

SENECA County 2020 INVENTORY, APPRAISAL & INSPECTION SNAPSHOT

2/9/2021

Inventory Data - NBIS Bridges Only

	<u>NBIS COUNT</u>
NBIS Bridges > 20'	214
Bridges 10'-20'	189
	403

Item 221 Inspection Responsibility	CODE	# NBIS	# ALL
Data Tab Col BV,BW County	2	214	403
Item 21 Maintenance responsibility	CODE	# NBIS	# ALL
Data Tab County	2	214	403
Col D City or other local	4	0	0
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
		214	403
Item 42A Type service on bridge	CODE	# NBIS	# ALL
Data Tab Other	0	0	0
Col Q Highway	1	213	402
Railroad	2	0	0
Ped/Bikeway	3	1	1
Hwy/RR	4	0	0
Hwy/Ped	5	0	0
		214	403
Item 42B Type service under bridge	CODE	# NBIS	# ALL
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	214	403
Hwy/Waterway	6	0	0
RR/Waterway	7	0	0
Hwy/Waterway/RR	8	0	0
Relief (for waterways)	9	0	0
		214	403

ITEMS 43A,B,C Structure Type	Data (Col M,N,O)	CODE	# NBIS	# ALL
Concrete Slab		101	10	22
Concrete Slab		102	0	1
Concrete Tee Beam		104	2	14
Concrete Box Beam/Girder Multiple		105	4	5
Concrete Frame		107	11	109

Concrete Deck Arch	111	1	1
Concrete Culvert (incl frame culverts)	119	0	24
Concrete Continuous Slab	201	4	4
Concrete Continuous Tee Beam	204	1	1
Steel Beam or Girder	302	50	62
Steel Thru Truss (includes Pony)	310	23	23
Steel Culvert (incl frame culverts)	319	2	8
Steel Continuous Beam or Girder	402	6	6
Prestressed Concrete Thru Arch	502	3	3
Prestr. Conc. Cont. Box Beam/Girder Multiple	505	88	106
Prestressed Concrete Continuous Thru Arch	602	3	3
Prestr. Conc. Cont. Box Beam/Girder Multiple	605	2	2
Timber Slab	701	3	4
Timber Culvert (incl frame culverts)	719	0	1
Aluminum or Iron Culvert (incl frame culverts)	919	1	4
		<u>214</u>	<u>403</u>

Item 92A Fracture Critical		CODE	# NBIS	# ALL
Data Tab	Requires FC Inspection	Y	22	n/a
Col U,V,Y	Requires FC Inspection	N	181	n/a
			<u>203</u>	n/a
	FC Switch Y/N is Blank		<u>11</u>	n/a

Item 113 Scour			# NBIS	# ALL
Data Tab	Bridge not over waterway	N	0	0
Col AA	unknown foundation	U	0	0
	over tidal waters	T	0	0
	foundations on dry land	9	3	5
	stable above footing	8	78	191
	countermeasures installed	7	5	8
	no scour evaluation made	6	0	0
	stable within footer limits	5	128	199
	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
			<u>214</u>	<u>403</u>

Item 63	Documented Engineering Judgment	# NBIS	# ALL
	Field Eval & Doc EJ	1	n/a

BR_100 for these bridges?

Item 92B	Underwater	CODE	# NBIS	# ALL
Data Tab	requires dive inspection	N	203	n/a
Col W,X,Z	requires dive inspection	Y	0	n/a
			203	
	dive insp date blank		11	

Item 709	Plan Information	CODE	# NBIS	# ALL
Data Tab	plans not avail	0	2	8
Col. AW	plan avail	1	201	366
	field measured	2	5	15
	Field Testing	3	0	0
	not applicable	N	0	0
			208	389

Item 63	Method of Analysis	CODE	# NBIS	# ALL
Data Tab	Field Eval & Doc. Eng Judgment	0	1	15
Col. AV	Work Stress	1	0	0
	LFR	2	0	0
	LRFR	3	0	0
	Load testing	4	1	1
	No Rating done	5	1	1
	Load Factor (LF)	6	184	262
	WS or AS	7	10	12
	Load & Resistance Factor	8	17	111
	Assigned Rating (LFR) HS20	D	0	0
	Assigned Rating (LRFR) HL93	F	0	1
	Not applicable (Ped, RR, Bldg)	X	0	0
			214	403

REMINDER:

Load Factor required for bridges built after 1993

(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	196	382
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	2	2
	Posted for load capacity	P	16	19
	Posted for other than load	R	0	0
	Closed for other than load	X	0	0
			214	403

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.A V	Item 70 correct?	0
Col. AW	Method of Rating Alike?	0
Col. AX	Op & Inv RF in Tons as req'd?	1
Col. AY	Item 575 correct?	0
Col. AZ	Depth of fill completed?	0

check later

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	0	100.0%	(C)

METRIC 10 - Insp. Frequency FC Member

FC Inspections Overdue	# OVERDUE	# FC	% PASS	COMPLIANCE
Data Tab Col. Y 24 months	1	22	99.5%	(SC)

METRIC 12 - Routine Inspection **(from files examination)

Field Ratings	# > +/-1	# Ratings	% PASS	COMPLIANCE
field ratings	0	30	100.0%	(C)
Comments	Missing	# < 6	% PASS	
Tab Comments when Rating < 6	34	212	84.0%	(SC)
Inadequate comments**	6	6	0.0%	improvement plan
	Error	Total Scour	% PASS	
Comments Rating should be = Scour	0	205	100.0%	within tolerance +/- 1
Tab Noncompliant Scour Rating Err	0	205	100.0%	(C)

METRIC 14 - Posting Load rating data tab

From Files review	# errors	#sampled	% PASS	COMPLIANCE
Op RF < 3 tons but not closed Column BB	1	214	99.5%	(SC)
Op RF = 0 but not closed Column BC	0	214	100.0%	(C)
% Legal < 100 but not posted Column BD	0	214	100.0%	(C)
Item 41 = B Column BE	0	214	100.0%	(C)

METRIC 16 - Fracture Critical Inspection (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)

improvement plan

Gusset Plate Calculations	0	2	100.0%	(C)
FC Inspection Procedure	2	2	0.0%	(SC)

improvement plan

METRIC 17 - Underwater Inspection (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	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	supply comments when rating<6, comments need to be detailed with LES
14	Op and Inv RF need to be in tons or bridge needs to be closed
16	Supply FC Insp Procedure and FPD for each FC bridge