

HistoricBridges.org - National Bridge Inventory Data Sheet

2010 Inventory

The National Bridge Inventory contains data submitted by state transportation 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

California [06]	Contra Costa County [013]	Martinez [46114]	04-CC-680-25.04-MTZ	38-02-29 = 38.041389	122-07-25 = - 122.123611
28 0153L	Highway agency district 4	Owner State Highway Agency [01]	Maintenance responsibility	State Highway Agency [01]	
Route 680		INTERSTATE 680 SB	Toll Toll bridge [1]	Features intersected UP,BNSF,AMTRAK,SUISUN BA	
Design - main	Steel [3]	Design - approach	Steel [3]	Kilometerpoint	2504 km = 1552.5 mi
10	Truss - Deck [09]	8	Stringer/Multi-beam or girder [02]	Year built	1962
				Year reconstructed	1991
				Skew angle	0
				Structure Flared	
				Historical significance	Bridge is not eligible for the NRHP. [5]
Total length	1894.3 m = 6215.2 ft	Length of maximum span	160.9 m = 527.9 ft	Deck width, out-to-out	23.6 m = 77.4 ft
Inventory Route, Total Horizontal Clearance	11 m = 36.1 ft	Curb or sidewalk width - left	0 m = 0.0 ft	Curb or sidewalk width - right	0 m = 0.0 ft
Deck structure type	Concrete Cast-in-Place [1]				
Type of wearing surface	Monolithic Concrete (concurrently placed with structural deck) [1]				
Deck protection					
Type of membrane/wearing surface					

Weight Limits

Bypass, detour length	Method to determine inventory rating	Load Factor(LF) [1]	Inventory rating	40.8 metric ton = 44.9 tons
4.7 km = 2.9 mi	Method to determine operating rating	Load Factor(LF) [1]	Operating rating	68 metric ton = 74.8 tons
	Bridge posting	Equal to or above legal loads [5]	Design Load	MS 18 / HS 20 [5]

Functional Details

Average Daily Traffic	97000	Average daily truck traffi	8	%	Year	2000	Future average daily traffic	175890	Year	2029
Road classification	Principal Arterial - Interstate (Urban) [11]		Lanes on structure	4		Approach roadway width	27.4 m = 89.9 ft			
Type of service on bridge	Highway-pedestrian [5]		Direction of traffic	1 - way traffic [1]		Bridge median				
Parallel structure designation	The right structure of parallel bridges carrying the roadway in the direction of the inventory. [R]									
Type of service under bridge	Highway-waterway-railroad [Lanes under structure	4		Navigation control	Navigation control on waterway (bridge permit required). [1]			
Navigation vertical clearanc	41.1 m = 134.8 ft		Navigation horizontal clearance	134.1 m = 440.0 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	7.62 m = 25.0 ft		Minimum vertical underclearance reference feature	Railroad beneath structure [R]						
Appraisal ratings - underclearances	Basically intolerable requiring high priority of corrective action [3]									

Repair and Replacement Plans

Type of work to be performed	Work done by	Work to be done by contract [1]		
Other structural work, including hydraulic replacements. [38]	Bridge improvement cost	44744000	Roadway improvement cost	8948000
	Length of structure improvement	1894.3 m = 6215.2 ft	Total project cost	75169000
	Year of improvement cost estimate	2010		
	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	Equal to present minimum criteria [6]
Condition ratings - superstructure	Satisfactory [6]	Appraisal ratings - roadway alignment	Equal to present desirable criteria [8]
Condition ratings - substructure	Good [7]	Appraisal ratings - deck geometry	Meets minimum tolerable limits to be left in place as is [4]
Condition ratings - deck	Good [7]		
Scour	Bridge foundations determined to be stable for assessed or calculated scour condition. [5]		
Channel and channel protection	Banks are protected or well vegetated. River control devices such as spur dikes and embankment protection are not required or are in a stable condition. [8]		
Appraisal ratings - water adequacy	Superior to present desirable criteria [9]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection	In place and functioning [2]	Sufficiency rating	74
Culverts	Not applicable. Used if structure is not a culvert. [N]		
Traffic safety features - railings	Inspected feature meets currently acceptable standards. [1]		
Traffic safety features - transitions	Inspected feature meets currently acceptable standards. [1]		
Traffic safety features - approach guardrail	Inspected feature meets currently acceptable standards. [1]		
Traffic safety features - approach guardrail ends	Inspected feature meets currently acceptable standards. [1]		
Inspection date	December 2009 [1209]	Designated inspection frequency	24 Months
Underwater inspection	Unknown [Y60]	Underwater inspection date	July 2010 [0710]
Fracture critical inspection	Every two years [Y24]	Fracture critical inspection date	January 2011 [0111]
Other special inspection	Not needed [N]	Other special inspection date	