

Gallia County 2021

INVENTORY, APPRAISAL & INSPECTION SNAPSHOT

10/13/2021

Inventory Data - NBIS Bridges Only

				<u>NBIS COUNT</u>	
NBIS Bridges > 20'				136	
Bridges 10'-20'				143	
				<u>279</u>	
Item 22 Inspection Responsibility				CODE	# NBIS # ALL
Data Tab	Col BV,Bw	County		2	136 279
Item 21 Maintenance responsibility				CODE	# NBIS # ALL
Data Tab		County		2	132 275
Col D		City or other local		4	0 0
		Railroad		27	1 1
		Private (tohter than RR)		26	3 3
		State Park		11	0 0
		Local Park		23	0 0
		Township		3	0 0
					<u>136</u> <u>279</u>
Item 42 Type service on bridge				CODE	# NBIS # ALL
Data Tab		Other		0	4 4
Col Q		Highway		1	132 275
		Railroad		2	0 0
		Ped/Bikeway		3	0 0
		Hwy/RR		4	0 0
		Hwy/Ped		5	0 0
					<u>136</u> <u>279</u>
Item 42 Type service under bridge				CODE	# NBIS # ALL
Data Tab		Other		0	0 0
Col R		Hwy w/ or w/o Ped		1	4 4
		Railroad		2	0 0
		Ped/Bkwy		3	0 0
		Hwy w/ RR		4	0 0
		Waterway		5	132 275
		Hwy/Waterway		6	0 0
		RR/Waterway		7	0 0
		Hwy/Waterway/RR		8	0 0
		Relief (for waterways)		9	0 0
					<u>136</u> <u>279</u>

ITEMS 43A,B,C Structure Type (Col M,N,O)		CODE	# NBIS	# ALL
Concrete Slab		101	5	20
Concrete Girder		103	1	1
Concrete Frame		107	1	35
Concrete Deck Arch		111	1	1
Concrete Culvert (incl frame culverts)		119	0	6
Concrete Continuous Slab		201	4	4
Steel Beam or Girder		302	89	165
Steel Girder w/ Floor System		303	1	1
Steel Thru Truss (includes Pony)		310	22	22
Steel Culvert (incl frame culverts)		319	2	14
Steel Continuous Beam or Girder		402	1	1
Prestr. Conc. Cont. Box Beam/Girder Multiple		505	8	8
Prestressed Concrete Continuous Thru Arch		602	1	1
			136	279

Item 92 Fracture Critical		CODE	# NBIS	# ALL
Data Tab	Requires FC Inspection	Y	20	23
Col U,V,Y	Requires FC Inspection	N	116	0
			136	n/a
	FC date blank		0	n/a
	missing Y/N switch			

Item 11 Scour			# NBIS	# ALL
Data Tab	Bridge not over waterway	N	4	4
Col AA	unknown foundation	U	0	0
	over tidal waters	T	0	0
	foundations on dry land	9	2	2
	stable above footing	8	54	111
	countermeasures installed	7	1	1
	no scour evaluation made	6	0	0
	stable within footer limits	5	73	155
	stable action needed	4	2	6
	scour critical - unstable	3	0	0
	scour critical - scour present	2	0	0
	scour critical - failure imminent	1	0	0
	scour critical - bridge failed	0	0	0
			136	279

Item 63 Documented Engineering Judgment		# NBIS	# ALL
	Field Eval & Doc EJ	9	21

BR_100 for these bridges?

Item 92 Underwater		CODE	# NBIS	# ALL
Data Tab	requires dive inspection	N	136	0
Col W,X,Z	requires dive inspection	Y	0	0
			136	
	dive insp date blank		0	0

Item 70 Plan Information		CODE	# NBIS	# ALL
Data Tab	plans not avail	0	87	193
Col. AW	plan avail	1	16	43
	field measured	2	29	37
	Field Testing	3	0	0
	not applicable	N	4	4
			136	277

Item 63 Method of Analysis		CODE	# NBIS	# ALL
Data Tab	Field Eval & Doc. Engr Judgm	0	9	21
Col. AV	Work Stress	1	0	0
	LFR	2	0	0
	LRFR	3	0	0
	load test	4	0	0
	No rating done	5	4	5
	LFR	6	104	134
	AS	7	4	34
	LRFR	8	15	85
	Assigned LFR HS20	D	0	0
	Assigned LRFR HL93	F	0	0
	not appl (RR, etc)	X	0	0
			136	279

REMINDER:

**Load Factor required for bridges built afte (exceptions: timber, etc.)
LRFR required for bridges built after 2010**

Missing 2 bridges Column AW left blank GAL-C0134-00.260_(2730000) & GAL-C0099-01.770_(2734496)
Both Concrete Frames

Inspection Condition Data - NBIS Bridges Only

Item 41 Operating Status		CODE	# NBIS	# ALL
Data Tab	Open, No restriction	A	109	248
Col AM	Open, posting recommended	B	0	0
	Open, Half width constr.	C	0	0
	Open because of temp. fix	D	0	0
	Open using temp. structure	E	0	0
	New struture not yet open	G	0	0
	closed for load cap. reason	K	1	1
	Posted for load capacity	P	26	30
	Posted for other than load	R	0	0
	Closed for other than load	X	0	0
			136	279

Load Rating Data

Load Rating Tab	# OF ERRORS
Col. AN	Op RF greater than Inv RF?
Col. AO	Posting and % Legal OK?
Col. AP	"0" used instead of blank
Col. AT	% legal <> lowest RF
Col. AV	Item 70 correct?
Col. AW	Method of Rating Alike?
Col. AX	Op & Inv RF in Tons as req'd?
Col. AY	Item 575 correct?
Col. AZ	Depth of fill completed?

METRIC 8 - Insp. Frequency Underwater					
Dive Inspections Overdue		# OVERDUE	# UW	% PASS	COMPLIANCE
Data Tab Col. Z	60 months	0	0	100.0%	(C)

METRIC 10 - Insp. Frequency FC Member					
FC Inspections Overdue		# OVERDUE	# FC	% PASS	COMPLIANCE
Data Tab Col. Y	24 months	0	20	100.0%	(C)

METRIC 12 - Routine Quality Insp. ** (from files examination)					
Field Ratings		# > +/-1	# Ratings	% PASS	COMPLIANCE
	field ratings	0	24	100.0%	(C)
Comments		Missing	# < 6	% PASS	
Tab	Comments when Rating < 6	7	141	95.0%	(C)
	Inadequate comments**	2	30	93.3%	(C)
Error		total	Score	% PASS	
Comment Tab	Rating should be = Scour	4	132	97.0%	within tolerance +/- 1
Tab	Noncompliant Scour Rating E	0	132	100.0%	(C)

KEY METRICS

(C) Compliant	(CC) Conditionally Compliant
(SC) Substantially Compliant	(NC) Non-Compliant
	(NC) (SC) If corrected within 6/12 months
	Refresher=6 mo, Comprehensive=12

METRIC 2 - Program Manager Qualification (from files examination)					
From Files review		Missing	# sampled	% PASS	COMPLIANCE
PE /Experience		0	1	100.0%	(C)
Comprehensive		0	1	100.0%	(C)
Refresher		0	1	100.0%	(C)

METRIC 3 - Team Leader Qualification (from files examination)					
From Files review		Missing	# sampled	% PASS	COMPLIANCE
Degree /Experience		0	2	100.0%	(C)
Comprehensive		0	2	100.0%	(C)
Refresher		0	2	100.0%	(C)

METRIC 6 Insp. Frequency Routine					
Bridge Inspections Overdue		# OVERDUE	% PASS	COMPLIANCE	
Data Tab	NBIS - 24 months	4	97.1%	(SC)	
Col. AB	ORC - Calendar Year	4	97.1%	(SC)	
	BIM - 18 months	4	97.1%	(SC)	

(OK no issue) 3 are Conveyors, 1 is a closed Fly-ash pipe

METRIC 8 - Insp. Frequency Underwater						
Dive Inspections Overdue		# OVERDUE	# UW	% PASS	COMPLIANCE	
Data Tab Col. Z	60 months	0	0	100.0%	(C)	
METRIC 10 - Insp. Frequency FC Member						
FC Inspections Overdue		# OVERDUE	# FC	% PASS	COMPLIANCE	
Data Tab Col. Y	24 months	0	20	100.0%	(C)	
METRIC 12 - Routine Quality Insp. ** (from files examination)						
Field Ratings		# > +/-1	# Ratings	% PASS	COMPLIANCE	
	field ratings	0	24	100.0%	(C)	
Comments		Missing	# < 6	% PASS		
Tab	Comments when Rating < 6	7	141	95.0%	(C)	
	Inadequate comments**	2	30	93.3%	(C)	
		Error	total Score	% PASS		
Comment	Rating should be = Scour	4	132	97.0%	within tolerance +/- 1	
Tab	Noncompliant Scour Rating E	0	132	100.0%	(C)	

GAL-C0180-05.310_(2738309) GAL-T0709-00.060_(2740915) GAL-T0902-00.0300_(2738635)

GAL-C0146-00.590_(2743477) GAL-C0100-00.020_(2738961) GAL-C0109-01.090_(2740451)

GAL-C0146-00.590_(2743477);

7 bridges above missing channel comments the rest of the bridges missing scour comments have them in the NBI Item 60.

GAL-C0065-00.540_(2742381) Scour rating should be closer to a 4 which impacts the substructure rating'

GAL-T0465-00.920_(2742861) Abutment condition warrants a 3 but is within 1 point so OK

GAL-C0180-05.900_(2738325); GAL-T0432-00.200_(2742039); GAL-T0268-01.070_(2736772); GAL-C0180-05.900_(2738325)

Scour over rules Substructure in the 4 bridges noted above

METRIC 14 - Posting		Load rating data tab				
From Files review	# errors	#sampled	% PASS	COMPLIANCE		
Op RF < 3 tons but not closed	0	136	100.0%			(C)
Op RF = 0 but not closed	0	136	100.0%			(C)
% Legal < 100 but not posted	0	136	100.0%			(C)
Item 41= B	0	136	100.0%			(C)
METRIC 16 - Fracture Critical Ins (from files examination)						
From Files review	Missing	# FC	% PASS	COMPLIANCE		
Fract Critical Member ID	0	2	100.0%			(C)
Fatigue Prone Detail	0	2	100.0%			(C)
Gusset Plate Calculations	0	2	100.0%			(C)
FC Inspection Procedure	0	2	100.0%			(C)
METRIC 17 - Underwater Inspecti (from files examination)						
From Files review	Missing	# UW	% PASS	COMPLIANCE		
Uw Inspection Procedure	0	0	100%			(C)
Location of Uw elements	0	0	100%			(C)
Uw frequency identified	0	0	100%			(C)

PRELIMINARY FHWA 23 Metric Matrix

23 metrics used by FHWA to measure NBIS compliance

Compliance Codes for the following Metrics:

- (C)** Compliant
- (SC)** Substantially Compliant
- (CC)** Conditionally Compliant (Adhering to approved PCA)
- (NC)** Not Compliant

Metric	Description	(C)	(SC)	(CC)	(NC)
1	State Bridge Inspection Organization				
2	Program Manager Qualification				
3	Team Leader Qualification				
4	Load Rating Engineer Qualification				
5	UW Bridge Inspection Diver Qualification				
6	Routine Inspection Frequency - Low Risk				
7	Routine Inspection Frequency - High Risk				
8	UW Inspection Frequency - Low Risk				
9	UW Inspection Frequency - High Risk				
10	FC Inspection Frequency				
11	Frequency Criteria				
12	Inspection Quality				
13	Load Rating				
14	Posted or Restricted Bridges				
15	Bridge Files				
16	FC Bridges				
17	UW inspection procedures				
18	Scour Critical Bridges				
19	Complex Bridges				
20	QC/QA				
21	Critical Findings				
22	Inventory**				
23	Updating of Data				

** based on results of Field Review

Metric	Action Needed
12	Scour Rating should control Substructure on 4 bridges ; Make note in scour rating item that comments are in Sustructure.
14	Add Posting Sign Dates to 25 bridges in Assetwise