

BUTLER County 2021

INVENTORY, APPRAISAL & INSPECTION SNAPSHOT

12/9/2021

Inventory Data - NBIS Bridges Only

		<u>NBIS COUNT</u>	
NBIS Bridges > 20'		218	
Bridges 10'-20'		192	
		<u>410</u>	
Item 22 Inspection Responsibility			
		<u>CODE</u>	<u># NBIS</u>
		<u># ALL</u>	
Data Tab	Col B'V, B'w County	2	218
			410
Item 21 Maintenance responsibility			
		<u>CODE</u>	<u># NBIS</u>
			<u># ALL</u>
Data Tab	County	2	208
Col D	City or other local	4	0
	Railroad	27	10
	Private (tohter than RR)	26	0
	State Park	11	0
	Local Park	23	0
	Township	3	0
			<u>218</u>
			<u>410</u>
Item 42 Type service on bridge			
		<u>CODE</u>	<u># NBIS</u>
			<u># ALL</u>
Data Tab	Other	0	0
Col Q	Highway	1	203
	Railroad	2	10
	Ped/Bikeway	3	0
	Hwy/RR	4	0
	Hwy/Ped	5	5
			<u>218</u>
			<u>410</u>
Item 42 Type service under bridge			
		<u>CODE</u>	<u># NBIS</u>
			<u># ALL</u>
Data Tab	Other	0	0
Col R	Hwy w/ or w/o Ped	1	10
	Railroad	2	7
	Ped/Bkwy	3	0
	Hwy w/ RR	4	0
	Waterway	5	198
	Hwy/waterway	6	1
	RR/waterway	7	2
	Hwy/waterway/RR	8	0
	Relief (for waterways)	9	0
			<u>218</u>
			<u>410</u>

ITEMS 43A,B,C Structure Type		Data (Col M,N,O)	CODE	# NBIS	# ALL
Other Beam or Girder			002	1	1
Concrete Slab			101	12	34
Concrete Box Beam/Girder Multiple			105	8	15
Concrete Frame			107	5	25
Concrete Deck Arch			111	1	1
Concrete Culvert (incl frame culverts)			119	48	133
Concrete Continuous Slab			201	16	16
Concrete Continuous Box Beam/Girder Multiple			205	1	1
Steel Beam or Girder			302	15	17
Steel Girder w/ Floor System			303	3	3
Steel Thru Truss (includes Pony)			310	4	4
Steel Culvert (incl frame culverts)			319	7	59
Steel Continuous Beam or Girder			402	5	5
Prestressed Concrete Thru Arch			502	12	12
Prestr. Conc. Cont. Box Beam/Girder Multiple			505	50	51
Prestr. Conc. Cont. Box Beam/Girder Spread			506	1	1
Prestressed Concrete Continuous Thru Arch			602	11	11
Prestr. Conc. Cont. Box Beam/Girder Multiple			605	17	17
Timber Deck Arch			811	1	1
Timber Culvert (incl frame culverts)			819	0	1
Aluminum or Iron Culvert (incl frame culverts)			919	0	2
				218	410

Item 92 Fracture Critical		CODE	# NBIS	# ALL
Data Tab	Requires FC Inspection	Y	4	n/a
Col U,V,Y	Requires FC Inspection	N	214	n/a
			218	n/a
		FC Switch Y/N is Blank	0	n/a

Item 113 Scour			# NBIS	# ALL
Data Tab	Bridge not over waterway	N	17	22
Col AA	unknown foundation	U	0	0
	over tidal waters	T	0	0
	foundations on dry land	9	1	1
	stable above footing	8	125	248
	countermeasures installed	7	2	3
	no scour evaluation made	6	0	0
	stable within footer limits	5	73	136
	stable action needed	4	0	0
	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
			218	410
Item 63 Documented Engineering Judgment				
	Field Eval & Doc EJ		22	n/a
BR_100 for these bridges?				
Item 92 Underwater				
		CODE	# NBIS	# ALL
Data Tab	requires dive inspection	N	216	n/a
Col W,X,Z	requires dive inspection	Y	2	n/a
			218	
Item 70 Plan Information				
		CODE	# NBIS	# ALL
Data Tab	plans not avail	0	22	40
Col. AW	plan avail	1	180	352
	field measured	2	6	6
	Field Testing	3	0	0
	not applicable	N	10	12
			218	410

Item 70 Plan Information		CODE	# NBIS	# ALL
Data Tab	plans not avail	0	22	40
Col. AV	plan avail	1	180	352
	field measured	2	6	6
	Field Testing	3	0	0
	not applicable	N	10	12
			218	410

Item 63 Method of Analysis		CODE	# NBIS	# ALL
Data Tab	Field Eval & Doc. Engr Judgment	0	22	40
Col. AV	Work Stress	1	0	0
	LFR	2	0	0
	LRFR	3	0	0
	load test	4	0	0
	No rating done	5	10	143
	LFR	6	144	159
	AS	7	4	18
	LRFR	8	38	49
	Assigned LFR HS20	D	0	1
	Assigned LRFR HL93	F	0	0
	not appl (RR, etc)	X	0	0
			218	410

REMINDER:

**Load Factor required for bridges built after 15 (exceptions: timber, etc.)
LRFR required for bridges built after 2010**

Inspection Condition Data - NBIS Bridges Only

Item 41 Operating Status		CODE	# NBIS	# ALL
Data Tab	Open, No restriction	A	211	403
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	0	0
	Posted for load capacity	P	6	6
	Posted for other than load	R	1	1
	Closed for other than load	X	0	0
			218	410

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

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 mo

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	0	100.0%	(C)
Col. AB ORC - Calendar Year	0	100.0%	(C)
BIM - 18 months	0	100.0%	(C)

METRIC 8 - Insp. Frequency Underwater						
Dive Inspections Overdue		# OVERDUE	# UW	% PASS	COMPLIANCE	
Data Tab Col. Z	60 months	0	2	100.0%	(C)	
METRIC 10 - Insp. Frequency FC Member						
FC Inspections Overdue		# OVERDUE	# FC	% PASS	COMPLIANCE	
Data Tab Col. Y	24 months	0	4	100.0%	(C)	
METRIC 12 - Routine Inspection (** from field review)						
Field Ratings		# > +/-1	# Ratings	% PASS	COMPLIANCE	
	field ratings**	0	24	100.0%	(C)	
Comments		Missing	# < 6	% PASS	COMPLIANCE	
Tab	Comments when Rating < 6	0	208	100.0%	(C)	
	Adequacy comments**	0	30	100.0%	(C)	
		Error	total Scot	% PASS	COMPLIANCE	
Comment	Rating should be = Scour	1	200	99.5%	within tolerance +/- 1	BUT-T0195-0130_(0933252)
Tab	Noncompliant Scour Rating E	0	200	100.0%	(C)	Scour controls Substructure
METRIC 14 - Posting Load rating data tab						
From Files review		# errors	# sampled	% PASS	COMPLIANCE	
	Op RF < 3 tons but not closed	0	218	100.0%	(C)	
	Op RF = 0 but not closed	0	218	100.0%	(C)	
	% Legal < 100 but not posted	1	218	99.5%	(SC)	BUT-T0064-0165_(0932213)
	Item 41= B	0	218	100.0%	(C)	Simple coding error A to P
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 Inspect (from files examination)						
From Files review		Missing	# UW	% PASS	COMPLIANCE	
	Uw Inspection Procedure	0	1	100.0%	(C)	
	Location of Uw elements	0	1	100.0%	(C)	
	Uw frequency identified	0	1	100.0%	(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	U/W Bridge Inspection Diver Qualification	█			
6	Routine Inspection Frequency - Low Risk	█			
7	Routine Inspection Frequency - High Risk	█			
8	U/W Inspection Frequency - Low Risk	█			
9	U/W 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	U/W 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
14	Edit Assetwise item 41 from A to a P BUT-T0064-0165_(0932213)