



FHWA Validations & Submission

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Basic FHWA Validation & Submittal in BrM

1. Set up bridge data to indicate which records are reported to FHWA
2. Perform standard FHWA validations on bridge data
3. Resolve data errors
4. Export submittal JSON file

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1. **Set up bridge data to indicate which records are reported to FHWA**
2. Perform standard FHWA validations on bridge data
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Bridge Data – Bridges & Elements

- Bridges » Inventory & Appraisal » Identification allows user to indicate whether a bridge and its elements should be submitted to FHWA

AASHTOWare™ Bridge Management

Bridges » Inventory & Appraisal » Identification

Bridge ID * 000101 Feature Intersected PAWTUXET RIVER Facility Carried US 1 ELMWOOD AV

Identification

Details

Bridge Number (B.ID.01) *	Agency Bridge ID *
0000000000000010	000101
Bridge Name (B.ID.02) *	Bridge Nickname
Elmwood Ave Bridge	US 1 ELMWOOD AV OVER PAWTUXET RIVER
Bridge Facility Carried	Bridge Feature Intersected
US 1 ELMWOOD AV	PAWTUXET RIVER
Bridge Status	Bridge Life Cycle Phase
3 Active	1 Service
☒ Report Bridge to FHWA	☒ Report Elements to FHWA

Bridge Data – Features

- Bridges » Inventory & Appraisal » Features allows user to indicate whether a bridge feature should be submitted to FHWA

AASHTOWare™ Bridge Management

Bridges » Inventory & Appraisal » Features

Bridge ID ⓘ
000101

Feature Intersected ⓘ
PAWTUXET RIVER

Facility Carried ⓘ
US 1 ELMWOOD AV

Feature Location (B.F.02) Feature Name (B.F.03)

Add Feature

Feature Details

Feature Name (B.F.03) *

Feature Type (B.F.01) *

Feature Location (B.F.02) *

☒ Report to FHWA

Basic FHWA Validation & Submittal in BrM

1. Set up bridge data to indicate which records are reported to FHWA
- 2. Perform standard FHWA validations on bridge data**
3. Resolve data errors
4. Export submittal JSON file

Standard FHWA Validation in BrM

- Bridges » Validate allows an agency to validate bridges against the latest FHWA validations

AASHTOWare™
Bridge Management

Bridges » Validate

Validate

Bridges are validated against the FHWA SNBI Data Validation Rules v1.1 (published 12/30/2025).

Assets

Filter

None

Layout

Load Ratings

☐ Include bridges not reported to FHWA

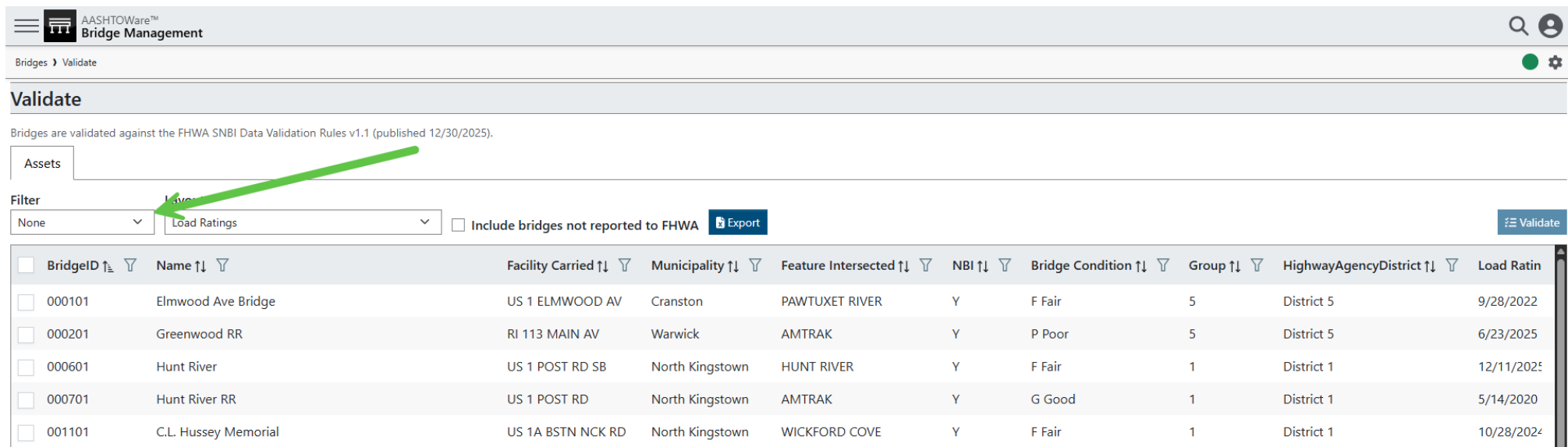
Export

Validate

☐	BridgeID ↑↓	Name ↑↓	Facility Carried ↑↓	Municipality ↑↓	Feature Intersected ↑↓	NBI ↑↓	Bridge Condition ↑↓	Group ↑↓	HighwayAgencyDistrict ↑↓	Load Rating
☐	000101	Elmwood Ave Bridge	US 1 ELMWOOD AV	Cranston	PAWTUXET RIVER	Y	F Fair	5	District 5	9/28/2022
☐	000201	Greenwood RR	RI 113 MAIN AV	Warwick	AMTRAK	Y	P Poor	5	District 5	6/23/2025
☐	000601	Hunt River	US 1 POST RD SB	North Kingstown	HUNT RIVER	Y	F Fair	1	District 1	12/11/2025
☐	000701	Hunt River RR	US 1 POST RD	North Kingstown	AMTRAK	Y	G Good	1	District 1	5/14/2020
☐	001101	C.L. Hussey Memorial	US 1A BSTN NCK RD	North Kingstown	WICKFORD COVE	Y	F Fair	1	District 1	10/28/2024

Standard FHWA Validation – Filtering

- ‘Filter’ drop down allows user to select an existing filter for a subset of bridges



AASHTOWare™ Bridge Management

Bridges > Validate

Validate

Bridges are validated against the FHWA SNBI Data Validation Rules v1.1 (published 12/30/2025).

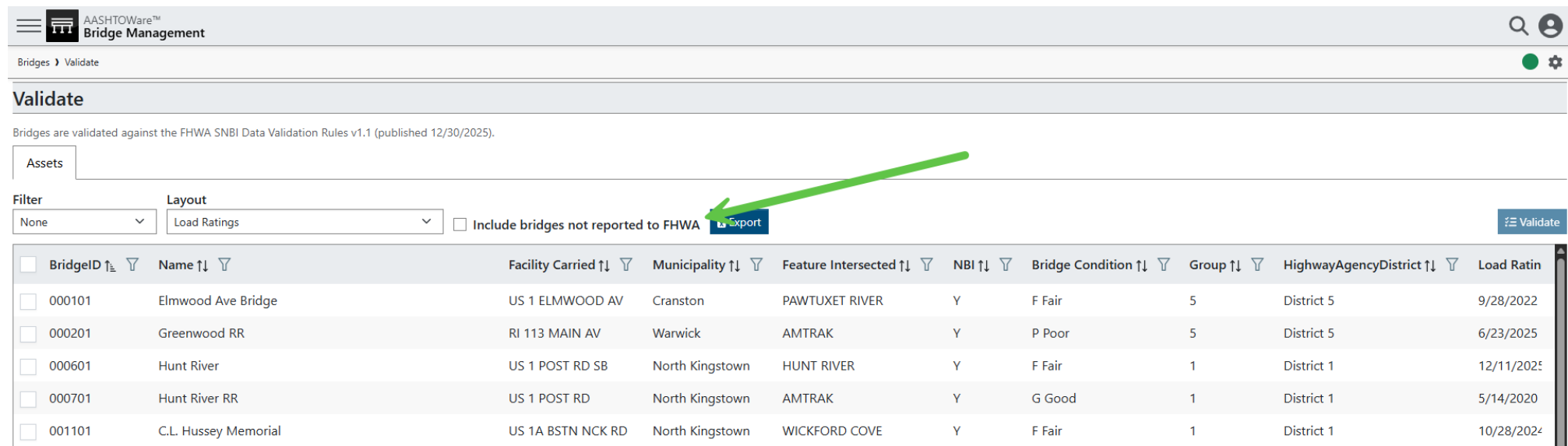
Assets

Filter: None (selected) Load Ratings (dropdown) ☐ Include bridges not reported to FHWA [Export](#) [Validate](#)

☐ BridgeID ↑↓	Name ↑↓	Facility Carried ↑↓	Municipality ↑↓	Feature Intersected ↑↓	NBI ↑↓	Bridge Condition ↑↓	Group ↑↓	HighwayAgencyDistrict ↑↓	Load Rating
☐ 000101	Elmwood Ave Bridge	US 1 ELMWOOD AV	Cranston	PAWTUXET RIVER	Y	F Fair	5	District 5	9/28/2022
☐ 000201	Greenwood RR	RI 113 MAIN AV	Warwick	AMTRAK	Y	P Poor	5	District 5	6/23/2025
☐ 000601	Hunt River	US 1 POST RD SB	North Kingstown	HUNT RIVER	Y	F Fair	1	District 1	12/11/2025
☐ 000701	Hunt River RR	US 1 POST RD	North Kingstown	AMTRAK	Y	G Good	1	District 1	5/14/2020
☐ 001101	C.L. Hussey Memorial	US 1A BSTN NCK RD	North Kingstown	WICKFORD COVE	Y	F Fair	1	District 1	10/28/2024

Standard FHWA Validation – Filtering

- ‘Include bridges not reported to FHWA’ allows user to validate non-reportable bridges



AASHTOWare™ Bridge Management

Bridges > Validate

Validate

Bridges are validated against the FHWA SNBI Data Validation Rules v1.1 (published 12/30/2025).

Assets

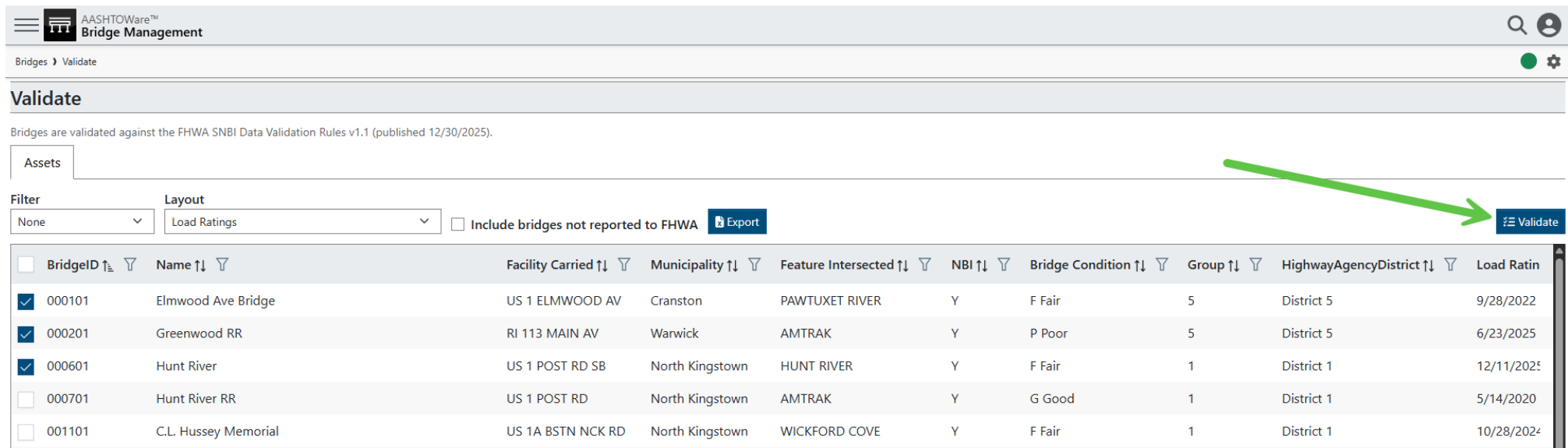
Filter: None Layout: Load Ratings

☐ Include bridges not reported to FHWA [Export](#) [Validate](#)

☐ BridgeID ↑↓	Name ↑↓	Facility Carried ↑↓	Municipality ↑↓	Feature Intersected ↑↓	NBI ↑↓	Bridge Condition ↑↓	Group ↑↓	HighwayAgencyDistrict ↑↓	Load Rating
☐ 000101	Elmwood Ave Bridge	US 1 ELMWOOD AV	Cranston	PAWTUXET RIVER	Y	F Fair	5	District 5	9/28/2022
☐ 000201	Greenwood RR	RI 113 MAIN AV	Warwick	AMTRAK	Y	P Poor	5	District 5	6/23/2025
☐ 000601	Hunt River	US 1 POST RD SB	North Kingstown	HUNT RIVER	Y	F Fair	1	District 1	12/11/2025
☐ 000701	Hunt River RR	US 1 POST RD	North Kingstown	AMTRAK	Y	G Good	1	District 1	5/14/2020
☐ 001101	C.L. Hussey Memorial	US 1A BSTN NCK RD	North Kingstown	WICKFORD COVE	Y	F Fair	1	District 1	10/28/2024

Standard FHWA Validation – Validating

- Once one or more bridges have been selected, 'Validate' button becomes enabled

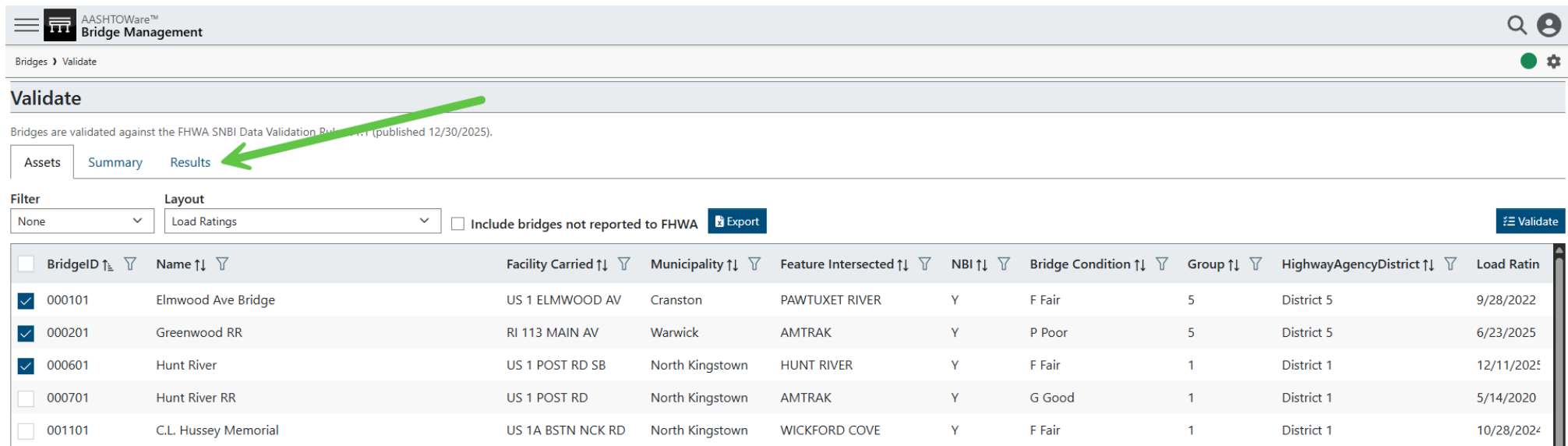


The screenshot shows the 'Validate' page in the AASHTOWare Bridge Management system. The page header includes the AASHTOWare logo and 'Bridge Management'. Below the header, there's a breadcrumb 'Bridges > Validate' and a search icon. The main heading is 'Validate'. A note states: 'Bridges are validated against the FHWA SNBI Data Validation Rules v1.1 (published 12/30/2025)'. There's an 'Assets' input field. Below this, there are 'Filter' and 'Layout' sections. The 'Filter' section has a dropdown set to 'None'. The 'Layout' section has a dropdown set to 'Load Ratings'. To the right of the layout dropdown is a checkbox labeled 'Include bridges not reported to FHWA' and an 'Export' button. On the far right, there is a 'Validate' button, which is highlighted by a green arrow. Below these controls is a table of bridge data.

☐	BridgeID ↑↓	Name ↑↓	Facility Carried ↑↓	Municipality ↑↓	Feature Intersected ↑↓	NBI ↑↓	Bridge Condition ↑↓	Group ↑↓	HighwayAgencyDistrict ↑↓	Load Rating
☒	000101	Elmwood Ave Bridge	US 1 ELMWOOD AV	Cranston	PAWTUXET RIVER	Y	F Fair	5	District 5	9/28/2022
☒	000201	Greenwood RR	RI 113 MAIN AV	Warwick	AMTRAK	Y	P Poor	5	District 5	6/23/2025
☒	000601	Hunt River	US 1 POST RD SB	North Kingstown	HUNT RIVER	Y	F Fair	1	District 1	12/11/2025
☐	000701	Hunt River RR	US 1 POST RD	North Kingstown	AMTRAK	Y	G Good	1	District 1	5/14/2020
☐	001101	C.L. Hussey Memorial	US 1A BSTN NCK RD	North Kingstown	WICKFORD COVE	Y	F Fair	1	District 1	10/28/2024

Standard FHWA Validation – Validating

- Click 'Validate' to display 'Summary' and 'Results' tabs

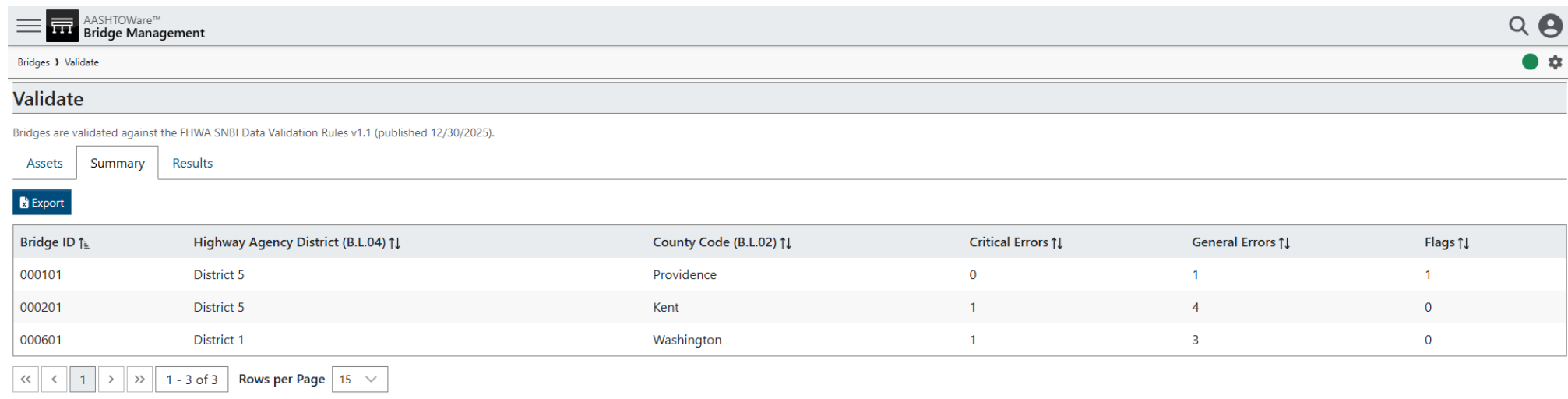


The screenshot shows the AASHTOWare Bridge Management interface. The top navigation bar includes the AASHTOWare logo and 'Bridge Management'. Below this, a breadcrumb trail shows 'Bridges > Validate'. The main section is titled 'Validate' and contains a note: 'Bridges are validated against the FHWA SNBI Data Validation Rulebook (published 12/30/2025)'. Below the note are three tabs: 'Assets', 'Summary', and 'Results'. A green arrow points to the 'Results' tab. Below the tabs are filters for 'Filter' (set to 'None') and 'Layout' (set to 'Load Ratings'). There is also a checkbox for 'Include bridges not reported to FHWA' and an 'Export' button. A 'Validate' button is located on the right side of the filter section. The main content area displays a table of bridge data.

☐	BridgeID ↑↓	Name ↑↓	Facility Carried ↑↓	Municipality ↑↓	Feature Intersected ↑↓	NBI ↑↓	Bridge Condition ↑↓	Group ↑↓	HighwayAgencyDistrict ↑↓	Load Rating
☒	000101	Elmwood Ave Bridge	US 1 ELMWOOD AV	Cranston	PAWTUXET RIVER	Y	F Fair	5	District 5	9/28/2022
☒	000201	Greenwood RR	RI 113 MAIN AV	Warwick	AMTRAK	Y	P Poor	5	District 5	6/23/2025
☒	000601	Hunt River	US 1 POST RD SB	North Kingstown	HUNT RIVER	Y	F Fair	1	District 1	12/11/2025
☐	000701	Hunt River RR	US 1 POST RD	North Kingstown	AMTRAK	Y	G Good	1	District 1	5/14/2020
☐	001101	C.L. Hussey Memorial	US 1A BSTN NCK RD	North Kingstown	WICKFORD COVE	Y	F Fair	1	District 1	10/28/2024

Standard FHWA Validation – Summary

- ‘Summary’ tab lists overall count of errors, by severity, for each bridge that was validated



AASHTOWare™ Bridge Management

Bridges > Validate

Validate

Bridges are validated against the FHWA SNBI Data Validation Rules v1.1 (published 12/30/2025).

Assets Summary Results

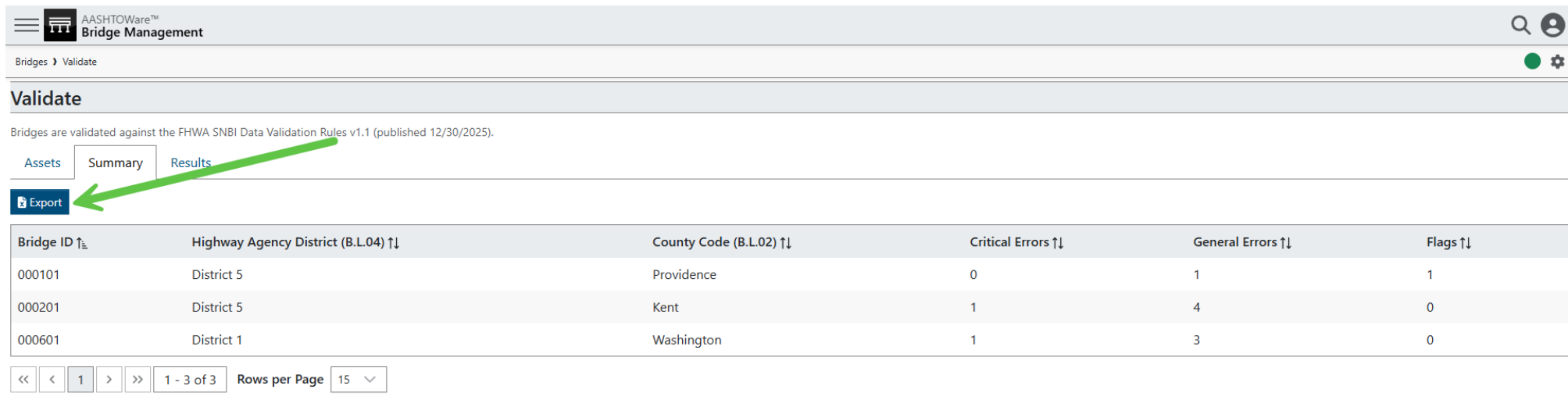
Export

Bridge ID ↑↓	Highway Agency District (B.L.04) ↑↓	County Code (B.L.02) ↑↓	Critical Errors ↑↓	General Errors ↑↓	Flags ↑↓
000101	District 5	Providence	0	1	1
000201	District 5	Kent	1	4	0
000601	District 1	Washington	1	3	0

<< < 1 > >> 1 - 3 of 3 Rows per Page 15

Standard FHWA Validation – Summary

- ‘Summary’ tab lists overall count of errors, by severity, for each bridge that was validated
 - Can be exported to Excel for review



AASHTOWare™ Bridge Management

Bridges > Validate

Validate

Bridges are validated against the FHWA SNBI Data Validation Rules v1.1 (published 12/30/2025).

Assets Summary Results

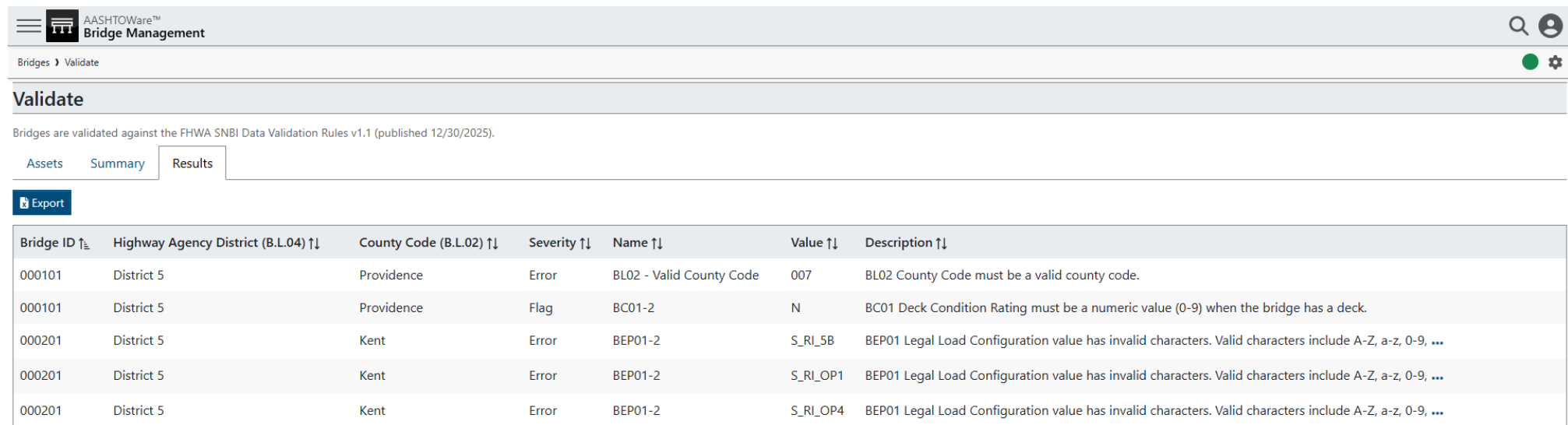
Export

Bridge ID ↑↓	Highway Agency District (B.L.04) ↑↓	County Code (B.L.02) ↑↓	Critical Errors ↑↓	General Errors ↑↓	Flags ↑↓
000101	District 5	Providence	0	1	1
000201	District 5	Kent	1	4	0
000601	District 1	Washington	1	3	0

<< < 1 > >> 1 - 3 of 3 Rows per Page 15

Standard FHWA Validation – Results

- ‘Results’ tab lists each individual error, along with the saved database value for the field



AASHTOWare™ Bridge Management

Bridges > Validate

Validate

Bridges are validated against the FHWA SNBI Data Validation Rules v1.1 (published 12/30/2025).

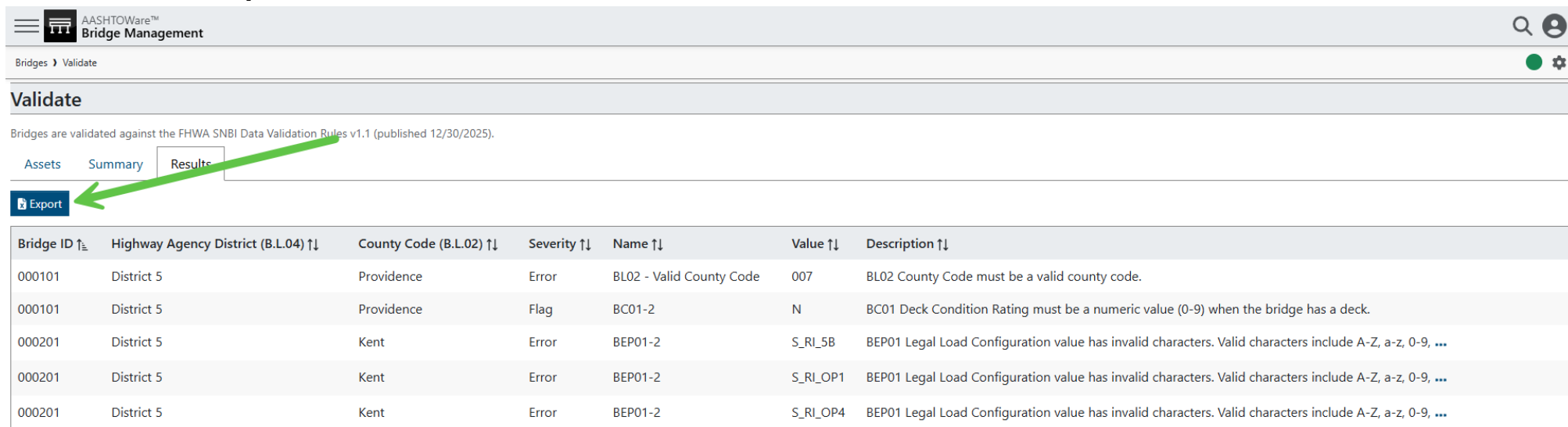
Assets Summary Results

Export

Bridge ID ↑	Highway Agency District (B.L.04) ↑	County Code (B.L.02) ↑	Severity ↑	Name ↑	Value ↑	Description ↑
000101	District 5	Providence	Error	BL02 - Valid County Code	007	BL02 County Code must be a valid county code.
000101	District 5	Providence	Flag	BC01-2	N	BC01 Deck Condition Rating must be a numeric value (0-9) when the bridge has a deck.
000201	District 5	Kent	Error	BEP01-2	S_RI_5B	BEP01 Legal Load Configuration value has invalid characters. Valid characters include A-Z, a-z, 0-9, ...
000201	District 5	Kent	Error	BEP01-2	S_RI_OP1	BEP01 Legal Load Configuration value has invalid characters. Valid characters include A-Z, a-z, 0-9, ...
000201	District 5	Kent	Error	BEP01-2	S_RI_OP4	BEP01 Legal Load Configuration value has invalid characters. Valid characters include A-Z, a-z, 0-9, ...

Standard FHWA Validation – Results

- ‘Results’ tab lists each individual error, along with the saved database value for the field
 - Can be exported to Excel for review



AASHTOWare™ Bridge Management

Bridges > Validate

Validate

Bridges are validated against the FHWA SNBI Data Validation Rules v1.1 (published 12/30/2025).

Assets Summary **Results**

Export

Bridge ID ↑↓	Highway Agency District (B.L.04) ↑↓	County Code (B.L.02) ↑↓	Severity ↑↓	Name ↑↓	Value ↑↓	Description ↑↓
000101	District 5	Providence	Error	BL02 - Valid County Code	007	BL02 County Code must be a valid county code.
000101	District 5	Providence	Flag	BC01-2	N	BC01 Deck Condition Rating must be a numeric value (0-9) when the bridge has a deck.
000201	District 5	Kent	Error	BEP01-2	S_RI_5B	BEP01 Legal Load Configuration value has invalid characters. Valid characters include A-Z, a-z, 0-9, ...
000201	District 5	Kent	Error	BEP01-2	S_RI_OP1	BEP01 Legal Load Configuration value has invalid characters. Valid characters include A-Z, a-z, 0-9, ...
000201	District 5	Kent	Error	BEP01-2	S_RI_OP4	BEP01 Legal Load Configuration value has invalid characters. Valid characters include A-Z, a-z, 0-9, ...

Basic FHWA Validation & Submittal in BrM

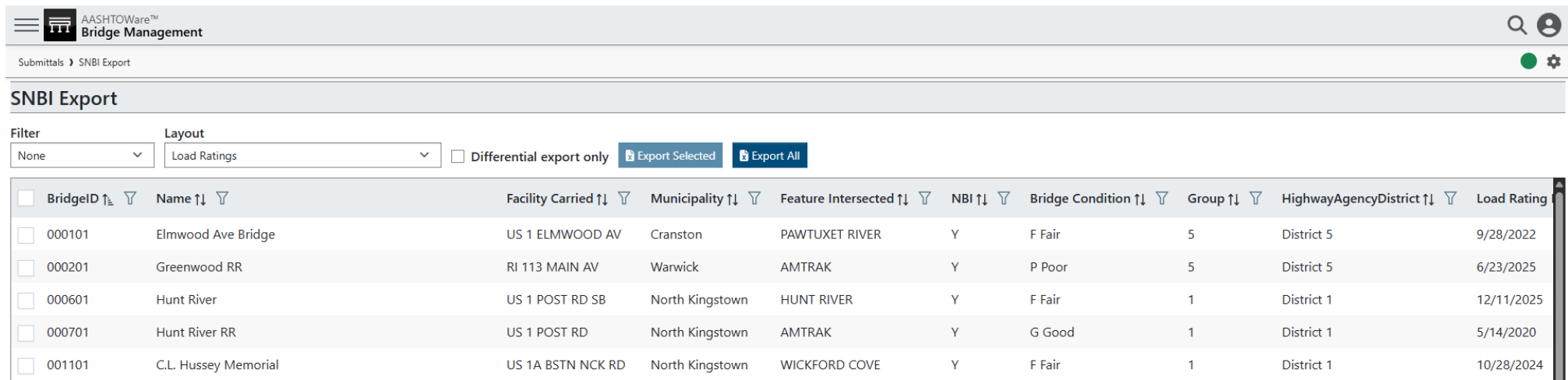
1. Set up bridge data to indicate which records are reported to FHWA
2. Perform standard FHWA validations on bridge data
3. **Resolve data errors**
4. Export submittal JSON file

Basic FHWA Validation & Submittal in BrM

1. Set up bridge data to indicate which records are reported to FHWA
2. Perform standard FHWA validations on bridge data
3. Resolve data errors
4. **Export submittal JSON file**

Data Submittal

- Submittals » SNBI Export allows an agency to export selected bridges' data to JSON file for submittal to FHWA



AASHTOWare™ Bridge Management

Submittals » SNBI Export

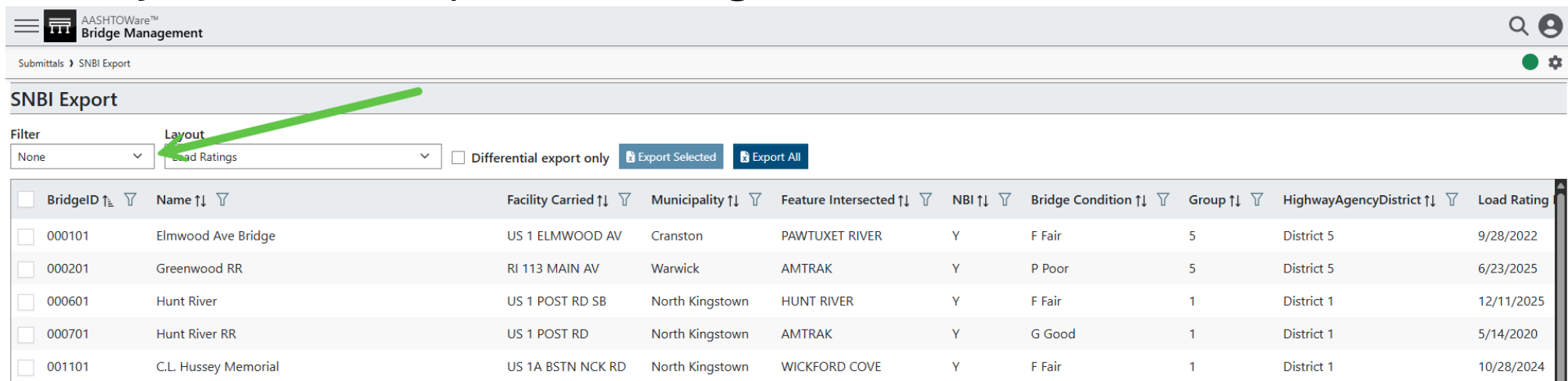
SNBI Export

Filter: None Layout: Load Ratings ☐ Differential export only [Export Selected](#) [Export All](#)

☐ BridgeID ↑↓	Name ↑↓	Facility Carried ↑↓	Municipality ↑↓	Feature Intersected ↑↓	NBI ↑↓	Bridge Condition ↑↓	Group ↑↓	HighwayAgencyDistrict ↑↓	Load Rating
☐ 000101	Elmwood Ave Bridge	US 1 ELMWOOD AV	Cranston	PAWTUXET RIVER	Y	F Fair	5	District 5	9/28/2022
☐ 000201	Greenwood RR	RI 113 MAIN AV	Warwick	AMTRAK	Y	P Poor	5	District 5	6/23/2025
☐ 000601	Hunt River	US 1 POST RD SB	North Kingstown	HUNT RIVER	Y	F Fair	1	District 1	12/11/2025
☐ 000701	Hunt River RR	US 1 POST RD	North Kingstown	AMTRAK	Y	G Good	1	District 1	5/14/2020
☐ 001101	C.L. Hussey Memorial	US 1A BSTN NCK RD	North Kingstown	WICKFORD COVE	Y	F Fair	1	District 1	10/28/2024

Data Submittal – Filtering

- ‘Filter’ drop down allows user to select an existing filter for a subset of bridges
 - Always limited to reportable bridges, elements, and features



AASHTOWare™ Bridge Management

Submittals > SNBI Export

SNBI Export

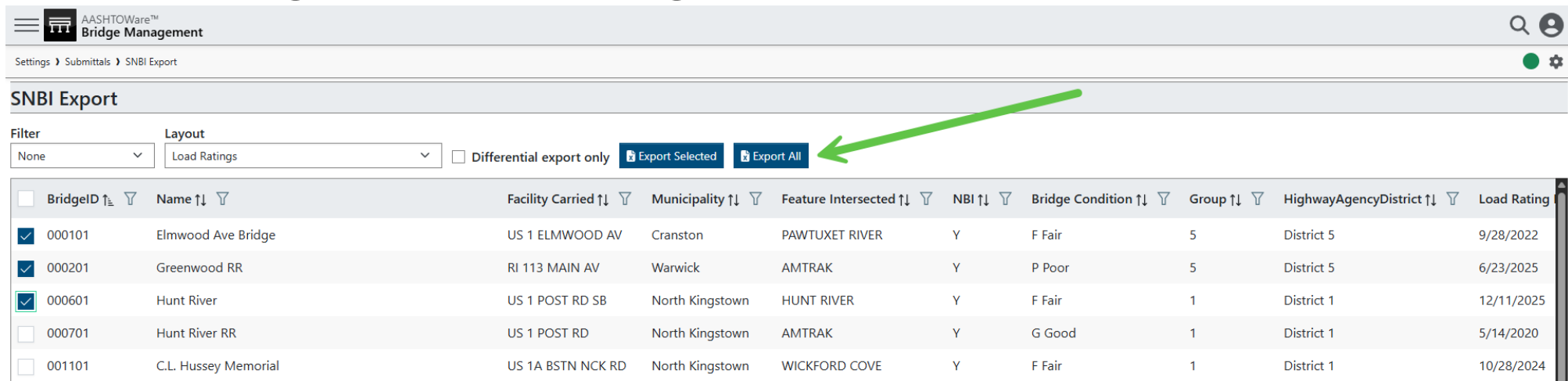
Filter: None Layout: Load Ratings

☐ Differential export only [Export Selected](#) [Export All](#)

☐ BridgeID ↑↓	Name ↑↓	Facility Carried ↑↓	Municipality ↑↓	Feature Intersected ↑↓	NBI ↑↓	Bridge Condition ↑↓	Group ↑↓	HighwayAgencyDistrict ↑↓	Load Rating
☐ 000101	Elmwood Ave Bridge	US 1 ELMWOOD AV	Cranston	PAWTUXET RIVER	Y	F Fair	5	District 5	9/28/2022
☐ 000201	Greenwood RR	RI 113 MAIN AV	Warwick	AMTRAK	Y	P Poor	5	District 5	6/23/2025
☐ 000601	Hunt River	US 1 POST RD SB	North Kingstown	HUNT RIVER	Y	F Fair	1	District 1	12/11/2025
☐ 000701	Hunt River RR	US 1 POST RD	North Kingstown	AMTRAK	Y	G Good	1	District 1	5/14/2020
☐ 001101	C.L. Hussey Memorial	US 1A BSTN NCK RD	North Kingstown	WICKFORD COVE	Y	F Fair	1	District 1	10/28/2024

Data Submittal – Exporting

- Once one or more bridges have been selected, ‘Export Selected’ or ‘Export All’
 - ‘Export All’ ignores user’s bridge access to export all records in database



The screenshot shows the AASHTOWare Bridge Management interface for the SNBI Export function. The header includes the AASHTOWare logo and navigation links for Settings, Submittals, and SNBI Export. The main section is titled 'SNBI Export' and contains a Filter dropdown set to 'None', a Layout dropdown set to 'Load Ratings', and a checkbox for 'Differential export only'. Two buttons, 'Export Selected' and 'Export All', are visible. A green arrow points to the 'Export All' button. Below the buttons is a table with columns for BridgeID, Name, Facility Carried, Municipality, Feature Intersected, NBI, Bridge Condition, Group, HighwayAgencyDistrict, and Load Rating. The table lists five bridges, with the first three selected (checked).

BridgeID	Name	Facility Carried	Municipality	Feature Intersected	NBI	Bridge Condition	Group	HighwayAgencyDistrict	Load Rating
☒ 000101	Elmwood Ave Bridge	US 1 ELMWOOD AV	Cranston	PAWTUXET RIVER	Y	F Fair	5	District 5	9/28/2022
☒ 000201	Greenwood RR	RI 113 MAIN AV	Warwick	AMTRAK	Y	P Poor	5	District 5	6/23/2025
☒ 000601	Hunt River	US 1 POST RD SB	North Kingstown	HUNT RIVER	Y	F Fair	1	District 1	12/11/2025
☐ 000701	Hunt River RR	US 1 POST RD	North Kingstown	AMTRAK	Y	G Good	1	District 1	5/14/2020
☐ 001101	C.L. Hussey Memorial	US 1A BSTN NCK RD	North Kingstown	WICKFORD COVE	Y	F Fair	1	District 1	10/28/2024

Advanced FHWA Validation & Submittal in BrM

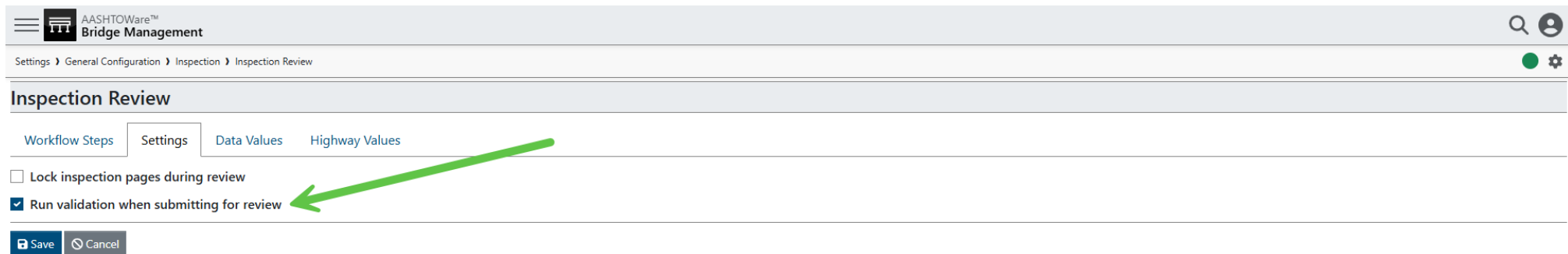
- Validation as part of inspection review
- Agency-defined validations (coming in 7.2.2)
- Differential submittals (coming in 7.2.2)

Advanced FHWA Validation & Submittal in BrM

- **Validation as part of inspection review**
- Agency-defined validations (coming in 7.2.2)
- Differential submittals (coming in 7.2.2)

Validation in Inspection Review

- Settings » General Configuration » Inspection » Inspection Review allows an agency to include validation as part of inspection review workflow



AASHTOWare™ Bridge Management

Settings » General Configuration » Inspection » Inspection Review

Inspection Review

Workflow Steps Settings Data Values Highway Values

☐ Lock inspection pages during review

☒ Run validation when submitting for review

Save Cancel

Validation in Inspection Review

- Clicking ‘Submit for Review’ on an inspection takes user to Validate page filtered for the bridge in question
 - User is not required to resolve all issues before proceeding

The screenshot displays the 'Validate' page in the AASHTOWare Bridge Management system. The page header includes the AASHTOWare logo and 'Bridge Management'. The breadcrumb trail shows 'Bridges > Validate'. The main section is titled 'Validate' and contains two tabs: 'Summary' (selected) and 'Results'. Below the tabs is an 'Export' button. A table lists the validation data for Bridge ID 00110. The table has columns for Bridge ID, Highway Agency District (B.L.04), County Code (B.L.02), Critical Errors, General Errors, and Flags. The data row shows 9 Critical Errors, 53 General Errors, and 7 Flags. Below the table is a pagination control showing '1 - 1 of 1' and 'Rows per Page 15'. At the bottom are two buttons: 'Submit for Review' and 'Cancel'.

Bridge ID ↑	Highway Agency District (B.L.04) ↑↓	County Code (B.L.02) ↑↓	Critical Errors ↑↓	General Errors ↑↓	Flags ↑↓
00110			9	53	7

Advanced FHWA Validation & Submittal in BrM

- Validation as part of inspection review
- **Agency-defined validations (coming in 7.2.2)**
- Differential submittals (coming in 7.2.2)

Agency-Defined Validations

- Settings » General Configuration » Validation Rules allows an agency to manage the validations seen on Bridges » Validate

AASHTOWare™
Bridge Management

Settings » General Configuration » Validation Rules

Search

Validation Rules

Standard rules implement the FHWA SNBI Data Validation Rules v1.1 (published 12/30/2025).

Filter

Severity

Active

All

Search

Collapse All

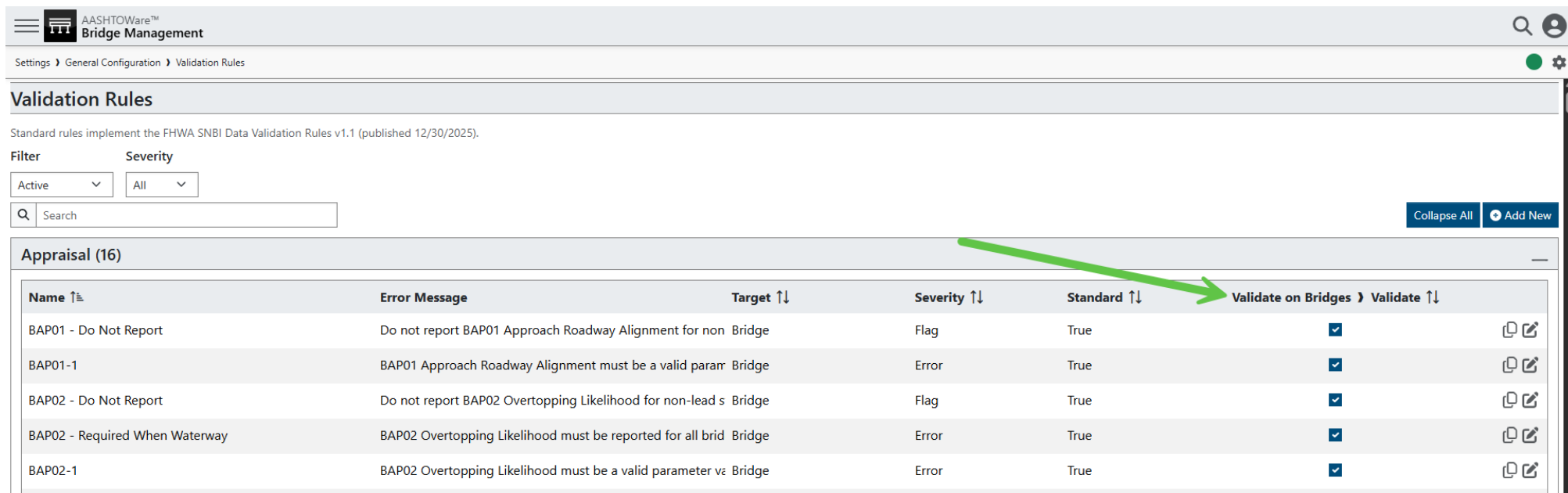
Add New

Appraisal (16)

Name ↕	Error Message	Target ↕	Severity ↕	Standard ↕	Validate on Bridges »	Validate ↕
BAP01 - Do Not Report	Do not report BAP01 Approach Roadway Alignment for non Bridge		Flag	True	☒	 
BAP01-1	BAP01 Approach Roadway Alignment must be a valid param Bridge		Error	True	☒	 
BAP02 - Do Not Report	Do not report BAP02 Overtopping Likelihood for non-lead s Bridge		Flag	True	☒	 
BAP02 - Required When Waterway	BAP02 Overtopping Likelihood must be reported for all brid Bridge		Error	True	☒	 
BAP02-1	BAP02 Overtopping Likelihood must be a valid parameter v Bridge		Error	True	☒	 

Agency-Defined Validations – Disabling

- ‘Validate on Bridges > Validate’ allows an agency to disable standard FHWA validations



AASHTOWare™ Bridge Management

Settings > General Configuration > Validation Rules

Validation Rules

Standard rules implement the FHWA SNBI Data Validation Rules v1.1 (published 12/30/2025).

Filter **Severity**

Active All

[Collapse All](#) [Add New](#)

Appraisal (16)

Name ↑↓	Error Message	Target ↑↓	Severity ↑↓	Standard ↑↓	Validate on Bridges > Validate ↑↓	
BAP01 - Do Not Report	Do not report BAP01 Approach Roadway Alignment for non Bridge		Flag	True	☒	
BAP01-1	BAP01 Approach Roadway Alignment must be a valid param Bridge		Error	True	☒	
BAP02 - Do Not Report	Do not report BAP02 Overtopping Likelihood for non-lead s Bridge		Flag	True	☒	
BAP02 - Required When Waterway	BAP02 Overtopping Likelihood must be reported for all brid Bridge		Error	True	☒	
BAP02-1	BAP02 Overtopping Likelihood must be a valid parameter v Bridge		Error	True	☒	

Agency-Defined Validations – Overriding

- ‘Override’ allows an agency to override a standard FHWA validation with an agency-defined version of the validation

AASHTOWare™ Bridge Management

Settings > General Configuration > Validation Rules

Validation Rules

Standard rules implement the FHWA SNBI Data Validation Rules v1.1 (published 12/30/2025).

Filter: Active | Severity: All

Search: []

Collapse All | Add New

Appraisal (16)

Name ↑	Error Message	Target ↑↓	Severity ↑↓	Standard ↑↓	Validate on Bridges ↑↓	Validate ↑↓
BAP01 - Do Not Report	Do not report BAP01 Approach Roadway Alignment for non Bridge		Flag	True	☒	 
BAP01-1	BAP01 Approach Roadway Alignment must be a valid param Bridge		Error	True	☒	 
BAP02 - Do Not Report	Do not report BAP02 Overtopping Likelihood for non-lead s Bridge		Flag	True	☒	 
BAP02 - Required When Waterway	BAP02 Overtopping Likelihood must be reported for all brid Bridge		Error	True	☒	 
BAP02-1	BAP02 Overtopping Likelihood must be a valid parameter v Bridge		Error	True	☒	 

Agency-Defined Validations – Overriding

- Overridden rule is marked as disabled
- Override rule is clearly labeled

Validation Rules

Standard rules implement the FHWA SNBI Data Validation Rules v1.1 (published 12/30/2025).

Filter: All Severity: All

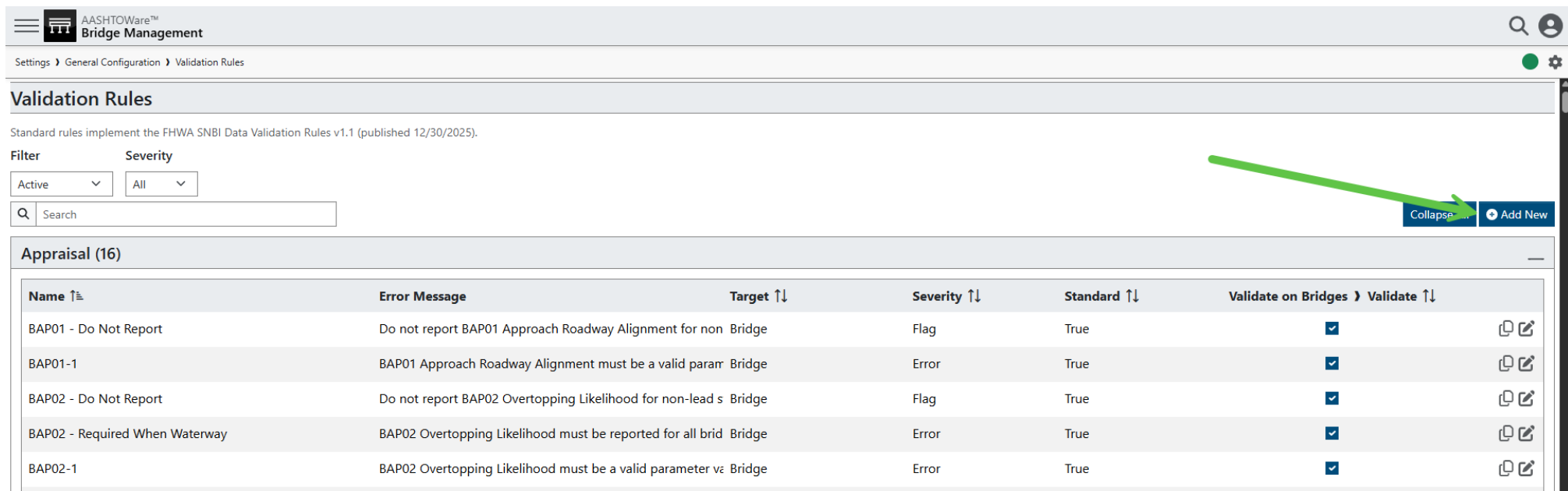
Q bg01-3 Collapse All Add New

BridgeGeometry (2)

Name ↑	Error Message	Target ↑↓	Severity ↑↓	Standard ↑↓	Validate on Bridges > Validate ↑↓	
BG01-3 Overridden	BG01 NBIS Bridge Length must be greater than 20 or the bri Bridge		Error	True	☐	
BG01-3 (Override) Override of: BG01-3	BG01 NBIS Bridge Length must be greater than 20 or the bri Bridge		Error	False	☒	

Agency-Defined Validations – Creating New

- ‘Add New’ allows an agency to create a new agency-specific validation that will be included on Bridges » Validate



AASHTOWare™ Bridge Management

Settings » General Configuration » Validation Rules

Validation Rules

Standard rules implement the FHWA SNBI Data Validation Rules v1.1 (published 12/30/2025).

Filter: Active | Severity: All

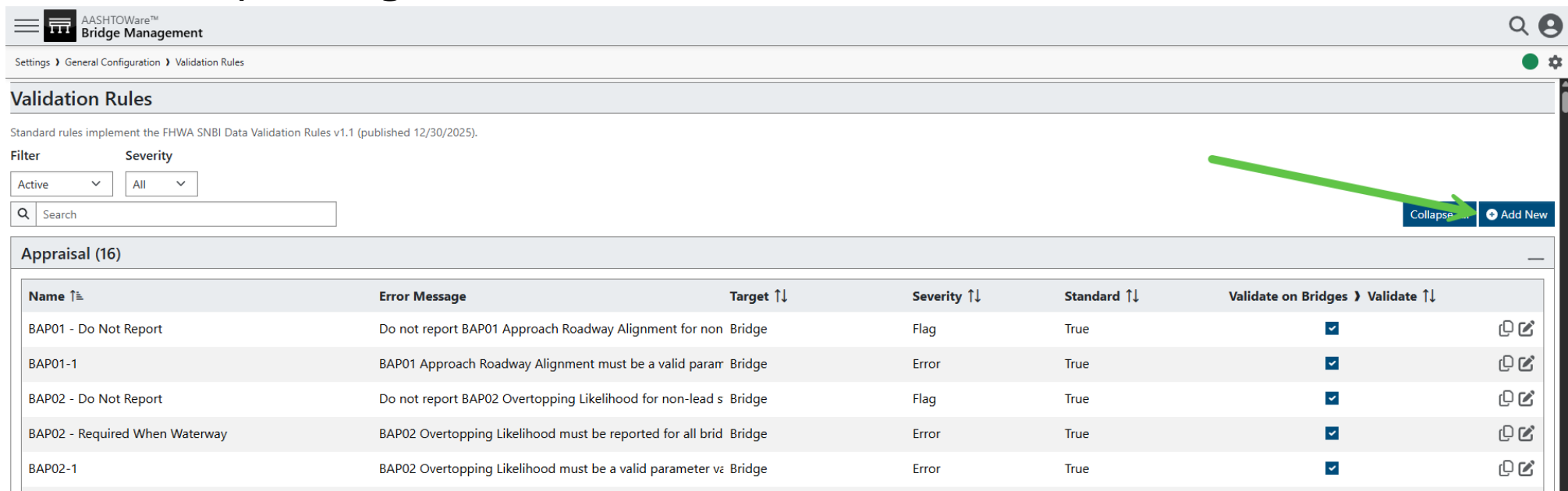
Search:

Collapse Add New

Name ↑	Error Message	Target ↑↓	Severity ↑↓	Standard ↑↓	Validate on Bridges » Validate ↑↓
BAP01 - Do Not Report	Do not report BAP01 Approach Roadway Alignment for non Bridge		Flag	True	☒
BAP01-1	BAP01 Approach Roadway Alignment must be a valid param Bridge		Error	True	☒
BAP02 - Do Not Report	Do not report BAP02 Overtopping Likelihood for non-lead s Bridge		Flag	True	☒
BAP02 - Required When Waterway	BAP02 Overtopping Likelihood must be reported for all brid Bridge		Error	True	☒
BAP02-1	BAP02 Overtopping Likelihood must be a valid parameter v Bridge		Error	True	☒

Agency-Defined Validations – Creating New

- ‘Add New’ allows an agency to create a new agency-specific validation that will be included on Bridges > Validate
 - Enter the passing condition for the rule

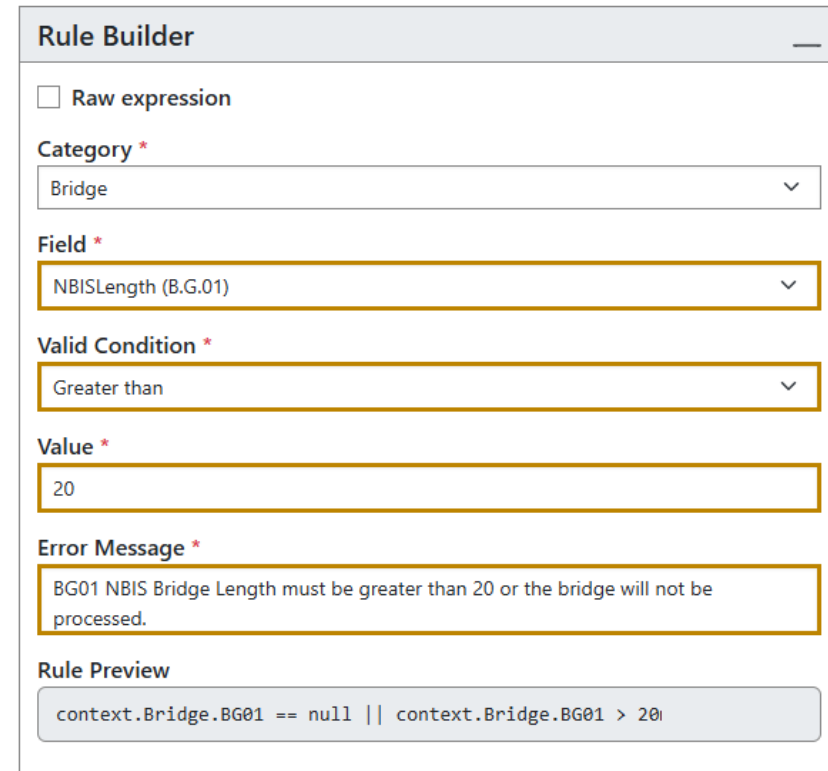


The screenshot shows the 'Validation Rules' page in the AASHTOWare Bridge Management application. The page header includes the application name and navigation links. Below the header, there's a section for 'Validation Rules' with a note about standard rules. A filter section allows users to filter by 'Active' and 'Severity'. A search bar is also present. The main content is a table titled 'Appraisal (16)' which lists validation rules. A green arrow points to the 'Add New' button in the top right corner of the table area.

Name ↑	Error Message	Target ↑↓	Severity ↑↓	Standard ↑↓	Validate on Bridges > Validate ↑↓
BAP01 - Do Not Report	Do not report BAP01 Approach Roadway Alignment for non Bridge		Flag	True	☒
BAP01-1	BAP01 Approach Roadway Alignment must be a valid param Bridge		Error	True	☒
BAP02 - Do Not Report	Do not report BAP02 Overtopping Likelihood for non-lead s Bridge		Flag	True	☒
BAP02 - Required When Waterway	BAP02 Overtopping Likelihood must be reported for all brid Bridge		Error	True	☒
BAP02-1	BAP02 Overtopping Likelihood must be a valid parameter v Bridge		Error	True	☒

Creating New Validations – Rule Builder

- Rule builder provides drop down fields to create rule
 - ‘Category’ (section of SNBI export) and ‘Field’ drop downs
 - ‘Valid Condition’ drop down has selections dependent on field type



The screenshot displays the 'Rule Builder' interface. At the top, there is a toggle for 'Raw expression' which is currently unchecked. Below this, the 'Category' dropdown is set to 'Bridge'. The 'Field' dropdown is set to 'NBISLength (B.G.01)'. The 'Valid Condition' dropdown is set to 'Greater than'. The 'Value' field contains the number '20'. The 'Error Message' field contains the text: 'BG01 NBIS Bridge Length must be greater than 20 or the bridge will not be processed.' At the bottom, the 'Rule Preview' section shows the logical expression: `context.Bridge.BG01 == null || context.Bridge.BG01 > 20`.

Rule Builder

☐ Raw expression

Category *
Bridge

Field *
NBISLength (B.G.01)

Valid Condition *
Greater than

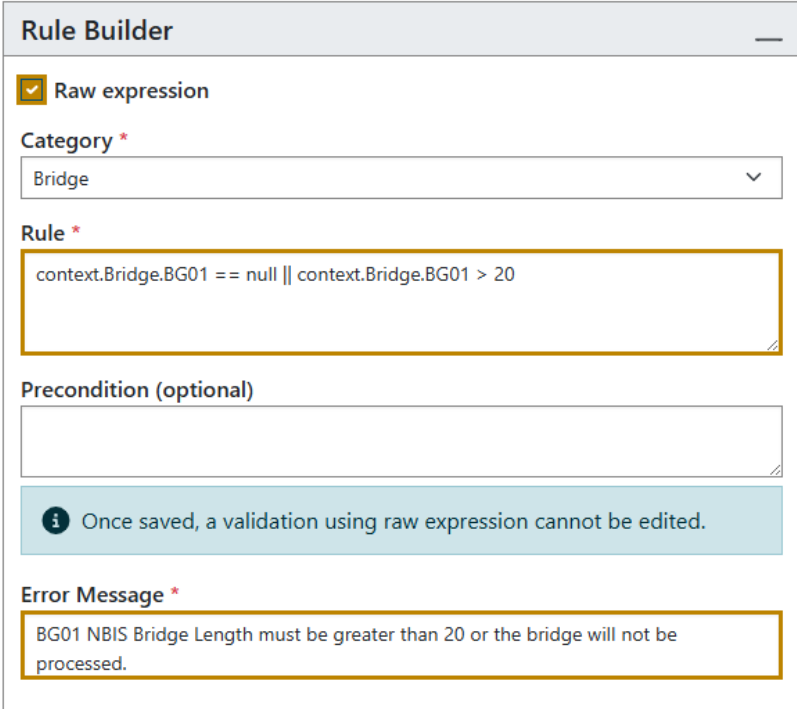
Value *
20

Error Message *
BG01 NBIS Bridge Length must be greater than 20 or the bridge will not be processed.

Rule Preview
`context.Bridge.BG01 == null || context.Bridge.BG01 > 20`

Creating New Validations – Raw Expression

- Raw expression provides text box to build rule from scratch
 - More flexibility and access to helpers such as
 - IsValidParameter
 - HasValidFhwaCharacters
 - AnyChild
 - AllChild



The screenshot shows the 'Rule Builder' interface. It has a title bar 'Rule Builder' with a close button. Below the title bar, there is a checked checkbox labeled 'Raw expression'. Underneath, there is a 'Category *' dropdown menu with 'Bridge' selected. The 'Rule *' section contains a text box with the expression 'context.Bridge.BG01 == null || context.Bridge.BG01 > 20'. Below this is an empty 'Precondition (optional)' text box. A light blue information banner states: 'Once saved, a validation using raw expression cannot be edited.' At the bottom, the 'Error Message *' section contains a text box with the message: 'BG01 NBIS Bridge Length must be greater than 20 or the bridge will not be processed.'

Creating New Validations – Precondition

- Precondition allows user to define when a rule should be checked
- Rule Builder has built-in advanced preconditions

The screenshot shows a web interface for configuring a precondition. At the top, there is a header bar labeled "Precondition" with a minus sign on the right. Below this, there are two blue buttons: "Add Precondition" and "Add Advanced Precondition". The main content area is titled "Precondition 1" with a minus sign on the right. Inside this section, there is a label "Advanced Precondition *" followed by a dropdown menu that currently displays "Is the lead state" with a downward arrow. Below this, there is a label "Result" followed by a dropdown menu that currently displays "is true" with a downward arrow. In the bottom right corner of the "Precondition 1" section, there is a red button with a trash icon and the text "Remove Precondition".

Creating New Validations – Precondition

- Precondition allows user to define when a rule should be checked
- Rule Builder has built-in advanced preconditions
- Raw expression allows for text entry of same advanced preconditions

Rule Builder

☒ Raw expression

Category *
Bridge

Rule *
context.Bridge.BG01 == null || context.Bridge.BG01 > 20

Precondition (optional)
IsLeadState(context.Bridge)

Once saved, a validation using raw expression cannot be edited.

Error Message *
BG01 NBIS Bridge Length must be greater than 20 or the bridge will not be processed.

Creating New Validations – User Manual

- The 7.2.2 user manual is being updated to include all standard operators, helpers, and advanced conditions needed to write raw expression rules and preconditions.

The following **Advanced Conditions** are available. If entering via rule builder UI, the user can add an advanced condition by clicking the **Add Advanced Precondition** button:

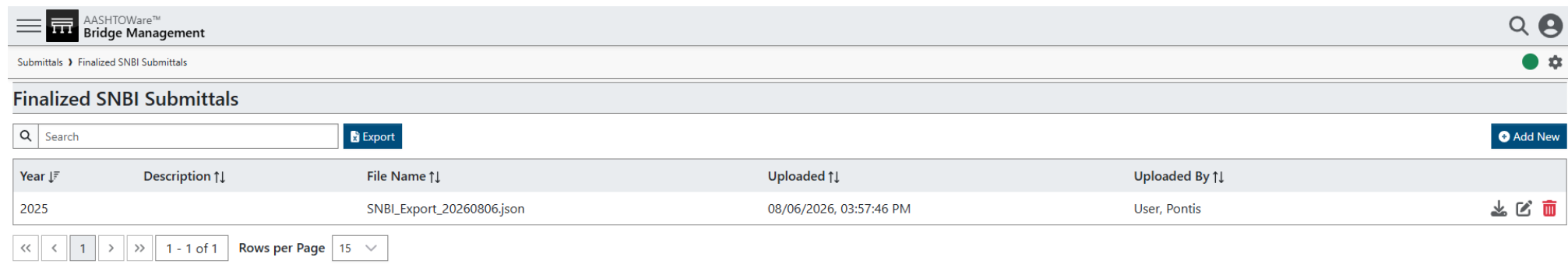
Advanced Condition	Example	What it checks
Has a waterway	HasWaterwayFeature(context.Bridge)	Feature Type (B.F.01) for at least one feature record for the given bridge begins with 'W' AND the record has Report to FHWA set as checked. Features are set on Bridges » Inventory & Appraisal » Features .
Has a waterway or relief structure	HasWaterwayOrReliefFeature(context.Bridge)	Feature Type (B.F.01) for at least one feature record for the given bridge begins with 'W' or 'F' AND the record has Report to FHWA set as checked. Features are set on Bridges » Inventory & Appraisal » Features .
Has a steel span or substructure	HasSteelSpanOrSteelSub(context.Bridge)	Span Material (B.SP.04) for at least one superstructure record for the given bridge begins with 'S' OR Substructure Material (B.SB.03) for at least one substructure record for the given bridge starts with 'S'. Superstructure field values are set on Bridges » Inventory & Appraisal » Design .

Advanced FHWA Validation & Submittal in BrM

- Validation as part of inspection review
- Agency-defined validations (coming in 7.2.2)
- **Differential submittals (coming in 7.2.2)**

Differential Submittals – Final Submittal Files

- New page Submittals » Finalized SNBI Submittals allows the agency to upload their finalized JSON file for each year



AASHTOWare™ Bridge Management

Submittals » Finalized SNBI Submittals

Finalized SNBI Submittals

Search [Export](#) [Add New](#)

Year ↓↑	Description ↑↓	File Name ↑↓	Uploaded ↑↓	Uploaded By ↑↓
2025		SNBI_Export_20260806.json	08/06/2026, 03:57:46 PM	User, Pontis

<< < 1 > >> 1 - 1 of 1 Rows per Page 15

Differential Submittals – SNBI Export

- Check box on Submittals » SNBI Export allows agency to submit a differential export instead of a full database export

The screenshot shows the AASHTOWare Bridge Management interface for the SNBI Export function. The header includes the AASHTOWare logo and 'Bridge Management'. Below the header, the breadcrumb 'Submittals » SNBI Export' is visible. The main section is titled 'SNBI Export'. It features a 'Filter' dropdown set to 'None' and a 'Layout' dropdown set to 'Load Ratings'. There are two checkboxes: 'Differential export only' (unchecked) and 'Export Selected' (checked, highlighted with a green arrow). To the right of these checkboxes are two buttons: 'Export Selected' and 'Export All'. Below this is a table with 10 columns: BridgeID, Name, Facility Carried, Municipality, Feature Intersected, NBI, Bridge Condition, Group, HighwayAgencyDistrict, and Load Rating. The table contains 5 rows of data.

BridgeID	Name	Facility Carried	Municipality	Feature Intersected	NBI	Bridge Condition	Group	HighwayAgencyDistrict	Load Rating
000101	Elmwood Ave Bridge	US 1 ELMWOOD AV	Cranston	PAWTUXET RIVER	Y	F Fair	5	District 5	9/28/2022
000201	Greenwood RR	RI 113 MAIN AV	Warwick	AMTRAK	Y	P Poor	5	District 5	6/23/2025
000601	Hunt River	US 1 POST RD SB	North Kingstown	HUNT RIVER	Y	F Fair	1	District 1	12/11/2025
000701	Hunt River RR	US 1 POST RD	North Kingstown	AMTRAK	Y	G Good	1	District 1	5/14/2020
001101	C.L. Hussey Memorial	US 1A BSTN NCK RD	North Kingstown	WICKFORD COVE	Y	F Fair	1	District 1	10/28/2024

Differential Submittals – SNBI Export

- Differential export includes only new or changed:
 - posting status events
 - inspection schedule
 - work events
- Per FHWA requirements, bridge records are always reported.
- Finalized SNBI Submittal files from past years are used to identify & remove duplicates.
- Differential export also includes a spreadsheet of the above with key field changes, which need to be communicated manually to FHWA.



AASHTOWare Bridge Management User Group Meeting 2026