

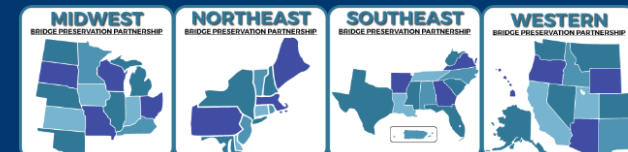
Local Program Asset Management Assistance

Philip Meinel, PE
Structures Asset Management Engineer

Laura Shadewald, PE
Structures Development Chief



BUREAU OF
STRUCTURES

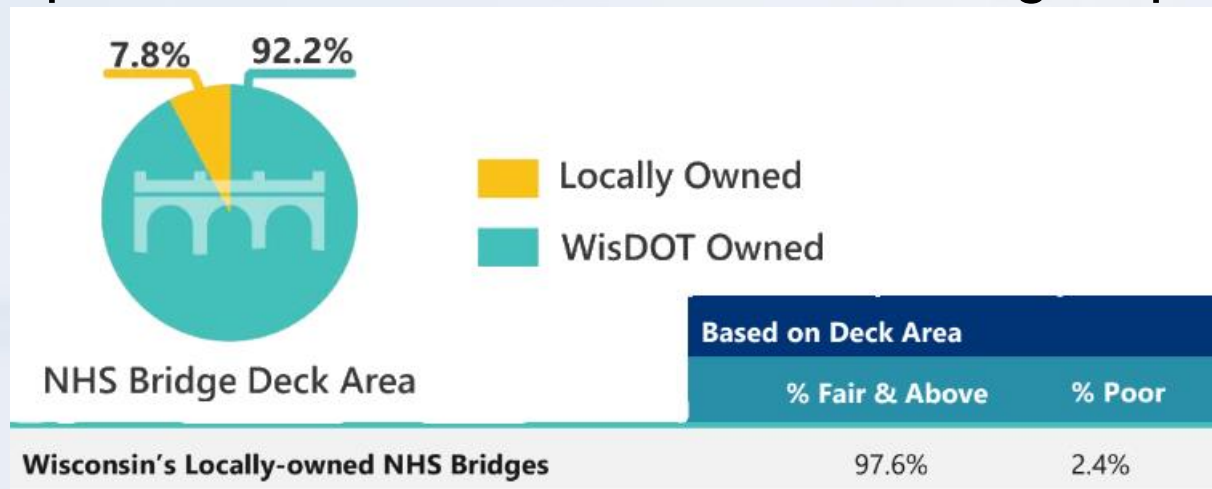


Presentation Overview

- Wisconsin stats
 - Local and State
- Structures asset management development
 - Policy and Bridge Management System (BMS)
- Local bridge assistance program
 - Background and enhancements
- Implementation status
 - Legislation

Wisconsin Stats

- 9,128 Local-owned bridges
 - Average GCR = 6.6
 - Average minimum GCR = 6.3
 - 400 load postings
 - 59% single span
- 5,397 State-owned bridges
 - Average GCR = 6.75
 - Average minimum GCR = 6.4
 - 14 load postings
 - 24% single span



<https://www.wisdotplans.gov/plan/tamp>

Wisconsin Stats

2023-25 TRANSPORTATION: ALL FUNDS

ALL FUNDS BUDGETED: \$8.35 BILLION

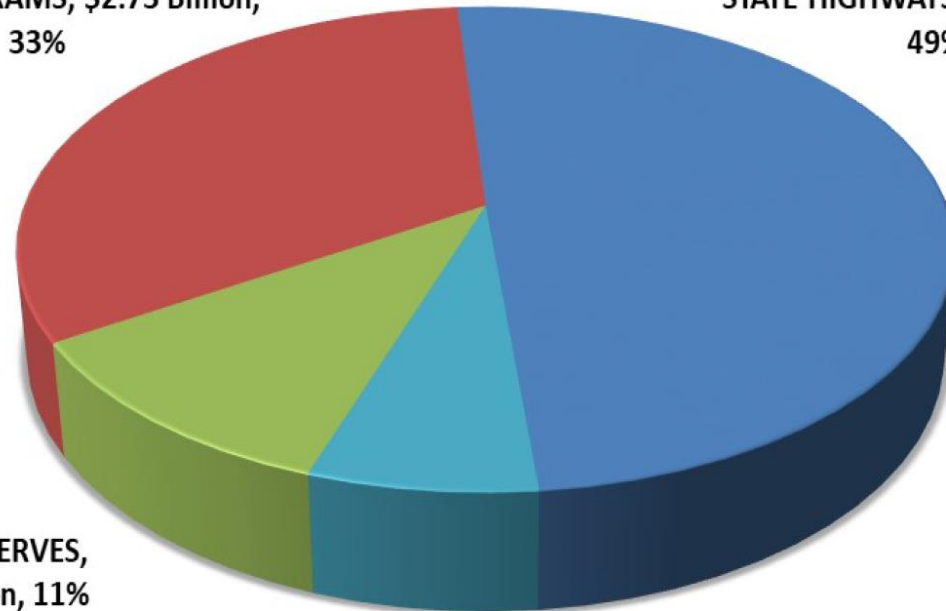
2023 ACT 19

LOCAL PROGRAMS, \$2.73 Billion,
33%

STATE HIGHWAYS, \$4.15 Billion,
49%

DEBT
SERVICE/RESERVES,
\$912.8 Million, 11%

DOT STATE OPERATIONS, \$559.8 Million,
7%



Wisconsin Stats



Wisconsin Department of Transportation MAPSS Performance Improvement Program

FAQ

ARCHIVE

Mobility ▾

Accountability ▾

Preservation ▾

Safety ▾

Service ▾

Performance Measure

Goal Met

Trend

About the Measure

Local Bridge Condition

Annually: Calendar Year 2024
Last Reported 4/2024



Wisconsin's bridges are critical infrastructure assets of the transportation network. Inspecting and evaluating bridges is a key component of meeting this objective.

Goal: Our goal is to have 90% of locally owned or maintained bridges rated in fair condition or better.

State Bridge Condition

Annually: Calendar Year 2023
Last Reported 7/2024



Wisconsin bridges are critical to the highway transportation network. Inspecting and evaluating bridges in a timely, comprehensive fashion is key to keeping bridges safe.

Goal: 95% of Wisconsin's state-owned or maintained bridges rated fair or above.

<https://mapss.wisconsin.gov/Public/Category/3>



NATIONAL BRIDGE PRESERVATION CONFERENCE 2024
Innovation for Infrastructure Resiliency

Structures Asset Management Development

- MAP-21 and FAST Act
- 2016 WI-FHWA Preventative Maintenance Agreement updated
- 2017 Bridge Management Peer Exchange
- 2018 Bridge Preservation Guide
- 2020 WI Bridge Manual updated
 - Ch. 40 Bridge Rehabilitation
 - Ch. 41 Structures Asset Management (SAM)
 - Ch. 42 Bridge Preservation
 - Ch. 43 SAM: Maintenance Work
- 2023 WI TAMP updated



Structures Asset Management Development

- Automated Bridge Management System (BMS)
 - Focused on data-driven decisions
- Database
 - 2000's Highway Structures Information system (HSI)
 - Inventory and inspection data
 - More info at 9am Thursday presentation "Navigating the Transition" SNBI updates
- Optimizer
 - 2016 Wisconsin Structures Asset Management System (WiSAMS)
 - Guided by network policies to meet performance measures
 - Projected deterioration and recommended work in optimal year
- Planning and Programming
 - 2018 Structures Certification Tool (SCT)
 - All bridge work approved by central office

Structures Asset Management Development

- 2014 AASHTO elements statewide
 - All inspections in our database are the same
 - Improved QA program
 - Valuable information for project scoping
- 2016 WiSAMS optimization statewide
 - Limited ability for local owners to utilize output
 - Goal: All structures have equal opportunity for data-driven decision making

Local Bridge Assistance Program

- Eligibility determined by Structural Deficiency and Function Obsolescence (1992 reference)
 - Structure must meet one of these definitions
- Scope of work determined by Sufficiency Rating
 - If < 80, eligible for rehabilitation
 - If < 50, eligible for full replacement
- Typical funding split 80/20 Fed/Local
 - County programs have additional 50/50 County/Local split on remaining 20%

Local Bridge Assistance Program

- BIL funding FY22-FY26
 - Bridge Formula Program (BFP) \$45M/year
 - WI decided to give all of this to Local Program

State	Bridge Formula Program		
	Bridge (Main)	Off-System Bridges	Total
Wisconsin	38,250,000	6,750,000	45,000,000

Minimum

Post-Apportionment Set-Asides

- Sets aside 15% of each State's BFP apportionment for use on "off-system" bridges (highway bridges located on public roads, other than bridges located on Federal-aid highways). [sixth proviso and thirteenth proviso]

Federal Share

- As a general rule, in accordance with 23 U.S.C. 120. (See the "Federal Share" fact sheet for additional detail.) [fourteenth proviso]
- Federal share of 100% for BFP funds—
 - set aside for Tribal transportation facility bridges (see above); [fifth proviso] or
 - used on an off-system bridge that is owned by a local agency or federally-recognized Tribe. [fifteenth proviso]

**Additional
incentive**

Eligible Activities

- BFP funds may be used for highway bridge replacement, rehabilitation, preservation, protection, or construction projects on public roads. [twelfth proviso]

Local Bridge Assistance Program

- Issues with previous application process
 - Reference to outdated terms of Sufficiency Rating and Deficiency
 - Discourages rehabilitation
 - Doesn't capture all needed replacements
 - Required to “correct all deficiencies”
 - Can imply geometric or hydraulic deficiencies, which leads to full replacement
 - Requirement for engineering study
 - Can be burdensome for local owners

Local Bridge Assistance Program

- Short-term solution
 - “Correct all deficiencies” refers to structural issues, not all potential issues
 - Avoid increasing scope to full replacement if not needed
 - WisDOT to supply template engineering reports
 - Easy for local owners to submit with application
 - WisDOT to expand replacement eligibility for bridges that are only rehab-eligible, but no cost-effective rehabilitation exists
 - Template report for full replacement
 - WisDOT to enhance the “Eligible Bridge List”
 - Include WiSAMS optimal work recommendations which qualify for template reports

Local Bridge Assistance Program

Local Bridge Improvement Assistance

Assistance programs

[Bipartisan Infrastructure Law funding](#)

[Road and bridge](#)

[Transit](#)

[Other aid](#)

New [2024-2029 Program Cycle Awards](#)

- [2024 to 2029 Local Bridge Approved Projects](#)

[2024-2029 Program Cycle Documents](#) (Application deadline was October 27, 2023.)

- [Instructions](#)
- [Application](#)
- [Guidelines](#)

Bridge Guidance

- [Bridge Approach Guidance](#)
- [Eligible Bridge List](#)
- [Bureau of Structures Cost Estimate Tool](#)

The Template Reports linked below provide applicants with the tools to prepare Bridge Rehabilitation Reports without consultant assistance. More complex projects may require consultants.

- [Template Reports](#)
 - [Rehabilitation Report for Bridge Local Program Funding – Replace Structure](#)
 - [Rehabilitation Report for Bridge Local Program Funding – Concrete Overlay](#)
 - [Rehabilitation Report for Bridge Local Program Funding – Paint](#)
 - [Rehabilitation Report for Bridge Local Program Funding – Deck Replacement](#)
- [Eligible Bridge List Guidance and Template Report Example](#)

Local Bridge Assistance Program

- Eligible Bridge List
 - Sufficiency Rating (going away with proposed legislation)
 - Deficiency (going away with proposed legislation)
 - Template Report to Use (streamlining the application process)

WisDOT Bureau of Structures Eligible Bridge List
Data from May 16, 2023

Structure #	Region	County	Owner	Deck Area (sf)	Sufficiency	Item 58	Item 59	Item 60	Item 61	Item 72	Deficiency	Base Eligibility	Template Report to Use
B020423	NW	ASHLAND	COUNTY	655	42	5	3	4	N	8	S.D. & F.O.	REPLACEMENT	N/A
B030725	NW	BARRON	COUNTY	4305	59.3	5	4	5	N	8	S.D.	REHABILITATION	NO WORK IS ELIGIBLE FOR TEMPLATE REPORT USE.
B040018	NW	BAYFIELD	COUNTY	6583	51.7	5	6	4	N	6	S.D.	REHABILITATION	NO WORK IS ELIGIBLE FOR TEMPLATE REPORT USE.
B040036	NW	BAYFIELD	TOWN	2472	64.5	6	6	4	N	5	S.D.	REHABILITATION	NO WORK IS ELIGIBLE FOR TEMPLATE REPORT USE.
B040413	NW	BAYFIELD	TOWN	935	43.9	5	5	4	N	3	S.D. & F.O.	REPLACEMENT	N/A
B050008	NE	BROWN	COUNTY	1935	30.9	4	4	5	N	8	S.D.	REPLACEMENT	N/A
B050026	NE	BROWN	COUNTY	3650	68.8	4	8	5	N	8	S.D.	REHABILITATION	CONCRETE OVERLAY
B050048	NE	BROWN	TOWN	6085	67.7	4	5	6	N		S.D.	REHABILITATION	DECK REPLACEMENT (WITH PAINT AS SECONDARY WORK)
B050105	NE	BROWN	COUNTY	2725	68.5	6	6	4	N		S.D.	REHABILITATION	NO WORK IS ELIGIBLE FOR TEMPLATE REPORT USE.
B050118	NE	BROWN	COUNTY	4046	56.7	N	N	N	N	8	S.D.	REHABILITATION	REPLACE STRUCTURE

Pending Legislative Changes

- Long-term solution
 - Remove reference to Sufficiency Rating and Deficiency
 - Utilize NBI general condition ratings for eligibility
 - Increase eligibility for preservation type projects
 - Structures in good condition may be eligible for polymer overlay
 - Direct reference to BMS generated recommendations
 - Additional text in Bridge Manual
 - Local entitlement \$ based on inventory and condition rating
 - Very similar to previous calculation of entitlement, but include rehabilitation costs

Pending Legislative Changes

- Change of Wisconsin Administrative Code
 - Trans 212
 - Also changing with recent changes in inspection practice
 - Trans 213

The Local Bridge Program federal statutes are located in [US Code Title 23, Chapter 1, Section 144, Subpart D](#). The relevant state statute and administrative rule are [Sec. 84.18, Wis. Stats](#) and [Trans 213](#), respectively.

Pending Legislative Changes

- Changes Timeline (long-long-term solution)
 - 2016 – Structures Asset Management Unit identified the need
 - 2021 – BIL funding forced serious discussion about improving the program
 - 2023-2025 – Administrative Code change process
 - 2025 and Beyond – Implementation of new eligibility criteria

Pending Legislative Changes

- What now?
 - Working through the Administrative Code change process
 - Communicating with local stakeholders
 - Emergency ruling ahead of administrative code change
 - Better assist local partners to preserve their bridges!

Local Program Asset Management Assistance

Questions?

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