

GUERNSEY County 2020

INVENTORY, APPRAISAL & INSPECTION SNAPSHOT

1/27/2021

Inventory Data - NBIS Bridges Only

	<u>NBIS COUNT</u>
NBIS Bridges > 20'	204
Bridges 10'-20'	110
	314

Item 221	Inspection Responsibility	<u>CODE</u>	<u># NBIS</u>	<u># ALL</u>
Data Tab Col BV,BW	County	2	204	314
Item 21	Maintenance responsibility	<u>CODE</u>	<u># NBIS</u>	<u># ALL</u>
Data Tab	County	2	204	314
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
			204	314
Item 42A	Type service on bridge	<u>CODE</u>	<u># NBIS</u>	<u># ALL</u>
Data Tab	Other	0	0	0
Col Q	Highway	1	201	311
	Railroad	2	0	0
	Ped/Bikeway	3	0	0
	Hwy/RR	4	0	0
	Hwy/Ped	5	3	3
			204	314
Item 42B	Type service under bridge	<u>CODE</u>	<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	1	1
	Ped/Bkwy	3	0	0
	Hwy w/ RR	4	0	0
	Waterway	5	203	313
	Hwy/Waterway	6	0	0
	RR/Waterway	7	0	0
	Hwy/Waterway/RR	8	0	0
	Relief (for waterways)	9	0	0
			204	314

ITEMS 43A,B,C Structure Type	Data (Col M,N,O)	CODE	# NBIS	# ALL
Other Culvert (incl frame culverts)		019	0	1
Concrete Slab		101	2	2
Concrete Tee Beam		104	1	1
Concrete Frame		107	6	35
Concrete Culvert (incl frame culverts)		119	1	8
Concrete Continuous Slab		201	4	4
Steel Beam or Girder		302	85	135
Steel Girder w/ Floor System		303	2	2
Steel Thru Truss (includes Pony)		310	13	13
Steel Culvert (incl frame culverts)		319	0	13
Steel Continuous Beam or Girder		402	7	7
Prestr. Conc. Cont. Box Beam/Girder Multiple		505	79	89
Prestr. Conc. Cont. Box Beam/Girder Multiple		605	2	2
Timber Thru Arch		702	1	1
Timber Deck Arch		811	1	1
			204	314

Item 92A Fracture Critical		CODE	# NBIS	# ALL
Data Tab	Requires FC Inspection	Y	15	n/a
Col U,V,Y	Requires FC Inspection	N	189	n/a
			204	n/a
	FC date blank but FC=Y		0	n/a

Item 113 Scour			# NBIS	# ALL
Data Tab	Bridge not over waterway	N	1	1
Col AA	unknown foundation	U	0	0
	over tidal waters	T	0	0
	foundations on dry land	9	0	0
	stable above footing	8	74	99
	countermeasures installed	7	4	4
	no scour evaluation made	6	0	0
	stable within footer limits	5	117	197
	stable action needed	4	8	13
	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
			204	314

Item 63	Documented Engineering Judgment	# NBIS	# ALL
	Field Eval & Doc EJ	6	n/a

Item 92B	Underwater	CODE	# NBIS	# ALL
Data Tab	requires dive inspection	N	204	n/a
Col W,X,Z	requires dive inspection	Y	0	n/a
			204	
	dive insp date blank but Dive=Y		0	n/a

Item 709	Plan Information	CODE	# NBIS	# ALL
Data Tab	plans not avail	0	11	13
Col. AW	plan avail	1	86	130
	field measured	2	106	170
	Field Testing	3	0	0
	not applicable	N	0	0
			203	313

GUE-C0073-48.060_(3030003) missing item 709

Item 63	Method of Analysis	CODE	# NBIS	# ALL
Data Tab	Field Eval & Doc. Eng Judgment	0	6	8
Col. AV	Load testing	4	0	0
	No Rating done	5	0	0
	Load Factor (LF)	6	169	0
	WS or AS	7	2	0
	Load & Resistance Factor	8	27	19
	Assigned Rating (LFR) HS20	D	0	249
	Assigned Rating (LFR) HL93	F	0	4
	Not applicable (Ped, RR, Bldg)	X	0	34
			204	314

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	<u>CODE</u>	<u># NBIS</u>	<u># ALL</u>
Data Tab	Open, No restriction	A	166	269
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	5	5
	Posted for load capacity	P	33	40
	Posted for other than load	R	0	0
	Closed for other than load	X	0	0
			204	314

Load Rating Data

<u>Load Rating Tab</u>	<u># OF ERRORS</u>
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)	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	3	100.0%	(C)
Comprehensive	0	3	100.0%	(C)
Refresher	0	3	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	0	15	100.0%	(C)

METRIC 12 - Routine Inspection

Field Ratings	# > +/-1	# Ratings	% PASS	COMPLIANCE
field ratings	0	24	100.0%	(C)
Comments	Missing	# < 6	% PASS	
Tab Comments when Rating < 6	0	199	100.0%	(C)
Comments	Error	Total Scour	% PASS	
Tab Rating should be = Scour	3	198	98.5% within tolerance +/- 1	
Tab Noncompliant Scour Rating Err	1	198	99.5%	(C)

METRIC 14 - Posting Load rating data tab

From Files review	# errors	#sampled	% PASS	COMPLIANCE
Op RF < 3 tons but not closed	0	204	100.0%	(C)
Op RF = 0 but not closed	0	204	100.0%	(C)
% Legal < 100 but not posted	0	204	100.0%	(C)

Item 41 = B	0	204	100.0%	(C)
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METRIC 16 - Fracture Critical Inspection

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 Inspection

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

16	Add Risk Factors to FC Insp Procedure for each FC bridge
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