	460,000	\$	115,000	\$	575,000
Michigan Street	Maryland Avenue to Leffingwell Avenue	Rotomill/resurface	City of GR	0.44	\$	280,000	\$	70,000	\$	350,000

### Illustrative Candidate Projects for FY2020-2023 TIP

Monroe Avenue	Newberry/6th Street to Ottawa Avenue/Coldbrook Street	Rotomill/resurface	City of GR	0.39	\$	190,000	\$	47,500	\$	237,500
Monroe Avenue	Ottawa Avenue/Coldbrook Street to Ann Street	Rotomill/resurface	City of GR	0.90	\$	440,000	\$	110,000	\$	550,000
O'Brien Road	Covell Avenue to Butterworth Avenue	Rotomill/resurface	City of GR	0.52	\$	270,000	\$	67,500	\$	337,500
Ottawa Avenue	Hastings Street to Fairbanks Street	Rotomill/resurface	City of GR	0.18	\$	110,000	\$	27,500	\$	137,500
Plainfield Avenue	3 Mile Road to Fuller Avenue	Rotomill/resurface	City of GR	0.50	\$	230,000	\$	57,500	\$	287,500
Plymouth Avenue	Boston Street to Hall Street	Rotomill/resurface	City of GR	0.46	\$	180,000	\$	45,000	\$	225,000
Plymouth Avenue	Michigan Street to Leonard Street	Rotomill/resurface	City of GR	1.00	\$	460,000	\$	115,000	\$	575,000
Richmond Street	Oakleigh Avenue to Walker Avenue	Rotomill/resurface	City of GR	0.59	\$	620,000	\$	155,000	\$	775,000
Richmond Street	Bristol Avenue to Valley Avenue	Rotomill/resurface	City of GR	0.38	\$	140,000	\$	35,000	\$	175,000
Richmond Street	Tamarack Avenue to Alpine Avenue	Rotomill/resurface	City of GR	0.25	\$	100,000	\$	25,000	\$	125,000
Richmond Street	WCL to Elmridge Avenue and Acacia Drive to Oakleigh Avenue	Rotomill/resurface	City of GR	0.59	\$	230,000	\$	57,500	\$	287,500
Seward Avenue	Fulton Street to 6th Street	Rotomill/resurface	City of GR	0.94	\$	550,000	\$	137,500	\$	687,500
State Street	Lafayette Avenue to Madison Avenue	Reconstruction	City of GR	0.14	\$	610,000	\$	152,500	\$	762,500
Sweet Street	Plainfield Avenue to College Avenue	Rotomill/resurface	City of GR	0.25	\$	110,000	\$	27,500	\$	137,500
Turner Avenue	Richmond Street to Ann Street	Rotomill/resurface	City of GR	0.26	\$	130,000	\$	32,500	\$	162,500
Union Avenue	Fountain Street to Lyon Street	Rotomill/resurface	City of GR	0.15	\$	90,000	\$	22,500	\$	112,500
Valley Avenue	Fulton Street to Bridge Street	Reconstruction	City of GR	0.47	\$	1,090,000	\$	272,500	\$	1,362,500
Valley Avenue	Bridge Street to 4th Street	Rotomill/resurface	City of GR	0.38	\$	190,000	\$	47,500	\$	237,500
Walker Avenue	Leonard Street to NCL	Rotomill/resurface	City of GR	1.21	\$	610,000	\$	152,500	\$	762,500
Wealthy Street	Benjamin Avenue to Richards Terrace	Reconstruction	City of GR	0.12	\$	380,000	\$	95,000	\$	475,000
Wealthy Street	Fuller Avenue to Benjamin Avenue	Reconstruction	City of GR	0.11	\$	370,000	\$	92,500	\$	462,500
Wealthy Street	Richards Terrace to Ethel Avenue	Reconstruction	City of GR	0.11	\$	350,000	\$	87,500	\$	437,500
68th Street	Division to Kalamazoo	Mill & Fill	KCRC	2.00	\$	1,280,000	\$	320,000	\$	1,600,000
Knapp Street	Pettis to Honey Creek	Crush & Shape	KCRC	2.75	\$	800,000	\$	200,000	\$	1,000,000
N. Division Avenue	6 Mile to 7 Mile	Crush & Shape	KCRC	1.00	\$	320,000	\$	80,000	\$	400,000
Pine Island Drive	13 Mile to Fonger	Crush & Shape	KCRC	1.50	\$	480,000	\$	120,000	\$	600,000
100th Street	Patterson to Kraft	Crush & Shape	KCRC	1.00	\$	320,000	\$	80,000	\$	400,000
Kraft Avenue	100th to 76th	Crush & Shape	KCRC	3.00	\$	880,000	\$	220,000	\$	1,100,000
Hanna Lake	68th to 60th	Crush & Shape	KCRC	1.00	\$	320,000	\$	80,000	\$	400,000
60th Street	Eastern to Wing	Mill & Fill	KCRC	3.00	\$	2,000,000	\$	500,000	\$	2,500,000
60th Street	Broadmoor to Thornapple River Dr	Crush & Shape	KCRC	2.50	\$	800,000	\$	200,000	\$	1,000,000
Thornapple River Dr	60th to 48th	Crush & Shape	KCRC	1.50	\$	480,000	\$	120,000	\$	600,000
84th Street	Kenowa to Wilson	Mill & Fill	KCRC	1.00	\$	400,000	\$	100,000	\$	500,000
84th Street	Burlingame to Clyde Park	Mill & Fill	KCRC	1.00	\$	720,000	\$	180,000	\$	900,000
6 Mile Road	Kenowa to Fruit Ridge	Crush & Shape	KCRC	1.00	\$	320,000	\$	80,000	\$	400,000
Grand River Drive	Buttrick to Snow	Crush & Shape	KCRC	3.00	\$	880,000	\$	220,000	\$	1,100,000
Thornapple River Dr	Cascade to Buttrick	Crush & Shape	KCRC	3.00	\$	880,000	\$	220,000	\$	1,100,000

## Illustrative Candidate Projects for FY2020-2023 TIP

Buttrick Avenue	Thornapple River to Grand River	Crush & Shape	KCRC	0.75	\$	240,000	\$	60,000	\$	300,000
Pine Island Drive	West River to 7 Mile	Crush & Shape	KCRC	1.50	\$	480,000	\$	120,000	\$	600,000
4 Mile Road	Cordes to Alpine	Mill & Fill	KCRC	1.00	\$	720,000	\$	180,000	\$	900,000
68th Street	Kraft to Cherry Valley	Allseason	KCRC	1.00	\$	1,200,000	\$	300,000	\$	1,500,000
Leffingwell Avenue	City limits to Knapp	Mill & Fill	KCRC	0.50	\$	200,000	\$	50,000	\$	250,000
3 Mile Road	East Beltline to Grand River	Crush & Shape	KCRC	2.50	\$	800,000	\$	200,000	\$	1,000,000
Rogue River Road	West River to Belmont	Crush & Shape	KCRC	1.25	\$	400,000	\$	100,000	\$	500,000
Rogue River Road	Belmont to Wolverine	Crush & Shape	KCRC	1.25	\$	400,000	\$	100,000	\$	500,000
Cascade Road	Whitneyville to Snow	Crush & Shape	KCRC	2.25	\$	720,000	\$	180,000	\$	900,000
Burton Street	Kraft to Cascade	Crush & Shape	KCRC	1.25	\$	400,000	\$	100,000	\$	500,000
76th Street	Clyde Park to Division	Mill & Fill	KCRC	1.00	\$	720,000	\$	180,000	\$	900,000
Wolverine Blvd.	10 Mile to 11 Mile	Mill & Fill	KCRC	1.00	\$	800,000	\$	200,000	\$	1,000,000
Northland Drive	11 Mile to 12 Mile	Crush & Shape	KCRC	1.00	\$	720,000	\$	180,000	\$	900,000
Fruit Ridge	4 Mile to 6 Mile	Crush & Shape	KCRC	2.00	\$	640,000	\$	160,000	\$	800,000
Leonard Street	Kinney to Remembrance	Mill pavement and Resurface	Walker	5100'	\$	1,000,000	\$	250,000	\$	1,250,000
Center Drive	Weatherford to Weatherford	Edge mill and resurface C&G section Reconstruct with C&G, sidewalk and drainage	Walker	5800'	\$	680,000	\$	170,000	\$	680,000
Kinney Avenue	Lake Michigan Drive to Leonard		Walker	5200'	\$	2,240,000	\$	560,000	\$	2,240,000
Fruit Ridge Overpass of I-96	Three Mile to Dykstra Drive	Reconfigure ramps and widen bridge	MDOT/Walker	2650'	\$	12,800,000	\$	3,200,000	\$	12,800,000
Three Mile Road	Remembrance (M-11) East	Add center turn lane at M-11	MDOT/Walker	1000'	\$	240,000	\$	60,000	\$	240,000
Bristol Bridge	Coopersville/Marne Railroad	Add second lane for through traffic	Walker	500'	\$	1,920,000	\$	480,000	\$	1,920,000
Burlingame	28th St to Burton	Burlingame Ave Resurfacing, 28th St to Burton	Wyoming	1.00	\$	640,000	\$	160,000	\$	800,000
Burlingame	36th St to 28th St	Burlingame Ave Resurfacing, 36th St to 28th St	Wyoming	1	\$	679,500	\$	220,500	\$	900,000
Burlingame	44th St to 36th St	Burlingame Ave Resurfacing, 44th St to 36th St	Wyoming	1.00	\$	640,000	\$	160,000	\$	800,000
Burlingame	52nd St to 44th St	Burlingame Ave Resurfacing, 52nd St to 44th St	Wyoming	1.00	\$	640,000	\$	160,000	\$	800,000
Burlingame	52nd St to 60th St	Burlingame Ave Resurfacing, 52nd St to 60th St	Wyoming	0.80	\$	480,000	\$	120,000	\$	600,000
Prairie Parkway	Byron Center to Burlingame	Prairie Pkwy, Byron Center to Burlingame	Wyoming	1.00	\$	640,000	\$	160,000	\$	800,000
Prairie Parkway	Burlingame to Michael	Prairie Pkwy, Burlingame to Michael	Wyoming	0.50	\$	320,000	\$	80,000	\$	400,000
Prairie Parkway	West City Limit to Byron Center	Prairie Pkwy, West City Limit to Byron Center	Wyoming	0.50	\$	320,000	\$	80,000	\$	400,000
Kenowa Ave	South City Limit to North City Limit	Kenowa Ave Resurfacing	Wyoming	1.50	\$	640,000	\$	160,000	\$	800,000
Madison	32nd St to 28th St	Madison Ave, 32nd St to 28th St	Wyoming	0.50	\$	320,000	\$	80,000	\$	400,000
Buchanan Ave	Alger to 28th St	Buchanan Ave, Alger to 28th St	Wyoming	0.50	\$	320,000	\$	80,000	\$	400,000
Burton St	Burlingame to Clyde Park	Burton St, Burlingame to Clyde Park	Wyoming	1.00	\$	640,000	\$	160,000	\$	800,000
32nd St	Michael to US-131	32nd St, Michael to US-131	Wyoming	1.00	\$	640,000	\$	160,000	\$	800,000

### Illustrative Candidate Projects for FY2020-2023 TIP

36th St	Clyde Park Ave to Division Ave	36th St, Clyde Park Ave to Division Ave	Wyoming	1.00	\$	640,000	\$	160,000	\$	800,000
36th St	Division Ave to East City Limit	36th St, Division Ave to East City Limit	Wyoming	1.00	\$	640,000	\$	160,000	\$	800,000
Ivanrest Avenue	South City Limit to North City Limit	Ivanrest Avenue Resurfacing	Wyoming	1.50	\$	560,000	\$	140,000	\$	700,000
40th Ave	Chicago Dr to Grant St	Mill full depth and resurface	Hudsonville	2,100'	\$	243,200	\$	60,800	\$	304,000
40th Ave	Grant St to Van Buren St	Mill full depth and resurface	Hudsonville	1,800'	\$	216,800	\$	54,200	\$	271,000
40th Ave	Van Buren St to N city limits	Mill full depth and resurface	Hudsonville	1,600'	\$	201,600	\$	50,400	\$	252,000
40th Ave	New Holland St to Chicago Dr	Mill full depth and resurface	Hudsonville	1,150'	\$	108,800	\$	27,200	\$	136,000
Balsam Dr	Chicago Dr to N city limits	Mill full depth and resurface. 4,000'	Hudsonville	4,000'	\$	657,600	\$	164,400	\$	822,000
Monroe St	Fremont to Avery	is 4 lanes and 1,800' is 3 lanes Reconstruction	City of Lowell	0.5	\$	375,000	\$	93,750	\$	468,750
W. Division	M-37 to State St	Resurface Mill & Fill	Sparta/KCRC	0.75	\$	360,000	\$	90,000	\$	450,000
S. and N. State St	12 Mile to N. Village of Sparta Limit	Resurface Mill & Fill	Sparta/KCRC	1.50	\$	720,000	\$	180,000	\$	900,000
52nd Street	Baileys Grove to East Paris	Mill and Fill	City of Kentwood	0.42	\$	403,200	\$	100,800	\$	504,000
Burton Street	Patterson Ave to East Paris Ave	Mill and Fill	City of Kentwood	1.21	\$	1,161,600	\$	290,400	\$	1,452,000
Acquest Drive/29th Street	28th St to East Paris Ave	Mill and Fill	City of Kentwood	0.63	\$	604,800	\$	151,200	\$	756,000
Eastern Avenue	48th St to 52nd St	Crush, Shape, Repave	City of Kentwood	0.5	\$	720,000	\$	180,000	\$	900,000
40th Street	Brockton Dr to Patterson Ave	Mill and Fill	City of Kentwood	0.68	\$	326,400	\$	81,600	\$	408,000
29th Street	East Paris Ave to Lake Eastbrook Blvd	Mill and Fill	City of Kentwood	0.34	\$	326,400	\$	81,600	\$	408,000
29th Street	Lake Eastbrook to M-37	Mill and Fill	City of Kentwood	0.42	\$	403,200	\$	100,800	\$	504,000
48th Street	Division to Eastern	Mill and Fill	City of Kentwood	0.97	\$	744,960	\$	186,240	\$	931,200
52nd Street	M-37 to Patterson	Mill and Fill	City of Kentwood	0.36	\$	345,600	\$	86,400	\$	432,000
Shaffer Avenue	North of 36th St to 44th St	Mill and Fill	City of Kentwood	1	\$	960,000	\$	240,000	\$	1,200,000
Eastern Avenue	52nd St to 60th St	Crush, Shape, Repave	City of Kentwood	1	\$	1,440,000	\$	360,000	\$	1,800,000
Eastern Avenue	44th St to 48th St	Crush, Shape, Repave	City of Kentwood	0.5	\$	720,000	\$	180,000	\$	900,000
48th Street	Division Ave to Marlette Ave	Add CTL and Reconstruct	City of Kentwood	0.38	\$	800,000	\$	200,000	\$	1,000,000

Figure 6: FY2020-2023 TIP Projects (Programmed and Illustrative)

