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

Pennsylvania [42]	Allegheny County [003]	Pittsburgh [61000]	SMITHFIELD ST.BRIDGE	40-26-00 = 40.433333	080-00-12 = -80.003333

023027002000000	Highway agency district: 11	Owner: State Highway Agency [01]	Maintenance responsibility: State Highway Agency [01]		
Route: 0	North [1]	SMITHFIELD ST	Toll: On free road [3]	Features intersected: MONONGAHELA RIVER,CSX RR	

Design - main	Steel [3]	Design - approach	Steel [3]	Kilometerpoint: 15.6 km = 9.7 mi	
2	Truss - Thru [10]	5	Girder and floorbeam system [03]	Year built: 1883	Year reconstructed: 1994
				Skew angle: 0	Structure Flared:
				Historical significance: Bridge is on the NRHP. [1]	

Total length: 358.7 m = 1176.9 ft	Length of maximum span: 109.7 m = 359.9 ft	Deck width, out-to-out: 14.1 m = 46.3 ft	Bridge roadway width, curb-to-curb: 12.8 m = 42.0 ft
Inventory Route, Total Horizontal Clearance: 7.5 m = 24.6 ft	Curb or sidewalk width - left: 3.3 m = 10.8 ft	Curb or sidewalk width - right: 3.2 m = 10.5 ft
Deck structure type: Closed Grating [4]			
Type of wearing surface: Epoxy Overlay [5]			
Deck protection:			
Type of membrane/wearing surface:			

Weight Limits

Bypass, detour length	Method to determine inventory rating	Load Factor(LF) [1]	Inventory rating	20 metric ton = 22.0 tons	
0.6 km = 0.4 mi	Method to determine operating rating	Load Factor(LF) [1]	Operating rating	26.3 metric ton = 28.9 tons	
	Bridge posting	30.0 - 39.9 % below [1]	Design Load	M 13.5 / H 15 [2]	

Functional Details

Average Daily Traffic	6401	Average daily truck traffi	9 %	Year	2010	Future average daily traffic	20000	Year	2020

Road classification	Minor Arterial (Urban) [16]	Lanes on structure	3	Approach roadway width	16.2 m = 53.2 ft
Type of service on bridge	Highway-pedestrian [5]	Direction of traffic	2 - way traffic [2]	Bridge median	
Parallel structure designation	No parallel structure exists. [N]				
Type of service under bridge	Highway-waterway-railroad [	Lanes under structure	1	Navigation control	Navigation control on waterway (bridge permit required). [1]
Navigation vertical clearanc	12.2 m = 40.0 ft	Navigation horizontal clearance	103.6 m = 339.9 ft		
Minimum navigation vertical clearance, vertical lift bridge		Minimum vertical clearance over bridge roadway	5.18 m = 17.0 ft		
Minimum lateral underclearance reference feature	Highway beneath structure [H]				
Minimum lateral underclearance on right	0 = N/A	Minimum lateral underclearance on left	0 = N/A		
Minimum Vertical Underclearance	4.11 m = 13.5 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

Other structural work, including hydraulic replacements. [38]

Work done by	Work to be done by contract [1]		
Bridge improvement cost	0	Roadway improvement cost	1000
Length of structure improvement	451.1 m = 1480.1 ft	Total project cost	6000
Year of improvement cost estimate			
Border bridge - state		Border bridge - percent responsibility of other state	
Border bridge - structure number			

Inspection and Sufficiency

Structure status	Posted for load [P]	Appraisal ratings - structural	Somewhat better than minimum adequacy to tolerate being left in place as is [5]
Condition ratings - superstructur	Fair [5]	Appraisal ratings - roadway alignment	Equal to present desirable criteria [8]
Condition ratings - substructure	Fair [5]	Appraisal ratings - deck geometry	Meets minimum tolerable limits to be left in place as is [4]
Condition ratings - deck	Satisfactory [6]		

Scour	Countermeasures have been installed to mitigate an existing problem with scour. [7]
Channel and channel protection	Bank is beginning to slump. River control devices and embankment protection have widespread minor damage. There is minor stream bed movement evident. Debris is restricting the channel slightly. [6]

Appraisal ratings - water adequacy	Superior to present desirable criteria [9]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection		Sufficiency rating	49.9

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	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - approach guardrail ends	Inpected feature meets currently acceptable standards. [1]

Inspection date	July 2009 [0709]	Designated inspection frequency	12	Months

Underwater inspection	Not needed [N]	Underwater inspection date	
Fracture critical inspection	Not needed [N]	Fracture critical inspection date	
Other special inspection	Not needed [N]	Other special inspection date	