TECHNICAL COMMITTEE MEETING
Wednesday, January 6, 2021
9:30 AM
REMOTE MEETING USING ZOOM
https://zoom.us/j/95842682034?pwd=RElQbXBbtmXNGd3YnZGTIpGWjBsQT09
Webinar ID: 958 4268 2034 | Passcode: 838427
+1 (301) 715-8592 | ACCESS CODE: 838427

AGENDA

I. ROLL CALL AND INTRODUCTIONS

II. APPROVAL OF MINUTES—ACTION: Tech Committee meeting minutes dated November 4, 2020
Please refer to Item II: Attachment A

III. OPPORTUNITY FOR PUBLIC COMMENT

IV. TIP AMENDMENTS—ACTION: On behalf of MDOT, Grand Rapids, and Lowell amendments/modifications to the FY2020-2023 TIP are being requested.
Please refer to Item IV: Attachment A

V. ADJUSTED NHS BRIDGE CONDITION TARGETS—INFORMATION/ACTION: The Committee will review MDOT’s adjusted 4-year Bridge Performance Targets and choose whether to take action at this time.
Please refer to Item V: Attachment A

VI. ITS UPDATE—INFORMATION/DISCUSSION: MDOT staff will provide the Committee with an update of its ITS activities, and the Committee will discuss reviving the regional ITS Subcommittee.

VII. OTHER BUSINESS

VIII. ADJOURNMENT
Laughlin, Technical Committee chair, called the meeting to order at 9:30 am. No introductions were necessary as all motions would be called to question by a roll call vote.

I. ROLL CALL AND INTRODUCTIONS

Voting Members Present
Sue Becker                  Alpine Township
Kristin Bennett            City of Grand Rapids
Tim Bradshaw (Vice Chair)  City of Kentwood/ Caledonia Twp.
Terry Brod                 Cannon Township
Scott Conners              City of Walker
Rick DeVries               City of Grand Rapids
Tim Haagsma                Gaines Charter Township
Jerry Hale                 Lowell Township
Wayne Harrall              Kent County/ County of Kent
Russ Henkel                City of Wyoming
Brian Hilbrands            Cascade Township
Nicole Hofert              City of Wyoming
Tom Hooker                 Byron Township
Dennis Kent                Proxy for
                           Mike Burns
                           City of Lowell
Tyler Kent                 MDOT
James Kilborn              Proxy for
                           Jim Holtvluwer
                           Ottawa County
Brett Laughlin             Ottawa County Road Commission
Robert Miller              City of Hudsonville
Clint Nemeth               Proxy for
                           Roy Hawkins
                           GFIAA
Julius Suchy               Village of Sparta
Charlie Sundblad           City of Grandville
Laurie VanHaitema          Jamestown Township
Steve Warren               Kent County Road Commission
Rod Weersing               Georgetown Township
Kevin Wisselink            ITP-The Rapid

Staff and Non-Voting Guests Present
Janet Arouicci             MDOT
Brad Doane                 GVMC Staff
Andrea Faber               GVMC Staff
Jeff Franklin              MDOT
II. APPROVAL OF MINUTES

Laughlin entertained a motion to approve the March 04, 2020 Technical Committee minutes.

MOTION by Haagsma, SUPPORT by Hooker, to approve the March 04, 2020 Technical Committee minutes. MOTION CARRIED UNANIMOUSLY by roll call vote.

Laughlin entertained a motion to approve the September 16, 2020 joint Tech/Policy Committee minutes.

MOTION by Haagsma, SUPPORT by Hooker, to approve the September 16, 2020 joint Tech/Policy Committee minutes. MOTION CARRIED UNANIMOUSLY by roll call vote.

III. OPPORTUNITY FOR PUBLIC COMMENT

None
IV. **TIP AMENDMENTS**

**Referring to Item IV: Attachment A,** Joseph introduced the TIP amendments that were being requested, which are as follows:

- MDOT is requesting the amendments/modifications to the TIP project list in the attached TIP Amendments/Modifications Summary. Some of these changes have triggered GPA threshold increases. These increase requests are also attached for Committee review. MDOT also provided a STIP Exempt list.

  - Kent explained the project addition is on the business spur of Chicago Dr from Burlingame to Clyde Park. Kent goes on to explain others on the exempt list, and future projects on I-196 from Fuller to Maryland, replacing the deck on the EB lane of I-196 over the Grand River, and M6 pavement repairs between Kalamazoo and East Paris as well as other regional reconstructs & interchange updates.

- Kent County Road Commission is walking on two local Bridge projects to FY2022 that will be input into Jobnet upon approval and taken to Policy Committee. This includes a GPA threshold change as well. Another modification being requested is to replace a FY2021 Project with an Illustrative project. This includes deleting a Division Ave job from 68th -76th with a 68th St from Division to Eastern. These will be included in the policy packet. Finally, KCRC is requesting use STP Flex funds from Newaygo County Road Commission to be used on a Fruit Ridge Avenue project and requesting to increase the Federal portion on another FY2021 project using purchased funds.

- Harrall wants it noted that for the Fruit Ridge Ave project MDOT has newly approved the use of Flex dollars on Urban projects. Additionally, the Division avenue was recently cape sealed which caused its removal for FY2021

- Grand Rapids is requesting to add additional local funds including participating and non-participating funds for Lake Eastbrook Blvd to accommodate for water main replacement which changed the total fund amount above 25% which in turn triggered and amendment. The federal funding amount did not change.

Laughlin entertained a motion to approve the TIP amendments, as requested.

**MOTION by Warren, SUPPORT by Haagsma, to approve the TIP amendments requested by the City of Grand Rapids, the MDOT and the KCRC. MOTION CARRIED UNANIMOUSLY by roll call vote.**

V. **FY2021 LOCAL PROGRAM ALLOCATIONS**

**Referring to Item V: Attachment A,** Joseph presented some new updated budget projections for FY2021, which have decreased the federal funding available in several of our funding programs, but pointed out that we have additional HIP funds that need to be
programmed, which can be used to supplement the shortfalls. Joseph proposed supplementing some impacted KCRC projects using the HIP funding.

-Harrall asked to follow up at a later time and Joseph agreed to follow up.

Joseph also asked the group for feedback on the STP Urban allocation. For STP Urban there is a 77K shortfall that we can supplement with HIP funds. Joseph further asked if there were any volunteers candidate projects.

-DeVries responded that the 77K change could happen on the Grand Rapids Lake Eastbrook project to use the HIP funds.

**MOTION by Harrall, SUPPORT by Haagsma, to approve the Allocation Changes requested for the City of Grand Rapids with possible modifications to KCRC**

**MOTION CARRIED UNANIMOUSLY by roll call vote.**

VI. **2021 SAFETY TARGETS**

Referring to Item VI: Attachment A Yang presented on MDOT’s establishment of 2021 five year moving traffic safety targets. MDOT was required to come up with targets prior to August 31, 2020 and the MPO is now required to support and approve them or come up with their own before February 27, 2021 to report our support or our own safety targets. MDOT staff will give a presentation at Policy Committee Meeting this month on the methodology behind choosing the targets.

Staff is recommending we support the state targets. Joseph further discussed progress on implementing our own safety goals regionally outside of the state’s requirements with examples.

Laughlin entertained a motion to adopt the 2021 safety targets for GVMC as outlined in the handouts.

**MOTION by Bradshaw, SUPPORT by Hooker, to support MDOT targets in conjunction with GVMC’s own safety efforts. MOTION CARRIED UNANIMOUSLY by roll call vote.**

VII. **OTHER BUSINESS**

- **MDOT**
  - Kent (Dennis) began with noting that GVMC & MDOT have begun preliminary discussion about ITS as a recommendation from FHWA to be more in coordination with examples of future involvement opportunities we will be arranging.
  - Kent (Dennis) also informed of MM2045 State Long Range Transportation Plan survey on the MetroQuest and asked for members to take the survey and give feedback.
- He further mentioned that the US-131 PEL is also undertaking a MetroQuest survey as well to get some comments on purpose and need as well as some evaluation criteria. This survey should be out in November.
- Rozema from MDOT out of the Grand Region office introduced the letting schedule changes in an effort to expand the construction season and allow more flexibility. This includes a modification in Jobnet to add a field for construction year so additional information can be provided when pulling reports.
- Kent (Tyler) provided information regarding the FY2021 transportation budget which included $600M from the general fund distributed by the Act51 formula. Further information was provided by the rebuilding Michigan bond program and MDOT is looking to try and put some on this funding to use on this side of the state. Kent further highlighted two projects being the 100th bridge and the I-196/I-96 flip that should be open mid-late November.

- GVMC
  - Faber gave an overview of the efforts for our Freight plan as well as the survey that is now available. Secondly, she offered up more safety outreach materials in addition to our bike lights, including: slap bracelets, safety belts, and TIP cards. Faber offered up these items to our jurisdictions and would like to coordinate on any events forthcoming for disbursement. Finally, there is also a newly designed safety outreach website that our members are encouraged to explore.

VIII. ADJOURNMENT

Laughlin adjourned the November 04, 2020 Technical Committee meeting at 10:13 am.
MEMORANDUM

DATE: December 30, 2020

TO: Technical Committee

FROM: Laurel Joseph, Director of Transportation Planning

RE: FY2020-2023 Transportation Improvement Program

On behalf of MDOT, Grand Rapids, and Lowell the following amendments/modifications to the FY2020-2023 TIP are being requested. Here are the specific requests:

- MDOT is requesting the amendments/modifications to the TIP project list in the attached pending projects summary, which includes “abandoning” a regionwide pavement marking project and adding a project to the FY2021 Trunkline Road GPA, which has triggered a threshold amendment. MDOT is also requesting committee review of the S/TIP exempt project list. Many of the projects on this S/TIP exempt list have been reviewed by the Committees in the past, but MDOT staff may highlight a few of note during the meeting (please see attachments).

- The City of Grand Rapids has received grants for two FY2022 safety projects and is requesting to add them to the TIP, which has triggered a threshold amendment for the FY2022 Local Traffic Operations and Safety GPA. Grand Rapids is also requesting to remove a FY2022 project from the TIP after initial design discussions have indicated the need to increase the scope for the project. They are requesting to add the federal budget associated with this removed project to an existing FY2022 TIP project, increasing that project’s federal budget (please see attachments).

- Staff, on behalf of the City of Lowell, is requesting to modify the scope and construction length of a statewide TAP funded project. This project is also moving from FY2021 to FY2023 (see pending projects attachment).

If you have any questions, please do not hesitate to contact me at (616) 776-7610.
<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Job#</th>
<th>GPA Type</th>
<th>Responsibl e Agency</th>
<th>Project Name</th>
<th>Limits</th>
<th>Length</th>
<th>Primary Work Type</th>
<th>Project Description</th>
<th>Phase</th>
<th>Fed Amount</th>
<th>State Amount</th>
<th>Local Amount</th>
<th>Total Amount</th>
<th>Federal Amendment Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>211144</td>
<td>S/TIP Line items</td>
<td>MDOT Regionwide - Grand Region</td>
<td>All trunkline routes in GVMC MPO boundary</td>
<td>1.953</td>
<td>Traffic Safety</td>
<td>FY 2021 Durable Pavement Marking Application</td>
<td>PE</td>
<td>$1,103</td>
<td>$123</td>
<td>$0</td>
<td>$1,225</td>
<td>Phase Abandoned</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>211144</td>
<td>S/TIP Line items</td>
<td>MDOT Regionwide - Grand Region</td>
<td>All trunkline routes in GVMC MPO boundary</td>
<td>1.953</td>
<td>Traffic Safety</td>
<td>FY 2021 Durable Pavement Marking Application</td>
<td>CON</td>
<td>$88,200</td>
<td>$9,800</td>
<td>$0</td>
<td>$98,000</td>
<td>Phase Abandoned</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>210833</td>
<td>Trunkline Road</td>
<td>MDOT I-96 E</td>
<td>E of Bristol east to West River Drive</td>
<td>2.659</td>
<td>Road Capital Preventive Maintenance</td>
<td>Single Course Asphalt Resurfacing</td>
<td>CON</td>
<td>$1,860,300</td>
<td>$206,700</td>
<td>$0</td>
<td>$2,067,000</td>
<td>GPA over 25% - phase added in GPA</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>211785</td>
<td>Local Traffic Operation s And Safety</td>
<td>Grand Rapids Citywide</td>
<td>Multiple Routes, Various Locations, city of Grand Rapids</td>
<td>0.006</td>
<td>Traffic Safety</td>
<td>Countdown pedestrian signals</td>
<td>CON</td>
<td>$199,017</td>
<td>$0</td>
<td>$22,113</td>
<td>$221,130</td>
<td>GPA over 25% - phase added in GPA</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>211896</td>
<td>Local Traffic Operation s And Safety</td>
<td>Grand Rapids Eastern Ave SE</td>
<td>Eastern Avenue SE from Andover Street to 40th Street, city of Grand Rapids</td>
<td>1.384</td>
<td>Traffic Safety</td>
<td>Signal modernization, pavement markings, signing</td>
<td>CON</td>
<td>$416,460</td>
<td>$0</td>
<td>$46,273</td>
<td>$462,733</td>
<td>GPA over 25% - phase added in GPA</td>
<td></td>
</tr>
</tbody>
</table>
### FY 2020-2023 Transportation Improvement Program

#### January 2021 Amendments/Modifications

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>MPO</th>
<th>Job Type</th>
<th>GPA Name</th>
<th>GPA Status</th>
<th>Threshold Amount</th>
<th>Total Usage Amount</th>
<th>Total Proposed Amount</th>
<th>Scope Construction Length Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>GVMC</td>
<td>Trunkline</td>
<td>Trunkline Road</td>
<td>MDOT</td>
<td>$4,970,002</td>
<td>$7,037,002</td>
<td>$2,067,000</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>GVMC</td>
<td>Local</td>
<td>Local Traffic Operations and Safety</td>
<td>Submitted</td>
<td>$1,384,000</td>
<td>$1,803,863</td>
<td>$615,477</td>
<td></td>
</tr>
<tr>
<td>Fiscal Year</td>
<td>Job Type</td>
<td>Job #</td>
<td>MDOT</td>
<td>County</td>
<td>Responsible Project Name</td>
<td>Limits</td>
<td>Length</td>
<td>Primary Work Type</td>
</tr>
<tr>
<td>-------------</td>
<td>----------</td>
<td>-------</td>
<td>------</td>
<td>--------</td>
<td>--------------------------</td>
<td>--------</td>
<td>--------</td>
<td>------------------</td>
</tr>
<tr>
<td>2021</td>
<td>200052</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>I-196/101</td>
<td>M-11 east to M-11</td>
<td>4.440</td>
<td>Road Rehabilitation Maintenance</td>
</tr>
<tr>
<td>2021</td>
<td>200053</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>I-196</td>
<td>From Cascade Road east to M-11</td>
<td>3.050</td>
<td>Road Rehabilitation</td>
</tr>
<tr>
<td>2021</td>
<td>203105</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>I-196</td>
<td>Fruitt-Ridge Road Over I-96</td>
<td>0.000</td>
<td>Bridge Rehabilitation</td>
</tr>
<tr>
<td>2021</td>
<td>203106</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>I-196</td>
<td>Fruitt-Ridge Road Over I-96</td>
<td>0.000</td>
<td>Bridge Rehabilitation</td>
</tr>
<tr>
<td>2021</td>
<td>204142</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>I-196</td>
<td>under Seguin Ave SE, Lowell Township, Kent County</td>
<td>0.000</td>
<td>Bridge Rehabilitation</td>
</tr>
<tr>
<td>2021</td>
<td>204142</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>I-196</td>
<td>under Seguin Ave SE, Lowell Township, Kent County</td>
<td>0.000</td>
<td>Bridge Rehabilitation</td>
</tr>
<tr>
<td>2021</td>
<td>207054</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>I-196</td>
<td>8 structures located along I-196</td>
<td>0.000</td>
<td>Bridge CSB Hauler Sealer</td>
</tr>
<tr>
<td>2021</td>
<td>208126</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>I-196</td>
<td>From Maven Avenue east to Lowell Street</td>
<td>4.660</td>
<td>Road Rehabilitation</td>
</tr>
<tr>
<td>2021</td>
<td>208126</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>I-196</td>
<td>From Maven Avenue east to Lowell Street</td>
<td>4.660</td>
<td>Road Rehabilitation</td>
</tr>
<tr>
<td>2021</td>
<td>210053</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>N-37</td>
<td>From 56th Street north to 76th Street</td>
<td>2.875</td>
<td>Road Rehabilitation</td>
</tr>
<tr>
<td>2021</td>
<td>210054</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>N-37</td>
<td>From 56th Street north to 76th Street</td>
<td>2.875</td>
<td>Road Rehabilitation</td>
</tr>
<tr>
<td>2021</td>
<td>210053</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>I-96 E</td>
<td>E of Bristol east to West River Drive</td>
<td>2.659</td>
<td>Road Rehabilitation</td>
</tr>
<tr>
<td>2021</td>
<td>204178</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>US-131</td>
<td>over West River Drive</td>
<td>0.000</td>
<td>Bridge Rehabilitation</td>
</tr>
<tr>
<td>2021</td>
<td>204178</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>US-131</td>
<td>over West River Drive</td>
<td>0.000</td>
<td>Bridge Rehabilitation</td>
</tr>
<tr>
<td>2021</td>
<td>207873</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>Grand Rapids - Grand Rapids TSC</td>
<td>Grand TSC Animals - Grand Rapids TSC Aspahlide</td>
<td>0.000</td>
<td>Road Rehabilitation</td>
</tr>
<tr>
<td>2021</td>
<td>208525</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>I-296US-131</td>
<td>NB</td>
<td>From Bridge Street north to Richmond Street</td>
<td>1.342</td>
</tr>
<tr>
<td>2021</td>
<td>209065</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>I-296US-131</td>
<td>SB</td>
<td>From Pearl Street north to Richmond Street</td>
<td>1.581</td>
</tr>
<tr>
<td>2021</td>
<td>210185</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Kent</td>
<td>MDOT</td>
<td>M-6 and US-131</td>
<td>3 Locations on M-6 and US-131 in Kent County</td>
<td>0.000</td>
<td>Bridge CSB Slab treatment of barrier and substructure</td>
</tr>
</tbody>
</table>
### S/TIP EXEMPT - REVERSIBLE JOBS

**Fiscal Year(s):** 2021, 2022, 2023

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Job Type</th>
<th>Job #</th>
<th>MPO</th>
<th>County</th>
<th>Responsible Project Agency</th>
<th>Project Name</th>
<th>Project Description</th>
<th>Phase</th>
<th>Phase Status</th>
<th>S/TIP Cycle</th>
<th>S/TIP Status</th>
<th>Fed Authorized Amount</th>
<th>Fed Estimated Date</th>
<th>Fund Source</th>
<th>Schedule Obligation Date</th>
<th>Actual Obligation Date</th>
<th>Schedule Let Date</th>
<th>Actual Let Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022</td>
<td>Trunkline</td>
<td>211211</td>
<td>MDOT</td>
<td>Ottawa</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>North River to S. Grand River</td>
<td>North River to S. Grand River</td>
<td>PE</td>
<td>Programmed</td>
<td>20-23</td>
<td>A</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$50,000</td>
<td>M</td>
<td>01/03/2022</td>
<td>10/07/2022</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>Trunkline</td>
<td>211212</td>
<td>MDOT</td>
<td>Ottawa</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>North River to S. Grand River</td>
<td>North River to S. Grand River</td>
<td>PE</td>
<td>Programmed</td>
<td>20-23</td>
<td>A</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$50,000</td>
<td>M</td>
<td>11/01/2021</td>
<td>10/07/2022</td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>Trunkline</td>
<td>200196</td>
<td>Kent</td>
<td>Kent</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>East to the Ottawa/Kent County Line</td>
<td>East to the Ottawa/Kent County Line</td>
<td>PE</td>
<td>Programmed</td>
<td>20-23</td>
<td>A</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$50,000</td>
<td>M</td>
<td>11/01/2022</td>
<td>10/02/2026</td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>Trunkline</td>
<td>204773</td>
<td>MDOT</td>
<td>Ottawa</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>at the 32nd Avenue Interchange</td>
<td>at the 32nd Avenue Interchange</td>
<td>PE</td>
<td>Programmed</td>
<td>20-23</td>
<td>A</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$50,000</td>
<td>M</td>
<td>11/01/2022</td>
<td>10/02/2024</td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>Trunkline</td>
<td>204773</td>
<td>MDOT</td>
<td>Ottawa</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>at the 32nd Avenue Interchange</td>
<td>at the 32nd Avenue Interchange</td>
<td>PE</td>
<td>Programmed</td>
<td>20-23</td>
<td>A</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$50,000</td>
<td>M</td>
<td>11/01/2022</td>
<td>10/02/2024</td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>Trunkline</td>
<td>208902</td>
<td>Kent</td>
<td>Kent</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Along US-131 NB</td>
<td>Along US-131 NB</td>
<td>PE</td>
<td>Programmed</td>
<td>20-23</td>
<td>A</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$50,000</td>
<td>M</td>
<td>11/01/2022</td>
<td>10/02/2024</td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>Trunkline</td>
<td>208902</td>
<td>Kent</td>
<td>Kent</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>Along US-131 NB</td>
<td>Along US-131 NB</td>
<td>PE</td>
<td>Programmed</td>
<td>20-23</td>
<td>A</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$50,000</td>
<td>M</td>
<td>11/01/2022</td>
<td>10/02/2024</td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>Trunkline</td>
<td>211594</td>
<td>MDOT</td>
<td>Kent</td>
<td>Grand Valley Metropolitan Council (GVMC)</td>
<td>From kit to the Drive</td>
<td>From kit to the Drive</td>
<td>PE</td>
<td>Programmed</td>
<td>20-23</td>
<td>A</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$50,000</td>
<td>M</td>
<td>10/03/2022</td>
<td>08/07/2026</td>
<td></td>
</tr>
</tbody>
</table>

**Grand Total:**

- Fed Authorized Amount: $0
- Actual Obligation Date: $0
- Fund Source: $19,326,421
- Budget: $1,756

**Preferences:**

- Report Format: Standard
- FISCAL Year(s): 2021, 2022, 2023
- MPO/Non-MPO: Grand Valley Metropolitan Council (Grand Rapids)
- County: ALL
- Prosperity Region: ALL
- MDOT Region: ALL
- STIP Cycle: ALL
- STIP Status: Approved, Pending (A - Approved, P - Pending)
- Job Type: Trunkline
- Phase Type: ALL
- Phase Status: ALL
- Amendment Type: ALL
- Templates: Trunkline - ALL
- Finance System: Trunkline - ALL
December 7, 2020

Laurel Joseph, Transportation Planning Director
Grand Valley Metro Council
678 Front Avenue NW, Suite 200
Grand Rapids, MI 49504

Ms. Joseph:

The City of Grand Rapids is requesting the following two FY 2022 Highway Safety Improvement Program (HSIP) projects are added to the regional Transportation Improvement Program (TIP):

**Project Name: Eastern Avenue**
**Project Limits:** Andover Street to 40th Street
**Control Section:** HSIP 41000 –Job Number 211896
**Approved Amount:** $462,733
**Federal Amount:** $416,459.70
**Work Description:** Modernize signals at 48th, 44th, and 40th Streets; add left turn phasing; upgrade crosswalk markings, pedestrian signs, and bus pads/related signage (coordinated with The Rapid); install Rapid Flashing Beacons at the East-West Trail Connector.

**Project Name: Countdown Pedestrian Signals**
**Project Limits:** 40 intersections
**Control Section:** HSIP 41000 –Job Number 211785
**Approved Amount:** $221,130
**Federal Amount:** $199,017
**Work Description:** Modify existing traffic signals with countdown pedestrian signals at 40 intersections within the City of Grand Rapids.

Please let us know if you have any questions. Thank you for your assistance.

Sincerely,

Kristin Bennett, AICP
Transportation Engineering Projects Manager

cc: John Bartlett, Tim Burkman, Eric DeLong, Rick DeVries, Karyn Ferrick, Justin Kimura, Josh Naramore
December 2, 2020

Mr. John Bartlett,
City of Grand Rapids
Traffic Safety Department
509 Wealthy Street SW
Grand Rapids, Michigan 49503

Dear Mr. Bartlett:

Project Name: Eastern Avenue
Control Section: HSIP 41000
Job Number: 211896

The Michigan Department of Transportation (MDOT) is pleased to inform you that the subject project has been approved for federal funding in the 2022 fiscal year (FY). All agencies were previously notified by telephone and approved projects are posted on MDOT’s website at www.michigan.gov/mdot.

- Control Section: HSIP 41000 - Job Number: 211896
- Safety Improvement Project Approved Amount: $462,733
- Federal Participation: $416,459.70
- Project Name: Eastern Avenue
- Project Limits: Eastern Avenue from Andover Street to 40th Street
- Work Description: Signal modernization at 48th Street, 44th Street, and 40th Street, add left turn phasing, upgrade crosswalk markings and pedestrian signs along corridor, RRFBs at the East-West Trail Connector, upgrade bus pads in coordination with the Rapid, transit sign

This project will be funded with 90 percent federal funds. Unless otherwise approved in writing by MDOT at the time of obligation, the federally participating project costs for the 2022 Highway Safety Improvement Program (HSIP) are limited to the project costs submitted with the application and listed above, plus the lesser of an increase of 20 percent or $20,000 above the total project cost. The maximum amount of federal funds allowed for this project is $600,000 for the construction phase let to contract, as long as the above listed limits are not exceeded.

Preliminary engineering, construction engineering, and right-of-way costs are not eligible for reimbursement. Nonparticipating construction items of work may be included in the overall project estimate, but are not reimbursable for federal funding. Items such as decorative lighting, brick sidewalks, street pavers, or any items that are not safety related in nature are not eligible for federal aid. These items will be reviewed once the preliminary plans are developed.

Funds for this project must be obligated in FY 2022. Federal funds cannot be obligated until the following steps have been completed (links to forms can be located at www.michigan.gov/mdotlap):
- Environmental/historical clearance (NEPA) is approved
- The Program Application has been completed (Form 0260)
- GI meeting has been held
- Permits are obtained and included in the project approval
- Right-of-way issues are cleared and approved
Final plans are submitted and approved

MDOT has programmed the selected project into JobNet for the area’s Transportation Improvement Program (TIP) for the fiscal year for which the project was selected. Local Agencies within Metropolitan Planning Organization (MPO) areas must coordinate with their MPO to ensure approval of their project in the TIP.

Provided MDOT has obligation authority remaining, HSIP funds will be obligated up through August 31, 2022. Therefore, to ensure funds are obligated prior to this date, **it is imperative that the project’s final package is completed and submitted to MDOT by August 13, 2022.** Once posted, the Local Agency Programs FY 2022 Project Planning Guide can be accessed at www.michigan.gov/mdotlap and contains the milestone dates required for a GI submittal in order to obligate your project for the fiscal year. If your local agency wishes to obligate and construct your project prior to the fiscal year for which it was selected, they may do so by utilizing the advance construct process. The Local Agency is responsible for ensuring the project is listed in the (S)TIP for both fiscal years (the year obligated and the year federal funds are converted).

Every effort has been given to maintain a fiscally constrained program and maximize the use of limited available funds. Projects will be handled on a first come, first served basis, so please make every effort to stay on schedule.

If your project is not obligated in FY 2022, MDOT may elect to retract approved funding and you will be required to resubmit your project under a future call. If a project has received prior written approval to be carried over to FY 2023, the agency will be scored significantly lower on subsequent project submittals for two years. Funding for any 2022 project not obligated by FY 2023 will be rescinded. Any changes in the scope of work or significant changes in project cost which cannot be justified will be denied.

Please send the programming application form, NEPA form, GI package and final plans electronically to BlazoP@Michigan.gov.

If you have any questions, please contact Pamela Blazo, Safety Programs Engineer, at (517) 335-2224 or BlazoP@Michigan.gov.

Sincerely,

Pamela R. Blazo, Safety Engineer
Local Agency Programs
November 23, 2020

Mr. John Bartlett,
City of Grand Rapids
Traffic Safety Department
509 Wealthy Street SW
Grand Rapids, Michigan 49503

Dear Mr. Bartlett:

Project Name: Countdown Pedestrian Signals
Control Section: HSIP 41000
Job Number: 211785

The Michigan Department of Transportation (MDOT) is pleased to inform you that the subject project has been approved for federal funding in the 2022 fiscal year (FY). All agencies were previously notified by telephone and approved projects are posted on MDOT’s website at www.michigan.gov/mdot.

Control Section: HSIP 41000 - Job Number: 211785
Safety Improvement Project Approved Amount: $221,130
Federal Participation: $199,017
Project Name: Countdown Pedestrian Signals
Project Limits: 40 intersections
Work Description: Countdown pedestrian signals

This project will be funded with 90 percent federal funds. Unless otherwise approved in writing by MDOT at the time of obligation, the federally participating project costs for the 2022 Highway Safety Improvement Program (HSIP) are limited to the project costs submitted with the application and listed above, plus the lesser of an increase of 20 percent or $20,000 above the total project cost. The maximum amount of federal funds allowed for this project is $600,000 for the construction phase let to contract, as long as the above listed limits are not exceeded.

Preliminary engineering, construction engineering, and right-of-way costs are not eligible for reimbursement. Nonparticipating construction items of work may be included in the overall project estimate, but are not reimbursable for federal funding. Items such as decorative lighting, brick sidewalks, street pavers, or any items that are not safety related in nature are not eligible for federal aid. These items will be reviewed once the preliminary plans are developed.

Funds for this project must be obligated in FY 2022. Federal funds cannot be obligated until the following steps have been completed (links to forms can be located at www.michigan.gov/mdotlap):
• Environmental/historical clearance (NEPA) is approved
• The Program Application has been completed (Form 0260)
• GI meeting has been held
• Permits are obtained and included in the project approval
• Right-of-way issues are cleared and approved
• Final plans are submitted and approved
MDOT has programmed the selected project into JobNet for the area’s Transportation Improvement Program (TIP) for the fiscal year for which the project was selected. Local Agencies within Metropolitan Planning Organization (MPO) areas must coordinate with their MPO to ensure approval of their project in the TIP.

Provided MDOT has obligation authority remaining, HSIP funds will be obligated up through August 31, 2022. Therefore, to ensure funds are obligated prior to this date, it is imperative that the project’s final package is completed and submitted to MDOT by August 13, 2022. Once posted, the Local Agency Programs FY 2022 Project Planning Guide can be accessed at www.michigan.gov/mdotlap and contains the milestone dates required for a GI submittal in order to obligate your project for the fiscal year. If your local agency wishes to obligate and construct your project prior to the fiscal year for which it was selected, they may do so by utilizing the advance construct process. The Local Agency is responsible for ensuring the project is listed in the (S)TIP for both fiscal years (the year obligated and the year federal funds are converted).

Every effort has been given to maintain a fiscally constrained program and maximize the use of limited available funds. Projects will be handled on a first come, first served basis, so please make every effort to stay on schedule.

If your project is not obligated in FY 2022, MDOT may elect to retract approved funding and you will be required to resubmit your project under a future call. If a project has received prior written approval to be carried over to FY 2023, the agency will be scored significantly lower on subsequent project submittals for two years. Funding for any 2022 project not obligated by FY 2023 will be rescinded. Any changes in the scope of work or significant changes in project cost which cannot be justified will be denied.

Please send the programming application form, NEPA form, GI package and final plans electronically to BlazoP@Michigan.gov.

If you have any questions, please contact Pamela Blazo, Safety Programs Engineer, at (517) 335-2224 or BlazoP@Michigan.gov.

Sincerely,

Pamela R. Blazo, Safety Engineer
Local Agency Programs
December 18, 2020

Dear Mr. Zonyk,

The City of Grand Rapids is scheduled to receive Surface Transportation Program – Urban (STPU) grant funds for Division Avenue – Fountain Street to Michigan Street in FY2022. The work was planned to be rotomill/resurfacing. Since we have started discussions for the design, the scope of the work has expanded to include significant public and private utility replacement work. Due to funding considerations, it is anticipated that the project will be postponed to a future year.

The City wishes to increase the Federal grant share for Collindale Avenue – Lake Michigan Drive to Leonard Street for the Division Avenue project. The Federal grant would be increased from $327,838 to $515,224 which would represent 37% of the estimated $1.5 million total cost of the project. We ask that the following change be made to the Transportation Improvement Program:

<table>
<thead>
<tr>
<th>FY2022 STP-U</th>
<th>PROJECT LIMITS</th>
<th>SCOPE</th>
<th>LENGTH</th>
<th>FEDERAL/STATE</th>
<th>NON-FED</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>DELETE</td>
<td>Division Avenue – Fountain Street to Michigan Street</td>
<td>Road Rehabilitation</td>
<td>0.117</td>
<td>$187,336</td>
<td>$ 62,664</td>
<td>$ 250,000</td>
</tr>
<tr>
<td>INCREASE</td>
<td>Collindale Avenue – Lake Michigan Drive to Leonard Street</td>
<td>Road Rehabilitation</td>
<td>1.003</td>
<td>$515,224</td>
<td>$984,776</td>
<td>$1,500,000</td>
</tr>
</tbody>
</table>

Please let us know if you have any questions. Thank you for your assistance.

Sincerely,

Rick DeVries, P.E.
Assistant City Engineer

cc: Laurel Joseph  Eric DeLong  Karyn Ferrick  Josh Naramore
Kristin Bennett  Tim Burkman  Breese Stam
MEMORANDUM

DATE: December 30, 2020
TO: Technical Committee
FROM: Laurel Joseph, Director of Transportation Planning
RE: Updated 4-Year Bridge Condition Targets

In accordance with federal performance measure requirements, MDOT established Bridge Condition targets in 2018, which the Technical and Policy Committees elected to support. We have now reached the mid-point of the performance period, which allows for adjustment of the 4-year targets. Based on updated data, MDOT has elected to adjust their 4-Year Bridge Performance Targets, which are listed below.

- Percentage of NHS bridges classified as in “Good” condition
- Percentage of NHS bridges classified as “Poor” condition

Multiple factors led to MDOT adjusting their 4-Year targets, including four large-deck-area bridges deteriorating faster than expected and changes in the inventory of NHS bridges, which the adjusted targets account for. A table summarizing the old and new targets and data is below.

<table>
<thead>
<tr>
<th>Bridge Performance Measures</th>
<th>2018 Measured (Statewide)</th>
<th>Original 4-Year State Target</th>
<th>2020 Measured (Statewide)</th>
<th>2020 Measured (GVMC area)</th>
<th>Updated 4-Year State Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of NHS bridges classified as in “Good” condition</td>
<td>33%</td>
<td>27%</td>
<td>26%</td>
<td>38%</td>
<td>23%</td>
</tr>
<tr>
<td>Percentage of NHS bridges classified as “Poor” condition</td>
<td>10%</td>
<td>7%</td>
<td>6%</td>
<td>4%</td>
<td>8%</td>
</tr>
</tbody>
</table>
MPOs have until March 31, 2021 to take action on these updated targets and can continue to support State targets or develop MPO targets. Staff has participated in target coordination meetings and working groups throughout the development process of all the State targets that have been presented to the committee and believe the State’s methodology for target development to be reasonable. For this reason, and because MDOT selects the recipients of local bridge funds in addition to allocating state bridge funds, staff is recommending that the Technical Committee recommend support of the state targets for the updated Bridge Performance Measures at this time. The generally better condition of NHS bridges in the GVMC area and the work that continues to be done by MDOT and our local agencies to improve NHS bridges in our region can support statewide target achievement.

Attached for additional information is the State’s Bridge Performance Measure Mid-Period Progress Newsletter.

If you have any questions, please do not hesitate to contact me at (616) 776-7610 or via email at laurel.joseph@gvmc.org.
2018 – 2022 ACTUALS AND TARGET

MDOT established Bridge Performance Management Targets for bridges carrying the NHS as required for the National Federal Highway Program Performance Goals. This document describes how MDOT determined the two- and four-year targets from asset management analyses and procedures and reflecting investment strategies that work toward achieving a state of good repair over the life cycle of assets at minimum practicable cost. This document reports on the actual performance at the Mid-Performance Period and recommends changes to the 2022 Target.
# TABLE OF CONTENTS

## Contents

Executive Summary .......................................................... 1  
Mid-Period Condition Report .............................................. 3  
Mid-Period Progress Toward Targets .................................... 6  
Mid-Period Investment Strategy ........................................... 9  
Target Adjustment ............................................................ 12  
MPO Coordination ............................................................ 14
EXECUTIVE SUMMARY

Executive Summary

TPM REQUIREMENTS
Infrastructure Condition is one of the national Federal highway program performance goals as established by Congress. The goal is to maintain the highway infrastructure asset system in a state of good repair. As part of this endeavor, targets were required to be set for NHS bridge conditions. These targets are the conditions that we expected in the short term (two- and four-years) as we apply our strategies to achieve our long-term goals given fiscal constraints and competing needs between all the performance management areas and assets. This report documents the progress of MDOT, our bridge authorities, and local agencies in meeting the NHS bridge condition targets.

TARGETS
Using deterioration modeling and analysis of programmed projects, MDOT predicted that the percentage of deck area on the NHS in Good condition would decline, the percentage of deck area in Fair condition would increase and the percentage of deck area in Poor Condition would decrease. Targets were set based upon this information, allowing for uncertainties, and are presented in Figure 1.

![Figure 1: Original Recommended Bridge Targets](image-url)
MID-PERFORMANCE PERIOD

The baseline condition reported for 2018 reflected NHS NBI data through March 14, 2018. The mid-performance period condition reflects NHS NBI data through March 13, 2020. The actual conditions report in March of 2020 were 26.3% in Good condition, 67.5% in Fair condition and 6.2% in Poor condition, by deck area. This is within 1% of the predicted target values, and the Poor condition performance exceeded the target condition. The major factor leading to the Good condition target being missed was the impact of four large deck area bridges deteriorating into Fair condition faster than predicted. This will be discussed in further detail.

Figure 2: 2020 Target vs 2020 Measured

During the timeframe, the inventory changed slightly as owners continued to manage their bridges through projects and inspections. 235 bridges were removed, added, or modified leading to changes in bridge counts and deck area. Table 1 reflects the changes in the inventory from the 2018 baseline data to the 2020 mid-performance period data. In general, the number of NHS bridges increased while the total deck area decreased. The percent change both by count and by area is less than 1% of the total NHS area.

Table 1: Inventory Changes – 2018 to 2020 - Statewide

<table>
<thead>
<tr>
<th>Owner</th>
<th>2018</th>
<th>2020</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Deck Area</td>
<td>Count</td>
</tr>
<tr>
<td>Trunkline</td>
<td>2,729</td>
<td>32,936,116</td>
<td>2738</td>
</tr>
<tr>
<td>Authority</td>
<td>8</td>
<td>1,998,482</td>
<td>8</td>
</tr>
<tr>
<td>Local</td>
<td>225</td>
<td>2,425,951</td>
<td>221</td>
</tr>
<tr>
<td>Total</td>
<td>2,962</td>
<td>37,360,549</td>
<td>2967</td>
</tr>
</tbody>
</table>
MID-Period Condition Report

NATIONAL BRIDGE INSPECTION STANDARDS

Federal law, outlined in the National Bridge Inspection Standards (NBIS), defines a bridge as a structure carrying traffic with a span greater than 20 feet and requires that all bridges be inspected to monitor and report condition ratings. The FHWA requires that for each applicable bridge, the performance measures for determining condition be based on the minimum values for substructure, superstructure and deck or culvert.

Condition ratings are based on a 0-9 scale and assigned for each culvert, or the deck, superstructure and substructure of each bridge. These ratings are recorded in Michigan’s National Bridge Inventory (NBI) database through a web-based system called MiBRIDGE. According to Federal standards, ratings of 7 and above are in Good Condition, 4 and less are in Poor Condition, and the remainder are in Fair Condition. Condition ratings are an important tool for transportation asset management as they are used to identify preventative maintenance needs and to determine rehabilitation and replacement projects.

<table>
<thead>
<tr>
<th>NBI Condition Ratings</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-9</td>
<td>Good Condition</td>
</tr>
<tr>
<td>5-6</td>
<td>Fair Condition</td>
</tr>
<tr>
<td>4</td>
<td>Poor</td>
</tr>
<tr>
<td>2-3</td>
<td>Serious or Critical</td>
</tr>
<tr>
<td>0-1</td>
<td>Imminent Failure or Failed</td>
</tr>
</tbody>
</table>

Table 2: NBI CONDITION RATINGS
MID-PERIOD CONDITION REPORT

MID-PERFORMANCE PERIOD NHS BRIDGE CONDITIONS

Structures that meet the definition of a bridge according to the NBIS are recorded in the Michigan Bridge Inventory database through a web-based system called MiBRIDGE. MDOT’s Bureau of Bridges and Structures (BOBS) in turn submits this information to the National Bridge Inventory (NBI). Using this database, BOBS compiles the number of bridges and deck area for each of the categories required by the Performance Management requirements. While the National Bridge Inspection Standards applies to all publicly owned highway bridges, the Transportation Performance Management Targets are only applied to those bridges carrying routes on the National Highway System (NHS) including bridge on- and off-ramps connected to the NHS. The FHWA requires counting the NHS condition by the respective deck area of each bridge and express condition totals as a percentage of the total deck area of bridges in a state. The area is computed using the NBI Structure Length and Deck Width or Approach Roadway Width (for some culverts). Tables 3 and 4 represent the data submitted to the FHWA on March 13, 2020.

---

<table>
<thead>
<tr>
<th>Owner</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trunkline</td>
<td>752</td>
<td>1828</td>
<td>158</td>
<td>2738</td>
</tr>
<tr>
<td>Authority</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Local</td>
<td>83</td>
<td>100</td>
<td>39</td>
<td>221</td>
</tr>
<tr>
<td>Total</td>
<td>838</td>
<td>1933</td>
<td>196</td>
<td>2967</td>
</tr>
</tbody>
</table>

Table 3: Mid-Performance Period NHS Bridge Condition by Number of Bridges – March 2020

<table>
<thead>
<tr>
<th>Owner</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Total (sft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trunkline</td>
<td>8,719,688</td>
<td>22,092,484</td>
<td>1,980,786</td>
<td>32,792,958</td>
</tr>
<tr>
<td>Authority</td>
<td>291,482</td>
<td>1,707,000</td>
<td>0</td>
<td>1,998,482</td>
</tr>
<tr>
<td>Local</td>
<td>756,411</td>
<td>1,282,990</td>
<td>322,158</td>
<td>2,361,559</td>
</tr>
<tr>
<td>Total</td>
<td>9,767,581</td>
<td>25,082,474</td>
<td>2,302,994</td>
<td>37,152,999</td>
</tr>
</tbody>
</table>

Table 4 Mid-Performance Period NHS Bridge Condition by Deck Area – March 2020

The majority of structures by both count and deck area are owned by MDOT Trunkline. The three bridge authorities – the International Bridge, the Mackinac Bridge, and Blue Water Bridge own only 8 structures, but those 8 structures comprise 5% of the NHS deck area statewide. Local agencies are responsible for 7% of the NHS population by count and 6% by deck area. While these numbers are small in comparison to the proportion within the trunkline program, the expected deterioration and improvement of Bridge Authority and Local Agency bridges must be considered when setting Performance Management Targets.
MID-Period Progress Toward Targets

COMPARING MEASURED AND TARGET VALUES

The Mid-performance period condition reflects NHS NBI data through March 13, 2020. The actual conditions report in March of 2020 were 26.3% in Good condition, 67.5% in Fair condition and 6.2% in Poor condition, by deck area. This is within 1% of the predicted Target Values, and the poor condition performance exceeded the target condition.

EVALUATING GOOD CONDITION

The target for Good condition was set as a combination of estimating the deck area that was expected to deteriorate and the deck area that was expected to be improved. This is demonstrated in Figure 5, which shows that 8.8% of the NHS deck area was predicted to leave Good condition and 2.3% was expected to enter Good condition during the time period. As shown, the Good condition deck area was predicted to decline and the mid-performance period target was set at 27.0%. However, the measured decline was slightly larger than predicted with a resulting Good condition by deck area of 26.3%. This 0.7% difference is 260,000 sft of deck area. The prediction for the 27.0% deck area in Good condition correlated to 23.4% of NHS bridges in Good condition by count. In 2020, the actual number of NHS in Good condition was significantly higher – 28.2%. This means that the reduction in Good deck area as compared to the target is less about the number of bridges that were maintained in Good condition, and more dependent on how large the bridges are that deteriorated. When analyzed by count instead of deck area, both the Good and Poor target were exceeded.
GOOD BRIDGE DETERIORATION

Four “big bridges” deteriorated from good condition to fair condition during this performance period. As discussed when setting the targets, when measuring by deck area the impact of only a few signature structures can significantly impact the uncertainty within projections. The four bridges that fell to fair condition sum to 1.43M sft of deck area, or just under 4% of the Statewide NHS deck area. Additionally, these structures had extenuating circumstances which make it challenging to perform condition projections as refined of a level as two-years. The two Zilwaukee bridges are segmental concrete box girders. Michigan has few of these structure types and so there is significant uncertainty in the prediction of deterioration rates. The other two structures were found to have Alkali Silica Reactivity (ASR) damage in the substructure, which leads to accelerated deterioration.
MID-Period Investment Strategy

TAMP INVESTMENT CONSISTENCY ANALYSIS

As part of the requirements of the Transportation Asset Management Plan, MDOT performs an investment consistency analysis each year. This analysis demonstrates implementation of MDOT’s TAMP. MDOT project selection is guided by investment strategies from the TAMP to make progress toward achievement of its targets for asset condition and performance of the NHS. The agency’s Investment Consistency Analysis shows an alignment between MDOT’s actual investment levels based on budgeted project obligations from FY 2018 to 2019 for specified work types, and MDOT’s planned levels of investment included in the TAMP for these same work types.

<table>
<thead>
<tr>
<th>Bridge Investment - 2018 and 2019</th>
<th>TAMP Allocations</th>
<th>Obligated Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trunkline (NHS and Non-NHS)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reconstruction</td>
<td>$154 M</td>
<td>$208 M</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>$81 M</td>
<td>$55 M</td>
</tr>
<tr>
<td>Preservation</td>
<td>$68 M</td>
<td>$66 M</td>
</tr>
<tr>
<td>Authorities and Local Agencies (NHS only)</td>
<td>$41 M</td>
<td>$39 M</td>
</tr>
</tbody>
</table>

Table 5: TAMP Investment Consistency Analysis

Implementation of bridge projects in FY 2018 exceeded the reconstruction investment estimate in the initial TAMP. This was primarily a result of two bridge replacements that accounted for $62 million. One of the bridges was rated in serious condition and the other bridge was scour critical. Considering these factors, the agency is satisfied that the constrained bridge strategy included in the initial and final TAMP for years 2018 and 2019 have been implemented within reasonable expectations due to changing conditions and circumstances and while maintaining a risk based asset management strategy.
Target Adjustment

DEVELOPING TARGETS
Starting from the condition reported with the NBI submittal on March 14th of 2018, the expected improved condition from projects and reduced condition from deterioration was summarized into expected condition in 2020 and in 2022. The deck areas in good, fair and poor conditions at each year were summarized. To account for uncertainty, the amount of deck area in good condition was conservatively reduced by 1%, and the amount of deck area in poor condition was increased by 1%. A 1% reduction for uncertainties reflects about 30 average size structures that either deteriorated faster than predicted or that did not see as much of an improvement as predicted.

Unfortunately, four of the bridges that deteriorated faster than predicted dwarfed the 1% reduction planned for uncertainties. If the four large deck area structures had remained in Good condition, then the NHS Good Condition Target would have been exceeded at a value of 30.1%. To account for this unforeseen circumstance and to bring the 2022 targets in alignment with current conditions, the target setting analysis was repeated by combining the current condition (therefore accounting for the bridges that deteriorated faster than predicted), the predicted deterioration rates of the remaining bridges as well as the expected condition following programmed projects.

ADJUSTING TARGETS
The 2018 and 2020 measured values and the updated 2022 Targets are shown in Figure 6. Overall, the number of Good bridges is expected to decline significantly as preservation efforts tend to extend life in Fair condition. Additionally, there is a large population of bridges that have exceeded the expected time in Good condition. By applying the statewide median time, they are predicted to fall to Fair condition at any time, and so they are reflected as in Fair condition in the targets. It could be that unique factors or preservation activities have extended the time in Good condition for these structures.
The amount of bridges in Good condition is predicted to decrease and the amount of deck area in Poor condition is predicted to increase. This is consistent with previous targets, except it accounts for the deterioration of the big bridges discussed previously which account for nearly 4% of the NHS deck area statewide. The amount of Fair deck area will require a sustained commitment to preservation in order to prevent an unsustainable amount of fair bridges from falling into poor condition.
MPO Coordination

The MPO’s established targets supporting the State DOT’s statewide bridge performance targets. As part of the Full Performance Period Progress Report, MPOs will report their established targets, performance, progress, and achievement of the targets to their respective state DOT in a manner that is agreed upon by both parties and documented in the Metropolitan Planning Agreement. The MPOs are not required to provide separate reporting to the FHWA. However, State DOTs and MPOs will need to coordinate and mutually agree to a target establishment reporting process. The minimum penalty threshold requires that no more than 10% of NHS bridges measured by deck area be classified as structurally deficient.

MDOT provided estimated condition for each MPO’s population of bridges, however it was not recommended that they were adopted as specific targets. As discussed earlier, predicting deterioration applies statewide average deterioration rates to all bridges. Some bridges will deteriorate faster while some will deteriorate slower. At the network level, these differences tend to balance. When looking at smaller populations, the difference between specific bridge deterioration and statewide averages can lead to large differences between predictions and measured values. When the performance values are measured in terms of deck area rather than count, large bridges can exacerbate this discrepancy.

MDOT also created a Transportation Performance Measures Dashboard for MPOs and bridge owners to aid in reviewing targets. The 2018 baseline data can be found at https://mdot.maps.arcgis.com/apps/webappviewer/index.html?id=26ddc82bc9634e05a055cd4a6747818f. The 2020 data can be found at https://mdot.maps.arcgis.com/apps/webappviewer/index.html?id=91289b5580114648a4ae0b4d002c565b. These pages represent a snapshot of data at the time of the NHS bridges in the NBI submittal to FHWA, and is what will be used by FHWA to evaluate the targets. For more current information, all NBI bridge data is updated monthly at https://Michigan.gov/bridgeconditions.
## 2020 Measured Condition on the NHS by Deck Area

<table>
<thead>
<tr>
<th>MPO</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Deck Area</td>
<td>Percentage</td>
<td>Deck Area</td>
<td>Percentage</td>
</tr>
<tr>
<td>Battle Creek Area Transportation Study</td>
<td>3,429</td>
<td>1%</td>
<td>420,446</td>
<td>92%</td>
</tr>
<tr>
<td>Bay City Area Transportation Study</td>
<td>112,658</td>
<td>18%</td>
<td>426,620</td>
<td>70%</td>
</tr>
<tr>
<td>Genesee County Metropolitan Planning Commission</td>
<td>133,738</td>
<td>7%</td>
<td>1,508,951</td>
<td>79%</td>
</tr>
<tr>
<td>Grand Valley Metropolitan Council</td>
<td>1,488,565</td>
<td>38%</td>
<td>2,257,583</td>
<td>58%</td>
</tr>
<tr>
<td>Jackson Area Comprehensive Transportation Study</td>
<td>112,658</td>
<td>21%</td>
<td>268,866</td>
<td>64%</td>
</tr>
<tr>
<td>Kalamazoo Area Transportation Study</td>
<td>234,944</td>
<td>44%</td>
<td>238,508</td>
<td>45%</td>
</tr>
<tr>
<td>Macatawa Area Coordinating Council</td>
<td>72,176</td>
<td>24%</td>
<td>230,927</td>
<td>76%</td>
</tr>
<tr>
<td>Midland Area Transportation Study</td>
<td>41,128</td>
<td>21%</td>
<td>154,375</td>
<td>79%</td>
</tr>
<tr>
<td>Saginaw Metropolitan Area Transportation Study</td>
<td>544,567</td>
<td>24%</td>
<td>1,722,253</td>
<td>75%</td>
</tr>
<tr>
<td>Southeast Michigan Council of Governments</td>
<td>5,712,390</td>
<td>35%</td>
<td>9,619,914</td>
<td>58%</td>
</tr>
<tr>
<td>Southwest Michigan Planning Commission</td>
<td>28,277</td>
<td>3%</td>
<td>1,000,380</td>
<td>96%</td>
</tr>
<tr>
<td>Niles-Buchanan-Cass Area Transportation Study</td>
<td>4,965</td>
<td>2%</td>
<td>294,901</td>
<td>98%</td>
</tr>
<tr>
<td>Tri-County Regional Planning Commission</td>
<td>23,312</td>
<td>3%</td>
<td>745,579</td>
<td>95%</td>
</tr>
<tr>
<td>West Michigan Metropolitan Transportation Planning Program</td>
<td>179,670</td>
<td>27%</td>
<td>479,380</td>
<td>71%</td>
</tr>
<tr>
<td>Outside MPO Boundaries</td>
<td>1,031,914</td>
<td>17%</td>
<td>4,837,944</td>
<td>80%</td>
</tr>
<tr>
<td>All NHS</td>
<td>9,767,581</td>
<td>26%</td>
<td>25,082,474</td>
<td>68%</td>
</tr>
</tbody>
</table>