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]	Lawrence County [073]	New Castle [53368]	MAHONING AVE. VIADUCT	40-58-54 = 40.981667	080-21-17 = -80.354722

370018030023630	Highway agency district	11	Owner	Railroad [27]	Maintenance responsibility	Railroad [27]	
Route	18		MAHONING AV	Toll	On free road [3]	Features intersected	SHENANGO R, CSX RR

Design - main	Steel [3]	Design - approach	Steel [3]	Kilometerpoint	1713.1 km = 1062.1 mi		
3	Truss - Thru [10]	8	Girder and floorbeam system [03]	Year built	1923	Year reconstructed	1985
				Skew angle	0	Structure Flared	
				Historical significance	Bridge is not eligible for the NRHP. [5]		

Total length	364.2 m = 1194.9 ft	Length of maximum span	93.6 m = 307.1 ft	Deck width, out-to-out	9.8 m = 32.2 ft	Bridge roadway width, curb-to-curb	9 m = 29.5 ft
Inventory Route, Total Horizontal Clearance	9 m = 29.5 ft	Curb or sidewalk width - left	1.5 m = 4.9 ft	Curb or sidewalk width - right	0.2 m = 0.7 ft		

Deck structure type	Concrete Cast-in-Place [1]
Type of wearing surface	Monolithic Concrete (concurrently placed with structural deck) [1]
Deck protection	Epoxy Coated Reinforcing [1]
Type of membrane/wearing surface	

Weight Limits

Bypass, detour length	Method to determine inventory rating	Load Factor(LF) [1]	Inventory rating	5.4 metric ton = 5.9 tons	
0.6 km = 0.4 mi	Method to determine operating rating	Load Factor(LF) [1]	Operating rating	35.4 metric ton = 38.9 tons	
	Bridge posting	Equal to or above legal loads [5]	Design Load	M 13.5 / H 15 [2]	

Functional Details

Average Daily Traffic	8583	Average daily truck traffi	16 %	Year	2010	Future average daily traffic	8000	Year	2023

Road classification	Minor Arterial (Urban) [16]	Lanes on structure	2	Approach roadway width	8.8 m = 28.9 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	Railroad-waterway [7]	Lanes under structure	0	Navigation control	
Navigation vertical clearanc	0 = N/A	Navigation horizontal clearance	0 = N/A		
Minimum navigation vertical clearance, vertical lift bridge		Minimum vertical clearance over bridge roadway	5.56 m = 18.2 ft		
Minimum lateral underclearance reference feature	Railroad beneath structure [R]				
Minimum lateral underclearance on right	0 = N/A	Minimum lateral underclearance on left	0 = N/A		
Minimum Vertical Underclearance	7.11 m = 23.3 ft	Minimum vertical underclearance reference feature	Railroad beneath structure [R]		
Appraisal ratings - underclearances	Basically intolerable requiring high priority of replacement [2]				

Repair and Replacement Plans

Type of work to be performed

Replacement of bridge or other structure because of substandard load carrying capacity or substantial bridge roadway geometry. [31]

Work done by	Work to be done by contract [1]		
Bridge improvement cost	2000	Roadway improvement cost	5000
Length of structure improvement	518.2 m = 1700.2 ft	Total project cost	21000
Year of improvement cost estimate			
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	Basically intolerable requiring high priority of replacement [2]
Condition ratings - superstructur	Poor [4]	Appraisal ratings - roadway alignment	Somewhat better than minimum adequacy to tolerate being left in place as is [5]
Condition ratings - substructure	Poor [4]	Appraisal ratings - deck geometry	Meets minimum tolerable limits to be left in place as is [4]
Condition ratings - deck	Satisfactory [6]		

Scour	Bridge foundations determined to be stable for assessed or calculated scour condition. [5]
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	Structurally deficient [1]
Pier or abutment protection		Sufficiency rating	4

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	March 2009 [0309]	Designated inspection frequency	24	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	