HistoricBridges.org - National Bridge Inventory Data Sheet

2010 Inventory

The National Bridge Inventory contains data submitted by state transportion departments to the Federal Highway Administration in coded format.
Form Interface Design: www.historicbridges.org. Data Conversion Assistance By www.bridgehunter.com. None of the involved parties make any guarantee of accuracy.

Basic Information

New York [36]	New York County [061]	New York [51000]	RTE 27 OVER EAST RIVER	40-42-24 = 40.706667	073-59-25 = -73.990278

2240027	Highway agency district	#Num!	Owner	City or Municipal Highway Agency [04]	Maintenance responsibility	City or Municipal Highway Agency [04]

Route	27		RTE 27	Toll	On free road [3]

Features intersected: RTE I278, EAST RIVER, FD

Design - main	Steel [3]	Design - approach	Steel [3]	Kilometerpoint	0 km = 0.0 mi
3	Suspension [13]	20	Truss - Deck [09]	Year built	1909
				Year reconstructed	1968
				Skew angle	0
				Structure Flared	
				Historical significance	Bridge is on the NRHP. [1]

Total length	1772.4 m = 5815.2 ft	Length of maximum span	448 m = 1469.9 ft	Deck width, out-to-out	32.3 m = 106.0 ft	Bridge roadway width, curb-to-curb	10.6 m = 34.8 ft

Inventory Route, Total Horizontal Clearance	10.6 m = 34.8 ft	Curb or sidewalk width - left	3.6 m = 11.8 ft	Curb or sidewalk width - right	3.6 m = 11.8 ft

Deck structure type	Closed Grating [4]
Type of wearing surface	Other [9]
Deck protection	
Type of membrane/wearing surface	

Weight Limits

Bypass, detour length		Method to determine inventory rating	Load Factor(LF) [1]	Inventory rating	33.6 metric ton = 37.0 tons
0.6 km = 0.4 mi		Method to determine operating rating	Load Factor(LF) [1]	Operating rating	45.4 metric ton = 49.9 tons
		Bridge posting	Equal to or above legal loads [5]	Design Load	

Functional Details

Average Daily Traffic	48416	Average daily truck traffi	9 %	Year	2009	Future average daily traffic	67782	Year	2029

Road classification	Other Principal Arterial (Urban) [14]	Lanes on structure	3	Approach roadway width	10.6 m = 34.8 ft
Type of service on bridge	Highway-railroad [4]	Direction of traffic	2 - way traffic [2]	Bridge median	
Parallel structure designation	No parallel structure exists. [N]				
Type of service under bridge	Highway-waterway [6]	Lanes under structure	12	Navigation control	Navigation control on waterway (bridge permit required). [1]
Navigation vertical clearanc	41.1 m = 134.8 ft	Navigation horizontal clearance	374.9 m = 1230.0 ft		
Minimum navigation vertical clearance, vertical lift bridge		Minimum vertical clearance over bridge roadway	4.26 m = 14.0 ft		
Minimum lateral underclearance reference feature	Highway beneath structure [H]				
Minimum lateral underclearance on right	0.4 m = 1.3 ft	Minimum lateral underclearance on left	0.4 m = 1.3 ft		
Minimum Vertical Underclearance	4.69 m = 15.4 ft	Minimum vertical underclearance reference feature	Highway beneath structure [H]		
Appraisal ratings - underclearances	Basically intolerable requiring high priority of corrrective action [3]				

Repair and Replacement Plans

Type of work to be performed

Widening of existing bridge with deck rehabilitation or replacement. [34]

Work done by	Work to be done by contract [1]		
Bridge improvement cost	6041000	Roadway improvement cost	3545000
Length of structure improvement	1772.4 m = 5815.2 ft	Total project cost	9586000
Year of improvement cost estimate	2009		
Border bridge - state		Border bridge - percent responsibility of other state	
Border bridge - structure number			

Inspection and Sufficiency

Structure status	Open, no restriction [A]	Appraisal ratings - structural	Somewhat better than minimum adequacy to tolerate being left in place as is [5]
Condition ratings - superstructur	Satisfactory [6]	Appraisal ratings - roadway alignment	Basically intolerable requiring high priority of replacement [2]
Condition ratings - substructure	Fair [5]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of replacement [2]
Condition ratings - deck	Excellent [9]		

Scour	Bridge foundations determined to be stable for assessed or calculated scour condition. [5]
Channel and channel protection	Bank protection is being eroded. River control devices and/or embankment have major damage. Trees and rush restrict the channel. [5]

Appraisal ratings - water adequacy	Somewhat better than minimum adequacy to tolerate being left in place as is [5]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection	None present but re-evaluation suggested [5]	Sufficiency rating	47

Culverts	Not applicable. Used if structure is not a culvert. [N]
Traffic safety features - railings	
Traffic safety features - transitions	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - approach guardrail	
Traffic safety features - approach guardrail ends	Inpected feature meets currently acceptable standards. [1]

Inspection date	November 2008 [1108]	Designated inspection frequency	24 Months
Underwater inspection	Unknown [Y60]	Underwater inspection date	July 2008 [0708]
Fracture critical inspection	Every two years [Y24]	Fracture critical inspection date	November 2008 [1108]
Other special inspection	Not needed [N]	Other special inspection date	