



# MDOT Bureau of Bridges and Structures

2026 Michigan Bridge Week

Beckie Curtis, Chief Bridge Engineer



BOBS  
Reorganization



MDOT  
Conditions



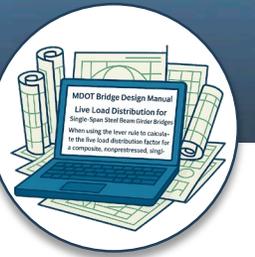
Local Bridge  
Bundle



Bridge  
Inspection



Ancillary  
Structures



Bridge  
Design



Bridge  
Construction



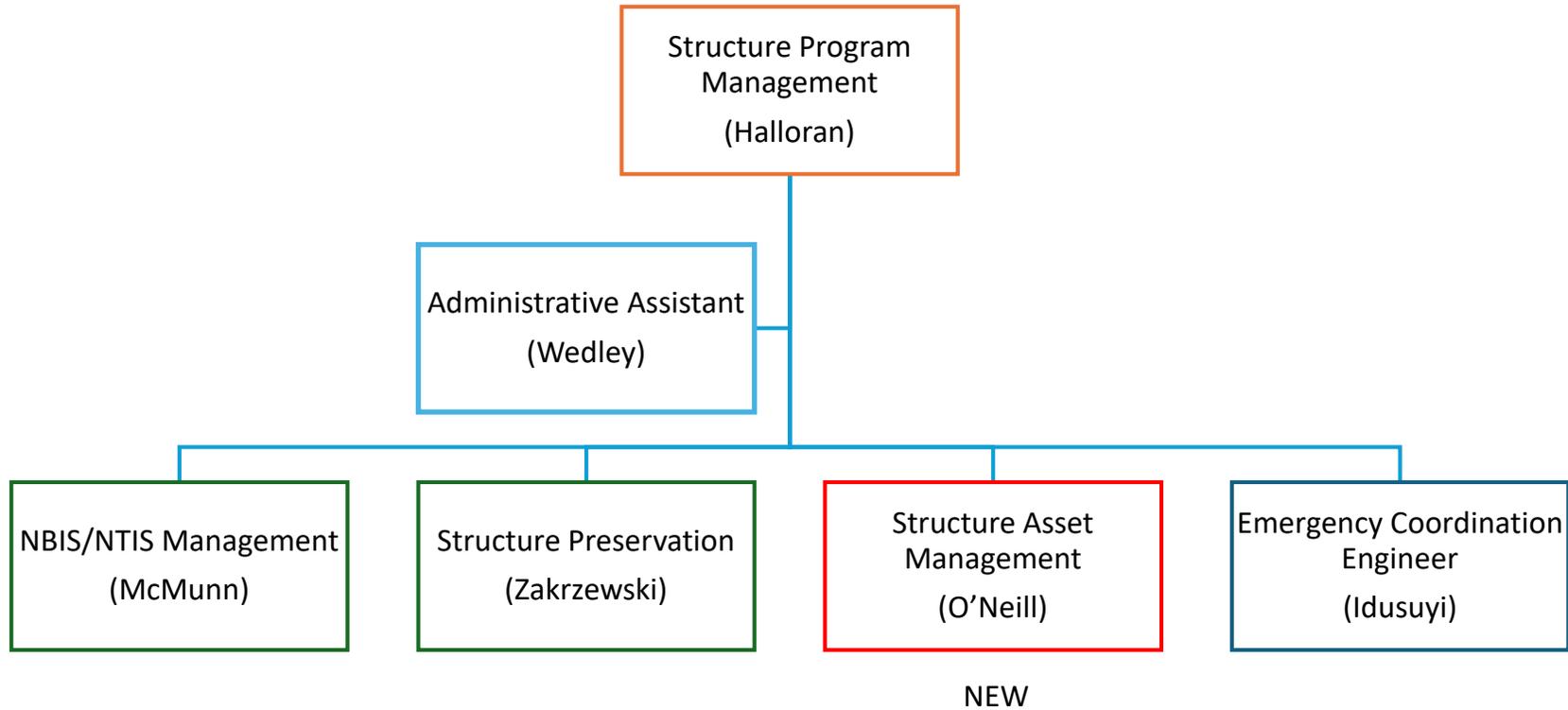
Blue Water  
Bridge



Structures  
Community  
of Learning

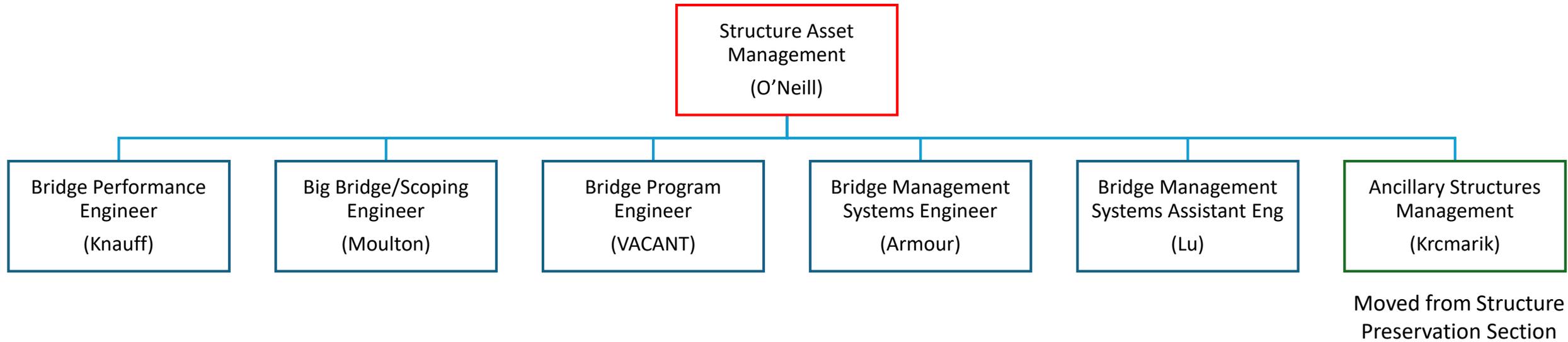


# Structure Program Management - Reorganization



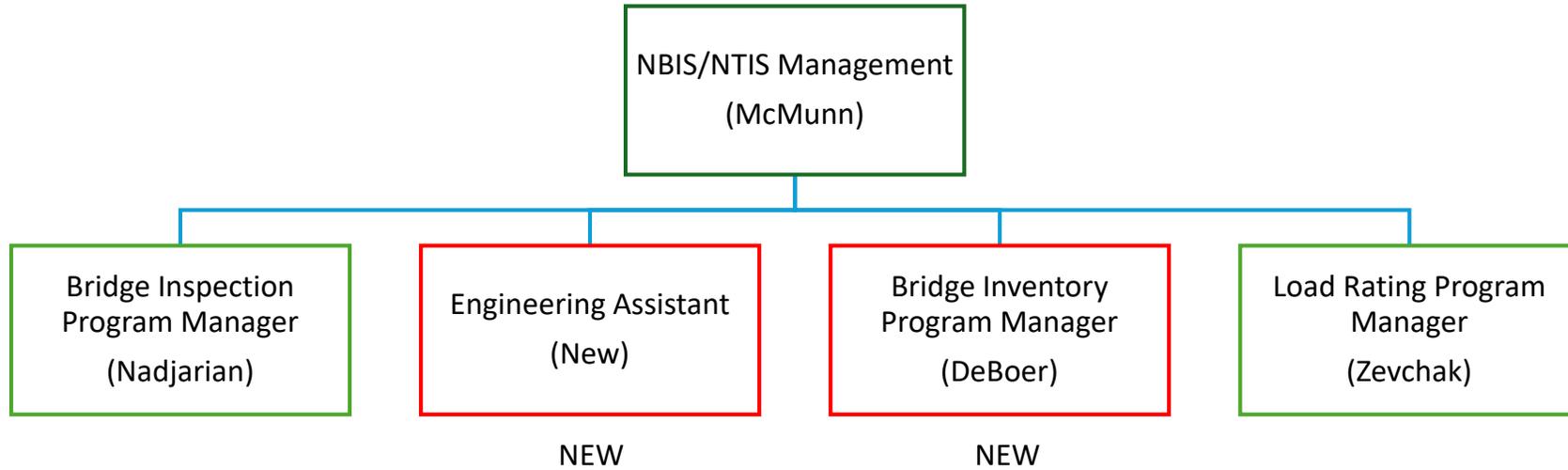


# Reorganization - Structure Asset Management



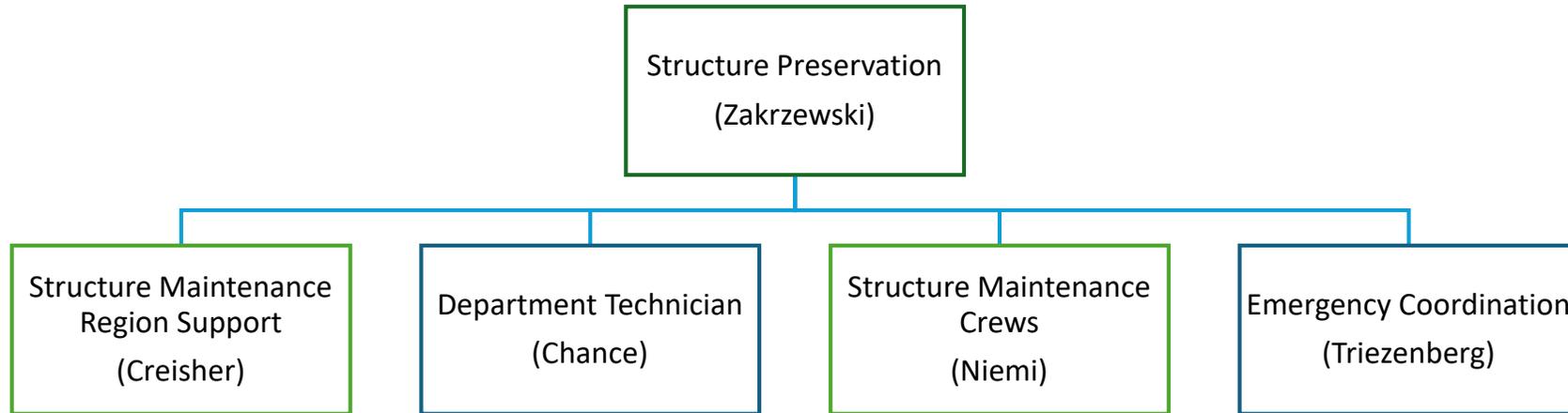


# Reorganization - NBIS/NTIS Management



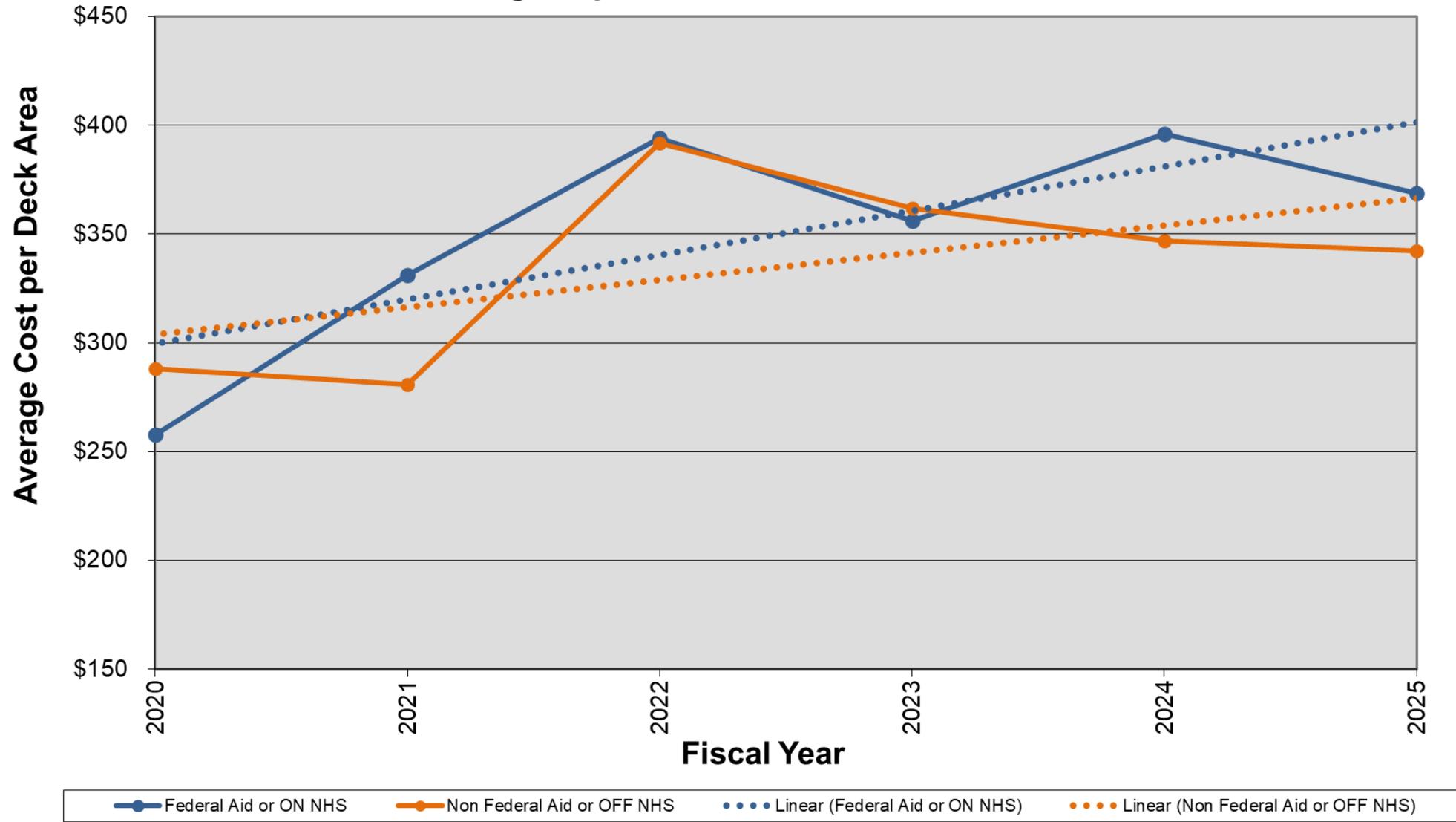


# Reorganization - Structure Preservation





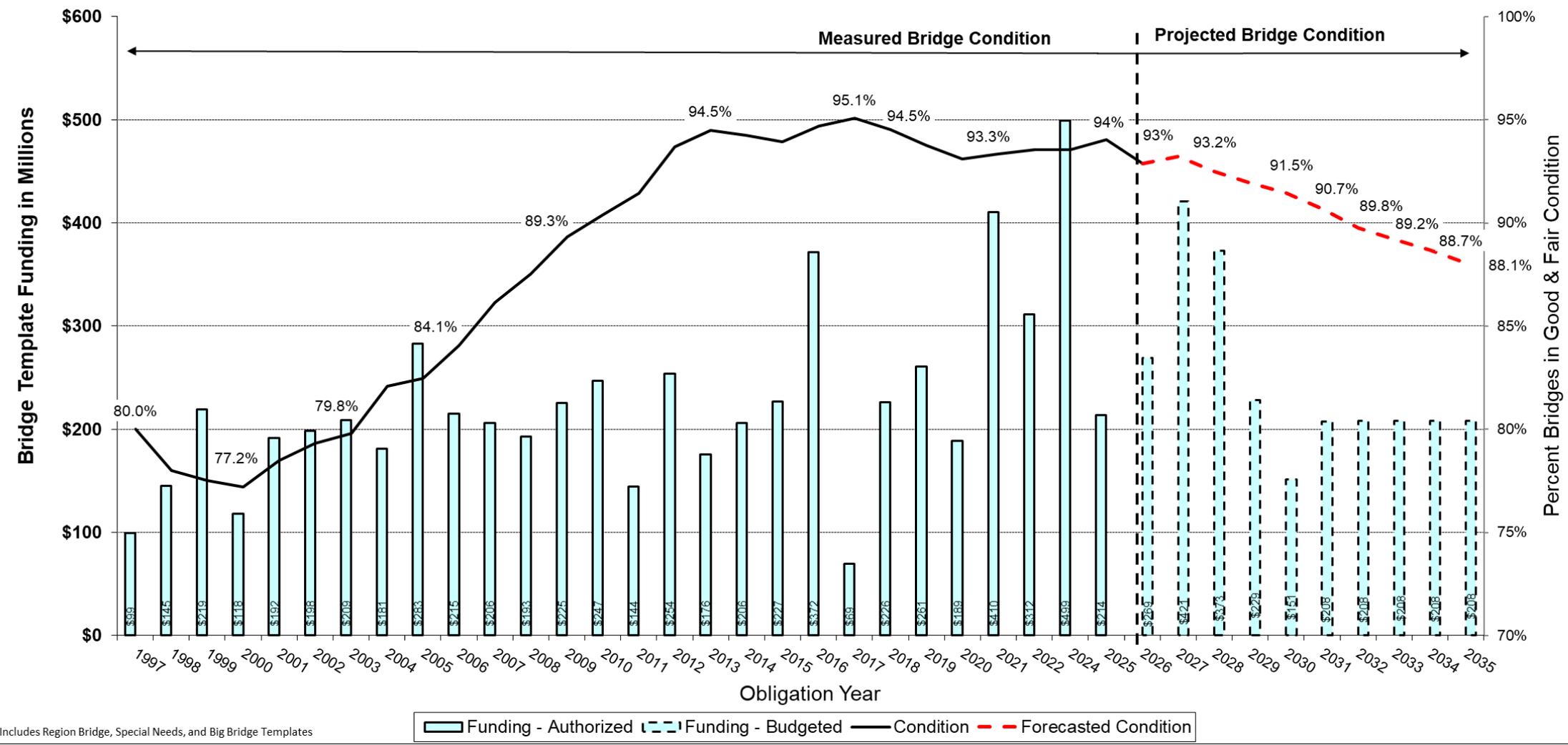
### Bridge Replacement Cost Trends 2020-2025





Updated Date 02/19/2026

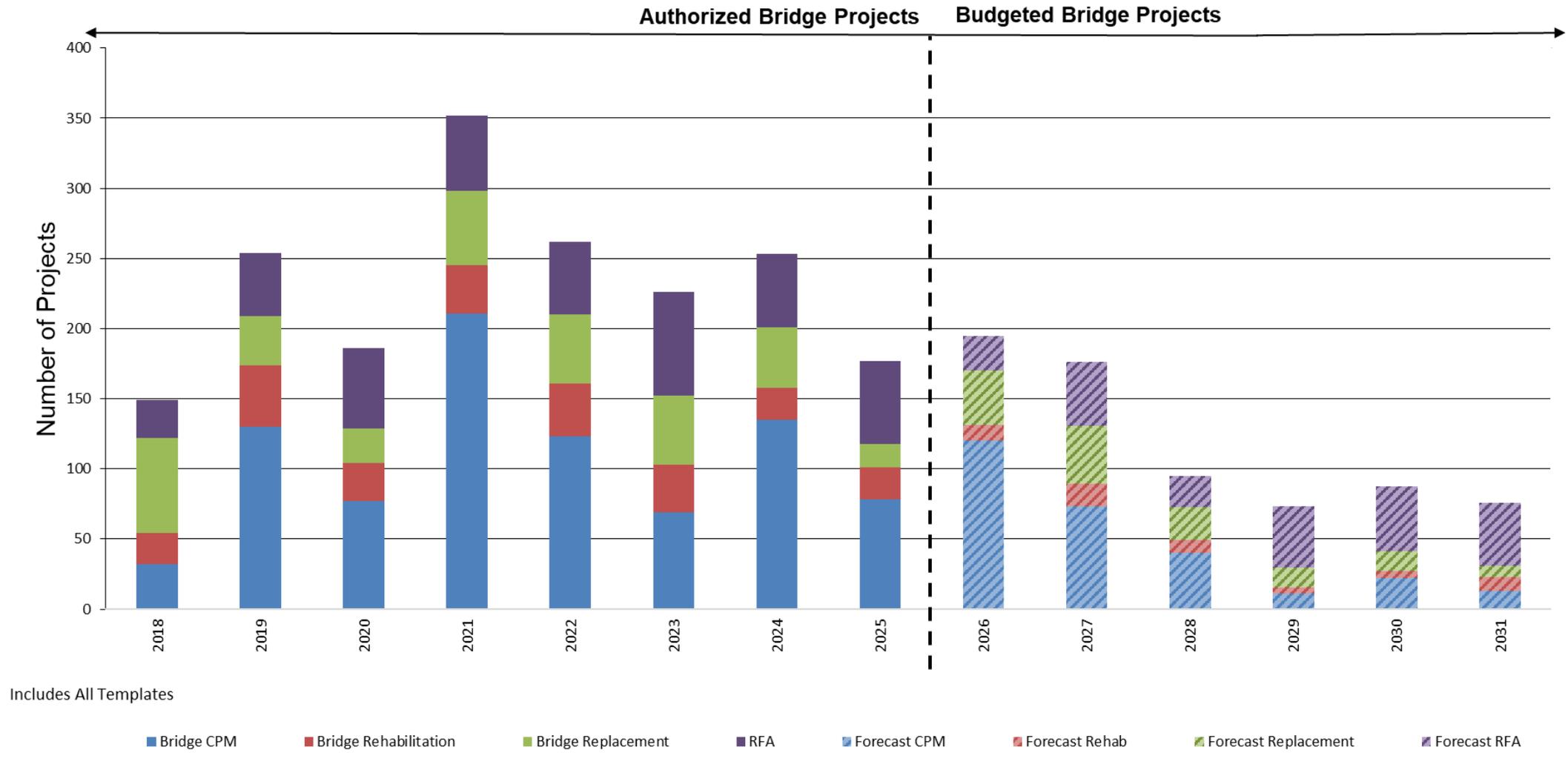
# MDOT NBI Bridge Conditions and Bridge Template Funding Levels





Updated 2/17/2026

# MDOT Bridge Project Categories Per Year

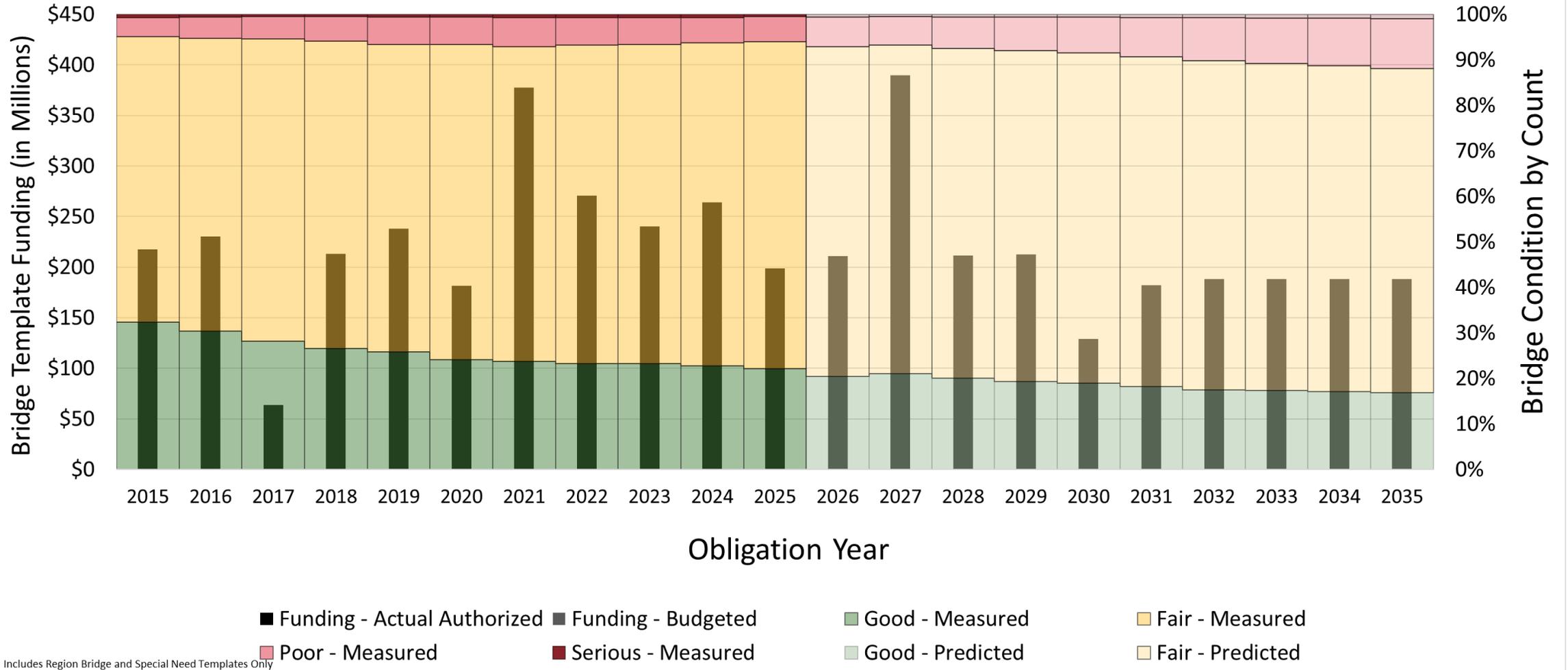


Includes All Templates



Updated Date 2/19/2026

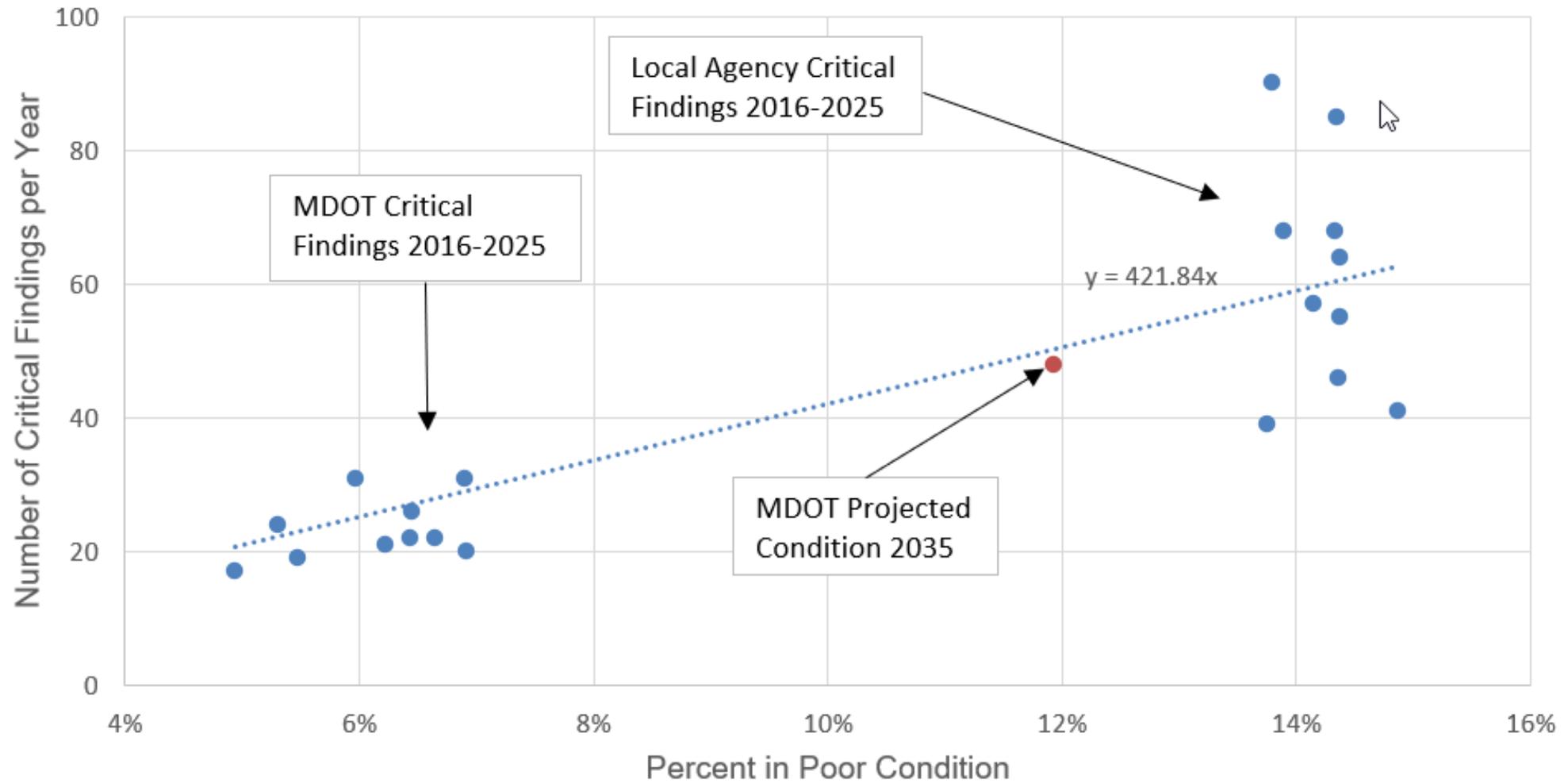
## MDOT NBI Bridge Conditions and Region Bridge Template Authorized Funding Levels



Includes Region Bridge and Special Need Templates Only



# Projecting Critical Findings



Update Date 2/26/2026



## Local Bridge Bundle Program

Strategic partnership between local agency bridge owners and MDOT to focus on addressing “*Closed/Critical/Serious Condition, Load Posted and Restricted Bridges*” on the transportation network to increase safety and continue connectivity for the state and local economies.

**Started in 2020 with a pilot and has since delivered 34 bridges/six bundles at *no* cost to the locals**

- Work with owners to prioritize these unfunded bridges and provide/manage EPE, PE, CON and CEI services through MDOT resources.
- Review, comment and approve environmental, design plans and through to construction.

**Goal:** Manage and deliver services without cost to the locals.



# Local Bridge Bundle Program - Completed Bridges

## Constructed 34 Bridges

Delivered 34 bridges; 24 more bridges planned and funded to construction

- Pilot Bundle (20 bridges) - November 2022
- Removal Bundle (five) - October 2023
- Alabaster Road Bridge (one) - November 2024
- Haze Road Bridge Removal (one) - September 2025
- North/Upper Bundle (five) - November 2025
- Grand/Southwest Bundle (two) - December 2025

**35 additional bridges being developed that could be delivered with additional funding, if identified**



*Jad Road Bridge (Marquette County), North/Upper Bundle*



*32nd Avenue Bridge (Ottawa County), Grand/Southwest Bundle*



# Local Bridge Bundle Program - Under Construction

## Seven Bridges Under Construction

### Miller and Rotunda Bridge Replacement Bundle (Wayne County - 93 percent complete)

- Construction resumes after seasonal shutdown/weather permitting
- Completion: June 2026

### University/Southwest Bridge Bundle (Branch, Jackson, Lenawee, Livingston and Monroe counties - 25 percent complete)

- Five bridge replacements let August 2025
- Clearing, demolition and substructure construction at closed bridges in progress
- Completion: November 2027



*Rotunda Drive Bridge - Beam Lowering*



*Hanover Road Bridge - Abutment Work*



# Local Bridge Bundle Program - Upcoming

## Upcoming Bundles - 17 Bridges

### Bay Bundle

Five bridge replacements (Bay, Huron, Lapeer and Saginaw counties, city of Flint)

- Planning, permitting, and design work underway
- Expected Spring 2026 letting with construction later in the year

### Lower Michigan Bundle

Five bridge replacements (Calhoun, Lenawee and Macomb Counties, city of Coopersville)

- Planning, permitting, and design work underway
- Expected Winter 2026 letting with construction early 2027



*Squaw Creek Road Bridge, Lapeer County*



*Grove Street Bridge, City of Coopersville*



# Local Bridge Bundle Program – Upcoming Grant

## Upcoming Bundles - 17 Bridges

### Urban BIP Grant/Expanded Phase III Bundle: Received USDOT Grant (\$34.2 million awaiting award)

Seven urban bridge replacements (Oakland, Bay, Washtenaw, and Wayne counties; cities of Ferrysburg, Lansing and Lincoln Park)

### Design-Build (DB) package: Expected letting in summer

- Sashabaw Road Bridge
- W. Spring Lake Road Bridge (Superstructure Replacement)
- Fraser Street Bridge
- E. Elm Street Bridge
- Plymouth Road Bridge
- Beck Road Bridge
- Harrison Street Bridge



FOR IMMEDIATE RELEASE  
November 1, 2024

MEDIA CONTACT  
Dan Weingarten  
906-250-4809  
[WeingartenD@Michigan.gov](mailto:WeingartenD@Michigan.gov)

### Federal grant will allow expansion of MDOT local agency bridge bundling program



*Harrison Street Bridge, City of Lincoln Park*

investment program (BIP) grant, supported by Infrastructure Law (BIL), will allow the [Michigan local agency bridge bundling program](#) to fund work on bridges around the state.

announced Thursday, will allow the funding of the innovative program:



# Local Bridge Bundle Program

## Communications

### Program Website

- Construction progress, schedules, photos, press releases, detour routes, letting dates, and contact information
- Archives previous bridge bundle projects

### Spring and Fall Local Agency Updates

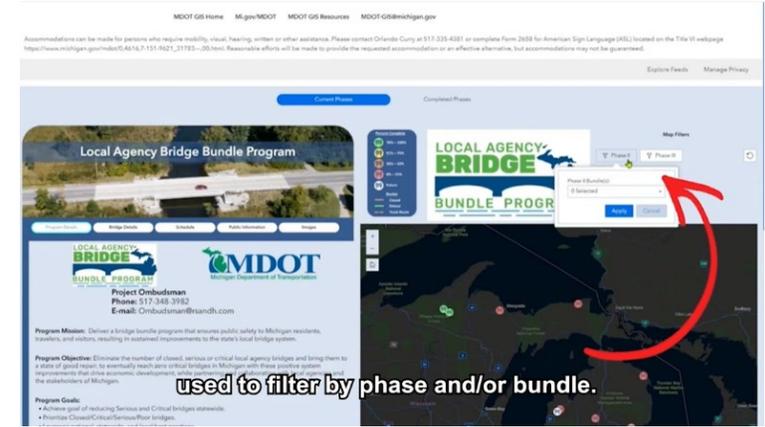
### Construction Ombudsman: 24-hour phone line and dedicated email

ombudsman@rsandh.com

517-348-3982

### Summer and Winter Newsletter Updates

- Available via email and on website
- Winter edition expected in early 2026
- To subscribe, email MIBridgeBundling@HNTB.com



[www.Michigan.gov/BridgeBundling](http://www.Michigan.gov/BridgeBundling)



#### 2024 YEAR IN REVIEW

The Bridge Bundle Program had a very successful year in 2024! Please see below for highlights on what was accomplished.

The Alabaster Road bridge in Iosco County was replaced and opened to traffic on November 13, 2024. This bridge project utilized federal Emergency Relief (ER) funds received due to a wash out of the west abutment during a storm in May 2020 along with program funding for implementation. MDT partnered with the County and was able to combine the ER funding with the bundle funding to deliver this bridge replacement to Iosco County.



Alabaster Road bridge before and after construction. Open to traffic on November 13, 2024.

The North/Upper Bridge Bundle Project started construction via design-build delivery and ended the year with three (3) of the five (5) bridge replacements opened to traffic - CR 501 in Luce County (September 24, 2024), Don Road in Missaukee County (November 15, 2024) and Reynolds Road in Benzie County (December 17, 2024).



# Local Bridge Inspection Program

## MDOT Team

Beckie Curtis - Chief Bridge Engineer

Mike Halloran - Structure Program Division Administrator

Creightyn McMunn - Section Manager over the NBIS

Allie Nadjarian - Bridge Inspection Program Manager

- **Dante Urena - Local Bridge Inspection Contract Manager**

Mike DeBoer - Bridge Inventory Program Manager

- **Jamie Hunt - Local Bridge Load Rating Contract Manager**



# Local Bridge Inspection Program

## Why

### 2022 NBIS Final Rule

- Several Immediate Changes
  - Documenting and reporting critical findings
  - Inspector qualifications
  - Risk-based inspection intervals
  - Collection of element level data on NHS bridges
- Phased-In Changes - 2026
  - Specifications for the National Bridge Inventory (SNBI)
    - Dozens of new inventory items
    - New field for **Routine Permit Loads**
- Non-compliance could result in losing federal obligation authority





## Local Bridge Inspection Program

# Project Scope - Starting Jan. 1, 2026

Five-year timeframe

### National Bridge Inspection Specifications (NBIS)

- Bridge Inspection
- Inventory
- Load Rating

### What's Not Included

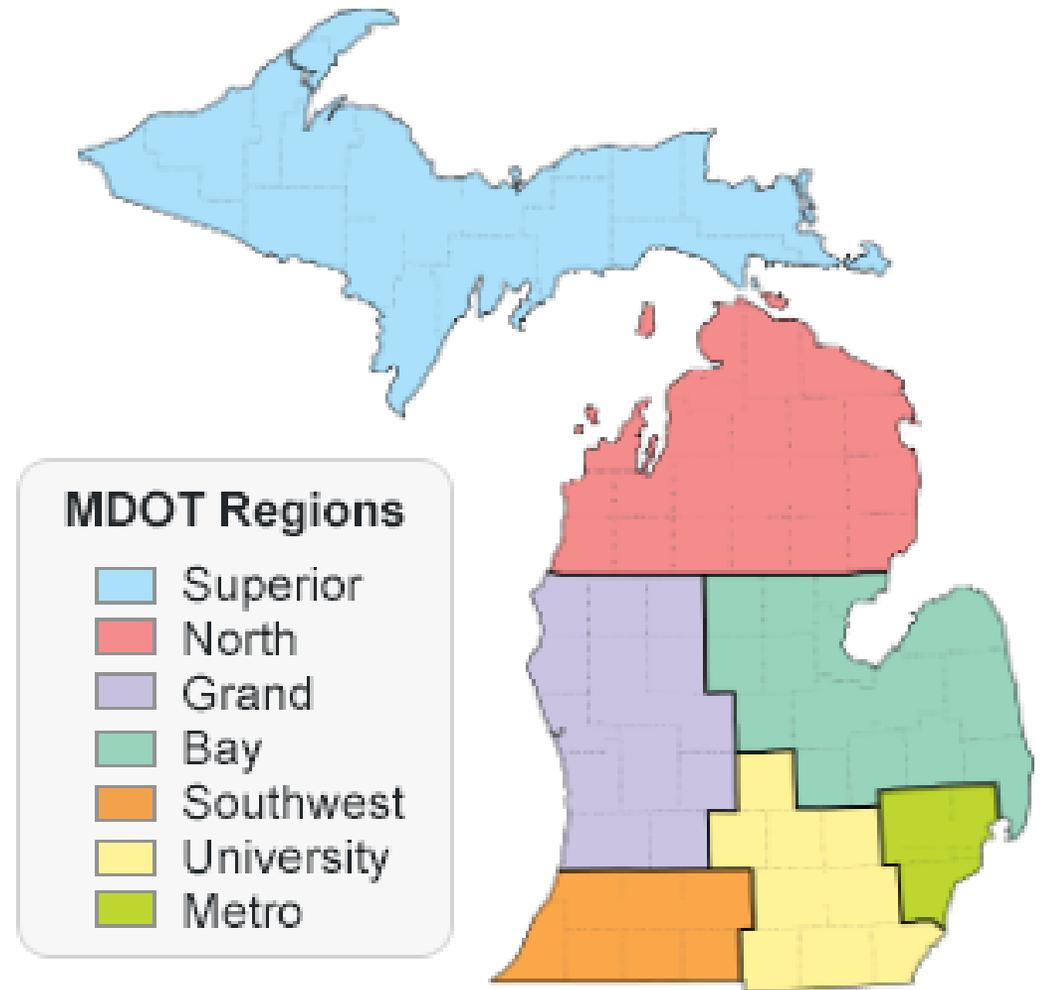
- Non-NBI Bridges (ped, RR,  $\leq 20$  feet)
- Bridge Maintenance
- Bridge Closures
- Bridge Load Posting
- Repairs (and Funding)



# Local Bridge Inspection Program

## Multiple Contracts

- Seven Inspection Contracts
  - One per region
- Five Load Rating Contracts
  - Bay Region
  - Metro and North regions
  - Southwest and Superior regions
  - Grand Region
  - University Region





# Local Bridge Inspection Program

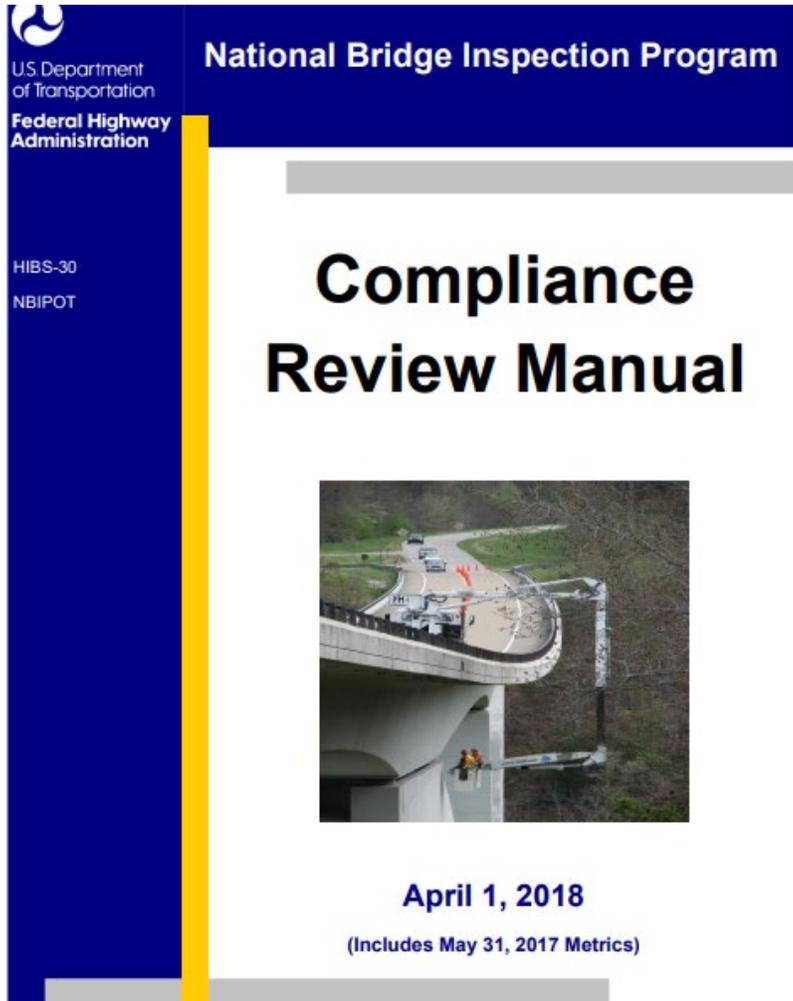


## Schedule

- Load rating - Run in parallel with inspections and will start shortly
- Inspections have started
- Three-year consultant contracts with planned extensions



# PY26 National Bridge Inspection Program (NBIP) Findings



- Metric 6 - Inspection Interval - Routine
- Metric 12 - Inspection Procedures - Quality Inspections
- Metric 15 - Inspection Procedures - Bridge Files
- Metric 20 - Inspection Procedures - QC and QA
- Metric 21 - Inspection Procedures - Critical Findings
- Metric N3 - Inspection Procedures - In-Depth and Special



# PY26 NBIP Findings

## Critical Findings

- Some traffic control devices are not being maintained (moved, removed, etc.)

## Quality Control/ Quality Assurance

- Some agency QC/QA procedures are not fully documented/performed

## Timeliness

- Some initial inspections not performed within three months of opening to traffic





# PY26 NBIP Findings - Inspection Quality

## Inspection Quality

- Report narrative did not always justify the component condition codes
- Notable deficiencies were not always identified and/or documented in the inspection report
- Inspection practices did not always follow the MBE and state inspection procedures





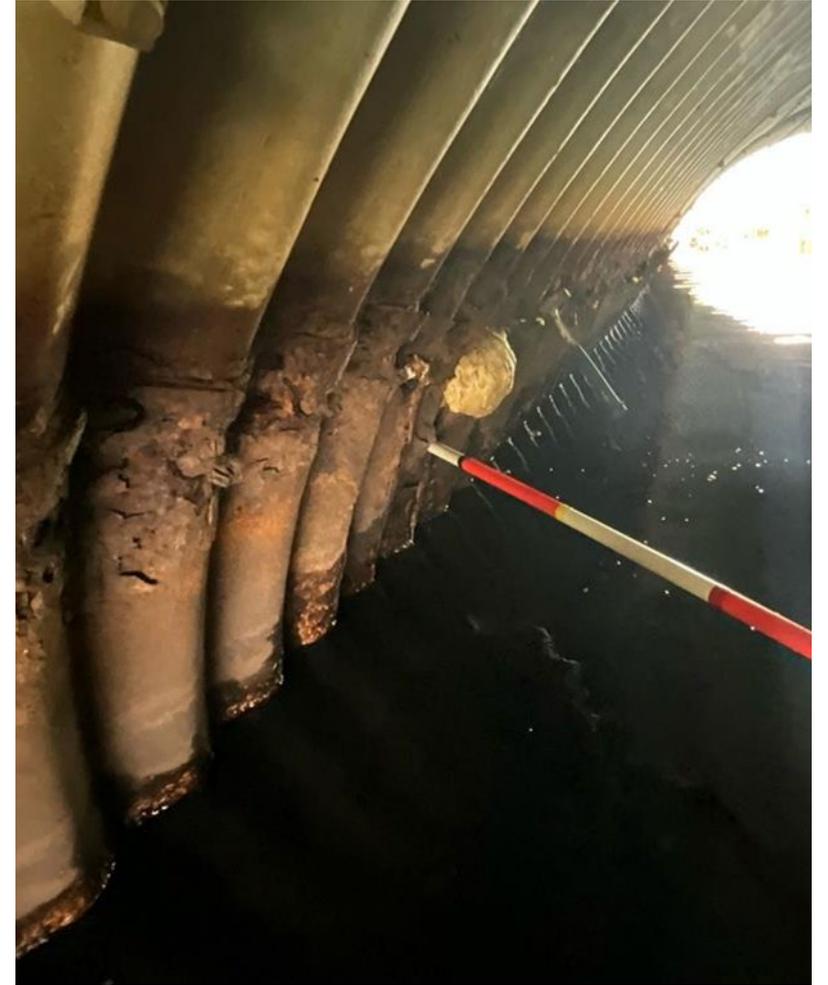
# PY26 NBIP Findings - Files and In-Depth Inspections

## Bridge Files

- Report does not always provide evidence that NSTM members received arms length inspection
- Completed NSTM checklist was not always available

## In-Depth Inspections

- Not always performed in accordance with the condition-based intervals recommended in the MiSIM
- Approximate location, length and estimated extent of section loss not always documented





# Ancillary Structures Program

## OUR MISSION

The Ancillary Structures Program is committed to performing comprehensive transportation asset management of ancillary structures. The program will provide asset condition data regarding inventory, inspection, and maintenance priorities to maintain safe and efficient public roadway operations in the state of Michigan.

Overhead  
Sign  
Structures  
and DMS

Light Poles  
and High  
Mast Light  
Towers

ITS Structures

Traffic Signal  
Poles and  
Mast Arms

Noise and  
Retaining  
Walls

Small  
Culverts  
<10 feet





# Ancillary Structures Five Years In Review



- More than **46,000** assets managed by the program
- GIS-based inventory platform developed for all 16 asset types
- Performed more than **43,000** asset inspections;  
18 field inspectors employed across four firms
- Addressed **515** RFAs and **1,451** Work Recs
- Administered more than **600** hours of inspection training
- 45** design standards and special details updated to LRFD
- More than **30** assets scoped and **20** assets designed



# Ancillary Structures Training

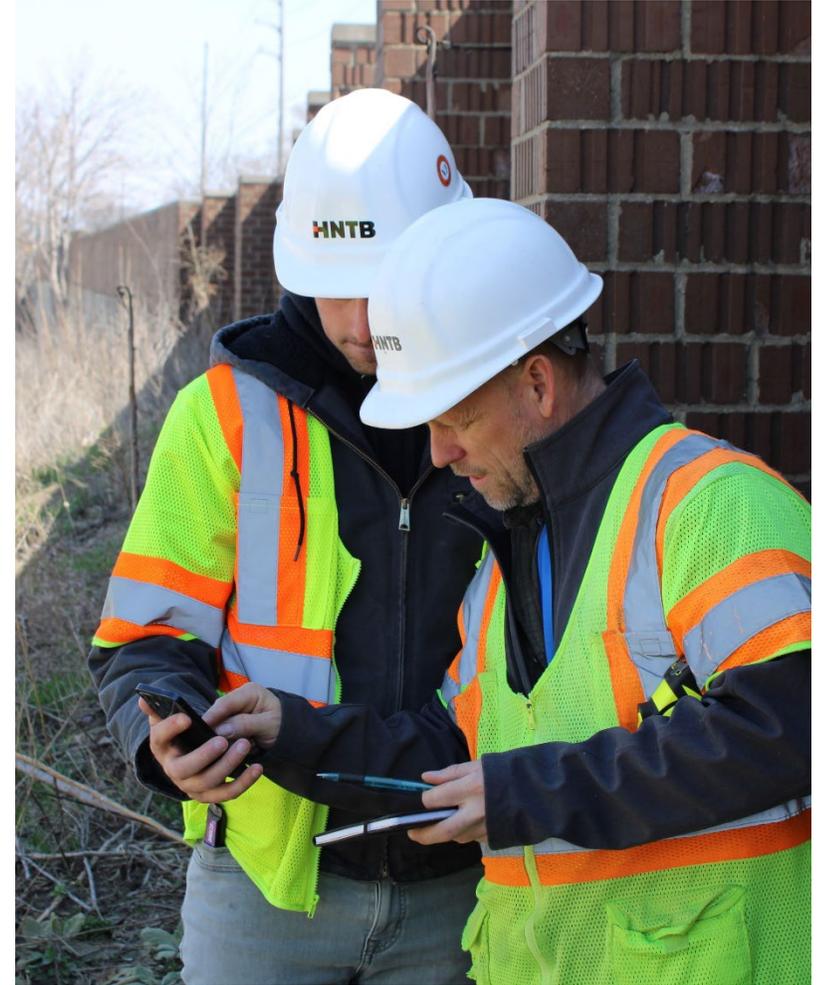
## MiASIM Inspection Trainings

- On-demand virtual training modules 1-9
- 65 individuals completed the introductory module

## Signal Designer Training Workshop

- Collaboration with the WMU Civil Engineering Department

## Lunch and Learn (Culvert Lining Rehab)





# Ancillary Structures Training

## MiASDG

- Six design guide chapters for the different asset classes

## Updated Standards and Details

- Traffic signal, ITS, sign support and light standards

## New Standards and Details

- Re-use of bridge-mounted signs
- Tower lighting unit foundation

## Scoping & Design Tools

- Strain pole scoping tool
- Pole buckling and dent calculator
- Mast arm designer worksheet



# Bridge Design Quality Assurance and Quality Control



To ensure bridges are designed correctly, with no errors once the design calculations, drawings and specifications are finalized, MDOT requires QA/QC procedures in accordance with section 2.05.01 of the Bridge Design Manual.



# Bridge Design Quality Assurance and Quality Control - Plan Sheets

## C. QC Procedures.

1. A supervisor or team leader is responsible for determining the necessary technical knowledge and experience of the Designer and Checker for that specific design. Designers and Checkers are assigned to bridge projects by matching experience and performance to project complexity.
2. The Checker is responsible to the supervisor for quality control of the design, which includes checking the design calculations, plans, and specifications to assure accuracy and constructability. One hundred percent of all design calculations, quantity calculations, plans, and specifications are checked as part of the QC process.
3. All bridge plan sheets include the names or initials of the person who drafted the details along with the Checker of the sheet and the date last revisions were made to that plan sheet. See [Guidelines For Bridge Plan Preparation](#) (MDOT Sample Plans Bridge) of Development Guide ([Design Submittal Requirements Chapter 7](#)) for guidelines related to drafting and plan preparation.

DRAWN BY: CONSULTANT	DATE: 05/08/23
CHK'D BY: CONSULTANT	DESIGN UNIT: OCCHIUTTO
FILE: _DECK_008.dgn	TSC: LANSING

DOES NOT MEET  
THE  
REQUIREMENT

	DATE: 07/17/24
	DESIGN UNIT: DONOSO
FILE: _site_001.dgn	TSC: OAKLAND

DOES NOT MEET  
THE  
REQUIREMENT

DRAWN BY: A. GROSS	DATE: 12/18/25
CHK'D BY: S. ZIES    CORR BY: AEG	DESIGN UNIT: KOPPER
FILE: s09_54014_title.dgn	TSC: CADILLAC

DESIRED  
INFORMATION



# Bridge Design Quality Assurance and Quality Control

## Calculations

All design calculations include name or initials of the designer and checker along with the date designed and checked.

All calculations are checked versus the Final Package Submittal for the project.

At the completion of the project, provide a set of design calculations for all elements of the bid package for the design file.



# Bridge Design Quality Assurance and Quality Control

## Implementing and documenting procedures

Each prime and sub consultant follow their own documented QA/QC procedures on file with their prequal.

The prime consultant is responsible for the project level QA of sub consultant deliverables to ensure uniformity within the project.

At the completion of the project the consultant furnishes the completed design package, including documentation of completed QA/QC and certifying letter.



# Bridge Design Quality Assurance and Quality Control

## Corrective Actions

### G. Corrective Actions.

QA/QC procedures are implemented on all projects. Through the PLQA, the overall program is continually monitored for effectiveness. When level of QC or QA is found to be insufficient, corrective actions are required.

1. The following actions are taken if QA or PLQA reviews indicate that a specific design unit, consultant, or consultant coordinator is not following the process.

a. The representative sample of projects for that unit or coordinator is increased until the Bridge Design Supervising Engineer is satisfied that the issue is corrected.

b. Concerns with consultant's performance are noted on consultant's review at the completion of the project.

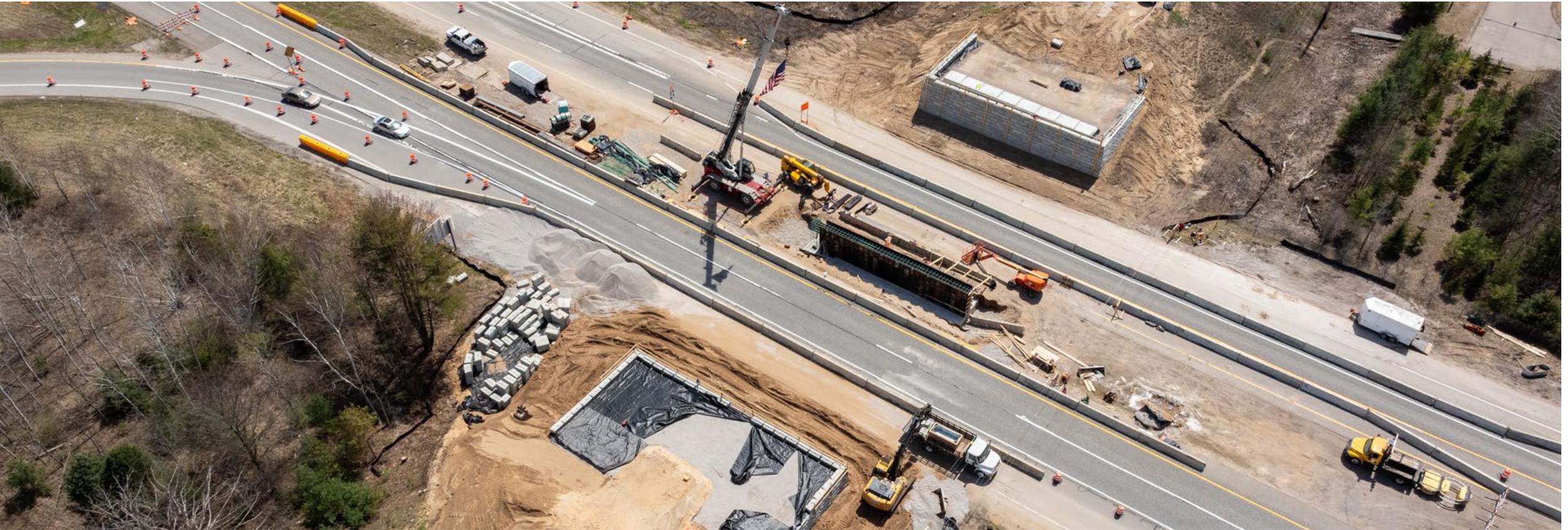
c. Concerns with MDOT staff member's performance are reflected in the staff member's annual performance review or interim performance review, depending on severity.

2. If, during the review of project submittals, it is evident that the consultant team has not followed QA/QC practices payment for hours associated with QA of a project as negotiated prior to the start of a project can be withheld.



## Bridge Construction - Last Season

Bridge construction continued throughout winter 2024-25 with work on southbound I-475 at Lafayette Street, then spring 2025 saw a flurry of work as the other 186 bridges got started, topping out at \$200 million.





## Bridge Construction - Looking Ahead

In FY 2026, there will be \$360 million of bridge work let and 178 bridges will be worked on; this includes bridge projects in all templates.





# Blue Water Bridge Plaza Project

## Project Purpose - Overall



Improve operational facilities.



Facilitate better traffic flow through the plaza.



Functional and adequate office space for all tenants (CBP, FDA, U.S. Department of Agriculture (USDA), Duty Free, Michigan State Police (MSP) and MDOT).



Maintain uninterrupted operation (24/7) during construction.



Provide an appropriate welcome and first impression to those arriving in the United States via the Blue Water Bridge.



Coordinate with stakeholders: City of Port Huron, St. Clair County, local townships, MDOT, Federal Highway Administration (FHWA) and Government of Canada agencies.



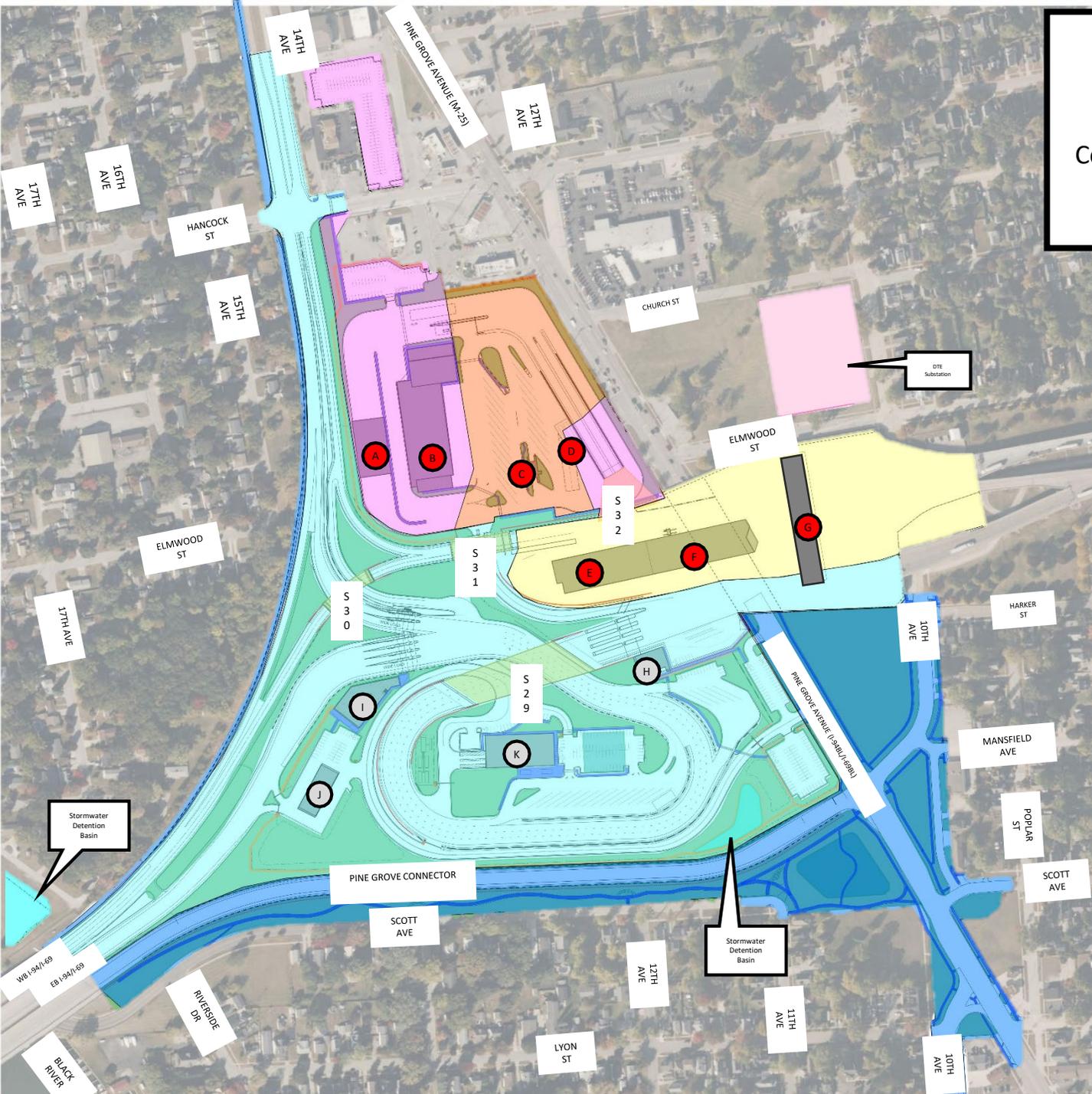
## Project Costs

Component One: \$40 million low-bid procurement (2025)

Component Two: \$300 million design-build with best value procurement (2026-2030)

Component Three: TBD

Component Four: TBD



**Construction Components**

Component 1		Under Construction
Component 2		Funded Work
Components 2 and 3		Funded Work
Component 3		Contingent on confirmed funding
Component 4		Contingent on confirmed funding

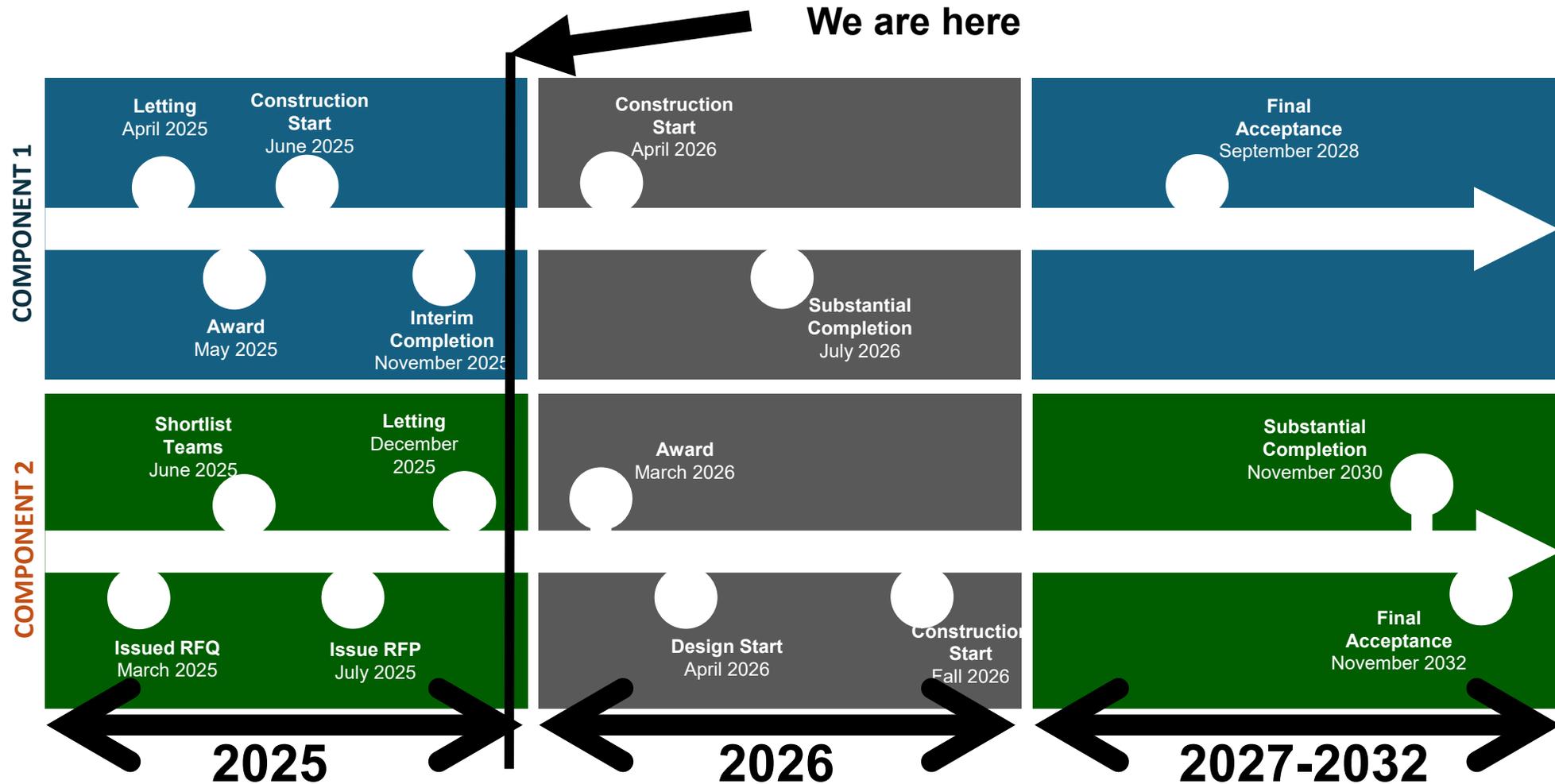
**Map Key:**

	Infrastructure Contingent on Confirmed Funding
	Funded Infrastructure
	CBP NII Building
	CBP Commercial Secondary Building
	HAZMAT Canopy
	USDA Canopy
	CBP Main Building
	CBP Non-Commercial Secondary Inspection Canopy
	CBP Primary Inspection Lanes
	CBP Outbound Building
	MDOT Administration Building
	MDOT Equipment Storage Building
	Duty Free Building
	Security Fence/Walls
	Sidewalks
	Bridges
	Buildings/Facilities
	Stormwater Basins



# Blue Water Bridge Plaza Project

## Project Schedule





# Combined Bridge Inspections

### The Challenge:

- **Multiple Entities:** Overlapping requirements for BWB MDOT, FBCL and International Bridge.
- **Regulatory Complexity:** Differing international inspection standards and varying contract requirements.
- **Specialized Scope:** Divergent needs for fracture critical and underwater inspections.

### The 2025 Strategy

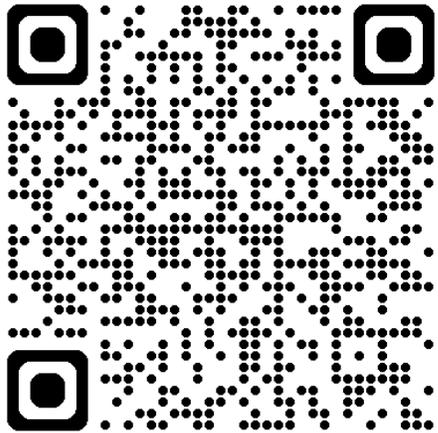
- **Consolidated Award:** One singular contract governing all three entities.
- **Streamlined Administration:** Reduced labor overhead via a scaled-up business model.
- **Cost Efficiency:** Leveraged competitive pricing through unified task orders.



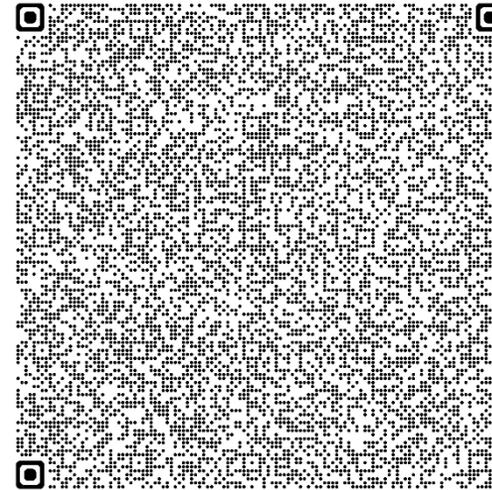
# Structures Community of Learning

**Mission Statement:** The Structures Community of Learning (SCOL) enhances the technical skills and knowledge of Michigan's highway structures community and fosters a network of passionate professionals.

Email ListServ



SharePoint



Email: [MDOT-Structures-Community@Michigan.gov](mailto:MDOT-Structures-Community@Michigan.gov)



## Past Webinars

-  *Improving the Reliability of MDOT's Movable Bridges* - June 24, 2025
-  BIM/Model as a Legal Document - July 29, 2025
-  *COBS/AASHTO 10th Edition* (Book Club) - Aug. 26, 2025
-  *Geosynthetic Reinforced Soil Abutments and Integrated Bridge Systems* - Sept. 30, 2025
-  *Overview of Concrete Patching Materials by Maintenance Forces* - Dec. 2, 2025
-  *Second Avenue Bridge Structural Health Monitoring* - Jan. 27, 2026
-  *MDOT Bridge Emerging Technology Program* - Feb. 24, 2026



# Upcoming Events

-  *Design Details Workshop at Bridge Week - March 18, 2026*
-  *MDOT Construction Manual (Book Club) - April 28, 2026*
-  *Heat Straightening - May 19, 2025*

Email: [MDOT-structures-community@Michigan.gov](mailto:MDOT-structures-community@Michigan.gov)

# Questions?

