

# WisDOT Local Bridge Program Solicitation

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**September 10, 2025** 

#### Goals for the webinar

- Answer some common questions we've received
- Clarify details of the current solicitation
- Will talk about changes in Trans 213 that affect the solicitation
- Will not go into all the background of administrative code language



Trans 212 & 213: Administrative Code Updates

Josh Dietsche – Director, WisDOT Bureau of Structures

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January 14, 2025





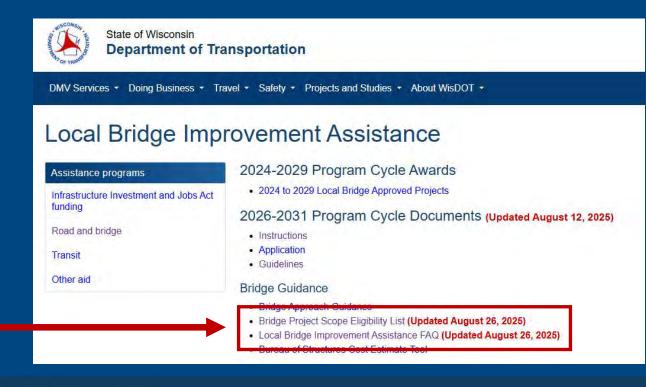






## **Updated Information**

WisDOT Local Bridge website







## **Updated Information**

WisDOT Local Bridge website







- In short, use available funds as effectively as possible
  - Right work at the right time
- Historically, local bridge program is a replacement program
  - Very little rehabilitation work has been done
  - Replacement are still necessary
  - Rehab can extend the life of a bridge in a cost-effective way



- Use the same methodology that we use to program state work
- Using inspection data NBI & element information
- Evaluate now, project condition into the future
  - Based on data
  - Based on a set of defined criteria
- More on this...



- Having said that...we understand this is a big change.
- Need a method to evaluate needed bridge work in an objective way
  - Sufficiency Rating (SR) had flaws and was outdated.
  - Not feasible to have an engineer dive into the details of all ~9,000 local-owned bridges.
- The new eligibility method provides consistent, data-driven decisionmaking across the state to better utilize funding.



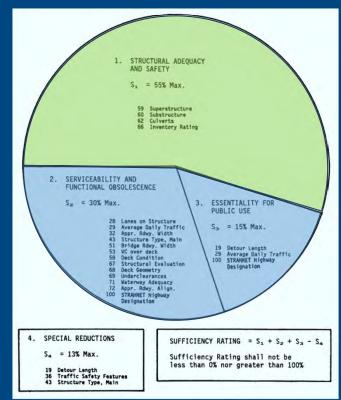
- Eligibility list is logical and consistent, but...not perfect
- Have a flexibility to propose and justify work that didn't previously exist
- If you take anything from today, we are here to help.



#### **Sufficiency Rating**

- Some components of the Sufficiency rating:
  - Condition (NBI rating)
- But also:
  - Detour length
  - ADT
  - Number of lanes
- Eligibility vs. priority









- Single-span concrete slab bridge, 43-ft long
- Built in 1977, Asphalt overlay in 2006
  - Sufficiency Rating: 35.5

Condition Ratings		
	File	New
Deck condition rating (C.01)	Poor (4)	Serious (3)
Superstructure condition rating (C.02)	Poor (4)	Serious (3)
Substructure condition rating (C.03)	Excellent (9)	Very Good (8)

Terrible condition, must be replaced...right? Maybe...



- Substructure is in great condition
- Wearing surface (overlay) is in good condition

8511		HMA (AC) Overlay	SF	1,609	1,497	112	0	0
	3210	Debonding/Spall/Patched Area/Pothole  1 SF repaired spall/sound SE corner, CS2. 1 SF repaired spall/sound SW corner, CS2.	] SF		0 [	2 [	0	0
	3220	Crack (Wearing Surface) CS2 cracks throughout.	SF		0	110	0	0

- Superstructure/Deck (one in the same for a slab) has issues...
  - ...but they're isolated.

					03.0%	U. / 70	3.2/0	0.570
						Quantity in C	ondition State	
Element.	Defect	Description	MOU	Total	- d/5	2	3	4
		Reinforced Concrete Slab - Coated Reinforcing	SF	1,663	1,493	12	54	104
38								
		Delamination - Spall - Patched Area	SF		0	0	54	104
	1080	North side patches are falling off. CS3 spalls are a Removed broken rebar and hanging concrete 2020. 60 CS4 South edge spalled. 44 CS4 North edge. North edge has longitudinal cracks in wearing so South top edge has a few longitudinal also. Top	urface	above CS	4 spalls.	or, not gty	<i>i</i> .	



- Superstructure/Deck (one in the same for a slab) has issues...
  - ...but they're isolated.









- Replacement? Possibly...
- But is there a cheaper option to get years more life?
- Rehab?
- Superstructure replacement?







#### **Eligibility List Development**

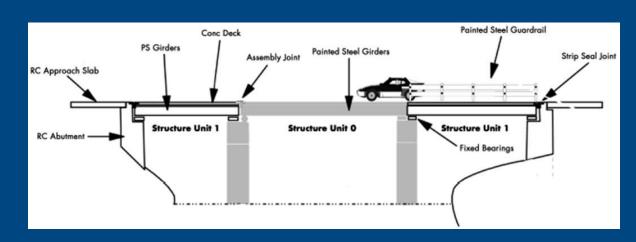
- WiSAMS
  - Wisconsin Structures Asset Management System
- A method to <u>systematically</u> determine bridge rehabilitation, preservation, and replacement needs at a <u>network-level</u>.
  - Not unlike SR...
- Is it perfect bridge-for-bridge? No no automated metric will be.
  - SR wasn't perfect, neither is this.
  - Focused on evaluating condition-based needs.



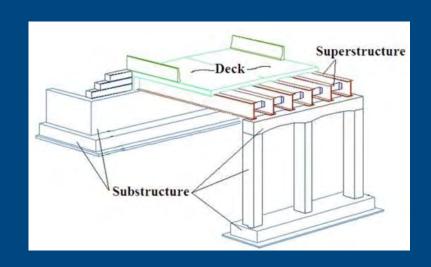
#### WiSAMS: Inputs

- HSIS
  - Inventory data
  - Inspection data
- Historic cost data
- Currently scheduled work
- Bridge Manual policy "rules"
- Deterioration modeling (HSIS historical data)





Rule 1 – Category: Substructure



#### Criteria

- Substructure NBI ≤ 3, AND
- Structure is scour critical (concern with the waterway)

#### **Result**

Replace structure





#### Criteria

- Substructure NBI ≤ 3, AND
- · Structure is scour critical





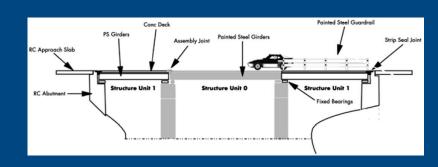
Rule 25 – Category: Concrete Overlay

#### **Criteria**

- No. of overlays = 0, AND
- Deck NBI ≥ 6, AND
- Quantity of CS2 + CS3 + CS4 for defect 1080 (delaminations, spalls, patches) is less than 20%

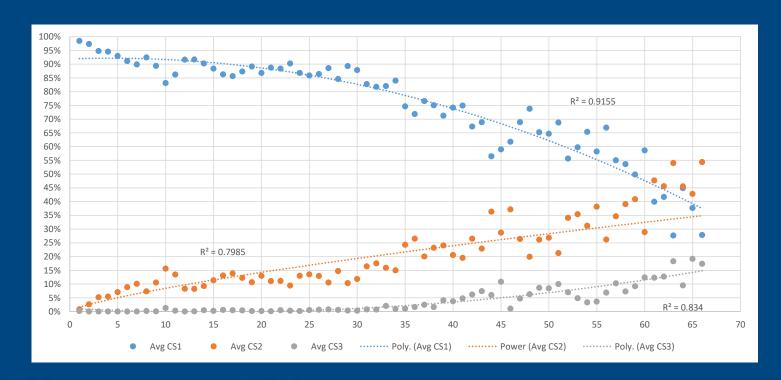
#### <u>Result</u>

Concrete overlay





#### **Element Deterioration**









See Wisconsin Bridge Manual Chapter 42 – Bridge Preservation

More information on underlying philosophy

 Condition-based, but doesn't mean that we can't take other factors into account









#### \*\*\* Eligibility Question \*\*\*

- All of my bridges with an NBI of 6 or less should be eligible for replacement, but they're not on the eligibility list. Why?
  - Eligibility based not just the table;
  - Eligibility list, too.

		Rehabilitation	Reconstruction
	9	×	
	8	×	
	7	×	
Superstructure,	6	x	×
Substructure,	5		×
or Culvert NBI	4		×
Rating	3		×
	2		×
	1		X
	0		×



# **Old** Trans 213 Language/Layout

What is eligible, what may be submitted for funding

#### Trans 213.03 Administration.

- (1) DETERMINATION OF ELIGIBILITY. A local bridge project is eligible for funds under s. 84.18, Stats., if it meets the following criteria:
  - (a) The bridge has been determined by the department to be a deficient bridge.
  - (b) The bridge has a sufficiency rating of 80 or less.
  - (c) The bridge has not been constructed or reconstructed in the last 10 years regardless of the source of funding for the construction or reconstruction.
  - (d) The bridge has not been programmed for construction under an order by the department under s. 84.11 (4), Stats.
- (2) REPLACEMENT AND REHABILITATION.
  - (a) An eligible local bridge project under sub. (1) may be for replacement of the bridge if the bridge has a current sufficiency rating of less than 50.
  - (b) An eligible local bridge project under sub. (1) may be for rehabilitation of the bridge if the bridge has a sufficiency rating of 80 or less. An engineering study shall be undertaken and funded independently by the eligible applicant that indicates that any rehabilitation would be cost effective, would extend the life of the bridge by at least 10 years, and would correct all deficiencies. If conditions exist that would prevent the completed improvement from correcting all deficiencies, the department may determine if the proposed project is eligible based on safety and the public interest.



# **New Trans 213 Language/Layout**

Keep similar layout – what is eligible…

Trans 213.03 (1)(e) The bridge meets criteria noted in Table 1 or Table 2.

TABLE 1 - Eligible preservation and rehabilitation projects based on Deck NBI Rating

		Preservation	Rehabilitation
	9	X	
	8	X	
	7	x	
	6	Х	х
Deck NBI Rating	5		X
	4		x
	3		х
	2		x
	1		×
	0		×

Table 213.03-1

TABLE 2 - Eligible rehabilitation and reconstruction based on superstructure, substructure, or culvert NBI Rating

		Rehabilitation	Reconstruction
	9	×	
	8	×	
	7	×	
Superstructure,	6	×	x
Substructure,	5		x
or Culvert NBI	4		х
Rating	3		X
	2		х
	1		×
	0		×

Table 213.03-2





# **New Trans 213 Language/Layout**

• ... and what can be submitted for funding

#### SECTION 42. Trans 213.02 (2) (a) and (2) (b) are amended to read:

(2)(a) An eligible local bridge project under sub. (1) may be submitted for replacement of the bridge if the bridge has a current sufficiency rating of less than 50-is identified by the department for replacement in the bridge project scope eligibility list. If the bridge in question does not appear on the list as replacement-eligible, the local owner may submit an application with a replacement scope, but it shall be accompanied by an engineering study providing justification. The justification should consider the timing of the proposed project, consideration of alternative scopes, safety of the traveling public, maintaining serviceability of the structure, and cost-benefit of the proposed scope versus other viable options.

(2)(b) An eligible local bridge project under sub. (1) may be <u>submitted</u> for rehabilitation of the bridge if the bridge has a <u>sufficiency rating of 80 or less.</u> An engineering study shall be undertaken and funded independently by the eligible applicant that indicates that any rehabilitation would be cost effective, would extend the life of the bridge by at least 10 years, and would correct all deficiencies. If conditions exist that would prevent the completed improvement from correcting all deficiencies, the department may determine if the proposed project is eligible based on safety and the public interest: an identified rehabilitation scope in the most recent bridge project scope eligibility list. If the bridge in question does not appear on the list as rehabilitation-eligible, the local owner may submit an application for rehabilitation, but it shall be accompanied by an engineering study providing justification. The justification should consider the timing of the proposed project, consideration of alternative scopes, safety of the traveling public, maintaining serviceability of the structure, and cost-benefit of the proposed scope versus other viable options.

#### Section 43. Trans 213.03 (2) (c) is created to read:

Trans 213.03 (2) (2)(c) An eligible local bridge project under sub. (1) may be submitted for preservation of the bridge if the bridge has an identified preservation action in the most recent Bridge Project Scope Eligibility List. If the bridge in question does not appear on the list, the local owner may submit an application for rehabilitation, but it shall be accompanied by an engineering study providing justification. The justification should consider the timing of the proposed project, safety, serviceability, and cost-benefit.

#### Section 44. Trans 213.03 (4) (a) is amended to read:

Trans 213.03 (4) DETERMINATION OF ENTITLEMENT. (a) The proportionate share of the funds available to each county shall be the ratio of the estimated cost of <u>rehabilitating or</u> replacing those eligible local bridges in the county with sufficiency ratings of less than 50 to the estimated cost of <u>rehabilitating or</u> replacing all eligible local bridges in the state with sufficiency ratings of less than 50.



#### Overview of the *New* Trans 213

- Three-step screening:
  - 1. Must have observed deficiencies (cracking, rust, etc.)
  - 2. Bridges condition meets the requirements of the eligibility tables
  - 3. Bridge has a work action on the bridge project scope eligibility list
  - If a bridge only meeting step 1 and 2, can still submit with an engineering study to justify the work



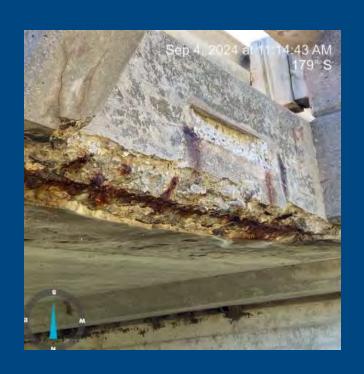
### \*\*\* Load Posting Question \*\*\*

- I have a posted bridge that doesn't show up on the eligibility list.
   Why?
  - Load posting is a consideration, but not the only consideration.
  - Load posting isn't always related to condition.
- (An actual) example: 2-span slab posted at 20 tons
  - Originally posted in 2012 conditions were NBI 5, 5, 6
  - Low initial design capacity (inadequate -moment reinforcement)
  - Condition is now 4, 4, 5 with spalling at edges
  - SR = 14.6!





### \*\*\* Load Posting Question \*\*\*











### \*\*\* Engineering Study Question/Comment \*\*\*

- Appreciate the flexibility, but an engineering study places additional burden on the local owner – time and money.
  - "The engineering study should include information about the timing of the proposed project, alternative scopes, safety of the travelling public, structural serviceability, and a cost-benefit analysis of the proposed scope versus other viable options."



#### \*\*\* Engineering Study Question/Comment \*\*\*

- Appreciate the flexibility, but an engineering study places additional burden on the local owner – time and money.
  - TALK TO US FIRST! WE'RE HERE TO HELP!
  - The goal is to do the right work at the right time. The "engineering study" only needs to enough to justify the proposed work. Don't necessarily need to hire a consultant.



#### \*\*\* Inspection Data Question \*\*\*

- What if an inspection is performed after the eligibility list is published?
  - Even with SR, the data to generate the list was pulled at a discrete point in time; not live data
  - If you take anything from today, we are here to help.
  - We can review new inspection information, as appropriate



### \*\*\* Project Planning Question \*\*\*

- I regularly use the sufficiency rating for each bridge to plan for future work and future budgets. With SR gone, how do I plan now?
  - WisDOT is intending to provide planning data, planning lists to help project future work.
  - If you take anything from today, we are here to help.



#### \*\*\* 10-Year Rule Question \*\*\*

- How do these changes coordinate with the Federal 10-year rule?
  - 10-year rule was eliminated in 2021
  - Still want cost-effective work

# Summary

- These changes expand the types of eligible bridge work.
- Eligibility determination is condition-based and logical...but not perfect.
- These changes allow for flexibility to propose work that didn't previously exist.
- If you take anything from today, we are here to help.





# Questions?

WisDOT Local Bridge Program Solicitation Webinar

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