

Local Agency Bridge Program 2016 Bridge Conference



Project Letting Summary

■ FY 2015

- 97 Local Bridge Projects Let to Contract: Total = \$66 million
- 101 Total Projects = \$68 million

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■ FY 2016 (As of March 1st)

- 53 Local Bridge Projects = \$31 million
- April Advertised Projects
 - 3 Local Bridge Projects = \$2 million

Waiting on Federal Funds from FAST Act

2016 Call For Applications

- Sent out February 9th to CRA and MML
– Call for FY 2019 Construction
- **Deadline – May 2, 2016**

2015 Call For Applications

- Sent out February 2nd to CRA and MML
– Call for FY 2019 Construction
- **Deadline – May 2, 2016**
- “Call For Projects” Location:
www.michigan.gov/mdot, Doing
Business, Local Agency Program, Bridge
Program, Call For Projects

Call For Applications

- Application limit – 5 Total
 - Multiple PM's count as 1 Application
 - No limit on structures in multiple PM application
 - Bundle for cost effectiveness
 - Minimize Mob and Traffic Control costs
 - Good Estimate Range \$150k-500k
 - Lower than 150K – not cost effective
 - Higher estimates limits RBC selection ability

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 - PM's selected by RBC consensus – Not by Points

Call For Applications

- Application Estimates:
 - General Estimate: Replacements
 - Rural: **\$300/sft** of Proposed Deck Area
 - Urban: **\$320/sft** of Proposed Deck Area
 - Approach Costs: \$35k/Sta, \$150k minimum, Urban higher (\$300k to \$500k)
 - Replace, Rehab and Preventative Maintenance – Fill Out “Estimate Worksheet of Costs”

Call For Applications

- **Application Keynotes**
 - Use New Cost Estimating Worksheets
 - Cost Estimate Worksheets updated: 12-11-15
 - Cost increases for several items of work
 - Decreases on some work items
 - Mobilization estimate 10%
 - Encourage Asset Management Plan with App.
 - PE, CE and ROW costs NOT eligible

Call For Applications

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- **Submit Applications Electronically**
 - Convert to .pdf – DO NOT scan

Call For Applications

- **Accurate/Updated SI & A**
 - Calculated rating points based SI & A information
 - MDOT QA on bridge inspection reports
 - Common issues/errors
 - ADT - Outdated
 - Route Classification incorrect
 - Load Rating and Posting Codes incorrect/outdated
 - Item 64F is used to determine Load Capacity & Cond. points
 - SI&A Posted Loading not matching bridge site posting
 - Lack detail in item condition description
 - Lack work recommendations

Call For Applications

- Key Items to include in Applications
 - Complete Narrative
 - Current Resolution
 - Public Utility relocation costs
 - Detailed Cost Estimates – Use Worksheets

Call For Applications

- Key Items to include in Applications
 - Complete Narrative
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 - Detailed Cost Estimates – Use Worksheets
 - Proper Scoping of Work
 - Rehabilitation and PM projects
 - Replacements – Don't underestimate size of new bridge
- Applications - Due May 2, 2016

How to Increase Application Rating

- Look for additional sources of funding
 - STP, Safety, Economic Development, etc.
- Increase the Local Agencies funding share – Ex. - 5% to 10% or more
- Closed bridges – consider removing bridge and cul-da-sac road.
- Bundling PM applications
- Ideas to conserve Local Bridge Program Funds

Bridge Preventative Maintenance

- Greatest Concern: Keeping water and chlorides off the bridge elements.
 - Leaking joints and open bridge railings
 - HMA overlays without Waterproof Membrane
 - Deck Drains without extensions
 - Debris/Vegetation trapping water
- These are Critical Items that need Immediate Attention!

Examples of Local PM



Examples of Local PM



Examples of Local PM



Examples of Local PM



Examples of Local PM



Examples of Local PM



Examples of Local PM



Examples of Local PM



Local Bridge Funding

- Local Bridge Program

- Federal Funds

- Off-System federal bridge funds
 - \$18.4 million

- State Funds

- 1/2 cent of gas tax
 - \$27.1 million
 - \$1.2 billion in new State Road funding
 - Adds nothing to Local Bridge Program



Local Bridge Funding

- \$1.2 billion in new State Road funding – Act 51 Distribution
 - 39% Counties - \$468 million
 - 22% Cities/Villages - \$264 million
- Annual distribution when fully implemented in 2021.
- **Relaying on Locals to fund additional bridge projects with new Local Funds.**



Regional Prosperity Initiative (RPI)

- MDOT announces new RPI – May 2015
 - Implemented Oct 21, 2016
- New Regional Alignment
 - 7 Regions
 - Grand gains 5 counties: 3 from North, 2 from SW
 - North - Mason, Lake, Osceola
 - SW – Allegan, Barry
 - Bay gains 2 counties: 1 from University, 1 from Metro
 - University - Shiawassee
 - Metro – St. Clair

Regional Prosperity Initiative (RPI)

- TSC county assignment has changed
 - See Regional Service Area map on MDOT website
- Local Bridge Program by statute must align with “old” regions until the law is changed
- MDOT considering having the statute changed
 - If the law is changed the Local Bridge Program will “align” with the “new” Regions

2015 Bridge Applications

- 338 Bridge Applications Received
 - \$260 million in applications (10% increase) ~ \$48 million in funding
- 89 Projects selected for FY 2018
 - “Mix of Fixes” –35% Replacement – 65% Rehab/PM
 - 35% of total \$ selected are Rehab/PM
 - Highest total to date

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 - \$260 million in applications (10% increase) ~ \$48 million in funding
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 - “Mix of Fixes” –35% Replacement – 65% Rehab/PM
 - 35% of total \$ selected are Rehab/PM
 - Highest total to date
 - “Mix of Fixes” – improves long term bridge condition vs replacement only

Design - QC/QA Requirement

- FHWA and MDOT review of Local design consultant QC/QA
 - Establish Bridge Design QC/QA
 - One page QC/QA certification document
 - Added to revised Bridge Program Application
 - Applies to projects GI after June 1, 2016

Design - QC/QA

- FHWA and MDOT review of Local design consultant QC/QA
 - Establish Bridge Design QC/QA
 - One page QC/QA certification document
 - Added to revised Bridge Program Application
 - Applies to projects GI after June 1, 2016
- FHWA and MDOT looking at Programmatic review of all bridge designs.

Design - QC/QA

MDOT 0258 (02/16)

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**BRIDGE PROJECT QUALITY CONTROL (QC) AND
QUALITY ASSURANCE (QA) CERTIFICATION**

PROJECTS HAVING GRADE INSPECTIONS AFTER JUNE 1, 2016 WILL REQUIRE QC/QA CERTIFICATION

Page 1 of 1

This form must be completed, signed, sealed, and certified by both the Project (Design) Engineer for Quality Control (QC) and the Quality Assurance (QA) Engineer. Upon completion, the local agency forwards the original document, including seals and signatures, to MDOT LAP before construction funds can be obligated.

ELIGIBLE APPLICANT AGENCY	DATE
ROUTE NAME	
CROSSING	

Refer to Federal Highway Administration (FHWA), Guidance on Quality Control and Quality Assurance (QC/QA) In Bridge Design (H-08-17) located at: <http://www.fhwa.dot.gov/bridge/h0817.pdf>

Quality Control (QC) shall include at a minimum:

- A supervisor or team leader responsible for determining the technical knowledge and experience of the designer/checker for a specific design.
- A documented program with detailed procedures, standards, and policies for oversight of the bridge design.
- Design calculations, checked calculations, review comments, and other pertinent documents.
- Bridge plan sheets shall include the names or initials of the designer and checker and the most current revision date. Names of the drafter and reviewer should also be added to the plans. Bridge design plans shall be signed and sealed by a Licensed Professional Engineer in the State of Michigan.
- Unique special provisions shall include the author's and reviewer's initials and date authored and checked.

Quality Assurance (QA) shall include at a minimum:

- Independent check of design calculations, unique special provisions by a qualified person or consultant other than the designer.
- Participation in field engineering reviews during design.

Based on the information included on this page, the designer/design consultant has adequately completed Quality Control and Quality Assurance for this project.

Signature (Project Design Engineer - QC) _____ Seal

Typed name and date: _____

Signature (Engineer - QA) _____ Seal

Typed name and date: _____

Clear Form

Bridge Asset Management

- Transportation Asset Management Council (TAMC)
- Bridge Asset Management Training
 - Divide Workshop into 2 classes
 - One Technical – Engineers/Consultants
 - One Non-Technical – Managers/Road Commissioners
 - Technical
 - Focus on developing Bridge Asset Management Plan
 - Participants use their own inventory to develop asset management plan.

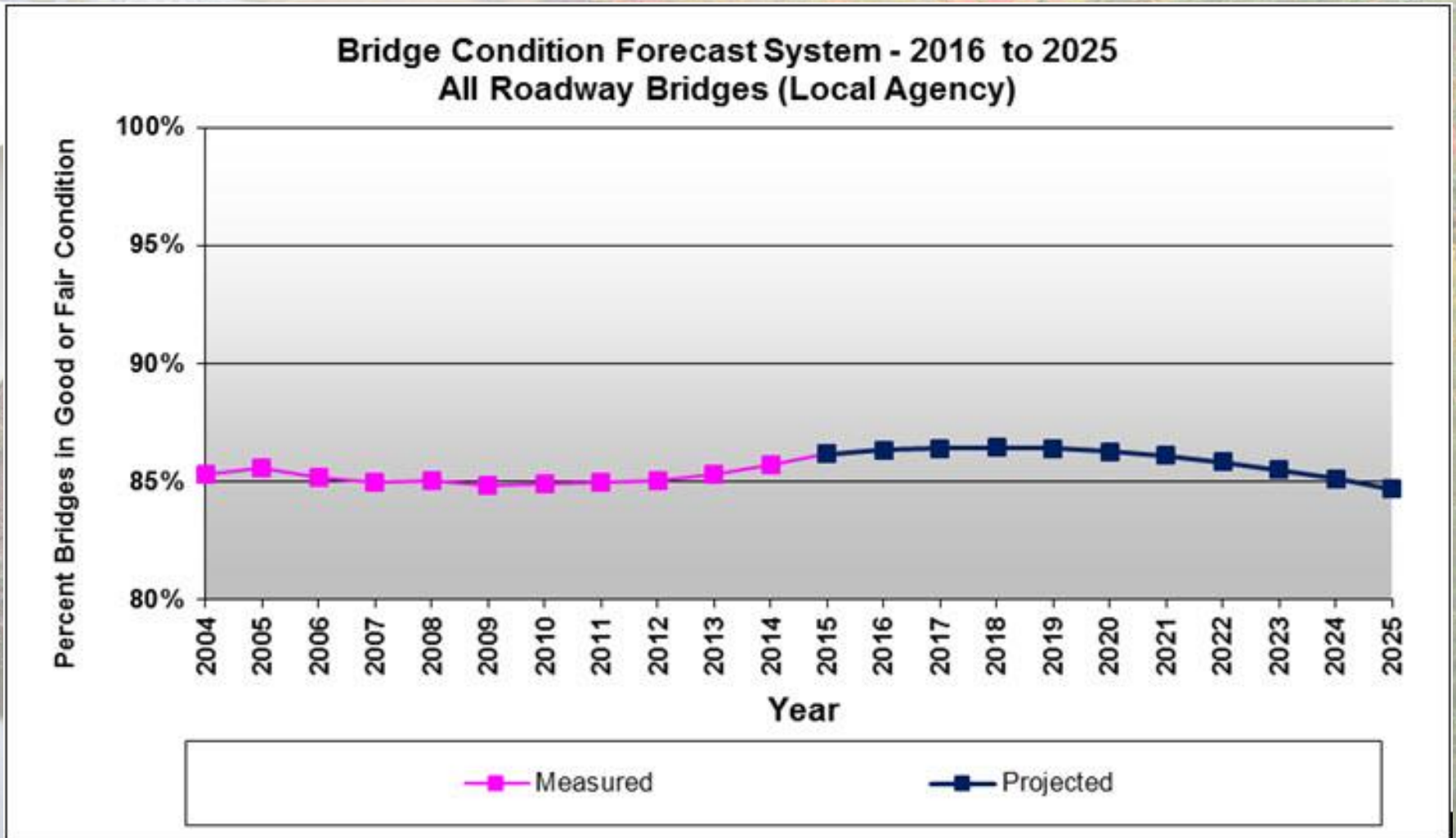
Bridge Asset Management

- Bridge Asset Management
 - Non-Technical
 - Focus on overview of Bridge Asset Management
 - Participants will understand the concepts and importance of asset management for their bridge networks.
- Each class targets a specific group
 - Classes are more efficient use of time
 - Classes are tailored to specific audiences
 - Technical Class – **Leave with practical asset management plan for your agency**

Bridge Asset Management

- Bridge Dashboard Upgrades
 - New Bridge AM Dashboard
 - New improved Bridge AM Dashboard
 - New graphics – Easier to navigate
- Bridge Asset Management
 - Evaluate Bridge Network Condition
 - Available Maintenance Options. The Right Fix at the Right Time.
 - Estimate Costs
 - Develop/Optimize Bridge Preservation Plan

Bridge Asset Management



Bridge Asset Management



Michigan
Transportation Asset
Management Council

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SPOTLIGHT
Save the Date /
Spring
Conference

INTERACTIVE MAPS

Create an up-to-date road and bridge
condition map

DASHBOARDS

Condition, operation, and
investment in Michigan's public
road system

REPORTING HUB

Investment Reporting Tool (IRT),
Act 51 Distribution and Reporting
System (ADARS), Non-Trunkline
Federal Aid (NTFA)

TRAINING

Sponsored Training,
support, and education
programs

Bridge Asset Management



Transportation Asset Management Council
MI Transportation Reporting Portal

Michigan.gov

The Official State of Michigan Website

Subscribe to TAMC Updates [Login](#)

Report Comparison

Bridge

Bridge Comparison

Traffic

Safety

Maintenance

Finance

Bridge
Conditions

Bridge Conditions



Bridge
Conditions



Trend
Conditions



Forecasting

Regional Map



Year

Geographic Area

Name

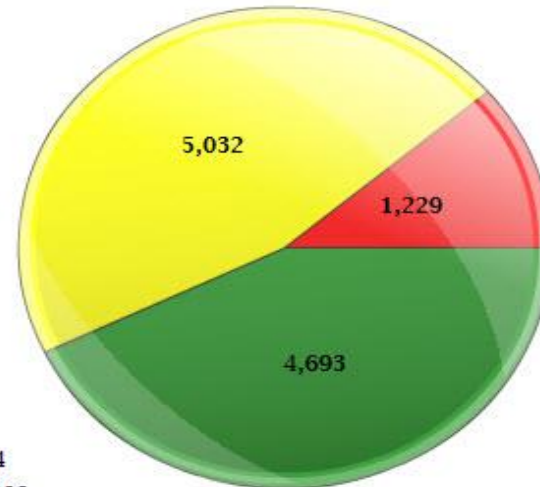
Category

Under Construction



MICHIGAN TRANSPORTATION
ASSET MANAGEMENT COUNCIL

- Bridges Good
- Bridges Fair
- Bridges Poor



Number of Bridges	10,954
Total Bridge Deck Area (in sq. ft)	67,850,092
Structurally Deficient Deck Area (in sq. ft)	5,981,088

Bridge Asset Management



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BRIDGE TRAINING & RESOURCES

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[MATERIALS](#)

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Maintaining bridges in good condition has proven to extend service life and to be more cost effective than allowing deterioration to progress, resulting in the need for more extensive and costly rehabilitation or replacement projects. By developing and implementing a comprehensive bridge preservation plan, a local agency can better identify its needs, prioritize its actions, and allocate available funds appropriately. Developing a successful bridge asset management plans requires quality inspection data, an understanding of bridge costs and actions as well as an understanding of asset management principles.

[Learn more about Bridge Training & Resources](#)

Bridge Asset Management



Bridge Inspection

Quality bridge inspection data is a key component of an asset management plan as well as a requirement of the National Bridge Inspection Standards. The safety inspection program in Michigan is managed within the Bridge Field Services Section of the Operations Field Services Division of MDOT. The program ensures compliance with the National Bridge Inspection Standards (NBIS) through comprehensive performance of inspection timeliness verifications, annual FHWA NBIS Metric evaluations, inspection team leader qualification appraisals, and quality assurance reviews. Bridge Field Services also develops inspection procedures, responds directly to the FHWA Michigan Division Bridge Engineer, and serves as the recognized resource for all inspection related inquiries.

[Read more](#) 

Bridge Management and Scoping

Developing an asset management plan requires identifying appropriate work types for a specific bridge and identifying costs. The bridge management and scoping program is operated by the Bridge Management Unit of MDOT. The program maintains a scoping manual, deck preservation matrices, and cost estimating worksheets. The site also contains studies on the expected service life of structures and information on preservation activities.

[Read More](#) 

Michigan Bridge Conference and Pre-Conference Workshop

This workshop will provide bridge engineers, bridge designers, and bridge owners a deeper understanding of bridge inspection reporting requirements, including routine reporting requirements, timeliness of inspections and reporting, new reporting requirements, and Scour Action Plan-development, use, and documentation. The morning sessions will provide overviews of quality control/quality assurance, inspection reporting requirements, and risk based inspections. The second half of the workshop will include non-destructive evaluation, Michigan-bridge updates, and safety issues. The conference will provide information on a variety of bridge topics including FHWA, MDOT, TAMC and Local Agency Program updates, Bridge Case Studies, current research, SHPO and historic bridges, and working with threatened and endangered species.

[Read more](#) 

Regional Bridge Council Meetings

Financial and Program Update

Bay Region: May 6th @ 10:00am, Genesee CRC

Grand Region: May 9th @ 10:00am, Ottawa CRC

Metro Region: April 27th @ 10:00am, St. Clair CRC

North Region: April 21st @ 10:00am, MDOT Gaylord Office

Southwest Region: May 2nd @ 10:00am, Van Buren CRC

Superior Region: April 22nd @ 8:30am, Marquette CRC

University Region: May 11th @ 9:00am, Ingham CRC

Bridge Unit Staff

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Questions?

