

DATE: September 18, 2024  
 TO: Highway Structures Information System (HSIS) Users  
 FROM: DTSD – Bureau of Structures  
 SUBJECT: **September 2024 HSIS updates**

Version 3.0.1-1290 of HSIS was released on 9/10/2024. Version 3.0.1-1304 was released on 9/17/24 to address bugs in 3.0.1-1290. The following is a list of some of the enhancements added and bugs fixed in these releases. This may not be a comprehensive list.

Version 3.0.1-1290 contains many changes related to implementing the NBIS and SNBI. If you believe something is not working correctly, if you cannot enter something you think you should be able to, or you have questions on where to find something, please contact me.

If you discover any bugs or have suggestions for enhancements, please email [ryan.bowers@dot.wi.gov](mailto:ryan.bowers@dot.wi.gov). If you do find a bug, please provide as much information as possible about what structure you were working on, what browser you used, if you were using a mobile device or not, items you were editing or clicking on prior to the bug occurring, etc. The more information you provide, the better chance we have at replicating the issue, determining the cause, and fixing it. Any screenshots or videos you can take are helpful.

### **Enhancements in 3.0.1-1290**

- 1) The following changes were made to inspection types.
  - a. “Initial / inventory” is no longer available for C, L V, M, R, S, and N structure types.
  - b. The “damage” and “special” inspection types were updated to account for inspector qualifications differing for each structure type. This is similar to how each structure type has a different “routine” inspection type shown on the create tab. This has no impact on how users create inspections, as the user will only have one option for “damage” or “special” to select, but it is something to be aware of when running reports and searches.



The screenshot shows the HSIS interface for structure B-40-010 (N PORT WASHINGTON RD over MILWAUKEE RIVER). The 'Inspection' tab is selected, and the 'Inspection type' dropdown is open. The options are: Initial / inventory, Routine (due May 2025), Damage, Special, NSTM (arm's length), In-Depth, and Uw-Dive. The 'Damage' and 'Special' options are highlighted.

“Damage” and “special” inspection type for B and P structures.

**C-40-002** STH 36 over RYAN CREEK

General

Small Bridge

**Inspection**

Create History Interval

Cover photo

Inspection type

- ☐ Routine - culvert (due 2024)
- ☐ Damage - c,m,n,r,v
- ☐ Special - c,m,n,r,v
- ☐ Uw-Dive

“Damage” and “special” inspection type for C, M, N, R, and V structures.

**S-40-001** over IH 43

General

Sign

**Inspection**

Create History Interval

Cover photo

Inspection type

- ☐ Routine - sign/signal (due 2024)
- ☐ Damage - sign/ signal/ lighting
- ☐ Special - sign/ signal/ lighting

“Damage” and “special” inspection type for L and S structures.

- 2) A new activity type, "isolated", is now in HSIS and included in the monthly scheduling report. This activity can potentially be used in lieu of completing an entire “routine” inspection for a bridge on a 12-month interval. Additional information will be provided by Bureau of Structures inspection staff in the future to assist in selecting bridges for considering using the “isolated” activity.

The “isolated” activity is visible on the create tab when 1) it is checked as “recommended” on the interval tab and 2) “special” inspection is checked. Region program managers have the ability to edit the data on the interval tab for this activity. Please contact your region program manager to discuss bridges where you may want to use this activity.

**Inspection**

Create History Interval

Cover photo

Inspection type

- ☐ Initial / inventory
- ☐ Routine
- ☐ Damage
- ☒ Special
- ☐ NSTM (arm's length)
- ☐ In-Depth
- ☐ Uw-Dive

Activity type

- ☐ Critical finding
- ☐ Structural review
- ☐ Isolated (due Oct 2024)
- ☐ Deck evaluation
- ☐ Load posted verification (dt2122)
- ☐ Non-Destructive evaluation
- ☐ QA inspection review
- ☐ Reach all
- ☐ Scour monitoring
- ☐ Scour plan of action
- ☐ Service
- ☐ SIA review
- ☐ SNBI

“Isolated” activity is now available.

- 3) The “scour monitoring” activity type is now available for use. This activity, along with most activities, can be created in HSIS without selecting an inspection type.

“Scour monitoring” activity is now available.

- 4) A new element was added, 312 Enclosed/concealed bearing. This item will be included in the 2025 inspection season, with guidance on using this element provided during the 2025 inspector refresher training.
- 5) 515 steel protective coating – other is now available for use with element 240 Steel Culvert.
- 6) A new assessment, 9037 Bridge Partial Closure System, is now available for bridges that have a traffic restriction but are not completely closed. Assessment 9036 Bridge Closure System is now called “Bridge Full Closure System”.
- 7) “N” is now an acceptable entry for SNBI item C.10 Channel Protection for structures over waterways.
- 8) AP.03 Scour Vulnerability is now checked when determining the “UW-Dive” inspection interval.
- 9) Region program managers can now enter a grace date up to 12 months out from the inspection due date.
- 10) “Prior” was added before “date” and “team leader” on the inspection pdf.

Type	Prior Date	Prior Team Leader	Frequency (mos)	Performed
Routine	09-17-20	Doemel, Robert (3517)	48	X
Special	08-17-21	Weber, Dale (3007)	0	
SIA review	08-17-21	Weber, Dale (3007)	48	
SNBI				X

“Prior” was added to inspection pdf.

- 11) SNBI items L.12 Metropolitan Planning Organization, CL.03 Federal or Tribal Land Access, CL.06 Emergency Evacuation Designation, SP.05 Span Continuity, and SP.08 Deck Interaction can now be stored in HSIS. BOS will be working to populate these fields. Inspectors are not able to update these fields. If you notice the data is incorrect for one of these fields, please notify me.
- 12) The “on” and “under” route information is now displayed in the “past 24 months inspections” section of the Preferences > Inspector tab.

Past 24 months inspections

216 inspections

search

Structure	On	Under	Date	Type(s)	Activity(s)	Status	Reviewed
B-70-318	N. OAKWOOD RD	HONEY CREEK	08/26/24	R	SNBI	Completed	
B-05-029	STH 29 & NE & SE Ramps	BR LANCASTER BROOK	08/21/24	R	SNBI	Completed	
B-20-252	CTH M	FOND DU LAC RIVER	08/13/24	INI,R	SIA,SNBI,UWP	Checked-in	
B-05-017	STH 32 SB-USH B41 SB	DUTCHMANS CREEK	08/05/24	R	SIA,SNBI	Completed	
B-05-035	STH 32 NB-USH B41 NB	DUTCHMANS CREEK	08/05/24	R	SIA,SNBI	Completed	
B-05-196	USH 141-STH 29	IH 43	08/01/24	R	SIA,SNBI	Completed	
B-05-717	USH 141-STH 29	BR SORENSONS CREEK	08/01/24	R	POA,SIA,SNBI,UWP	Completed	

“On” and “under” route information is displayed.

### **Bugs Fixed in 3.0.1-1290**

The following bugs were fixed with this version. Additional bugs not listed below were also fixed.

- 1) Abutment type was not displayed in HSIS for pipe and box culvert span types for C and V structures.
- 2) The bridge number and “GENERATED DRAFT” were not displayed in the footer of field inspection reports if generated by printing a collection.
- 3) The “routine specific procedures” box was not displayed in field inspection reports.
- 4) UW-dive inspection intervals were being set to 12 months when the appropriate interval was 24 months.
- 5) When running the inspection schedule report, users would sometimes get a message stating the “months” field was left blank when it wasn’t.
- 6) If a late reason with grace date was entered on the interval tab, an error occurred when creating an inspection if an inspection type and activity were selected when creating an inspection.
- 7) In an open inspection, the pier number shown on the SNBI tab would start at “0”.
- 8) UW-profile was being required for bridges with concrete floors that have one profile previously created (channel material = concrete lined).
- 9) A deck condition rating was being required for some bridge types that do not have a deck.
- 10) There had been a few cases where duplicate structure numbers were assigned when uploading V-structure inventory spreadsheets.

### **Bugs Fixed in 3.0.1-1304**

- 1) Emails sent from HSIS were not displaying correctly.
- 2) Users trying to import new V-structure via spreadsheet upload were not receiving the emip file via email.
- 3) V-structure inspections were requiring elements.
- 4) Some data fields were displayed twice in the deck evaluation activity.