



The Metropolitan Planning Organization for the Greater Kalamazoo Area

5220 Lovers Lane, Suite 110

Portage, MI 49002

269-343-0766

info@KATSmpo.org

TO: Kalamazoo Area Transportation Study Technical Committee  
FROM: Jonathan Start, Executive Director  
DATE: March 2, 2018  
SUBJECT: TECHNICAL COMMITTEE MEETING  
THURSDAY, MARCH 8, 2018 - 9:00 A.M.  
METRO  
530 N. ROSE STREET, KALAMAZOO

The Kalamazoo Area Transportation Study Technical Committee will be meeting on Thursday, March 8, 2018 at 9:00 a.m. at Metro. The following materials are included in your meeting packet:

1. Agenda for the March 8, 2018 Meeting
2. Draft Minutes of the February 8, 2018 Meeting
3. Proposed Amendments to the FY 2017-2020 Transportation Improvement Program
4. Information on the 2021 Local Bridge Program Call for Projects
5. Resolution of Support for the Village of Augusta Application for the 2021 Local Bridge Program

**Please remember that time sheets are due by the 15<sup>th</sup> of each month.**

KALAMAZOO AREA TRANSPORTATION STUDY

TECHNICAL COMMITTEE MEETING  
MARCH 8, 2018 - 9:00 A.M.  
METRO  
AGENDA

*Please limit public comments to 4 minutes.*

1. CALL TO ORDER
2. ROLL CALL (Sign-in Sheet Circulated)
3. CHANGES OR ADDITIONS TO THE AGENDA
4. APPROVAL OF THE AGENDA **(ACTION)**
5. MINUTES FROM THE FEBRUARY 8, 2018 MEETING (ENCLOSURE) **(ACTION)**
6. POLICY COMMITTEE REPORT
7. CITIZENS' COMMENTS (Non-agenda Items)
8. AMENDMENTS TO THE FY 2017-2020 TRANSPORTATION IMPROVEMENT PROGRAM (ENCLOSURE) **(ACTION)**
9. 2021 LOCAL BRIDGE PROGRAM CALL FOR PROJECTS (ENCLOSURES)
10. RESOLUTION OF SUPPORT FOR THE VILLAGE OF AUGUSTA APPLICATION FOR THE 2021 LOCAL BRIDGE PROGRAM (ENCLOSURE) **(ACTION)**
11. PUBLIC TRANSPORTATION UPDATES
12. STATUS REPORTS
  - a. ROADS - Questions on written status reports. Verbal reports will be limited to 4 minutes per agency.
  - b. LAND USE/PLANNING AND ZONING - Questions on written status reports. Verbal reports will be limited to 4 minutes per agency.
13. NEW BUSINESS
14. ADJOURNMENT

*The next meeting of the Kalamazoo Area Transportation Study Technical Committee will be held on Thursday, April 12, 2018 at 9:00 a.m. Metro, 530 N. Rose Street.*

**The Transportation Improvement Program Project Prioritization Process Subcommittee will meet following the Technical Committee meeting.**

KALAMAZOO AREA TRANSPORTATION STUDY

TECHNICAL COMMITTEE MEETING

FEBRUARY 8, 2018 - 9:00 A.M.

Metro

DRAFT MINUTES

**CALL TO ORDER**

The February Meeting of KATS Technical Committee was called to order at 9:00 a.m. at Metro by Chair Forth.

**ROLL CALL**

Meeting attendance was recorded on the sign in sheet. Introductions were made by those present.

**MEMBERS PRESENT**

Muhammad Arif	City of Portage Engineering
Mickey Bittner	Village of Paw Paw
Tony Dacoba	Van Buren Public Transit
Marc Elliot	Oshtemo Township
Chris Forth, Chair	City of Portage Planning
Rick Fowler	MDOT Lansing Planning
Kendra Gwin	City of Portage Engineering
Jeff Heppler	Village of Augusta
Larry Hummel	Van Buren County Road Commission
Lotta Jarnefelt	Kalamazoo County Planning
Debbie Jung	Road Commission of Kalamazoo County
Katie Reilly	City of Kalamazoo Planning
Dan Lewis	Village of Schoolcraft
Jim Mallery	Village of Vicksburg
Ryan Minkus	Road Commission of Kalamazoo County
Michelle O'Neill	MDOT TSC Engineering
Abhishek Prodduturi	City of Kalamazoo Engineering
Joe Stark	City of Kalamazoo Engineering
Nancy Stoddard	City of Parchment
Greg Vlietstra	Kalamazoo County Transportation Authority
Tim Woodhams	Village of Mattawan

**MEMBERS ABSENT**

Bill Bresson	City of Galesburg
Steve Diesler	Texas Township
Dexter Mitchell	Kalamazoo Township
Alan Smaka	Village of Lawton
Jodi Stefforia	Comstock Township
Jason Latham	MDOT SW Planning
Kathy Schultz, Vice-chair	Central County Transportation Authority

**OTHERS PRESENT**

Megan Arndt	Kalamazoo Area Transportation Study
Jamie Harmon	City of Portage Engineering
Martin Janssen	Kalamazoo County Transportation Authority

Jesse Morgan  
Paul Selden  
Jon Start  
Steve Stepek  
Jerry Vander Roest  
Julie Warner  
Monica Zehner

Hubbel, Roth and Clark  
Kalamazoo Region Bike Route Committee  
Kalamazoo Area Transportation Study  
Kalamazoo Area Transportation Study  
Charleston Township  
Hubbel, Roth and Clark  
Kalamazoo Area Transportation Study

## **CHANGES OR ADDITIONS TO THE AGENDA**

No changes to the agenda were requested.

## **APPROVAL OF THE AGENDA**

MOTION by Jarnefelt, SECOND by O'Neill, ***“to approve the Agenda of the February 8, 2018 Technical Committee Meeting.”*** MOTION APPROVED.

## **MINUTES FROM THE JANUARY 11, 2018 MEETING**

Zehner noted that Hoekstra requested to be added to the Minutes under the section “Others Present.”

MOTION by Hummel, SECOND by Fowler, ***“to approve the Minutes of the January 11, 2018 Meeting as amended.”*** MOTION APPROVED.

## **POLICY COMMITTEE REPORT**

Start reported that Policy Committee took action to approve the recommended amendments to the FY 2017-2020 Transportation Improvement Program and the Resolution of Support for the State Safety Targets for Calendar Year 2018. Selden addressed the members of the Policy Committee regarding the Southwest Michigan Bikeway.

## **CITIZENS' COMMENTS (NON-AGENDA ITEMS)**

A handout regarding the Southwest Michigan Bikeway was distributed at the meeting by Paul Selden, Chair of the Kalamazoo Region Bike Route Committee.

Selden addressed members of the KATS Technical Committee again regarding the Southwest Michigan Bikeway. Development of the Southwest Michigan Bikeway began with the evaluation of proposed commuter routes for Map 7 of the Metropolitan Transportation Plan. Additional work on evaluating the routes will have to be completed to ensure conditions have not changed since the initial development of the proposed segments since several years have passed. He discussed the potential economic benefits of the Bikeway to the area and users of the transportation system. The RCKC approved its sign Policy which will allow jurisdictions who opt to sign the segments of the bikeway with the sign selected to identify the bikeway by the Kalamazoo Region Bike Route Committee.

Mallery and Forth thanked Selden for his work with the Kalamazoo Region Bike Route Committee and the Southwest Michigan Bikeway. Selden thanked members of the committee for their appreciation, but noted that this was a community effort.

## **NATIONAL FUNCTIONAL CLASSIFICATION SYSTEM CHANGE REQUEST**

Proposed National Functional Classification (NFC) System change requests were included in the meeting materials.

Start reported that the Road Commission of Kalamazoo County completed a review of its public road system to see if changes to the Primary and Secondary road systems are appropriate. The study resulted in recommend changes to the National Functional Classification System (NFC) of roads used to

determine what roads are eligible for federal aid. The staff of Road Commission of Kalamazoo County shared the report and potential changes to the NFC with KATS staff. Staff reviewed the recommendations comparing the road conditions with federal standards for different NFC road classifications. Staff of KATS and the RCKC agree on the recommendations for changes.

Following Policy Committee action, the recommendation for changes to the NFC will be submitted to MDOT for review and a recommendation and then to the Federal Highway Administration for final review and action.

**MOTION by HUMMEL, SECOND by ARIF, “to recommend Policy Committee approval of the proposed changes to the National Functional Classification system.” MOTION APPROVED.**

### **UPCOMING PERFORMANCE MEASURE RESOLUTION OF SUPPORT**

Start reported that the Fixing America’s Surface Transportation (FAST) Act legislation that renewed the federal Surface Transportation Program contains requirements that performance measures be incorporated into the transportation planning process. States are to establish performance measure targets and the Metropolitan Planning Organizations are to either set its own or adopt the state’s targets.

There are additional performance measures that are in the process of target development. They include System Performance/Freight/Congestion Management Air Quality and Pavement/Bridge/Asset Management Plan measures. It will be the recommendation of KATS staff to adopt the targets set by the State of Michigan.

### **CONTRIBUTED SERVICES REPORTING**

Start reported that KATS had not yet received contributed service reports from a significant number of member agencies. Because there was no charge for the Pictometry flight, KATS will have a significant reduction in expected contributed services. Zehner noted that a report would be distributed at the February meeting of KATS Policy Committee. The deadline to submit timesheets for inclusion in the report is February 16.

### **PROJECT MAP**

Arndt has been working with local members to prepare a map of planned major road projects in the KATS area. Its purpose is to give the public and members information on upcoming projects to improve project coordination and reduce conflicts. The link to the project map on KATS website has been corrected.

Kalamazoo County Planning and Development is working with the Road Commission of Kalamazoo County to develop a map that shows road projects and utility projects so that coordination between these projects in the right of way might be better coordinated. KATS will provide its map layer to the County to assist in this effort.

### **PUBLIC TRANSPORTATION UPDATES**

Vlietstra reported that a Request for Proposals for a Fixed Route Bus Stop Only Study had been issued. Metro has begun rebranding which will be phased in. Metro continues to work on an M-96 Galesburg Route.

### **ROAD STATUS REPORTS**

**City of Kalamazoo:** The Howard Street from Stadium Drive to Oakland Drive and W. Michigan and Howard projects came in approximately 7% under estimate. The Pitcher Street project from E. Michigan Avenue to Kalamazoo Avenue is in the March letting.

**City of Portage:** The City is waiting on bid lettings for its 2018 projects:

- S. Westnedge Avenue from Romence Road to Mall Drive
- W. Centre Avenue from 12th Street to Oakland Drive
- Oakland Drive at Vanderbilt Avenue project
- Portage Road at Lakeview Drive

Engineering design has begun on 2019 projects.

#### **Road Commission of Kalamazoo County (RCKC):**

**RCKC Non-motorized:** Right of Way (ROW) acquisition is being finalized for the Drake Road Trail Project. Five properties remain. The RCKC continues coordination efforts with Kalamazoo County parks on the next two phases of the Kalamazoo River Valley Trail.

**RCKC Road Updates:** The KL Avenue at Almena and 1st Street project is in the May letting. The KL Avenue from 11<sup>th</sup> Street to Drake Road project is in the April letting. The 42<sup>nd</sup> Street project from the county line to north of Y Avenue is in the May letting. Five 2017 construction projects are waiting on restoration checks this spring to be closed out. The RCKC has been awarded funding for two safety projects for 2019:

- 8th Street from S Avenue to R Avenue (High Risk Rural Roads)
- D Avenue from 17th Street to Riverview Drive (Highway Safety Improvement Program)

**RCKC Other Updates:** The RCKC Bridge Asset Management Plan and RCKC Sign Policy were approved by the Board at the meeting on January 23rd. The documents are available on the RCKC website. The RCKC will be contacting Township's this month about the Primary Overlay Program (POP) for 2018 to discuss non-motorized facility plans along those routes.

#### **LAND USE, PLANNING, AND ZONING STATUS REPORTS**

**Kalamazoo County Planning and Development:** The Kalamazoo County Board of Commissioners approved distribution of the proposed Kalamazoo County Master Plan for review and comments. It will be available for comment until March 20 and is available on the County website. Light detection and ranging (LIDAR) data and 2-foot contour data are available by contacting the Kalamazoo County Planning and Development Office. The Pictometry flight is set for this spring.

**Village of Augusta:** Kalamazoo County Parks will be holding a public meeting regarding the Kalamazoo River Valley Trail extensions from Galesburg Augusta High School to Fort Custer Recreation Area and Augusta to Gull Lake on February 26 at 6:30 p.m. at the Augusta Village Hall.

**Oshtemo Township:** The township is finishing its Master Plan update. It has initiated a greenway project. The township has received an estimate from Amtrak for approximately \$85,000 to review the Drake Road Non-motorized project plans.

#### **NEW BUSINESS**

O'Neill reported that the Federal Highway Administration has prohibited the use of Rectangular Rapid Flash Beacons. The consultant for the Kalamazoo River Valley Trail extension was planning on using the beacons at Galesburg-Augusta High School.

Start reported that the State of Michigan Transportation Asset Management Council (TAMC) has changed the Unified Planning Work Program (UPWP) for FY 2018 to include approval of funding and reimbursements to Act-51 agencies for local road Pavement and Surface Evaluation Rating (PASER) data collection and work on asset management plans. Beginning in FY 2018, requests for funding will go through the MPOs and Regional Planning Organizations. Approved proposals will be for a fixed cost with the agency or jurisdiction being responsible for any additional costs it incurs. Written guidance will be issued. Interested agencies and jurisdictions are asked to submit proposals by May 1.

Start reported that draft state legislation has been issued to establish a Michigan Infrastructure Council and proposed changes in the Transportation Asset Management Council. The proposed legislation would change how Transportation Asset Management Council members are selected and also require Act-51 agencies with over 100 miles of roads to have an Asset Management Plan. The plans would be required to be updated every 3 years.

Steppek reported that Phase II of Jobnet Implementation is anticipated to begin in July. During the implementation, amendments to the Transportation Improvement Program will not be processed. All members were asked to submit proposed amendments to the Transportation Improvement Program by April 27.

Minkus reported that a Call for Projects has been issued for the 2021 Local Bridge Program. The deadline for to submit project applications is May 1. The Southwest Region Local Agency Construction Kick-Off Meeting has been scheduled. The meeting was rescheduled to March 9 due to concerns with March 30 being a local holiday.

Steppek reminded members that the Transportation Improvement Program Project Prioritization Process Subcommittee was meeting following the Technical Committee Meeting.

#### **ADJOURNMENT**

MOTION by Arif, SECOND by Jarnefelt, ***“to adjourn the February 8, 2018 Technical Committee Meeting.”*** MOTION APPROVED.

There being no other business Chair Forth adjourned the meeting at 9:55 a.m.

*The next meeting of the Kalamazoo Area Transportation Study Technical Committee will be held on Thursday, March 8, 2018 at 9:00 a.m. Metro, 530 n. Rose street.*

**Kalamazoo Area Transportation Study FY 2017 - 2020 Transportation Improvement Program**

10/1/2016 (03/28/18)

*Required Fields*

Fiscal Year	County	Respon-sible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	Phase	Advance Construct	Federal Cost (\$1000s)	Federal Fund Source	State Cost (\$1000s)	State Fund Source	Local Cost (\$1000s)	Local Fund Source	Total Phase Cost (\$1000s)	MDOT Job No.	Local ID No.	MPO/ Rural Action Date	Amend-ment Type	Air Quality	Comments
2018	Kalamazoo	Public Transit	Bus Purchase	1/1/18 through 12/31/18		Transit vehicle additions/replacements	Bus Purchase	T-Cap		91	STL			23	TRAL	114			3/28/18	Add	E	RTF, Add 3/28/18;
2018	Kalamazoo	Public Transit	Van Purchase	1/1/18 through 12/31/18		Transit vehicle additions/replacements	Van Purchase	T-Cap		34	STL			8	TRAL	42			3/28/18	Add	E	RTF, Add 3/28/18;
2019	Kalamazoo	RCKC	8th Street	S Avenue to R Avenue		Traffic ops/safety	Installation of a center left turn lane at three intersections and HMA resurfacing	CON		600	HSIP			69	CNTY	669			3/28/18	Add	E	Safety project award, add 3/28/18;
2019	Kalamazoo	RCKC	D Avenue	17th Street to Riverview Drive		Traffic ops/safety	Widen shoulders (4 foot paved, 2 foot aggregate) and HMA resurfacing	CON		480	HRRR			53	CNTY	533			3/28/18	Add	E	Safety project award, add 3/28/18;
2019	Kalamazoo	Vicksburg	Vicksburg Tail-Phase I North	City of Portage Line to Highway Street		Roadside facility	New Non-motorized path to connect the Village of Vicksburg to the S. City limits of Portage	CON		253	TAU			63	VLG	316			3/28/18	Cost	E	Local TAP Allocation approved during 17-20 TIP Development, change local cost to 20% match, 3/28/18





STATE OF MICHIGAN  
DEPARTMENT OF TRANSPORTATION  
LANSING

RICK SNYDER  
GOVERNOR

KIRK T. STEUDLE  
DIRECTOR

February 5, 2018

Ms. Denise Donohue, Director  
County Road Association of Michigan  
417 Seymour, Suite One  
Lansing, Michigan 48901-2067

Mr. Matt Bach, Director of Communications  
Michigan Municipal League  
320 North Washington Square, Suite 100  
Lansing, Michigan 48933-1288

Dear Ms. Donohue and Mr. Bach:

Local Bridge Program  
Deadline for Applications – May 1, 2018

The Michigan Department of Transportation is pleased to announce the solicitation of applications for candidate projects for the Local Bridge Program. Selected projects will be funded during the 2021 fiscal year (FY). Do not submit projects which cannot be committed to construction within FY 2021. The applications can be submitted by the local agency owner or their consultant. All bridge applications submitted in previous years that have not been selected for funding have been discarded. The total number of applications from any one local agency is limited to five.

The FY 2021 Local Bridge Program budget is estimated at \$48 million. This amount may be subject to revisions. We are asking the County Road Association of Michigan and the Michigan Municipal League to distribute this notice to their member agencies.

**Applications are to be electronically submitted or postmarked by Tuesday, May 1, 2018.**

Refer to the enclosed Exhibits for information regarding eligibility and submitting candidate Local Bridge Project Applications.

If you have any questions or need further information, please contact Keith Cooper, Bridge Program Manager, at 517-373-2346 or at cooperk@michigan.gov.

Sincerely,

Matthew W. DeLong, Administrator  
Development Services Division

Enclosures

cc: Keith Cooper, MDOT

## **Exhibit 1 – Bridge Definition and Application Process**

### ***Definition***

To be eligible for bridge funds, the structure must meet the definition of a bridge, defined as a structure with a total clear span of more than 20 feet, measured along the centerline of the roadway over a stream, watercourse, or opening. For a span bridge, this means the clear opening span, measured face to face at the inside of the abutments, is greater than 20 feet. A multi-unit culvert is considered a bridge if the total length, as measured along the centerline of the roadway, is greater than 20 feet and the distance between the culvert units is less than half the diameter of the smallest unit. This description is referenced in item number 112 of the Michigan Structure Inventory and Appraisal Coding Guide. There are many multi-unit culverts under local agency jurisdiction that qualify as bridges and thus, are required to be on the structure inventory and regularly inspected. Please check multi-unit culverts in your area to see if they qualify under the definition of a “bridge.”

### ***Work Type***

An application must list the specific work being applied for in the preventative maintenance and/or rehabilitation categories.

### ***Participation Level***

The preventive maintenance, structure rehabilitation and replacement, and approach construction costs may be eligible for a maximum of 95 percent participation from federal and/or state funds. The right-of-way, design engineering, and construction engineering costs are not eligible for Local Bridge Program funds.

### ***Cost Estimates***

The current Local Agency Program (LAP)–Bridge Cost Estimate Worksheet, dated 1/26/2018, which indicates per unit cost estimates of various rehabilitation and preventive maintenance options (Exhibit 4). This information will be helpful in determining estimated construction costs for different types of repairs. All estimates for projects to be constructed in 2021 should incorporate an annual inflationary factor of three percent (3%). If the structure is over a railroad, include the railroad’s flagging and construction fees.

### ***Data Formula Points***

The data found on the Structure Inventory and Appraisal (SI&A) form is used in many of the formula rating point calculations and is one item looked at by your Region Bridge Council when considering discretionary rating points. It is very important that this data be current and correct before submitting the application; incorrect data may significantly affect the rating points. When completing an application, the data stated in the supporting documents must match the data found in the SI&A form.

### ***Site Review for Bridge Applications***

MDOT bridge personnel will review submitted applications for completeness and determine the preliminary (computer generated) rating points. The LAP bridge staff will perform site visits, verify appropriate scopes of work, and create written site reports. The applications, preliminary rating points, and the site visit reports will then be forwarded to the respective Region Bridge Council for their review and the addition of the discretionary rating points.

### ***Project Estimate vs. Application Estimate***

The Local Bridge Advisory Board has set a policy for projects coming in over application estimate. If, at the grade inspection stage, the project estimate exceeds the application estimate, the Region Bridge Council may review the project. The council can decide to accept the project at the increased estimate, cap the project at a percentage above the application estimate, or request an application for additional funds be submitted in the next call for projects. Due diligence must be taken in getting the most reasonable application estimates.

### ***Bridge Application Package and Submission***

Please be sure your Structure Number is correct and have your signed resolution, SI&A, Bridge Inspection Report, cost estimate, location and detour maps, project narrative, letters of support, and photos ready to include as attachments. See Exhibit 3 for further details.

Applications can be submitted electronically using the [Local Agency Bridge Program Website](#), or directly at [FY 2021 Local Bridge Program - Call for Applications Submission Sheet](#)

## **Exhibit 2 – Bridge Scoping and Work Type Definitions**

### ***Bridge Scoping***

To assist in the bridge scoping and fix selection process, refer to [MDOT's Scoping Manual](#), specifically pages 30 through 48 of Chapter 5, *Signs of Pavement & Bridge Distress and Fix Selection Guidelines*.

### ***Bridge Asset Management Plan***

To assist with managing bridge inventory and developing an optimum bridge preservation strategy, a valuable resource is the [Asset Management Guide for Local Bridges](#) in Michigan.

All local agencies are encouraged to submit asset management plans for the bridge applications being submitted. A summary of the local agency's bridge network asset management plan may also be submitted for review.

### ***Replacement***

Replacement projects involve replacing the entire substructure, superstructure, deck and necessary approach work. If a multi-use path or sidewalk is planned but does not currently exist, the estimate needs to clearly indicate the costs of these items. If the project is selected for funding, a master plan showing the path or sidewalk must be provided for them to be considered participating in the Local Bridge Program.

The approach costs should be estimated using a minimum of \$35,000 per station, with a minimum approach cost of \$150,000. The estimate needs to account for public utilities such as water mains and sewers, which will need to be altered during construction. Also, if the structure is within a substandard horizontal or vertical alignment, the estimate must account for any possible increase in approach distance.

Replacement projects need to meet current American Association of State Highway and Transportation Officials (AASHTO) guidelines and the Load Factor Resistance Design criteria.

### ***Rehabilitation***

Rehabilitation is defined as major work required to restore the structural integrity of a bridge, as well as work necessary to correct major safety defects. These projects are required to meet AASHTO guidelines. If a rehabilitation project is over water, a scour analysis will be required during the design phase and the existing foundations will need to be shown to be stable under a scour event. A structure that is not found to be stable during a scour event may not be allowed to proceed to contract. If making the structure stable results in a change in scope, it may be necessary to re-apply during a future call for applications.

Estimated repair costs for bridge rehabilitation projects will vary by the type of work. Include publicly owned utility relocation costs. Examples of rehabilitation work eligible for funding under the program include:

- Full deck replacement (with or without painting of steel beams)
- Superstructure replacement
- Structure widening
- Removal of existing bridge without replacement

### ***Preventive Maintenance***

Preventative Maintenance applications can be a single bridge or multiple bridges submitted for similar preventive maintenance work into one application. This can include multiple agencies working together to submit one application. A multiple bridge application will count as one of the five applications any one agency can submit per year. The Region Bridge Councils will review a multiple structure application as one package and will not rate each structure independently. Preventive Maintenance activities are eligible under the Local Bridge Program.

When applying for a multiple bridge preventative maintenance project, submit each structure individually. For electronic submission, select “PM-Multiple Structure” as the type of work on each form. For paper submission, identify on the cover sheet that each bridge is part of a “PM-Multiple Structure” application. Examples of Preventive Maintenance include:

- Hot mix asphalt (HMA) overlay with waterproofing membrane
- Epoxy deck overlay (Concrete)
- Shallow deck overlay (removing and replacing concrete surface above the top mat of steel reinforcement)
- Deep deck overlay (removing and replacing the concrete surface below the top mat of steel reinforcement)
- Painting only (full, zone, or spot painting)
- Pin and hanger replacement
- Slope paving repair
- Joint replacement and repair
- Drainage system repair (bridge deck drains and bridge approach downspouts)
- Scour countermeasures
- Concrete crack sealing
- Concrete patching and repair
- Approach pavement relief joint installation
- Temporary supports
- Expansion or construction joint repair
- Guard rail beam retrofit or installation
- Substructure repairs

### Exhibit 3 – Application Requirements

1. Submit a narrative which includes the following:
  - a. The responsible local agency contacts person's name, title, mailing address, e-mail and telephone number.
  - b. **Clearly indicate whether the application is for rehabilitation, replacement, and preventive maintenance. For rehabilitation and preventive maintenance, clearly specify work requested for funding.**
  - c. A statement explaining the economic importance of the structure.
  - d. In a short paragraph, if there is currently a detour for the structure, explain "Existing detour currently affects ...."
  - e. In a short paragraph, if the structure is or would be closed, explain "If the structure is closed, the detour would affect...."
  - f. If the structure is closed, what year the structure was closed.
  - g. A statement of any maintenance done on the structure either past or present.
  
2. Include the most recent Structure Inventory and Appraisal (SI&A) form and Bridge Inspection Report form (BIR). These forms must have been updated within the 24-month period, prior to May 1, 2018. It is very important that this data be current and correct before submitting the application; incorrect data may significantly affect the rating points. The SI&A and BIR forms must be updated electronically on MiBridge prior to the May 1, 2018 deadline. Do not send in any marked-up forms as we cannot update the data for you.
  
3. Submit a legible map (8 ½" X 11") showing:
  - a. Emergency facilities such as fire stations, hospitals or police stations.
  - b. Schools and other significant traffic generating facilities.
  - c. The alternate routes or detours which must be used because of load limits or closures.
  
4. For all applications, include a minimum of two photographs of the following:
  - a. One showing the structure's alignment.
  - b. One showing the structure's profile view.
  - c. If the bridge is posted, include one photograph of the bridge clearly showing the current posting sign.
  
5. For **rehabilitation** and **preventive maintenance** applications, also include photographs of the following:
  - a. The deck showing the areas of delamination and patches.
  - b. The substructure units showing areas of delaminations/spalls.
  - c. The beams showing areas of cracks and delamination for concrete and local areas of corrosion and/or local failure for steel.

6. Submit a breakdown of the estimated replacement, rehabilitation, and preventive maintenance as follows:

A.	Approach Construction	(A) \$	_____
B.	Structure Construction	(B) \$	_____
	Total (A & B)	Total \$	_____

**Note: Use the attached Cost Estimate Worksheets to calculate the approach and structure costs.**

7. Submit a "**Priority List**" listing all the structures that you want rated.
8. **For each application**, submit a current resolution, signed and dated, from the governing board supporting the project. Resolutions from previous applications will not be accepted. Any application not containing a signed resolution for all applications will be considered incomplete, and will be rejected and returned to the owner. Letters of local support are recommended but are not mandatory.
9. If submitting a hard copy, do not staple the application together or put in a booklet or binder, as it needs to be reproduced on a scanner/copier.
10. Any application that is not complete will be rejected and returned to the local agency. Common examples of incomplete applications are those that are missing updated SI&A forms, photos of postings, load ratings, missing resolutions, and priority lists. All completed applications must be postmarked by the May 1, 2018, deadline.
11. All local agencies are encouraged to submit asset management plans for the applications being submitted. A summary of the local agencies bridge network asset management plan may also be submitted for review. Refer to the Asset Management Guide for Local Agency Bridges in Michigan, located on MDOT's Local Agency Bridge Program's website.
12. Previous years' applications have been discarded. The Region Bridge Councils and the Local Bridge Advisory Board will only review applications submitted during the current call for applications. After the applications have been reviewed and projects have been selected for funding, all non-funded bridge applications will be discarded.

Submit Applications:

By E-mail: Fill out form at the link below and attach application (One application per sheet).

**Application conversion to pdf is preferred over scanned applications due to file size.**

[FY 2021 Local Bridge Program - Call for Applications Submission Sheet](#)

By Mail:  
Send applications to:

Rita Levine, P.E.  
Local Agency Programs-Development Services Division, MDOT  
425 West Ottawa Street  
P.O. Box 30050  
Lansing, Michigan 48909  
Phone: (517) 373-0041



**Exhibit 4 - Cost Estimating Worksheets**

**2017**

**LAP - BRIDGE COST ESTIMATE WORKSHEET  
- CPM, REHAB, REPLACE -**

REV. 1/26/2018

REGION: \_\_\_\_\_ FISCAL YEAR: \_\_\_\_\_ STRUCTURE ID: (3-5 digits)  
 ENGINEER: \_\_\_\_\_ DATE: \_\_\_\_\_ BRIDGE ID: XXX-XXXX  
 LOCATION: \_\_\_\_\_ DECK AREA: SFT STR. TYPE: \_\_\_\_\_  
 PRIMARY WORK ACTIVITY: \_\_\_\_\_ DECK DIM: \_\_\_\_\_

<u>WORK ACTIVITY</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>UNIT COST</u>	<u>TOTAL</u>
<b>NEW BRIDGE</b>				
Concrete (add demo & road approach & MOT)		SFT	\$305.00/SFT	
Steel (as above)		SFT	\$320.00/SFT	
Precast 3-sided or 4-sided Culvert (add removal, roadway over, MOT)		SFT	\$400.00/SFT	
Other				
<b>NEW SUPERSTRUCTURE</b>				
Concrete (incl. remove exist super, new railing; add MOT & approach)		SFT	\$140.00/SFT	
Steel (as above)		SFT	\$190.00/SFT	
Over Water (add to new superstructure cost)		SFT	\$40.00/SFT	
Other				
<b>WIDENING</b>				
Added portion only. _____ ft of width (add road approach transition)		SFT	\$270.00/SFT	
Other				
<b>NEW DECK</b>				
Includes remove exist deck & new railing (add traffic control & approach)		SFT	\$70.00/SFT	
Other				
<b>DEMOLITION</b>				
Entire bridge, grade separation		SFT	\$32.00/SFT	
Entire bridge, over water		SFT	\$42.00/SFT	
Other				
<b>SUPERSTRUCTURE REPAIR</b>				
Concrete Deck Patch (includes hand chipping)		SFT	\$35.00/SFT	
Full Depth Patch		SFT	\$100.00/SFT	
HMA Cap (no membrane, add bridge rail if req'd)		SFT	\$1.50/SFT	
HMA Overlay with WP membrane (add bridge rail if req'd)		SFT	\$5.50/SFT	
Removal of Concrete Wearing Course (latex), Epoxy Ovly, or HMA Ovly		SFT	\$2.00/SFT	
Healer Sealer		SYD	\$22.00/SYD	
Epoxy Overlay		SYD	\$32.00/SYD	
Shallow Overlay (incl. joint repl & hydro; add bridge rail)		SFT	\$35.00/SFT	
Deep Overlay (incl. joint repl & hydro; add bridge rail)		SFT	\$37.00/SFT	
High Load Hit Repair (PCI Beam)		SFT	\$250.00/SFT	
PCI Beam End Repair		EA	\$4,600.00 EA	
Repair Structural Steel (\$4900 bolted, \$7000 welded)		EA	\$6,000.00 EA	
Paint Structural Steel (incl. clean & coat)		SFT	\$20.00/SFT	
Partial Painting (incl. clean & coat)		SFT	\$40.00/SFT	
Pin & Hanger replacement (incl. temporary supports)		EA	\$7,000.00 EA	
Other				
<b>SUBSTRUCTURE REPAIR</b>				
Pier repair (measured x 2) Replace if repair area > 30%		CFT	\$265.00/CFT	
Pier repair over water (measured x 2)		CFT	\$300.00/CFT	
Pier replacement		CFT	\$80.00/CFT	
Abutment repair (measured x 2)		CFT	\$265.00/CFT	
Temporary Supports for Substructure Repair		EA	\$1,800.00 EA	
Slope Protection repairs		SYD	\$140.00/SYD	
Other				
<b>MISCELLANEOUS</b>				
Expansion or Construction Joints (includes removal)		FT	\$550.00/FT	
Bridge Railing, remove and replace (\$250 Type 4, \$305 Aesthetic Parapet)		FT	\$280.00/FT	
Thrie Beam Railing retrofit		FT	\$40.00/FT	
Articulating Concrete Block System (ACB)		SYD	\$120.00/SYD	
Scour Countermeasures		LSUM	LSUM	
Other				

**STRUCTURE CONSTRUCTION BUDGET** \$0

<u>ROAD WORK</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>UNIT COST</u>	<u>TOTAL</u>
<b>ROAD WORK</b>				
Approach Pavement, 12" RC (add C & G, GR, Slope, Shldr.) 40' ea. end		SFT	\$16.00/SFT	
Approach Curb & Gutter (18' ea. quad.)		FT	\$50.00/FT	
Guardrail Anchorage to Bridge (<40')		quads	\$1,600.00/quad	
Guardrail, Type B or T (beyond GR anchorage to bridge, <200')		FT	\$22.00/FT	
Guardrail Ending (end section)		EA	\$1,750.00/EA	
Roadway Approach work (beyond approach pavement)		LSUM	LSUM	
Utilities		LSUM	LSUM	
Other				
<b>TRAFFIC CONTROL</b> <i>Unit Cost to be determined by Region or TSC Traffic &amp; Safety</i>				
Part Width Construction		LSUM	LSUM	
Crossovers		EA	\$300,000.00 EA	
Temporary Traffic Signals		set	\$25,000.00/set	
RR Flagging		LSUM	LSUM	
Detour		LSUM	LSUM	
Other				

**RELATED ROAD/TRAFFIC CONSTRUCTION BUDGET** \$0

<b>CONTINGENCY</b> (10% - 20%) (use higher contingency for small projects)		%	\$0.00	\$0
<b>MOBILIZATION</b> (estimate at 10%)	10	%	\$0.00	\$0
<b>INFLATION</b> (assume 3% per year, beginning in 2018)		%	\$0.00	\$0

(DOES NOT INCLUDE PE & CE)

**TOTAL CONSTRUCTION BUDGET** \$0

2017

**- CAPITAL SCHEDULED MAINTENANCE -  
LAP - BRIDGE CSM COST ESTIMATE WORKSHEET**

REV. 1/26/2018

REGION: FISCAL YEAR: STRUCTURE NUMBER: (3-5 digit)  
 ENGINEER: DATE: BRIDGE ID: XXX-XXXXX  
 LOCATION: DECK AREA: SFT STR. TYPE:  
 PRIMARY WORK ACTIVITY: DECK DIM:

DECK	WORK ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
	Patching Concrete, C-L (deck or barrier rail patching)		CYD	\$700.00 /CYD	
	Penetrating Healer/Sealer, Bridge Deck		SYD	\$22.00 /SYD	
	Crack Sealer		FT	\$5.00 /FT	
	Water Repellant Treatment, Penetrating (deck surface)		SYD	\$20.00 /SYD	
	Concrete Surface Coating (concrete barrier rail, deck slab fascia)		*SYD	\$16.00 /SYD	
	Resealing Bridge Construction Joints (hot poured rubber)		FT	\$18.00 /FT	
	End Header Replacement		FT	\$65.00 /FT	
	Concrete, Grade D		CYD	\$700.00 /CYD	
	Reinforcement, Steel, Epoxy Coated		LBS	\$1.40 /LB	
	Adhesive Anchoring of Horiz. Bars ___"		EA	\$25.00 /EA	
	Drain Casting, Type 1		EA	\$500.00 /EA	
	Drain Casting Assembly		EA	\$1,000.00 /EA	
	Deck Drain , Extension		EA	\$500.00 /EA	
	Downspout Replacement		EA	\$2,000.00 /EA	
	Embedded Galvanic Anode		EA	\$12.00 /EA	
	Other				

SUPERSTRUCTURE	WORK ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
	Spot Painting (80% clean, 20% coat)		*SFT	\$30.00 /SFT	
	Patching Concrete, C-L (concrete beam patching)		CYD	\$700.00 /CYD	
	Water Repellant Treatment, Penetrating (concrete fascia beams)		SYD	\$20.00 /SYD	
	Concrete Surface Coating (concrete fascia beams)		*SYD	\$16.00 /SYD	
	Other				

SUBSTRUCTURE	WORK ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
	Patching Concrete, C-L (substructure patching)		CYD	\$700.00 /CYD	
	Patch Forming (vertical & overhead surfaces)		SFT	\$30.00 /SFT	
	Concrete Surface Coating (vertical surfaces)		*SYD	\$16.00 /SYD	
	Substructure Horizontal Surface Sealer (horizontal surfaces)		*SYD	\$40.00 /SYD	
	Water Repellant Treatment, Penetrating		SYD	\$20.00 /SYD	
	Other				

DEMOLITION	WORK ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
	Hand Chipping, Shallow (~3" deep)		SYD	\$110.00 /SYD	
	Hand Chipping, Deep (~6" deep min)		SYD	\$210.00 /SYD	
	Hand Chipping, Other Than Deck (vertical & overhead surfaces)		CFT	\$80.00 /CFT	
	Structures, Rehabilitation, Rem Portions (slope protection removal)		*CYD	\$250.00 /CYD	
	Structures, Rehabilitation, Rem Portions (drain casting removal)		*EA	\$500.00 /EA	
	False Decking		SFT	\$1.00 /SFT	
	Other				

MISCELLANEOUS	WORK ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
	Joint, Expansion, Erg (pavement joint)		FT	\$16.00 /FT	
	Joint, Pressure Relief, 4 inch		FT	\$65.00 /FT	
	Backfill, Structure, CIP		CYD	\$22.00 /CYD	
	Slope Paving, Header		FT	\$50.00 /FT	
	Slope Paving, Concrete		SYD	\$70.00 /SYD	
	Slope Paving, Precast Concrete		SYD	\$70.00 /SYD	
	Articulating Concrete Block System (ACB)		SYD	\$120.00 /SYD	
	Other				

**BRIDGE TOTAL** \$0

TRAFFIC CONTROL	WORK ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
	Maintaining Traffic (from TSC or Region T&S)		LS		
	Other				

MOBILIZATION	QUANTITY	UNIT	UNIT COST	TOTAL
	10 %		\$0	\$0

**ROAD TOTAL** \$0

(DOES NOT INCLUDE PE & CE)

\* Estimated as unit shown, Paid for as LUMP SUM

**CONSTRUCTION TOTAL** \$0



The Metropolitan Planning Organization for the Greater Kalamazoo Area

5220 Lovers Lane, Suite 110

Portage, MI 49002

269-343-0766

info@KATSmpo.org

## RESOLUTION

### Supporting Application for Local Bridge Program Funds FY 2021 For Village of Augusta Bridge # STR 4666

**WHEREAS**, the Washington Street Bridge over the canal of Augusta Creek in the Village of Augusta, Kalamazoo County, Michigan, was constructed in 1921 as a steel I-beam structure and is in poor condition; and

**WHEREAS**, the current deterioration places a risk on the longevity of the bridge, the service it provides and its value as an important transportation system asset with a current load rating of 5 tons; and

**WHEREAS**, the investment in the complete bridge replacement will improve the condition of the bridge, avoiding more costly repairs in the future; and

**WHEREAS**, the Village of Augusta has prepared an application for Local Bridge Program Funds to replace this structure; and

**WHEREAS**, the Village Council will consider the application for Local Bridge Program Funds and authorize the submission of the application for Local Bridge Program Funds for FY 2021.

**NOW, THEREFORE, BE IT RESOLVED** that the Kalamazoo Area Transportation Study Technical Committee supports the consideration of the Village of Augusta application for Local Bridge Program Funds.

By \_\_\_\_\_ Dated: March 8, 2018  
Chair