# ASHLAND County 2020 INVENTORY, APPRAISAL & INSPECTION SNAPSHOT

# Inventory Data - NBIS Bridges Only

	NBIS Bridges > 20' Bridges 10'-20'		<u>NBIS COUNT</u> 136 <u>86</u> 222	
Item 221	Inspection Responsibility	CODE	<u># NBIS</u>	<u># ALL</u>
Data Tab Col	BV,BW County	2	136	222
Item 21	Maintenance responsibility	CODE	# NBIS	<u># ALL</u>
Data Tab	County	2	135	220
Col D	City or other local	4	1	2
	Railroad	27	0	0
	Private (tohter than RR)	26	0	0
	State Park	11	0	0
	Local Park	23	0	0
	Township	3	0	0
			136	222
Item 42A	Type service on bridge	CODE	# NBIS	# ALL
Data Tab	Other	0	0	0
Col Q	Highway	1	136	222
	Railroad	2	0	0
	Ped/Bikeway	3	0	0
	Hwy/RR	4	0	0
	Hwy/Ped	5	0	0
			136	222
Item 42B	Type service under bridge	CODE	<u># NBIS</u>	<u># ALL</u>
Data Tab	Other	0	0	0
Col R	Hwy w/ or w/o Ped	1	0	0
	Railroad	2	0	0
	Ped/Bkwy	3	0	0
	Hwy w/ RR	4	0	0
	Waterway	5	136	222
	Hwy/Waterway	6	0	0
	RR/Waterway	7	0	0
	Hwy/Waterway/RR	8	0	0
	Relief (for waterways)	9	0	0
			136	222

ITEMS 43A,B,C Structure Type	Data (Col M.N,O)	CODE	<u># NBIS</u>	<u># ALL</u>
Concrete Slab		101	0	5
Concrete Frame		107	2	20
Concrete Culvert (incl frame culverts)		119	1	24
Concrete Continuous Slab		201	9	9
Steel Beam or Girder		302	23	31
Steel Girder w/ Floor System		303	16	19
Steel Thru Truss (inlcudes Pony)		310	8	8
Steel Culvert (incl frame culverts)		319	1	23
Steel Continuous Beam or Girder		402	6	6
Prestr. Conc. Cont. Box Beam/Girder Mu	ltiple	505	69	73
Prestr. Conc. Cont. Box Beam/Girder Mu	ltiple	605	1	1

Timber Culvert (incl frame culverts)	819	0	1
Aluminum or Iron Culvert (incl frame culverts)	919	0	2
		136	222

Item 92A	Fracture Critical	CODE	<u># NBIS</u>	# ALL
Data Tab	<b>Requires FC Inspection</b>	Y	24	n/a
Col U,V,Y	<b>Requires FC Inspection</b>	Ν	112	n/a
			136	n/a
	FC date blank but FC=Y		0	n/a

Item 113 Scour			<u># NBIS</u>	<u># ALL</u>
Data Tab	Bridge not over waterway	N	0	0
Col AA	unknown foundation	U	0	0
	over tidal waters	Т	0	0
	foundations on dry land	9	0	0
	stable above footing	8	61	82
	countermeasures installed	7	1	1
	no scour evaluation made	6	0	0
	stable within footer limits	5	74	139
	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
			136	222

Item 63	Documented Engineering Judgment	<u># NBIS</u>	<u># ALL</u>
	Field Eval & Doc EJ	0	n/a

Item 92B	Underwater	CODE	<u># NBIS</u>	<u># ALL</u>
Data Tab	requires dive inspection	N	136	n/a
Col W,X,Z	requires dive inspection	Y	0	n/a
			136	
	dive insp date blank but Dive=Y		0	n/a

Item 709	Plan Information	CODE	<u># NBIS</u>	<u># ALL</u>
Data Tab	plans not avail	0	1	2
Col. AW	plan avail	1	134	218
	field measured	2	1	2
	Field Testing	3	0	0
	not applicable	Ν	0	0
			136	222

Item 63	Method of Analysis	CODE	<u># NBIS</u>	<u># ALL</u>
Data Tab	Field Eval & Doc. Eng Judgment	0	0	0
Col. AV	Load testing	4	0	0
	No Rating done	5	0	0
	Load Factor (LF)	6	101	0
	WS or AS	7	27	0
	Load & Resistance Factor	8	8	6
	Assigned Rating (LFR) HS20	D	0	126
	Assigned Rating (LRFR) HL93	F	0	80
	Not applicable (Ped, RR, Bldg)	Х	0	10
			136	222
REMINDE	R:			
	Load Factor required for bridges built after 1 LRFR required for bridges built after 2010	1993 (	exceptions: timber, et	c,)

Item 41	Operating Status	CODE	<u># NBIS</u>	<u># ALL</u>
Data Tab	Open, No restriction	А	128	213
Col AM	Open, posting recommended	В	8	8
	Open, Half width constr.	С	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	К	0	0
	Posted for load capacity	Р	0	1
	Posted for other than load	R	0	0
	Closed for other than load	Х	0	0
			136	222

# Inspection Condition Data - NBIS Bridges Only

	Load Rating Data	
Load Ratir	g 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.A V	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)	Compl
(SC)	Substa

pliant stantially Compliant (CC) (NC)

Conditionally Compliant (Adhering to approved plan of corrective action) Not Compliant

### METRIC 6 Insp. Frequency Routine

Bridge Inspections Overdue			<u>Overdue</u>	<u>% PASS</u>	COMPLIANCE
Data Tab	NBIS -	24 months	0	100.0%	(C)
Col. Y	ORC -	Calendar Year	0	100.0%	(C)
	BIM -	18 months	0	100.0%	(C)

#### METRIC 8 - Insp. Frequency Underwater

Dive Inspections Overdue		<u>Overdue</u>	Total UW	<u>% PASS</u>	COMPLIANCE
Data Tab Col. Z	60 months	0	0	100.0%	(C)

#### METRIC 10 - Insp. Frequency FC Member

FC Inspections Overdue		<u>Overdue</u>	Total FC	<u>% PASS</u>	COMPLIANCE
Data Tab Col. Y	24 months	0	24	100.0%	(C)

#### **METRIC 12 - Routine Inspection**

Field Rati	ngs	# > +/-1	# Ratings	% PASS	COMPLIANCE
field ratings		0	24	100.0%	(C)
Comments		Missing	# < 6	<u>% PASS</u>	
Tab	Comments when Rating < 6	0	136	100.0%	(C)
		Error	<b>Total Scour</b>	<u>% PASS</u>	
Comments	Rating should be = Scour	0	136	100.0%	
Tab	# of Compliance Errors	0	136	100.0%	(C)

### **METRIC 16 - Fracture Critical Inspection**

From Files review	Missing	# FC	<u>% PASS</u>	COMPLIANCE
Fract Critical Member ID	0	24	100.0%	(C)
Fatigue Prone Detail	9	24	62.5%	(NC)
Gusset Plate Calculations	0	24	100.0%	(C)
FC Inspection Procedure	9	24	62.5%	(NC)

### METRIC 17 - Underwater Inspection

From Files review	Missing	# UW	<u>% PASS</u>	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	(CC)
(SC)	Substantially Compliant	(NC)

Conditionally Compliant (per approved PCA) Not Compliant

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

**	based	on	result	ts of	Field	Review	

_	<u>Metric</u>	Action Needed
ſ	12	Scour Rating should control Substructure or Culvert
Γ	16	Supply FC Insp Procedure and Fatigue Prone Details for each FC bridge