

ALDOT Transition to BrM 7

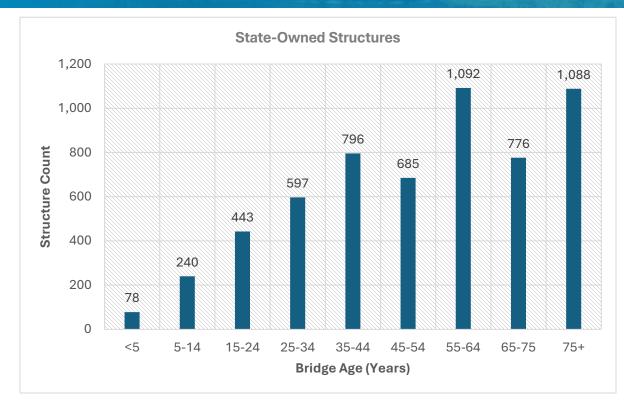
Cole Stump, P.E.

Bridge Operations Engineer – Alabama DOT



ALDOT & BrM

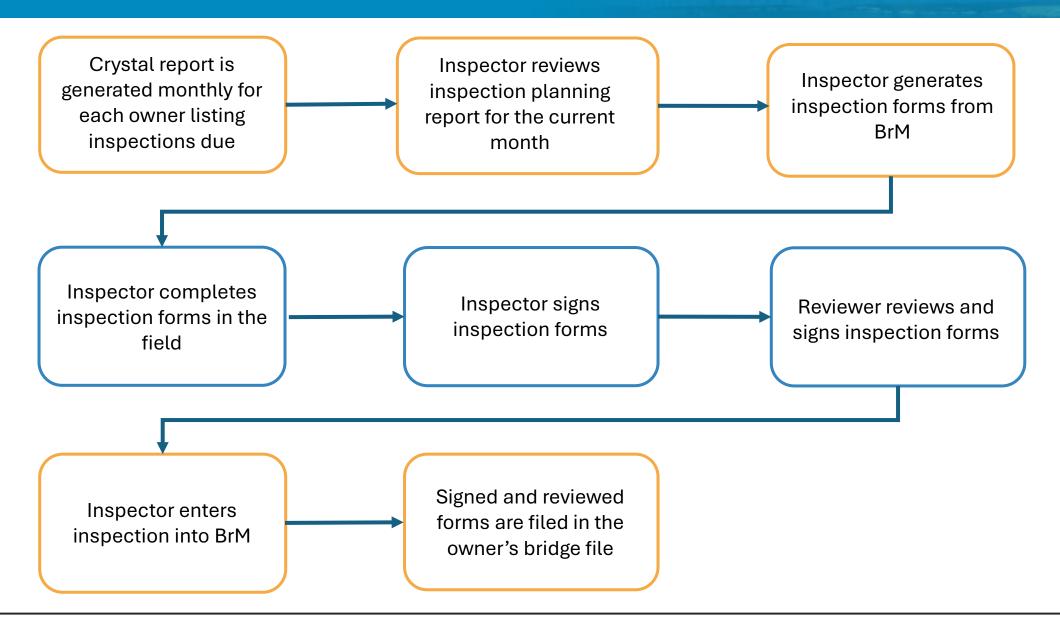
- Implemented AASHTOWare BrM in 2014
- The BrM database is the primary data source for ALDOT's bridge information.
- Used for Inspection and Management
- ALDOT inspects all state-owned structures with in-house forces.
- Local agencies are responsible for having their own bridges inspected.



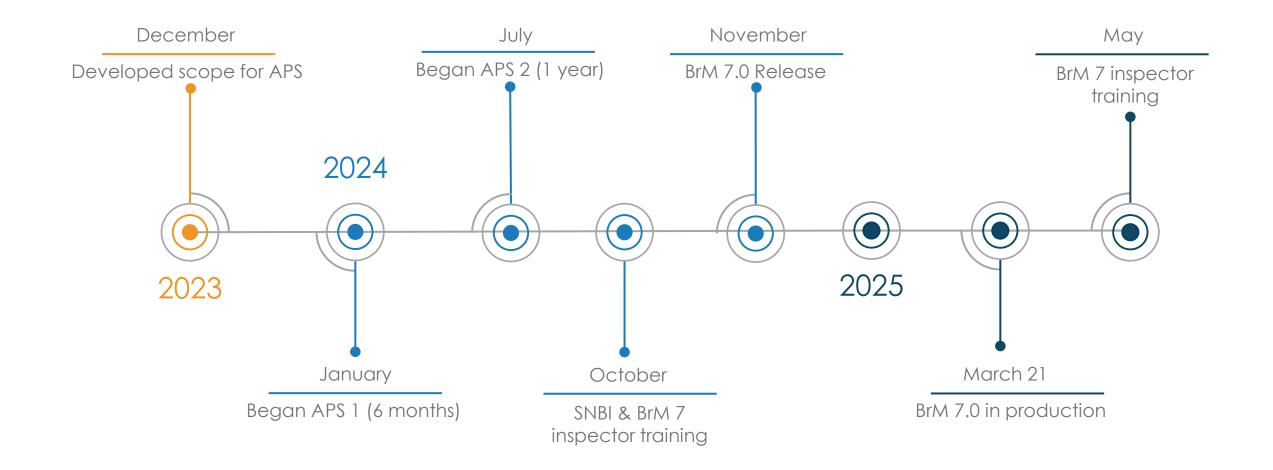
Owner	Count	Count (%)	Deck Area (ft²)	Deck Area (%)
State	5,795	36.3%	85,560,518	73.8%
County	8,488	53.0%	23,237,981	20.1%
City	1,640	10.3%	6,894,930	5.9%
Other	63	0.4%	213,729	0.2%
Total	15,986		115,907,158	



ALDOT Inspection Workflow



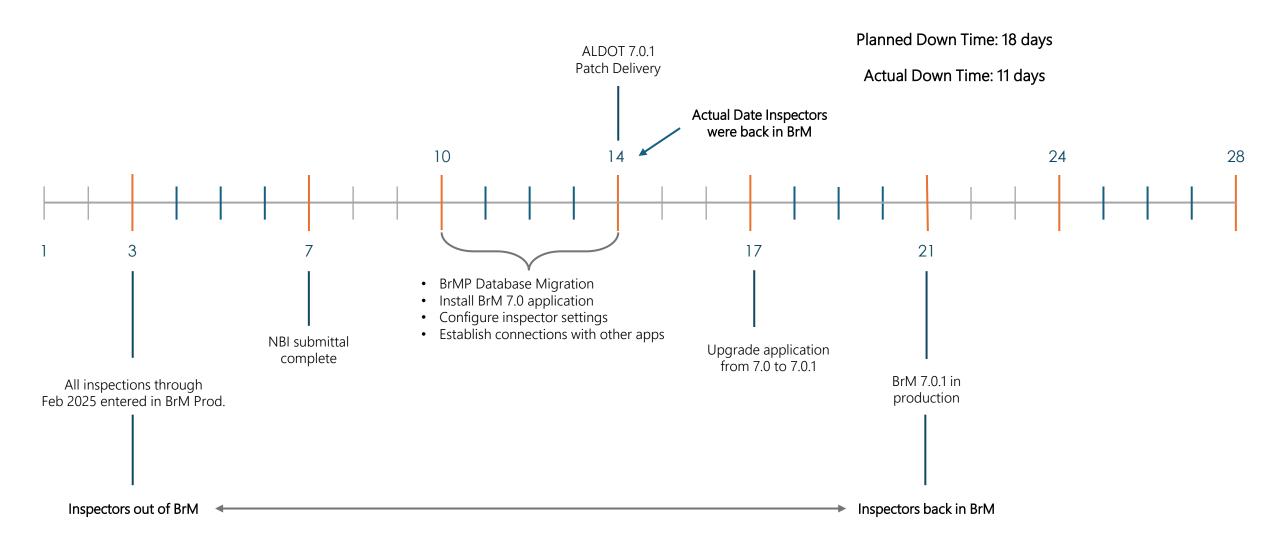
BrM 7 General Timeline



SNBI Training

- (May 2022) NBIS updated & SNBI published
- (March 2023) ALDOT hosted pilot NHI Bridge Inspection Refresher Training (SNBI Version)
- (Sep 2023) ALDOT hosted FHWA SNBI training for ALDOT central office and bridge inspection staff
- (Oct Dec 2023) ALDOT introduced inspectors to SNBI during bridge inspection refresher training
- (Fall 2024) ALDOT conducted SNBI training including using BrM 7.0
 All certified inspectors in Alabama were required to attend.
- (May 2025) ALDOT conducted SNBI training with expanded BrM 7.0 training

BrM 7 Upgrade Timeline | March 2025



Phased Approach

Phase 0

Data migration & testing

BrM 7.0 release

Phase 1
 Critical for go-live

Phase 2
 Not critical but high value needs

• Phase 3
Things we want but can do without to start

Database Migration

- Migrated userbrdg fields into SNBI fields where applicable
 - Paint History
 - Previous Bridge ID
 - Equipment Data
 - Scour inspection data
 - Scour evaluation data
- Added fields to UI via page builder page and created dashboards to verify the migrated data
- Mayvue provided post.upgrade.sql script using code blocks. When something is added to the script it is done
 under a new block. This allows for the script to be executed multiple times omitting blocks that have already
 executed.

```
1483 THROW;
1484 END CATCH;
1485 */
1486 COMMIT TRANSACTION;
```

Phase 1

- Goal was for inspectors to:
 - log in and access their assets
 - Know which inspections are due
 - Generate inspection forms
 - Enter completed inspections in BrM

- Steps
 - Install BrM 7 application on production server
 - Admin log in
 - Access filters
 - Users > Groups
 - Users > Roles
 - Inspection Types
 - Certifications / Qualifications
 - Load Rating Vehicles
 - Posting Sign Types
 - Configure Multimedia
 - Updated reports
 - Inspection Planning Report
 - Bridge Inspection Forms

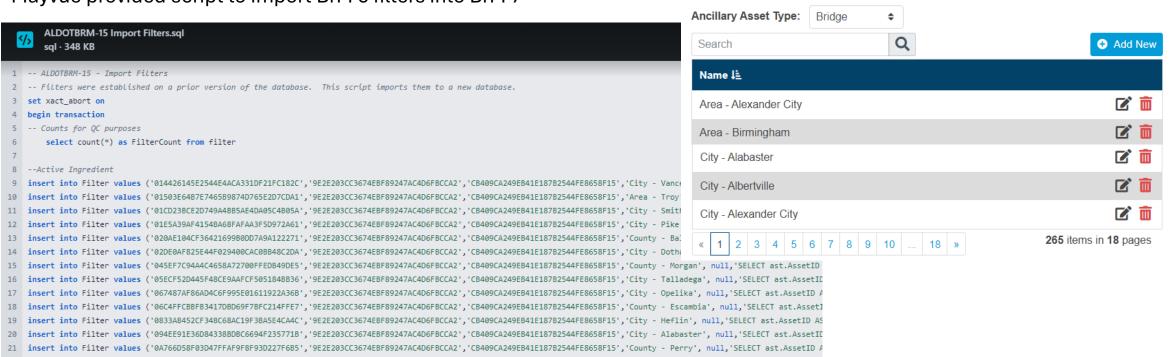


Group Access Filters

Groups migrated from BrM 6 to BrM 7 using standard migration script. Filters did not due to database differences.

Needed to create 265 group access filters.

Mayvue provided script to import BrM 6 filters into BrM 7



Admin > Security > Groups

User Groups

Roles

BrM 6

Role Name	Active Users	Inactive Users	Total Users
▼	¥		Ţ
Bridge Inspector	472	602	1074
Read Only	306	89	395
ALDOT Area Bridge Inspector	23	0	23
Admin	13	3	16
Rating	11	2	13
ALDOT Area Bridge Operations	12	0	12
Tunnel Inspector	11	0	11
Scour	6	0	6
Bridge Inspector - Advanced Multimedia	5	0	5
ALDOT Area Bridge & Tunnel Inspector	4	0	4
Default	4	0	4
Read Only - Scour	4	0	4
Admin Read-Only	2	0	2
ALDOT Area Bridge & Tunnel Operations	1	0	1
Atom	1	0	1
Basic	0	1	1
Total	875	697	1572

BrM 7

Role Name	Active Users	Inactive Users	Total Users
<u>▼</u>	▼	▼	ĮΨ
Bridge Data Entry	167	541	708
Read Only	237	72	309
A Bridge Inspector	247	3	250
No Access	36	207	243
ALDOT Area Bridge Inspector	27	0	27
ALDOT Data Entry	16	0	16
Admin	10	0	10
ALDOT Area Bridge Operations	7	0	7
ALDOT Area Bridge & Tunnel Inspector	6	0	6
Rating	6	0	6
Scour	5	0	5
FHWA	3	0	3
ALDOT Central Office Management & Training	2	0	2
Default	2	0	2
Mayvue	2	0	2
ALDOT Area Bridge & Tunnel Operations	1	0	1
Bridge & Tunnel Inspector	1	0	1
Total	775	823	1598

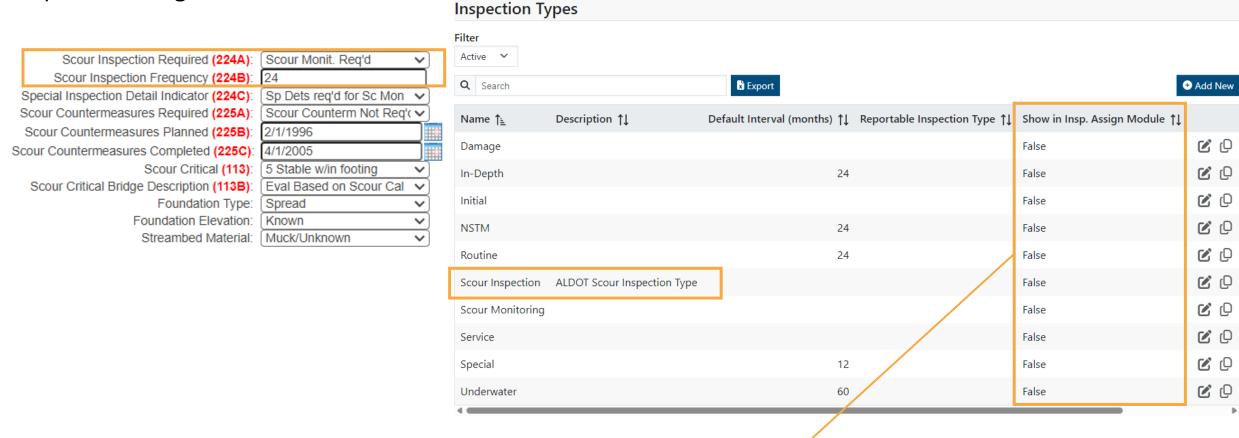


Inspection Types

Created inspection type for Scour Inspection (Different than SNBI Scour Monitoring)

Userbrdg fields in 6.x stored this data but wanted to create its own inspection type for

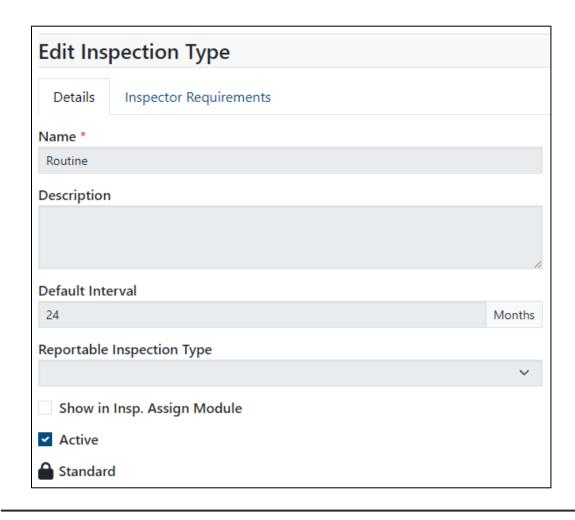
inspection assignment module

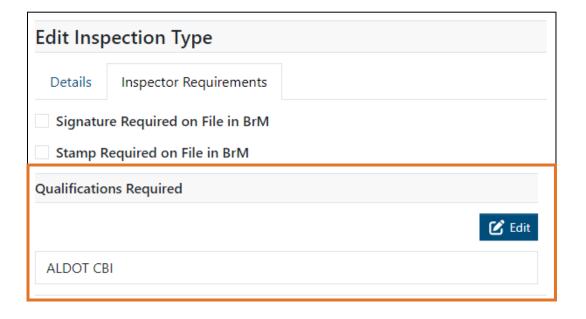


Currently not using inspection assignment but plan to in 7.1



Configured qualification requirements for inspection types







- ALDOT has been tracking:
 - Bridge inspector refresher training since 2002
 - NHI 130055 training since 1988
- Training history was stored in ALDOT in-house system (ABIMS) and carried forward into BrM.
- ALDOT Bridge Inspector Certification Policy
- Experience
 - 5 Years total qualifying experience
- Training
 - NHI 130055 or 130056
 - Bridge Inspection Refresher Training in the past 2 years
 - ALDOT BrM Training
 - ALDOT Element Inspection Training

Policy on Certification of Bridge Inspectors in Alabama

Contents

- 1. Definitions
- Overview
- 3. Certification of Bridge Inspectors in Alabama
- 4. Continuing Education Requirements for Certified Bridge Inspectors
- 5. Tracking of Certified Bridge Inspectors in Alabama
- 6. Enforcement of Certification Requirements
- 7. Returning to "Active" Status from "Suspended" Status
- 8. Contact

Change History

September 8, 2006

Updated "Policy on Certification of Bridge Inspectors in Alabama". Changed experience credit for four-year degree from two years to three years to agree with NBIS. Added one year experience credit for associate's degree to agree with NBIS. Clarified procedure under "Returning to 'Active' Status from 'Suspended' Status' to incorporate the Bridge Inspection Refresher Courses.

January 26, 2018

Updated "Policy on Certification of Bridge Inspectors in Alabama". Added requirement of CBI applicants to successfully complete an ALDOT BrM / Element Inspection Training Course. Added the option for professional engineers to successfully complete NHI Course 130056 "Safety Inspection of In-Service Bridges for Professional Engineers" to satisfy the requirement for successfully completing the national bridge inspection school sponsored by the National Highway Institute (NHI). Updated terms and definitions.

1. Definitions

The following terms are commonly used in this document.

BrM AASHTOWare Bridge Management. Software used by Alabama to manage a

centralized database of all bridges in the State meeting the criteria of the

National Bridge Inspection Standards (NBIS).

Agency As used in this document, a public organization such as a state, county, or

municipality that owns at least one structure that meets the definition of a

bridge as specified by the NBIS.

An agency, company, private organization, or individual who owns at least one

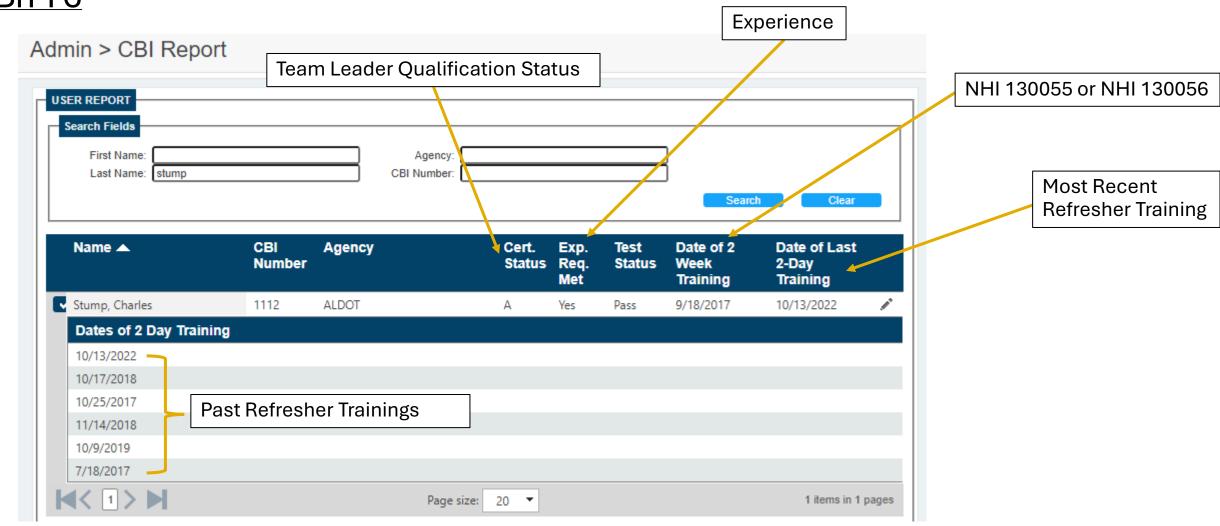
structure that meets the definition of a bridge as specified by the NBIS.

Policy on Certification of Bridge Inspectors in Alabama (March 2018)

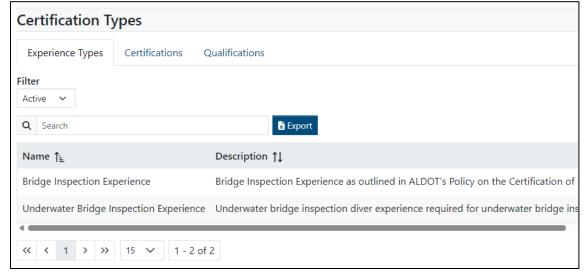
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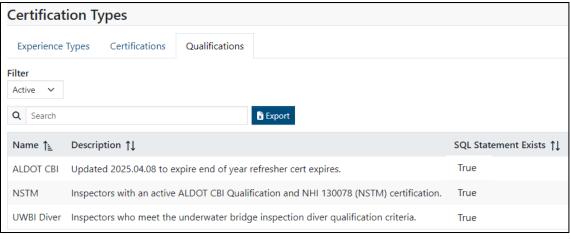


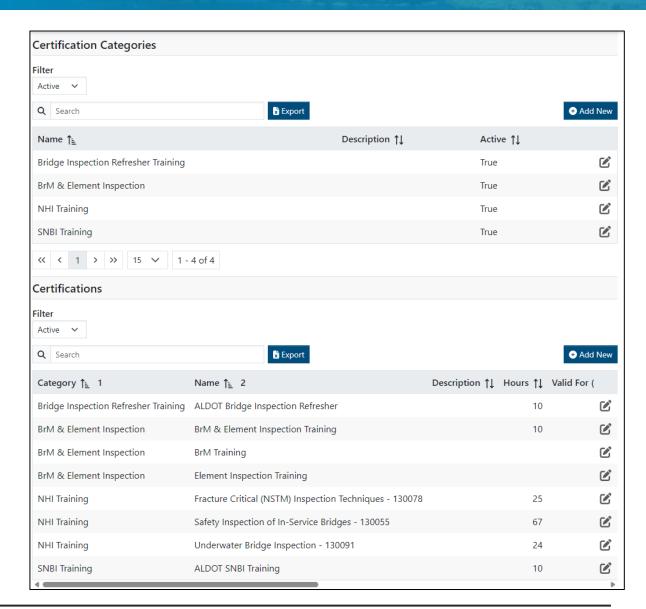




<u>BrM 7</u>

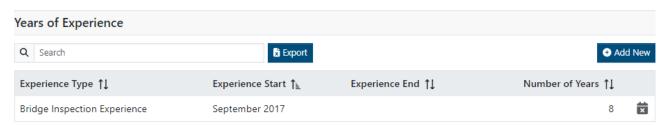




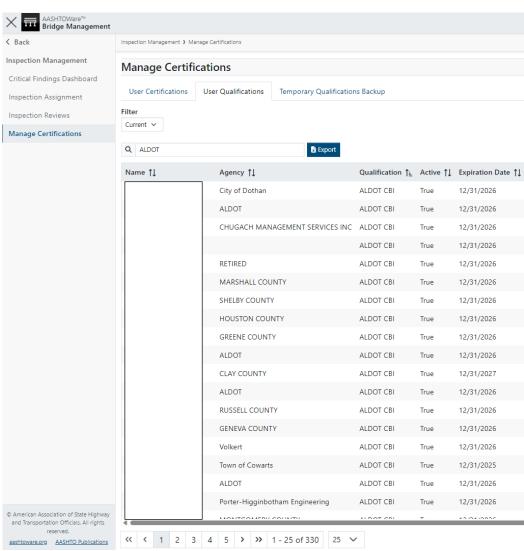




BrM 7



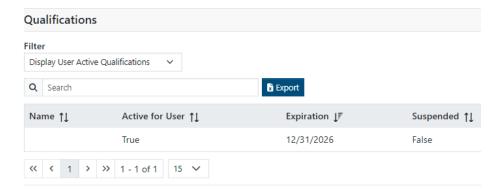
- To exercise control over qualifications, user experience is only entered by an Admin user once the inspector's application is approved by central office.
- Expires end of year, 24 months after last bridge inspection refresher training

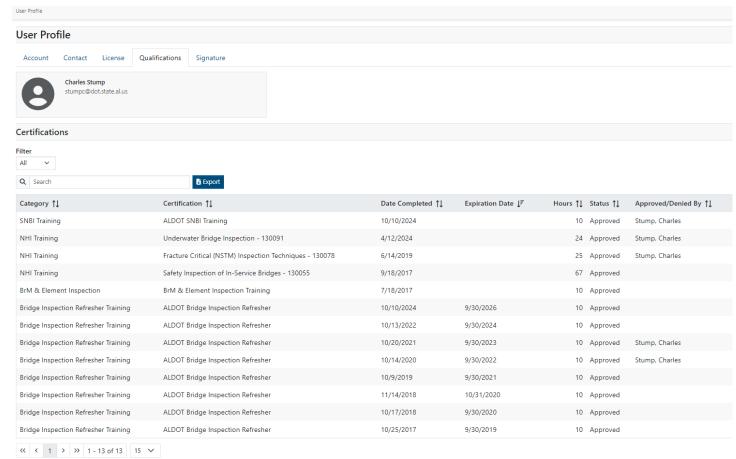




BrM 7

 Users can view their own certifications & qualifications on the user profile page



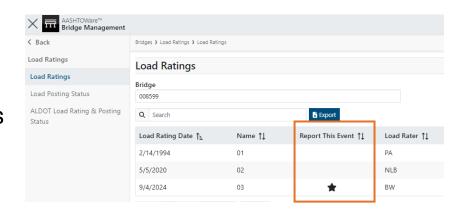


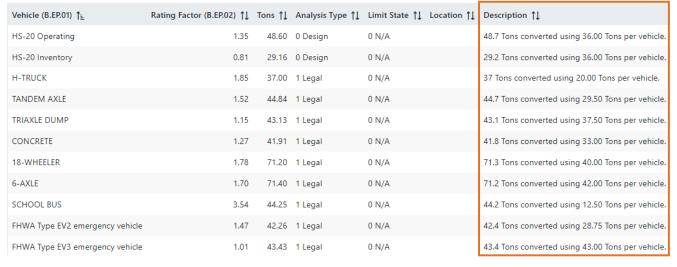


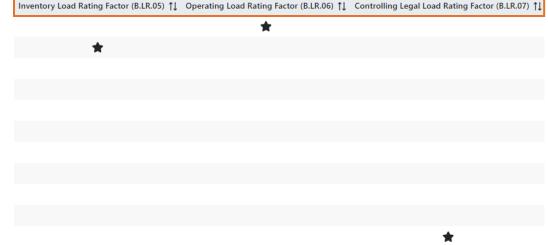
Load Ratings

Load ratings needed some touch up work

- Script to mark "Report This Event" (SNBI B.LR.## Items)
- Script to convert load rating vehicle tonnages to load factors
- Script to ratings for Operating Rating, Inventory Rating, and Controlling Legal Load Factor



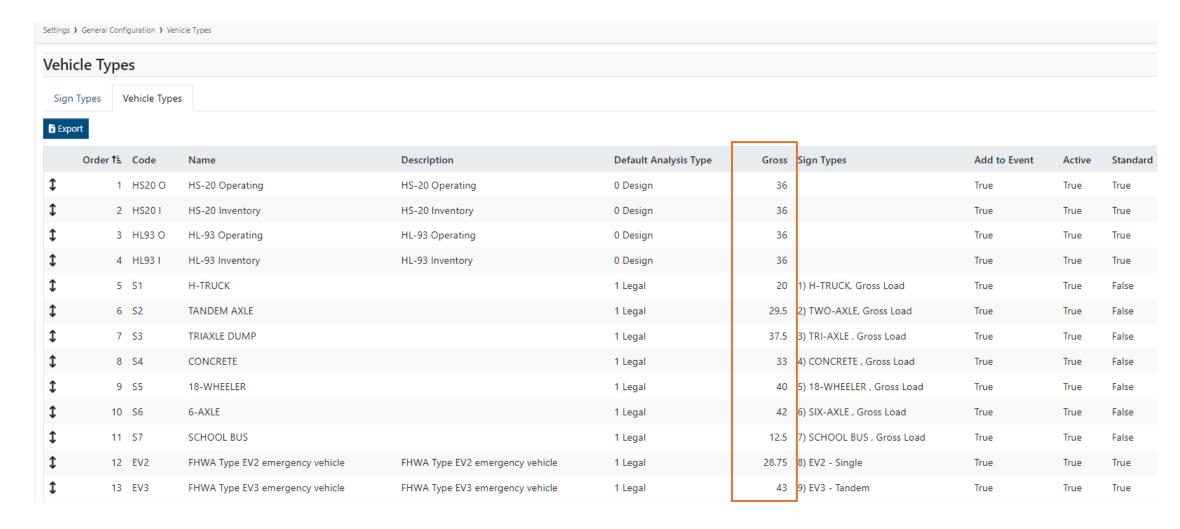






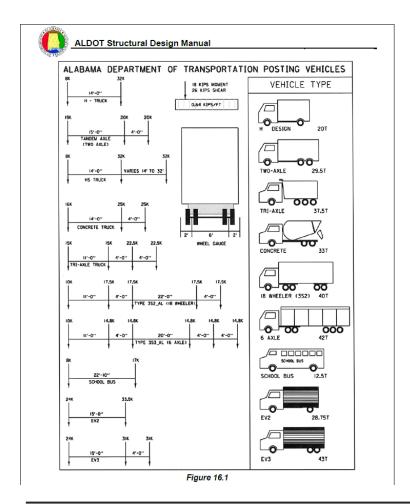
Load Rating Vehicles

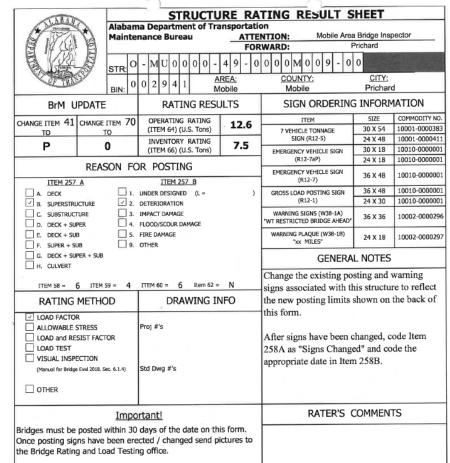
Before converting the vehicle tonnage to load factors vehicles must be configured

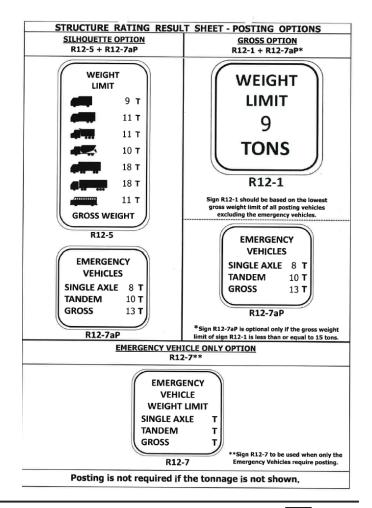


Posting Sign Types

ALDOT Posting Vehicles

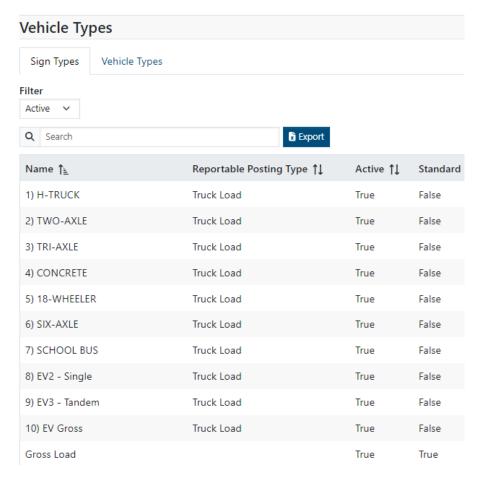




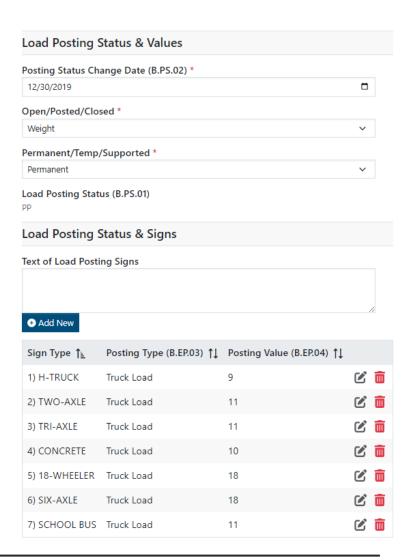


Posting Sign Types

Created sign type for each posting vehicle









Configuring Multimedia

- We had many multimedia files that still referenced [MULTISERVER5] in the database. This was giving us multimedia trouble in the application and crystal reports.
- Mayvue developed a Multimedia File Migration Tool.
- Legacy multimedia files were moved into the current BrM multimedia folder structure and naming convention.

FileLoc ↑↓▽	FileRef ↑↓▽
NULL	007850042514.jpg
[MULTISERVER5]	007850031705.JPG
NULL	007850_2023-04-05 (20).JPG
[MULTISERVER5]	007850031904.JPG
NULL	007850042540.jpg
NULL	007850042513.jpg

AASHTOWare BrM Support / ALDOT APS Support / ALDOTBRM-46

Multimedia images not showing in BrM 7.0.1 that show in 6.7.1

Attached you'll find the **Multimedia File Migration Tool** we've developed to assist with organizing and migrating multimedia files currently stored under [MULTISERVER5]. This tool pulls metadata directly from the ALDOT_7 database, builds folder structures using BridgeID, MultimediaFolder, and EventDate, and moves each file into its correct location.

Included: (Each file is clickable to download from Jira)

- Move-LegacyMultimediaFiles.ps1 the PowerShell script
- 🛢 BrM7 Legacy Media Move.docx usage guide and configuration steps

Key Features:

- Supports dry run mode for safe previewing
- Automatically creates folders and moves files
- Logs every action in a CSV file
- Updates IsMigratedFile = NULL on successful move
- · Works with over 170,000+ records efficiently

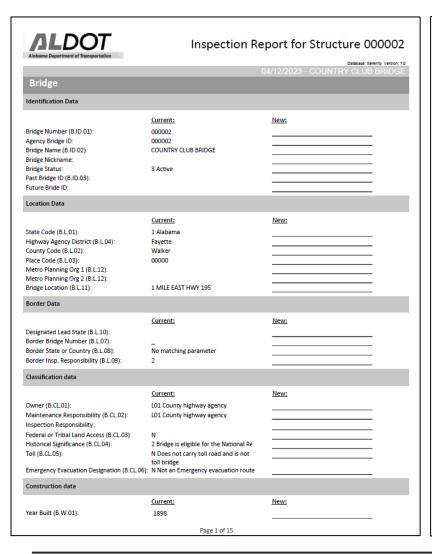
Please start by running the script in **dry run mode** (\$dryRun = \$true) to validate paths and log output.

Once confirmed, set \$dryRun = \$false to proceed with the full migration. The rough estimation of this tool's runtime is around 2 hours.



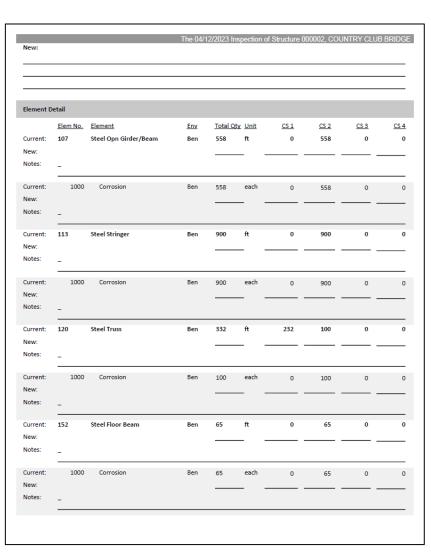
Phase 1 Reports

Inspection Report (Field Form)



Schedule	THE CHARLES THE POSSION	of Structure 000002, COUNTRY CLUB BRID
Summary		
,	Current:	New:
		- Table
Inspection Completion Date (B.IE.03):	2023-04-12	
Inspector:	Chesnutt, Jarrett	
Date Entered:	2023-04-12	
Entered by:	Chesnutt, Jarrett	
QA Date (B.IE.08):		
QC Date (B.IE.09):		
Inspection Data Update Date (B.IE.10):		
Inspection Needs		
	Current:	New:
NSTM Inspection Required (B.IR.01):	Y NSTM inspection required	
Complex Features (B.IE.04):		
Fatigue Details (B.IR.02):		
Inspection Condition		
	Current:	New:
Deck (B.C.01):	5 Fair	
Superstructure (BC.02):	5 Fair	
Substructure (B.C.03):	6 Satisfactory	
Culvert (B.C.04):	4 Poor	
Bridge Condition Classification (B.C.12):	P Poor	
Lowest Condition Rating (B.C.13):	4	
Railing (B.C.05):	No matching parameter	
Railing Transition (B.C.06):	No matching parameter	
Bearing (B.C.07):	No matching parameter	
Joints (B.C.08):	No matching parameter	
Other Condition Ratings		
	Current:	New:
Channel (B.C.09):	8 Very Good	
Channel Protection (B.C.10):	No matching parameter	
Scour (B.C.11):	No matching parameter	
NSTM Inspection Condition (B.C.14):	No matching parameter	
Underwater Inspection (B.C.15):	No matching parameter	
Appraisal		
	Current:	New:
Approach Roadway Alignment (B.AP.01):		
Overtopping Liklihood (B.AP.02):	No matching parameter	
Scour Vulnerability (B.AP.03):	No matching parameter	
Scour Plan of Action (B.AP.04):	No matching parameter	
Seismic Vulnerability (B.AP.05):	No matching parameter	
Inspection Notes		
Narrative of Inspection Elements (B.IE.11):		
Agency Inspection Notes:	CHANNEL DRIFT U.S. DECK POSTED 3 T	
	DECK NEEDS PATCHING SUPER SECTION SUB SETTLED AT ABUT 1 AND B4	N LOSS ON TRUSSES AND PINS AT TRUSS END @ B- DEBRIS ON BENTS
	SUB SETTLED AT ABOUT AND B4	DEBRIS ON BEN IS
	UNDERWATER INSPECTION 3/31/2020	BRIDGE CLOSED ADVANCED SECTION LOSS COLUM
	2-1, 3-2	

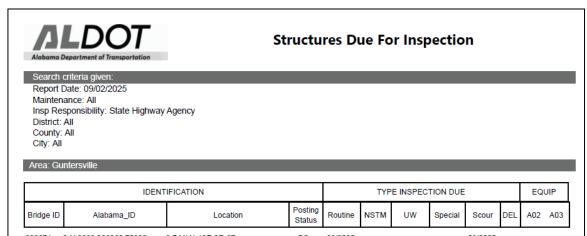
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Phase 1 Reports

Inspection Planning Report



IDENTIFICATION				TYPE INSPECTION DUE					EQUIP		
Bridge ID	Alabama_ID	Location	Posting Status	Routine	NSTM	UW	Special	Scour	DEL	A02	A03
000674	OAL0069 220262.75900	0.7 MI N JCT SR 67	РО	09/2025				09/2025			
000675	OAL0069 220264.35000	2.4 MI N JCT SR 67	PO	09/2025				09/2025			
000855	OAL0273 100009.51600	9.5 MI N JCT SR 68 *273	PO	09/2025				09/2025			
002722	OAL0075 480061.416+1	1.1 MI S JCT SR68 * SR75	PO	09/2025				09/2025			Υ
003478	OAL0069 220223.01600	0.7 MI N JCT SR 91	PO	09/2025				09/2025			
003479	OAL0069 220223.66600	1.4 MI N JCT SR 91	PO	09/2025				09/2025			
003480	OAL0069 220225.10000	2.8 MI N JCT SR 91	PO	09/2025				09/2025			
003481	OAL0069 220226.31900	4.2 MI N JCT SR 91	PO	09/2025				09/2025			
006526	OAL0001 280257.903-1	US 431 .6 MI SO.US 278	PO	09/2025							Υ
006527	OAL0001 280257.903+1	U S 431 .6 MI. SO. US 278	PO	09/2025							Υ
007202	OAL0068 100045.55800	0.5 MI W JCT SR 68 * 35	PO	09/2025				09/2025			
010781	OAL0091 220007.16600	7 MI N JCT SR 69	SO				09/2025				Υ
011038	OAL0069 480276.29200	1.4 MI W BROWNS CREEK	PO	09/2025				09/2025			
014778	OIN0565 450008.300-2	.3 M W JCT I565*AIRPRT RD	PO	09/2025						Υ	Υ
015204	OAL0069 220249.58400	2.5 MI N JCT US 278	PO	09/2025				09/2025			
15315	OIN0565 450014.03700	7.2 MI N COUNTY LINE RD	PO	09/2025						Υ	Υ
15668	OAL0001 450334.353+1	0.6 MI N JCT US231 *US431	PO	09/2025						Υ	Υ
15766	OMU0000 4500000010-1	1 MI. EAST CO. LINE RD.	PO	09/2025						Υ	Υ
15770	OMU0000 4500000010+1	1 MI E CO LINE RD	PO	09/2025						Υ	Υ
15948	OIN0565 450019.135-2	2.05 MI E JCT I565 * SR53	PO	09/2025						Υ	Υ
15954	OIN0565 450019.671-2	2.6 MI E JCT I565 * SR 53	PO	09/2025						Υ	Υ
15955	OIN0565 450019.676+2	2.6 MI E JCT I565 * SR 53	PO	09/2025						Υ	Υ
17494	OAL0077 280105.50900	AL 77 OVER HORTON CREEK	PO	09/2025				09/2025			

Structures Due:	This Month	Last Month	2 Months Ago	3 Months Ago	4 Months Ago	5 Months Ago	6 Months Ago	+ 6 MonthsAgo
Routine	22	0	0	0	0	0	0	0
NSTM	0	0	0	0	0	0	0	0
Underwater	0	0	0	0	0	0	0	0
Special	1	0	0	0	0	0	0	0
Scour	12	0	0	0	0	0	0	0
Total	35	0	0	0	0	0	0	0
A.1.6.5 Structure Insp Planning 2025-07-16 v0.9.rpt		Page	e 1 of 17					09/02/2025 15:23:17



Phase 1 Reports

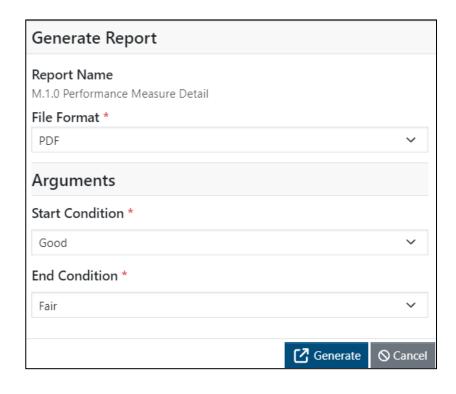
Structures Recommended for Posting

BrM 7 STRUCTURES RECOMMENDED FOR POSTING (B.PS.01 Needs Action, Needs Reduction, or Missing) SIGNS NOT IN PLACE

DIVISION: COUNTY: CITY:

BIN	STRUCT NUM	FEATURES INTERSECTED	RATING DATE	Posting Status	Posting Status Date
012242	OCO0080 250000M01100	YELLOW CREEK	07/31/2025	PA	07/31/2025
004389	OAL0050 620004.87500	WIND CREEK	05/30/2025	PA	05/30/2025
006685	OCO0083 230000113X00	EAST CHOCTAWHATCHEE R	05/23/2025	PD	05/23/2025
011859	OCO0134 360000192Z00	BRANCH	07/14/2025	PD	07/14/2025
003814	OCO0067 230000108X00	EAST CHOCTAWHATCHEE R	05/08/2025	PA	05/08/2025
004186	OCO0415 480000072Z00	DRUM CREEK	07/23/2025	PD	07/23/2025
005488	OCO0014 230000107X00	KELLY CREEK	05/09/2025	PD	05/09/2025
008732	OCO0020 230000118X00	JUDY CREEK	05/23/2025	PD	05/23/2025
004355	OCO0036 230000115X00	WEST CHOCTAWHATCHEE R	05/12/2025	PD	05/12/2025
006684	OCO0083 230000112X00	EAST CHOCTAWHATCHEE R	05/19/2025	PA	05/19/2025
007450	OCO0071 230000103Z00	LITTLE CHOC RIVER	05/12/2025	PD	05/12/2025
005285	OCO0076 250000120Z00	SOUTH FORK	07/22/2025	PD	07/22/2025
007368	OCO0021 230000111X00	HURRICANE CREEK	04/29/2025	PD	05/13/2025
013387	OCO0145 540000002Z00	LITTLE COALFIRE BRANCH	04/10/2025	PD	04/15/2025
005487	OCO0014 230000106X00	KILLEBREW MILL CREEK	05/08/2025	PA	05/08/2025
003095	OCO0054 230000119Z00	COTTON CREEK	05/08/2025	PA	05/08/2025
005986	OCO0073 230000129X00	BLACKWOOD CREEK	05/12/2025	PD	05/12/2025
010981	OCO0060 230000089Z00	LITTLE JUDY CREEK	07/01/2025	PD	07/01/2025
020218	OCO0000 650000008800	BRUSHY CREEK	07/30/2025	PA	07/30/2025
012198	OCO0060 140000040Z00	HORSE CREEK	04/01/2025	PA	04/01/2025
006652	OCO0068 230000123X00	WEST CHOCTAWHATCHEE R	05/19/2025	PA	05/19/2025
006653	OCO0068 230000124X00	WEST CHOCTAWHATCHEE R	05/19/2025	PA	05/19/2025
004357	OCO0036 230000117X00	JUDY CREEK	05/09/2025	PD	05/09/2025
004356	OCO0036 230000116X00	JUDY CREEK	05/09/2025	PD	05/09/2025
004354	OCO0036 230000114X00	WEST CHOCTAWHATCHEE R	05/08/2025	PA	05/08/2025
006654	OCO0068 230000127X00	LITTLE JUDY CREEK	05/19/2025	PD	05/19/2025
		TOTAL NUMBER OF STRUCTU	IRES: 26		





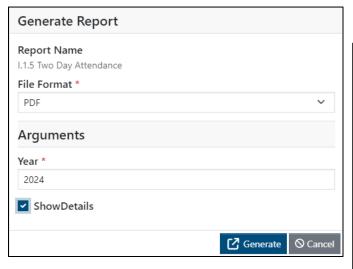
BIN: 011176 FACILITY CARRIED: US231; US431; SR1			NHS: Y	NHS: Y					
AREA: Guntersville	AREA: Guntersville FEATURE INTERSECTED: BRIAR FORK FLINT RIVER			YEAR BUI	YEAR BUILT: 1974				
OWNER: 501	FHWA DECK	AREA (FT²): 2	26,311.70)		AGE: 51			
Insp Date Insp Type	G/F/P	Deck	Super		Sub	Culv	Photos	Inspector	
12/09/2024 Routine	F	6	7		7	N	13	Brian Scott McDo	well
12/21/2022 Routine	G	7	7		7	N	10	Windell LaBron V	/hite
16				Unit	Total Qty.	CS 1	CS 2	CS 3	CS 4
12/09/2024 16	Re Conc Top	Flange		sq.ft	26,364	0	26,353	11	0
						0.00%	99.96%	0.04%	0.00%
12/21/2022 16	Re Conc Top	Flange		sq.ft	26,364	26,333	30	1	0
						99.88%	0.11%	0.00%	0.00%
110				Unit	Total Qty.	CS 1	CS 2	CS 3	CS 4
12/09/2024 110	Re Conc Opn	Girder/Beam		ft	3,672	3,657	13	2	0
						99.59%	0.35%	0.05%	0.00%
12/21/2022 110	Re Conc Opn	Girder/Beam		ft	3,672	3,657	13	2	0
						99.59%	0.35%	0.05%	0.00%

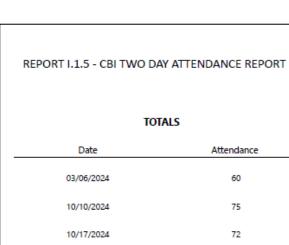


	FEDERALLY REQU	IRED LIST	
			September 04 Page 1
	Report Criteria		
Maint: S01 State transportation department Insp Resp: All			
Area: Birmingham			
County: All City: All			
City. All			
	STRUCTURES SUMM	MARY	
STRUCTURE TYPES			
	Total	FHWA Deck Area (Sq Ft)	AL Deck Area (Sq Ft)
Total Active Structures:	860	22,146,554	22,955,623
Total Active Bridges:	662	21,567,503	21,567,502
Total Active Culverts:	198	579,051	1,388,121
Total Active Unknown Type:	0	0	0
NSPECTION TYPES			
	Total	FHWA Deck Area (Sq Ft)	AL Deck Area (Sq Ft)
outine	860	22,146,554	22,955,623
Inderwater	15	413,305	413,305
STM	18	968,835	968,835
pecial	25	196,219	207,166
cour	377	4,061,240	4,870,309
OUIPMENT TYPES			
	Total		
01 Ladder	9		
02 Bucket lift vehicle	434		
A03 Under bridge inspection vehicle	136		
AO4 Rigging	270		
AO6 Boat	8		
AX ATV	0		
SCOUR SUMMARY			
	Total		
tructures requiring scour evalutaions:	377		
tructures with scour problems:	6		
tructures with scour evaluations:	375		
tructures without scour evaluations:	2		

	FEDERALLY	REQUIRED LIST
Maint: S01 State transpo Insp Resp: All Area: Birmingham County: All		t Criteria
City: All		
	POSTING STAT	TUS COUNTS
Posting Status	Description	Total
С	Closed	1
N	Permanent - New	3
PA	Permanent - Needs Action	0
PA-T	Needs Action	0
PD	Permanent - Needs Reduction	0
PM	Permanent - Missing	0
PO	Permanent - Open	847
PP	Permanent - Weight	0
PP-T	Weight	2
PR	Permanent - Other	0
PR-T	Other	0
SA	Supported - Needs Action	0
SD	Supported - Needs Reduction	0
SM	Supported - Missing	0
so	Supported - Open	8
SP	Supported - Weight	0
SR	Supported - Other	0
TA	Temporary - Needs Action	0
TD	Temporary - Needs Reduction	0
TM	Temporary - Missing	0
то	Temporary - Open	0
TP	Temporary - Weight	0
TR	Temporary - Other	0

		FEDERAL	LY REQUIRE	D LIST			
						Sept	ember 04, 202
							Page 19 of 3
			Report Criteria				
	te transportation department						
nsp Resp: All Area: Birmingh	nam.						
County: All	Nati						
City: All							
	STI	RUCTURES REQU	IRING UNDERWA	TER INSPECTI	ON		
						UW	
		UW INSP	LAST UW	SUB	CULV	INSP	POSTING
BIN	STRUCTURE NUMBER	INTERVAL	INSP	RATING	RATING	RATING	STATUS
007850	OIN0020 580164.462-1	24	08/20/2024	6	N	6	PO
007851	OIN0020 580164.462+1	24	08/20/2024	6	N	5	PO
007979	OAL0034 580004.47000	24	08/06/2025	6	N	7	PO
009187	OAL0269 370017.91100	24	08/18/2025	5	N	7	SO
009789	OAL0145 590024.95000	24	07/28/2025	6	N	7	PO
010641	OAL0004 580138.50000	24	08/19/2024	5	N		PO
010999	OAL0119 590030.15000	24	08/18/2025	6	N	N	PO
012428	OAL0269 370005.300+1	24	10/29/2024	6	N		PO
013319	OAL0038 590031.600-1	24	08/11/2025	6	N	7	PO
013632	OAL0025 590141.16000	24	10/28/2024	6	N		PO
015300	OAL0038 370005.600-1	24	10/28/2024	6	N		PO
015301	OAL0038 370005.680+1	24	10/28/2024	6	N		PO
017272	OAL0038 590031.600+1	24	08/11/2025	6	N	8	PO
017836	OAL0269 370015.90400	24	10/29/2024	7	N		PO
	OAL0025 580207,27200	24	08/19/2024	7	N	7	PO





69

57

80

66

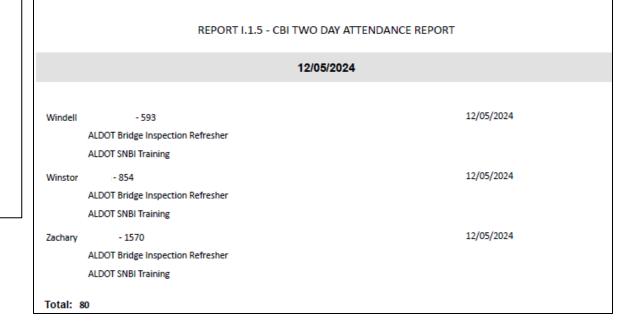
11/14/2024

11/21/2024

12/05/2024

12/12/2024

2024 TOTAL ATTENDANCE = 479





Load Ratings Summary

County: Autauga

STRUCTURES SUMMARY

STRUCTURE TYPES

 Total Active Structures:
 69

 Total Active Bridges:
 36

 Total Active Culverts:
 33

LOAD RATINGS SUMMARY

Total Bridges Rated in BrR = 18 (50.00%)

Total Bridges Rated by PE Inspection or Other = 10 (27.78%)

Total Bridges Needing More Information = 8 (22.22%)

BRIDGES NEEDING MORE INFORMATION

BIN	LOCAL ID	FACILITY CARRIED	FEATURE INTERSECTED
017066	058Z	CO RD 82	BRIDGE CREEK
016616	060Z	CO RD 6	AUTAUGA CREEK
014610	061Z	CO.RD. 64	MORTAR CREEK
013242	013X	CO.RD.8	LITTLE-MULLBERRY CREEK
012579	039Z	CO.RD.33	PINE CREEK
012263	074Z	CO.RD 14	BIG MULBERRY CREEK
011577	041Z	CO.RD 60	BUCK CREEK
004008	025X	CO.RD.4	AUTAUGA CREEK



Load Ratings Summary

County: Montgomery

STRUCTURES SUMMARY

STRUCTURE TYPES

 Total

 Total Active Structures:
 197

 Total Active Bridges:
 191

 Total Active Culverts:
 6

LOAD RATINGS SUMMARY

Total Bridges Rated in BrR = 190 (99.48%)

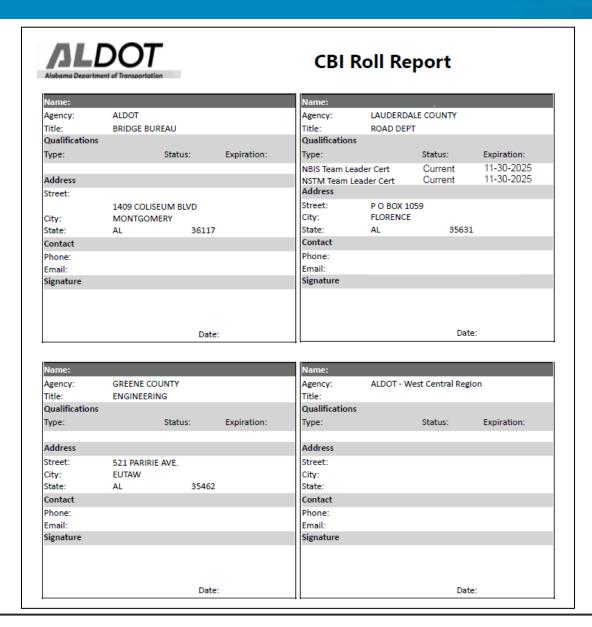
Total Bridges Rated by PE Inspection or Other = 1 (0.52%)

Total Bridges Needing More Information = 0 (0.00%)

BRIDGES NEEDING MORE INFORMATION

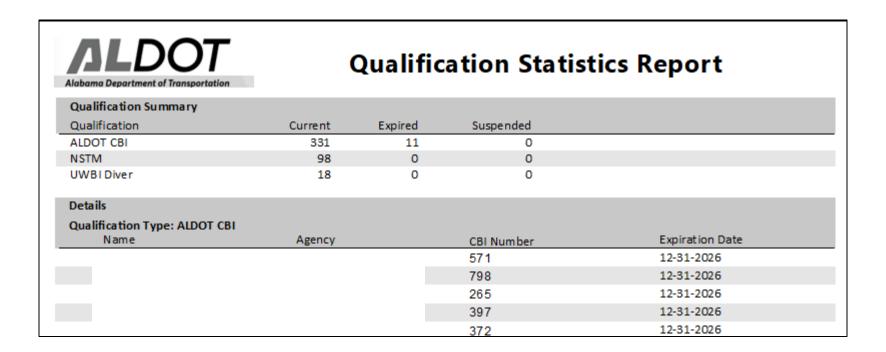
BIN LOCAL ID FACILITY CARRIED FEATURE INTERSECTED

None To Display



Name:	Charles Stump							
Agency:	ALDOT							
Title:	Maintenance B	lureau						
Qualifications								
Туре:		Status:		Expiration:				
ALDOT CBI		Currer	nt	12-31-2026				
Address								
Street:	1409 Colliseum	Blvd.						
City:	Montgomery							
State:	AL		36110					
Contact								
Phone:	(334) 242-6284	1						
Email:	stumpc@dot.st	tate.al.us						
Signature								
	Date:							

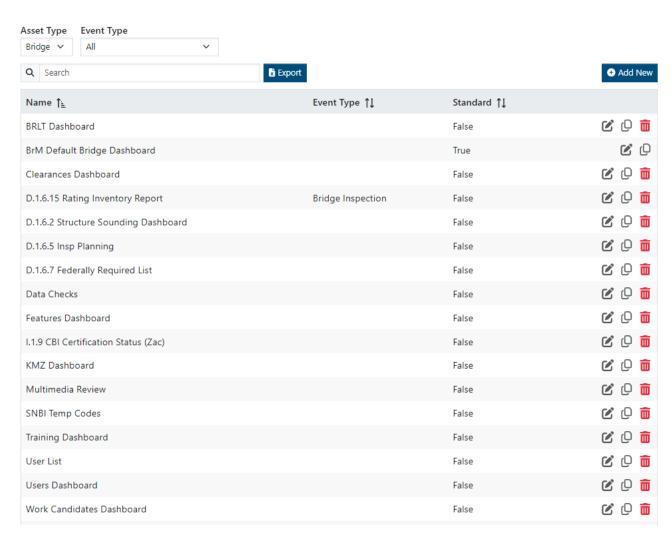




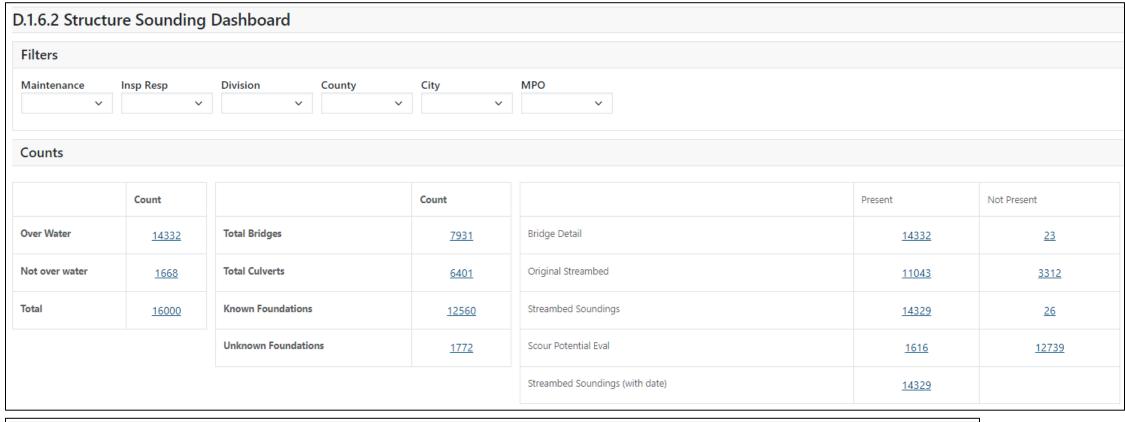
Very useful with many – to – one relationships

If it was a report better suited for a dashboard then we converted to dashboard only.

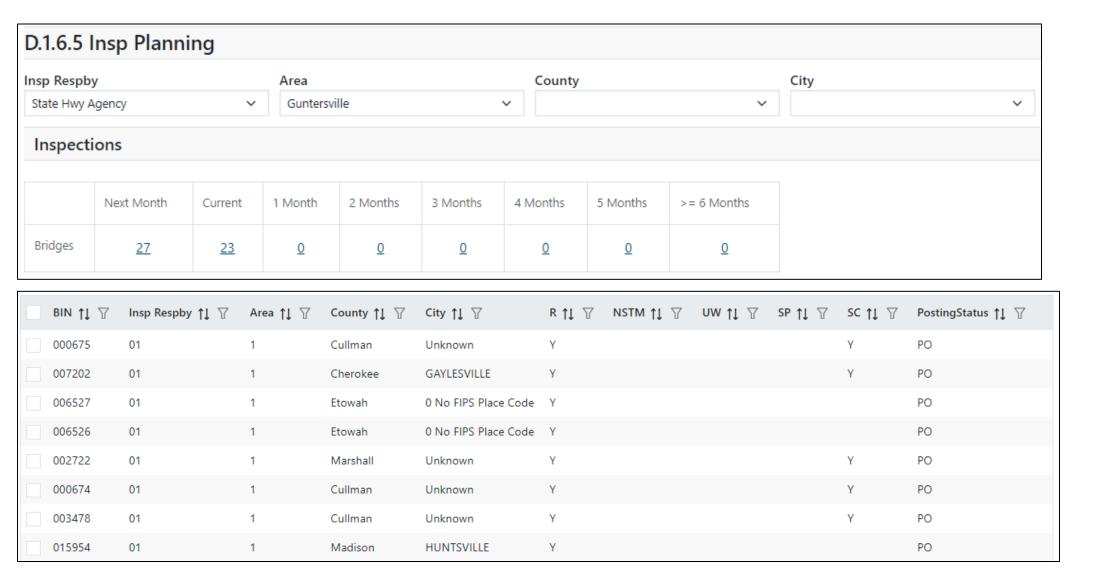
Any report that was developed we duplicated as much of the data in a dashboard as possible.







bridgeid ↑↓ ▽	RecordCount ↑↓ ▽	CSdate ↑↓ ▽
014094	20	02/2024
000458	36	06/2025
003047	28	01/2024



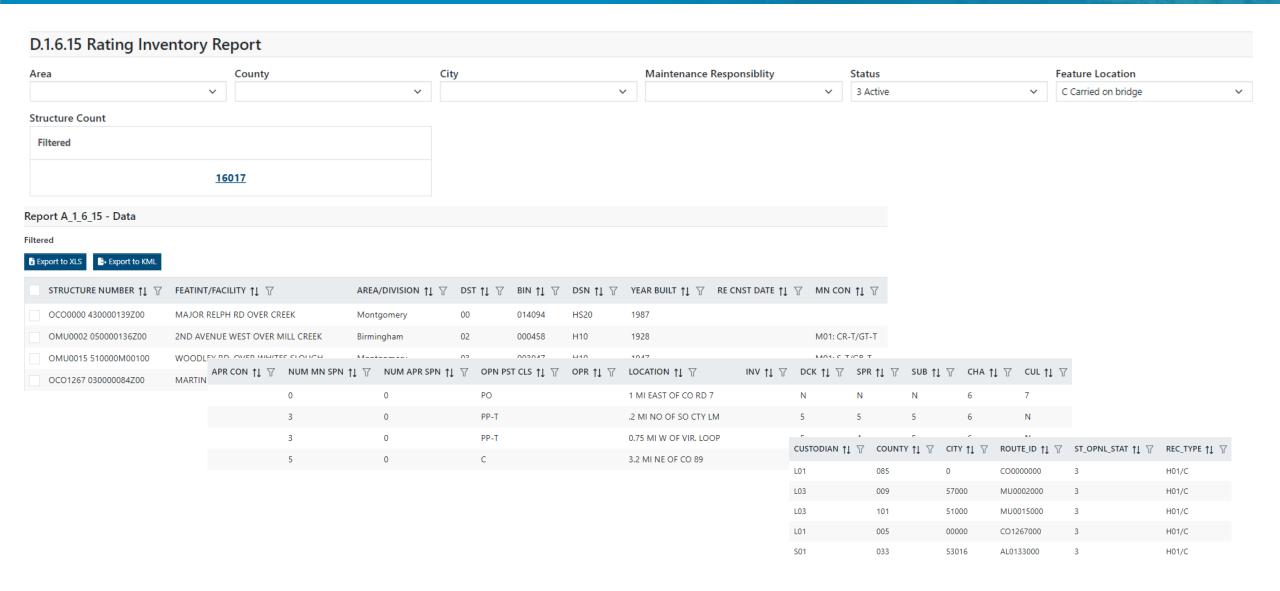
						1.19				
Data										
otals				Inspections			Condit	ions		
	# Structures	FHWA Deck Area	AL Deck Area	Underwater Required		<u>151</u>	Deck	Condition = 4	0	
Total Active Structures	<u>576</u>	18,067,364	19,207,474	NSTM Required		<u>7</u>	Super	Condition = 4	2	
otal Active Bridges	<u>387</u>	<u>18,031,148</u>	18,031,148	Special Required		12	Sub C	ondition = 4	1	
otal Active Culverts	<u>189</u>	<u>36,216</u>	<u>1,176,326</u>	Special Required (On-N	IHS)	<u>10</u>	Culve	t Condition = 4	1	
Total Active Unknown Structure Type	<u>0</u>			Special Required (Off-NHS)		2	Deck	Condition = 3 or less	0	
							Super	Condition = 3 or less	0	
								Sub Condition = 3 or less		
							Culve	t Condition = 3 or less	0	
osted and Closed		Equipment			Scour					
osted Structures	0	A01 Ladder		<u>2</u>	B.AP.03 Scour Vulnerability			B.AP.02 Overtopping Likelihood		
Closed Structures	d Structures <u>0</u> A02 Bucket lift vehicle <u>135</u>		<u>135</u>	B.AP.03 = 0		<u>3</u>	0 - Never			
Permanent-Needs Action (PA) <u>0</u>		A03 Under bridge inspection vehicle 274		B.AP.03 = A <u>400</u>		<u>400</u>	1 - Remote (once every 100 years or less frequently)			
Temporary-Weight (TP) <u>0</u>		A04 Rigging	A04 Rigging <u>272</u>		B.AP.03 = B <u>0</u>		<u>0</u>	2 - Very low (once every 51 to 99 years)		
Permanent-New (N)	0	A06 Boat		<u>50</u>	B.AP.03 = C		<u>0</u>	3 - Low (once every 26 to 50 years)		
Temporary-Open (TO)	<u>0</u>	AX ATV (Other)		<u>0</u>	B.AP.03 = D		<u>13</u>	4 - Moderate (once every 11 to 25 years)		
Supported-Open (SO)	<u>2</u>				B.AP.03 = E		0	5 - High (once every 3 to 10 years)		
Permanent-Open (PO)	<u>574</u>				B.AP.03 = U		0	6 - Very High (once every 2 years or more frequently)		
Permanent-Needs Reduction (PD)	0				-T (Temporary Code)		<u>0</u>	-T (Temporary Code)		



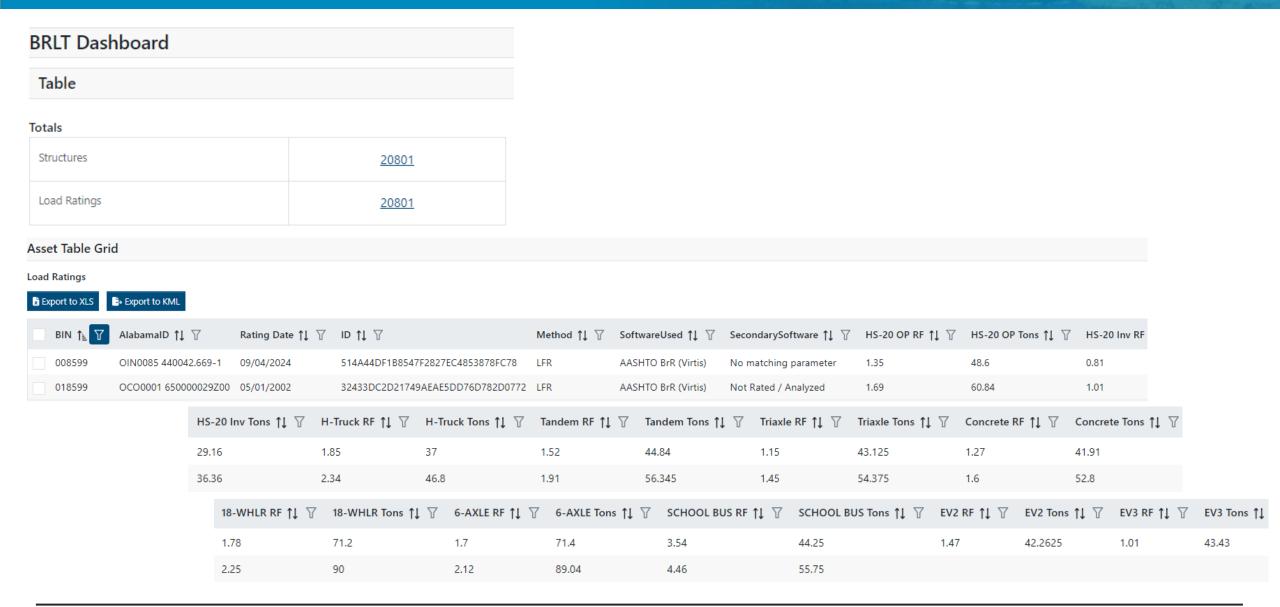
Asset Table Grid returns the same columns as the crystal report

Inspections	
Underwater Required	<u>151</u>
NSTM Required	7
Special Required	<u>12</u>
Special Required (On-NHS)	<u>10</u>
Special Required (Off-NHS)	<u>2</u>

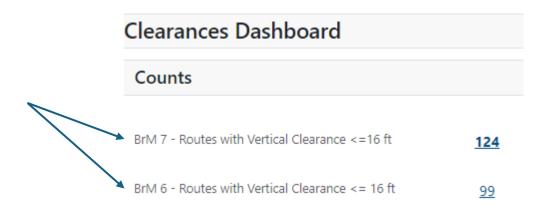
Asset Table Grid	Asset Table Grid										
NSTM Required											
Export to XLS	Export to XLS										
BIN ↑ <u>±</u> ▽	AL_ALABAMA_ID $\uparrow\downarrow$ \triangledown	LastInsp ↑↓ ▽	IntervalMonths $\uparrow \downarrow \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	Inspection Code $\uparrow \downarrow \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	Inspection Type $\uparrow \downarrow \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	Required for Bridge $\uparrow \downarrow \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	postingstatus $\uparrow \downarrow \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	PostingStatusDate $\uparrow \downarrow \ \ egin{array}{cccccccccccccccccccccccccccccccccccc$	SuperRating $\uparrow \downarrow \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	NSTMRating $\uparrow \downarrow \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	FatigueDetails †↓ 🎖
001390	OAL0003 180095.83300	02/24/2023	24	MUYI	NSTM	true	PO	02/24/2023	5		
008714	OAL0016 490037.344-1	09/20/2024	12	TEBZ	NSTM	true	PO	09/20/2024	4		
012321	OIN0065 490024.309-1	11/22/2024	24	AVBF	NSTM	true	PO	11/22/2024	5		
012322	OIN0065 490024.309+1	11/21/2024	24	SMEG	NSTM	true	PO	11/21/2024	5		
013393	OAL0188 490010.04300	08/28/2024	24	VZBO	NSTM	true	PO	02/11/2025	6		
015508	OIN0165 490000.100-1	02/06/2025	24	TBNV	NSTM	true	PO	02/06/2025	5		
015574	OIN0165 490000.100+1	02/25/2025	24	XRSJ	NSTM	true	PO	02/25/2025	6		







If your BrM 6.x database is running on the same database server as the BrM 7.x database, you can pull BrM 6 data into reports and dashboards.



Asset Table	Grid									
rM 7 - Routes	with Vertical Clea	arance <=16 ft								
Export to XLS										
BIN ↑ <u>≒</u>	√ Area ↑↓ √	County ↑↓ 🍸	FacilityCarried ↑↓ ▽	FeatureIntersected ↑↓ ▽	BridgeStatus ↑↓ ▽	MaintenanceResponsibility ↑↓ [¬]	Owner ↑↓	YearBuilt ↑↓ \	7 Alabama ID	tt ∆
000272	6	Butler	CSX RR	AL 10	3 Active	R	R	1925	OAL0010 070	123.16400
000381	9	Escambia	B & amp; N RR	US 31	3 Active	R	R	1927	OAL0003 270	041.20900
000552	4	Calhoun	CSX RAILROAD	SR 204	3 Active	R	R	1928	OAL0204 080	000.40300
	Latitude $\uparrow \downarrow \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	Longitude ↑↓ ▽	BridgeLocation $\uparrow \downarrow \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	Feature Location 🚶 🍸	Feature Designation ↑↓	FeatureName ↑↓	LRS Inv Route 🚶 🍸	MP ↑↓ 🍸	Route Dir 📬 🍸	Min Vert Clearance - B
	31.828333	-86.628333	GRNVILLE2MI E OF AL 18	35 B	H02		AL0010000	123.164	2-T	10.5
	31.024113	-87.497044	0.2 MI S SR 21	В	H02	B & amp; N RR	AL0003000	41.209	Т	15.9
	33.856472	-85.905722	0.7 MI EAST JCT US 431	В	H02	CSX RAILROAD	AL0204000	0.403	2-T	16

Data Checks

Duplicate Inspection Count

Duplicate Inspection Count 15

Structures Reported to FHWA	
Active Structures Less than 20ft Total Length	<u>28</u>
Active Reported Structures	<u>16016</u>
Active Not Reported Structures	124
Active Not Reported Structures (Errors)	1
Proposed Reported Structures	82
Proposed Not Reported Structures	<u>613</u>

		_			
N	_	C	nan		otc
13	O	0	pan	0	ets

Active with No Span Sets	<u>4</u>

Previous / Replacement BINs

Bridges with Previous BIN	<u>3226</u>
Bridges with Replacement BIN	<u>3154</u>

Elements

Steel Piles	<u>4391</u>
Timber Piles	<u>597</u>

Inspections Review

Routine Inspections Completed This Month	<u>31</u>
Routine Inspections Completed Last Month	<u>394</u>
Routine Inspections Completed 2 Months Ago	<u>501</u>
Routine Inspections Completed 3 Months Ago	<u>443</u>
Scour Inspection Date with no Cross Sections	<u>9</u>

Active Bridges No Inspections / Posting Status

Active status no posting status	<u>0</u>
Active status no inspections	<u>0</u>



Multimedia Review Filters MaintenanceResponsibility Inspection Responsibility Area County PlaceCode V State Highway Agency V Birmingham V V V

Total Structures	<u>876</u>	
Structures with Bridge Context Pictures	<u>859</u>	<u>98.06%</u>
Structures without Bridge Context Pictures	<u>17</u>	
Structures with Inspection Context Pictures	860	<u>98.17%</u>
Structures without Inspection Context Pictures	<u>16</u>	
Structures with Latest Inspection Inspection Context Pictures	<u>831</u>	94.86%
Structures without Latest Inspection Inspection Context Pictures	<u>45</u>	



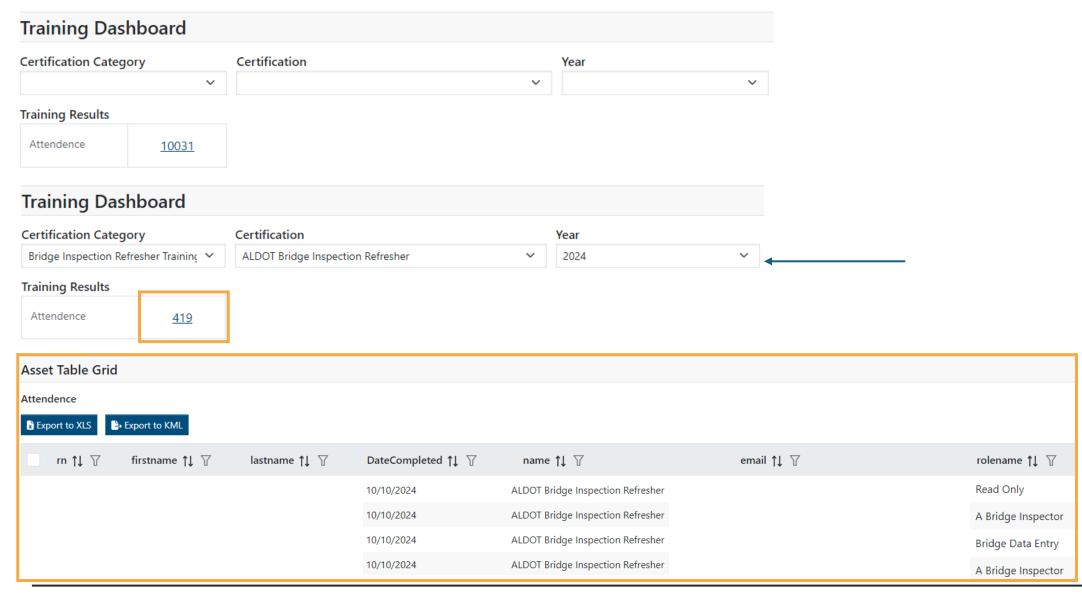
SNBI Temp Codes

Scour Rating	<u>11843</u>
Overtopping Likelihood	<u>6475</u>
Scour Vulnerability	<u>5</u>
Scour Plan of Action	<u>13</u>
Substructure Navigation Protection	<u>53</u>
Border Bridge Inspection Responsibility	<u>0</u>
Federal Lands Access	<u>0</u>
Historical Significance	<u>0</u>

Asset Table Grid







Users Dashboard

User Roles

A Bridge Inspector	247
Admin	<u>10</u>
ALDOT Area Bridge & Tunnel Inspector	<u>6</u>
ALDOT Area Bridge & Tunnel Operations	1
ALDOT Area Bridge Inspector	<u>27</u>
ALDOT Area Bridge Operations	7

ALDOT Area Bridge Inspector	<u>27</u>
ALDOT Area Bridge Operations	7
Bridge & Tunnel Inspector	<u>1</u>
Bridge Data Entry	<u>167</u>
Default	2
FHWA	<u>3</u>

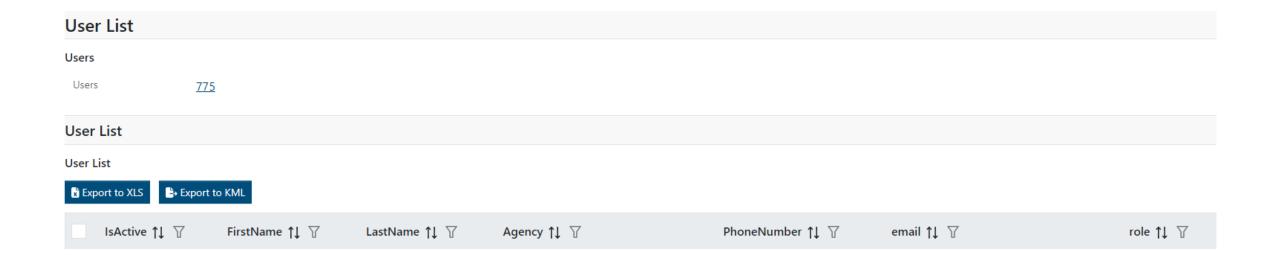
Mayvue	2
No Access	<u>36</u>
Rating	<u>6</u>
Read Only	<u>237</u>
Scour	<u>5</u>

Users with "@mayvue.com" email address

Users with "@mayvue.com" email address

<u>442</u>

Dashboards can be a useful way of providing limited information to specific roles / groups / users



Work Candidates Dashboard

Dashboard Notes:

SQL is hard-coded for: Maint = S01; Highway On; Active Status; Excludes Closed

Records returned are limited to current user's access

Filters

Area

Troy

Data

Work Candidates

High Priority	Medium Priority	Low Priority	All	
<u>595</u>	400	<u>2</u>	<u>997</u>	

bridgeid ↑↓ ▽	ALDOT Area ↑↓ ▽	County ↑↓ 🍸	ALDOT District $\uparrow \downarrow \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	Name ↑↓ ▽	Rec Date (yyyy/mm/dd) $\downarrow^{\overline{r}} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	Comp Date (yyyy/mm/dd) $\uparrow \downarrow \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	Priority $\uparrow \downarrow \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	TargetYear ↑↓ 🍸	Status ↑↓ 🍸	Source ↑↓ ▽
001746	7	Crenshaw	03	B44 "MN BEARING DEV-INS,MT,REP"	2025/08/25		High	2025		Inspector Recommended
002103	7	Covington	03	B26 BRIDGE CULVERT CLEANING	2025/08/19		High	2025	Under Review	
011894	7	Barbour	06	B30 SLOPE & SHORE PROT REPAIR	2025/08/12		High	2025		Inspector Recommended

Features Dashboard

Dashboard Notes:

Dashboard coded for structures in Active status

Data

Features

Туре	Carried	Below	Above	Top Level	Lower Level
Highways	<u>16377</u>	<u>1717</u>	<u>6</u>	1	<u>0</u>
Railroad	2	<u>625</u>			
Pathway	<u>360</u>	<u>13</u>			
Waterway		<u>13608</u>			
Relief for waterway		<u>747</u>			
Urban Feature	2	2			
Dry Terrain or Side Slope		<u>0</u>			
Other	<u>0</u>	<u>59</u>			

Many–to–one data sets are easily searched when using a dashboard

Features

Туре	Carried	Below	Above	Top Level	Lower Level
Highways	<u>16377</u>	<u>1717</u>	<u>6</u>	1	<u>0</u>

Location ↑↓ ▽	Designation ↑↓ 🍸	FeatureName ↑↓ 🍸	Name ↑↓ 🍸	LRSRouteID ↑↓ 🍸	MilePoint ↑↓ 🍸	MinVerticalClearance $\uparrow \downarrow \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	NHSDesignation $\uparrow \downarrow \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	RouteNumber 📬 🎖	RouteType ↑↓ 🍸	Direction ↑↓ 🍸
В	H02	165 SBL	H Highway	AL0010000	120.869	16.8	Υ	10	3	2-T
В	H02	US80	H Highway	IN0065000	167	17.3	Υ	65	1	2-T
В	H04	I-10 WBL	H Highway	IN0010000	22.22	16	Υ	10	1	1-T

Туре	Carried	Below	Above	Top Level	Lower Level
Relief for waterway		<u>747</u>			

Location ↑↓ 🍸	Designation ↑↓ 🍸	FeatureName ↑↓ 🏻	Name ↑↓ 🍸
В	F01	WARRIOR RVR REL (-)	F Relief for Waterway
В	F01	STREAM	F Relief for Waterway
В	F01	SIPSEY RIVER RELIEF	F Relief for Waterway



Application Connections

- Connecting in-house and third-party applications
 - Comprehensive Project Management System (CPMS)
 - System developed in-house
 - Direct connection to database servers utilizing database views
 - Maintenance Management System (ATOM)
 - Third-party application
 - Utilizes BrM API
 - Currently working with AASHTOWare OpenAPI to connect
 - ESRI
 - Direct connection to database servers utilizing database views
 - Oversize / Overweight Permitting & Routing (ALPASS)
 - TBD
 - AASHTOWare Bridge Rating (BrR)
 - Utilizes BrM API
 - Waiting for BrR vendor to update BrR- BrM API integration



Cole Stump, P.E.

Bridge Operations Engineer Alabama DOT stumpc@dot.state.al.us

