

The National Bridge Inventory contains data submitted by state transportation departments to the Federal Highway Administration in coded format.
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Basic Information		Michigan [26]		Charlevoix County [029]		Charlevoix [14780]		IN CHARLEVOIX		45-19-07 = 45.318611		085-15-31 = - 85.258611	
15115012000B010		Highway agency district 2		Owner State Highway Agency [01]		Maintenance responsibility		State Highway Agency [01]					
Route 31		US-31		Toll On free road [3]		Features intersected		ISLAND LAKE OUTLET					
Design - main Steel [3]		Design - approach Steel [3]		Kilometerpoint 240.1 km = 148.9 mi		Year built 1949		Year reconstructed 1992					
1 Movable - Bascule [16]		2 Stringer/Multi-beam or girder [02]		Skew angle 0		Structure Flared							
				Historical significance		Bridge is on the NRHP. [1]							
Total length 67.9 m = 222.8 ft		Length of maximum span 33.8 m = 110.9 ft		Deck width, out-to-out 17.6 m = 57.7 ft		Bridge roadway width, curb-to-curb 13.4 m = 44.0 ft							
Inventory Route, Total Horizontal Clearance 17 m = 55.8 ft		Curb or sidewalk width - left 1.6 m = 5.2 ft		Curb or sidewalk width - right 1.6 m = 5.2 ft									
Deck structure type		Open Grating [3]											
Type of wearing surface		Other [9]											
Deck protection													
Type of membrane/wearing surface													

Weight Limits					
Bypass, detour length 5.5 km = 3.4 mi		Method to determine inventory rating Allowable Stress(AS) [2]		Inventory rating 30 metric ton = 33.0 tons	
		Method to determine operating rating Allowable Stress(AS) [2]		Operating rating 64.5 metric ton = 71.0 tons	
Bridge posting		Equal to or above legal loads [5]		Design Load M 18 / H 20 [4]	

Functional Details

Average Daily Traffic	15896	Average daily truck traffi	4	%	Year	2007	Future average daily traffic	16391	Year	2018
Road classification	Principal Arterial - Other (Rural) [02]		Lanes on structure	4	Approach roadway width	13.4 m = 44.0 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	Waterway [5]		Lanes under structure	0	Navigation control	Navigation control on waterway (bridge permit required). [1]				
Navigation vertical clearanc	5 m = 16.4 ft		Navigation horizontal clearance	27 m = 88.6 ft						
Minimum navigation vertical clearance, vertical lift bridge			Minimum vertical clearance over bridge roadway	99.99 m = 328.1 ft						
Minimum lateral underclearance reference feature	Feature not a highway or railroad [N]									
Minimum lateral underclearance on right	99.9 = Unlimited				Minimum lateral underclearance on left	0 = N/A				
Minimum Vertical Underclearance	0 = N/A		Minimum vertical underclearance reference feature	Feature not a highway or railroad [N]						
Appraisal ratings - underclearances	N/A [N]									

Repair and Replacement Plans

Type of work to be performed	Work done by									
Bridge rehabilitation because of general structure deterioration or inadequate strength. [35]	Bridge improvement cost		Roadway improvement cost							
	Length of structure improvement		Total project cost							
	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, would be posted or closed except for temporary shoring [D]	Appraisal ratings - structural	Equal to present minimum criteria [6]
Condition ratings - superstructure	Good [7]	Appraisal ratings - roadway alignment	Better than present minimum criteria [7]
Condition ratings - substructure	Satisfactory [6]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of replacement [2]
Condition ratings - deck	Good [7]		
Scour	Countermeasures have been installed to mitigate an existing problem with scour. [7]		
Channel and channel protection	Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift. [7]		
Appraisal ratings - water adequacy	Better than present minimum criteria [7]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection	In place and functioning [2]	Sufficiency rating	59.7
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	April 2009 [0409]	Designated inspection frequency	15 Months
Underwater inspection	Unknown [Y60]	Underwater inspection date	August 2005 [0805]
Fracture critical inspection	Unknown [Y15]	Fracture critical inspection date	April 2009 [0409]
Other special inspection	Not needed [N]	Other special inspection date	