

HistoricBridges.org - National Bridge Inventory Data Sheet

2006 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

Tennessee [47]	Hamilton County [065]	Chattanooga [14000]	MARKET STREET BRIDGE	35-03-18 = 35.055000	085-18-36 = - 85.310000
33SR0080007	Highway agency district 2	Owner State Highway Agency [01]	Maintenance responsibility	State Highway Agency [01]	
Route 27	FAU 8	Toll On free road [3]	Features intersected TN RIVER & FAU 5395		
Design - main	Steel [3]	Design - approach	Concrete [1]	Kilometerpoint	1559.5 km = 966.9 mi
1	Movable - Bascule [16]	16	Arch - Deck [11]	Year built	1917
				Year reconstructed	N/A [0000]
				Skew angle	0
				Structure Flared	
				Historical significance	Bridge is possibly eligible for the NRHP. [3]
Total length	577.6 m = 1895.1 ft	Length of maximum span	109.4 m = 358.9 ft	Deck width, out-to-out	15.6 m = 51.2 ft
Inventory Route, Total Horizontal Clearance	10.9 m = 35.8 ft	Curb or sidewalk width - left	1.8 m = 5.9 ft	Curb or sidewalk width - right	1.8 m = 5.9 ft
Deck structure type	Concrete Cast-in-Place [1]				
Type of wearing surface	Bituminous [6]				
Deck protection					
Type of membrane/wearing surface					

Weight Limits

Bypass, detour length	Method to determine inventory rating	Allowable Stress(AS) [2]	Inventory rating	24.3 metric ton = 26.7 tons
0.8 km = 0.5 mi	Method to determine operating rating	Allowable Stress(AS) [2]	Operating rating	36 metric ton = 39.6 tons
	Bridge posting	Equal to or above legal loads [5]	Design Load	M 13.5 / H 15 [2]

Functional Details

Average Daily Traffic	20680	Average daily truck traffi	5	%	Year	2005	Future average daily traffic	32640	Year	2026
Road classification	Minor Arterial (Urban) [16]		Lanes on structure	4		Approach roadway width	11 m = 36.1 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 [6]		Lanes under structure	2		Navigation control	Navigation control on waterway (bridge permit required). [1]			
Navigation vertical clearanc	30 m = 98.4 ft		Navigation horizontal clearance	89.9 m = 295.0 ft						
Minimum navigation vertical clearance, vertical lift bridge	17.3 m = 56.8 ft				Minimum vertical clearance over bridge roadway	5 m = 16.4 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	6.58 m = 21.6 ft		Minimum vertical underclearance reference feature	Highway beneath structure [H]						
Appraisal ratings - underclearances	Basically intolerable requiring high priority of replacement [2]									

Repair and Replacement Plans

Type of work to be performed	Work done by	Work to be done by contract [1]		
Replacement of bridge or other structure because of substandard load carrying capacity or substantial bridge roadway geometry. [31]	Bridge improvement cost	24634000	Roadway improvement cost	2464000
	Length of structure improvement	577.6 m = 1895.1 ft	Total project cost	36952000
	Year of improvement cost estimate	2006		
	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	Meets minimum tolerable limits to be left in place as is [4]
Condition ratings - superstructure	Poor [4]	Appraisal ratings - roadway alignment	Equal to present minimum criteria [6]
Condition ratings - substructure	Poor [4]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of replacement [2]
Condition ratings - deck	Poor [4]		
Scour	Bridge foundations determined to be stable for the assessed or calculated scour condition. [8]		
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	Better than present minimum criteria [7]	Status evaluation	Structurally deficient [1]
Pier or abutment protection	None present but re-evaluation suggested [5]	Sufficiency rating	24.5
Culverts	Not applicable. Used if structure is not a culvert. [N]		
Traffic safety features - railings			
Traffic safety features - transitions			
Traffic safety features - approach guardrail			
Traffic safety features - approach guardrail ends			
Inspection date	April 2005 [0405]	Designated inspection frequency	24 Months
Underwater inspection	Unknown [Y60]	Underwater inspection date	May 2001 [0501]
Fracture critical inspection	Every two years [Y24]	Fracture critical inspection date	April 2005 [0405]
Other special inspection	Not needed [N]	Other special inspection date	