

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					
Ohio [39]	Cuyahoga County [035]	Cleveland [16000]	DETROIT/SUPERIOR BRIDGE	41-29-30 = 41.491667	081-42-21 = - 81.705833
1800930	Highway agency district 12	Owner State Highway Agency [01]	Maintenance responsibility State Highway Agency [01]		
Route 6	USR 6	Toll On free road [3]	Features intersected (1499)CUY. RIVER & RTA		
Design - main Steel [3]	Design - approach Concrete [1]	Kilometerpoint 2344 km = 1453.3 mi	Year built 1917	Year reconstructed 1997	
1 Arch - Thru [12]	12 Arch - Deck [11]	Skew angle 0	Structure Flared Yes, flared [1]	Historical significance Bridge is on the NRHP. [1]	
Total length 809.5 m = 2656.0 ft	Length of maximum span 180.1 m = 590.9 ft	Deck width, out-to-out 26 m = 85.3 ft	Bridge roadway width, curb-to-curb 21.9 m = 71.9 ft		
Inventory Route, Total Horizontal Clearance 21.9 m = 71.9 ft	Curb or sidewalk width - left 1.5 m = 4.9 ft	Curb or sidewalk width - right 1.5 m = 4.9 ft			
Deck structure type	Concrete Cast-in-Place [1]				
Type of wearing surface	Integral Concrete (separate non-modified layer of concrete added to structural deck) [2]				
Deck protection	Epoxy Coated Reinforcing [1]				
Type of membrane/wearing surface	Unknown [8]				

Weight Limits		
Bypass, detour length 0.3 km = 0.2 mi	Method to determine inventory rating No rating analysis performed [5]	Inventory rating 32.4 metric ton = 35.6 tons
	Method to determine operating rating No rating analysis performed [5]	Operating rating 40.5 metric ton = 44.6 tons
Bridge posting Equal to or above legal loads [5]	Design Load MS 18 / HS 20 [5]	

Functional Details

Average Daily Traffic	19230	Average daily truck traffi	5	%	Year	2007	Future average daily traffic	26691	Year	2027
Road classification	Other Principal Arterial (Urban) [14]		Lanes on structure	6		Approach roadway width	25.6 m = 84.0 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	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	4.27 m = 14.0 ft			
Minimum lateral underclearance reference feature	Railroad beneath structure [R]									
Minimum lateral underclearance on right	99.9 = Unlimited					Minimum lateral underclearance on left	99.9 = Unlimited			
Minimum Vertical Underclearance	9.14 m = 30.0 ft		Minimum vertical underclearance reference feature	Railroad beneath structure [R]						
Appraisal ratings - underclearances	Superior to present desirable criteria [9]									

Repair and Replacement Plans

Type of work to be performed	Work done by		Work to be done by contract [1]							
Bridge deck rehabilitation with only incidental widening. [36]	Bridge improvement cost	\$5,400,000	Roadway improvement cost	\$430,000						
	Length of structure improvement	853.4 m = 2800.0 ft		Total project cost	\$5,830,000					
	Year of improvement cost estimate	2003								
	Border bridge - state					Border bridge - percent responsibility of other state				
	Border bridge - structure number									

Inspection and Sufficiency

Structure status	<input type="text" value="Open, no restriction [A]"/>	Appraisal ratings - structural	<input type="text" value="Somewhat better than minimum adequacy to tolerate being left in place as is [5]"/>
Condition ratings - superstructure	<input type="text" value="Satisfactory [6]"/>	Appraisal ratings - roadway alignment	<input type="text" value="Equal to present desirable criteria [8]"/>
Condition ratings - substructure	<input type="text" value="Fair [5]"/>	Appraisal ratings - deck geometry	<input type="text" value="Basically intolerable requiring high priority of corrective action [3]"/>
Condition ratings - deck	<input type="text" value="Good [7]"/>		
Scour	<input type="text" value="Bridge foundations determined to be stable for the assessed or calculated scour condition. [8]"/>		
Channel and channel protection	<input type="text" value="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	<input type="text" value="Equal to present desirable criteria [8]"/>	Status evaluation	<input type="text" value="Functionally obsolete [2]"/>
Pier or abutment protection	<input type="text"/>	Sufficiency rating	<input type="text" value="67.4"/>
Culverts	<input type="text" value="Not applicable. Used if structure is not a culvert. [N]"/>		
Traffic safety features - railings	<input type="text" value="Inspected feature meets currently acceptable standards. [1]"/>		
Traffic safety features - transitions	<input type="text" value="Inspected feature meets currently acceptable standards. [1]"/>		
Traffic safety features - approach guardrail	<input type="text" value="Inspected feature meets currently acceptable standards. [1]"/>		
Traffic safety features - approach guardrail ends	<input type="text" value="Inspected feature meets currently acceptable standards. [1]"/>		
Inspection date	<input type="text" value="October 2010 [1010]"/>	Designated inspection frequency	<input type="text" value="12"/> Months
Underwater inspection	<input type="text" value="Unknown [Y60]"/>	Underwater inspection date	<input type="text" value="October 2010 [1010]"/>
Fracture critical inspection	<input type="text" value="Every year [Y12]"/>	Fracture critical inspection date	<input type="text" value="December 2009 [1209]"/>
Other special inspection	<input type="text" value="Unknown [Y06]"/>	Other special inspection date	<input type="text" value="March 2010 [0310]"/>

Unit of Measure: **English**
Structure File Number **1800930**
Sufficiency Rating: **50.9 SD**

Bridge Inventory Information
Inventory Bridge Number: **CUY 00006 1456**
ON (1499)CUY. RIVER & RTA

Report Date **09/18/2012** **BM-191** Page: 1 of 2
BR. Type STEEL / ARCH / THRU
Date of Last Inventory Update: **03/05/2012**

District: **12** County **CUYAHOGA** (101) Location: **DETROIT/SUPERIOR BRIDGE** (102) Facility Carried: **USR 6**
(2) FIPS Code: **CLEVELAND** (103) Route On Bridge: **STATE (ODOT)** (104) Route Under Bridge: **NON-HIGHWAY**
(9) Direction of Traffic: **2-WAY TRAFFIC** (10) Temporary: **N** (11) Truck Network: **N** (12) Parallel: **N**
(95) Insp: **OHIO TRAN DEPT** (96) Maint: **OHIO TRAN DEPT** (97) Routine: **CITY/LOC** (100) Type Serv: (On): **HIGHWAY/PEDESTRIAN** (Under): **RAILROAD/WATERWAY**

Inventory Route Data

(3) Route On/Under: **ON** Hwy Sys: **U.S. NUMBERED HIGHWAY** (63) Main Spans Number: **1** Type: **STEEL / ARCH / THRU**
Route No.: **00006** Dir: Des: **MAINLINE** Pref: Approach Spans Number: **12** Type: **CONCRETE / ARCH / DECK**
Total Spans: **13** (65) Max Span: **591 Ft** (66) Overall Leng: **2656 Ft**

(4) Feature Intersected: **(1499)CUY. RIVER & RTA** (70) Substructure (71) Foundation and Scour Information
(5) County: **CUY** Mileage: **1456** Special Desig: Abut-Rear Matl: **CONCRETE** Type: **SOLID WALL** Fnd: **SPREAD FOOTING**
(6) Avg. Daily Traffic(ADT): **15,930** (7) ADT Year: **2010** Abut-Fwd Matl: **CONCRETE** Type: **SOLID WALL** Fnd: **SPREAD FOOTING**
(8) Truck Traf: **990** (14) NHS: **NO - X** (15) Corridor: **N** Pier-Pred Matl: **CONCRETE** Type: **TOWER** Fnd: **SPREAD FOOTING**
(16) Functional Class: **OTHER PRINCIPAL ARTERIAL-URBAN** (19) Strahnt: **Non-Interstate** Pier-Other Matl: **NONE** Type: **NONE** Fnd: **NONE/NOT APPLICABLE (SUCH AS CULVERTS)**
Pier-Other Matl: **NONE** Type: **NONE** Fnd: **NONE/NOT APPLICABLE (SUCH AS CULVERTS)**

Intersected Route Data

(22) Route On/Under: Hwy Sys: No of Piers Predominate: **12** Other: **NN** Other: **NN**
Route No.: Dir: Des: Pref: (86) Stream Velocity: **005.6** (74) Scour: **STABLE: EVAL SCOUR ABOVE TOP OF FOOTING**
(23) Feature Intersected: (189) Dive: **Y Freq: 60** Probe: **N Freq: 0** (75) Chan Prot: **SHEET PILING**
(24) County: Mileage: Special Desig: (189) Date of last Dive Insp: **10/02/2010** (152) Drainage Area: **813 Sq Mi**

(25) Avg. Daily Traffic(ADT): **0** (26) ADT Year: (156) Min. Horiz Under Clear: **NC: 0.0 Ft** Card: **0.0 Ft**
(27) Truck Traf: **0** (28) NHS: - (29) Corridor: (157) Prac Max Vrt Under Clear: **30.0 Ft**
(30) Functional Class: (36) Strahnt: **Not Applicable** (77) Min Vert Under Clear: **NC: 0.0 Ft** Card: **30.0 Ft**
(78) Min Lat Under Clear: **NC: 0.0 / 0.0 Ft** Card: **9999.9 / 9999.9 Ft**

Clearance Under the Bridge

Clearance On the Bridge

(154) Min Hriz on Bridge: **NC: 0.0 Ft** Card: **72.0 Ft**
(155) Prac Max Vert On Brg: **14.0 Ft**
(67) Min Vrt Clr On Brg: **NC: 0.0 Ft** Card: **14.0 Ft**
(80) Min Latl Clr: **NC: 1.0 / 1.0 Ft** Card: **1.0 / 1.0 Ft**
(81) Vrt Clr Lft: **0.0 Ft** (78) Min Lat Under Clear: **NC: 0.0 / 0.0 Ft** Card: **9999.9 / 9999.9 Ft**

Load Rating Information

(88-89) Appraisal

(48) Design Load: **HS/20** (Including calculated Items)
(83) Operating: **45 Ton**
Inventory: **36 Ton**
Ohio Percent of Legal Load **135** (88) Waterway Adequacy **8**
Year of Rating: **2001** (89) Approach Alignment **8**
(84) Analysis: **ENGINEERING JUDGEMENT [DEFAULT]** Calc Gen Appraisal: **4**
(85) Rate Soft: **NO SOFTWARE USED** Analyzed by: Calc Deck Geometry: **3**
Analysis on Bars: **NOT ON BARS [DEFAULT]** Calc Underclearance: **9**

Approach Information

(109) Approach Guardrail: **OTHER**
(110) Approach Pavement: **CONCRETE** (111) Grade: **GOOD**

Culvert Information

(131) Culvert Type: **NONE/NOT APPLICBLE** (127) Length: **0.0 Ft**
(129) Depth of Fill: **0.0 Ft** (130) Headwalls: **NONE**

General Information

(121) Main Member **N/A (CULVERTS, TRUSSES, ETC.)** (122) Moment Plate: **NONE**
(169) Expansion Joint: **ELASTOMERIC STRIP SEAL**
(124) Bearing Devices: **FIXED ARCH-RIB/SLIDING (BRONZE)**
(126) Navigation: **Control- N** Vert Clr: **0.0 Ft** Horiz Clear: **0.0 Ft**
(193) Spec Insp: **Y** Freq: **6** Date: **2011-08-08**
(188) Fracture Critical Insp: **Y** Freq: **24** Date: **2011-01-30**
(138) Long Member: **TWO OR MORE ARCHES (RIVETED)** (135) Hinges: **PINS AND HANGERS**
(141) Structural Steel Memb: **UNKNOWN** (139) Framing: **NONE**
Railing: **UNKNOWN**

(62) Wearing Surface: **INTEGRAL CONCRETE (MONOLITHIC)** Pay Wt: **0 pounds** Prime Loc: **FIELD** Paint: **PAINT SYSTEM OZEU**
Thickness: **1.0 in** (119) Date of Wearing Surface: **11/15/1996** Bridge Dedicated Name:
Slope Protection: **NONE-NATURAL PROTECTION(GRASS,BUSHES)**

Unit of Measure: **English**
 Structure File Number **1800930**
 Sufficiency Rating: **50.9 SD**

Bridge Inventory Information
 Inventory Bridge Number: **CUY 00006 1456**
ON (1499) CUY. RIVER & RTA

Report Date **09/18/2012** BM-191 Page: 2 of 2
 BR. Type **STEEL/ARCH/THRU**
 Date of Last Inventory Update: **03/05/2012**

General Information (Continued)				Original Plans Information			
(---) Hist Significance: NATIONAL HISTORIC REGISTER		(69) NBIS: Y		(142) Fabricator:			
(---) Hist Builder: COUNTY ENGINEER		Hist Build Year: 1917		(143) Contractor:			
(69) Hist Type: THREE HINGE				(144) Ohio Original Construction Project No.:			
(161) Special Features (see below):				(---) Microfilm Reel:			
(105) Border Bridge State: Resp % (106) SFN:				(151) Standard Drawing:			
Proposed Improvements		Programming Info		Aperture Cards: Orig: N Repair: Y Fabr: Y			
(90) Type Work: 36 - BRG DECK REHAB WITH INCIDENTAL WIDENING		PID Number: 5561		Plan Information Available: 1PLAN INFORMATION AVAILABLE			
(90) Length: Ft		PID Status: PROGRAM		(153) Repair Projects			
(90) Bridge Cost (\$1000s): 0		PID Date: 11/09/1994		1. 670019 / 004		2. / MMM	
(90) Roadway Cost (\$1000s): 0				4. / 010		5. / 020	
(90) Total Project Cost (\$1000s): 0		(90) Year:		7. / 011		8. / 011	
(91) Future ADT (On Bridge): 0		(92) Year of Future ADT: 2033		10. / 059		9. / 011	
Inspection Summary		(I-69) Survey Items		Utilities		Special Features	
(I-8) Deck: 6	Railings: 1 MEETS CURRENT STANDARDS	(I-46) Electric: Y	(161) Lighting: Y	(I-32) Superstructure: 5	Transitions: 1 MEETS CURRENT STANDARDS	Gas: N	Fencing: Y
(I-42) Substructure: 4	Guardrail: 1 MEETS CURRENT STANDARDS	Sanitary Sewer: N	Glare-Screen: N	(I-50) Culvert: 6	Rail Ends: 1 MEETS CURRENT STANDARDS	Telephone: Y	Splash-Guard: N
(I-54) Channel: 6	In Depth: 0 DOES NOT MEET CURRENT STANDARDS	TV Cable: N	Catwalks: Y	(I-60) Approaches: 6	Fracture Critical: 0 DOES NOT MEET CURRENT STANDARDS	Water: N	Other-Feat: N
(I-66) General Appraisal: 4	Scour Critical: 1 MEETS CURRENT STANDARDS	Other: Y	(184) Signs-on: Y	(I-66) Operational Status: A	Critical Findings: N NONE N/A	(162) Fence-Ht: 6.0 Ft	Signs-Under: N
Inspection Date: 12/07/2011	Insp. Update Date: 03/05/2012	(163) Noise Barr: N		(94) Desig Insp Freq: 12 Months			
SFNs Replacing this retired bridge: -				INV Field Bridge Marker: CUY-00006-1456 -			
SFNs That where replaced by this bridge: -				INT Field Bridge Marker: ---			
This bridge was retired and copied to:							
The bridge was copied from:							

PONTIS CoRe elements and Condition States

Elem No.	CoRe Element Description	Total Quantity	Unit Meas.	Condition State Percents(*)				
				1	2	3	4	5
14	CONCRETE DECK - PROTECTED W/AC OVERLAY	1	EA	0	0	0	100	0
141	PAINTED STEEL ARCH	5312	LF	0	100	0	0	0
215	REINFORCED CONC ABUTMENT	168	LF	0	0	100	0	0
304	OPEN EXPANSION JOINT	168	LF	0	100	0	0	0
333	MISCELLANEOUS - BRIDGE RAILING	5312	LF	100	0	0	0	0

(*) Percentages Should add to 100%

STATE OF OHIO DEPARTMENT OF TRANSPORTATION
BRIDGE INSPECTION REPORT

BR-86 REV 02-95

1 8 0 0 9 3 0
Structure File Number 7

Bridge Number **CUY 00006 1456** CLEVELAND
CO ROUTE UNIT

Date Built **07/01/1917 - 1997**

District **12** Bridge Type **STEEL/ARCH/THRU**

Type Service **1 57 (1499)CUY. RIVER & RTA**

CUY

DECK		Out/Out 85.2			THCK = 1.0	
1. Floor	1-REINF CONCRT (PRESTRSD	8	2	2. Wearing Surface	2-INTEGRAL CONCRETE (MON	41
	1-CONCRETE				W.S. Date = 11/15/1996	
3. Curbs, Sidewalks, Walkways	1-CONCRETE	9	2	4. Median		42
5. Railing	5-REINF CONCR POST & CON	10	1	6. Drainage	3-SCUPPERS & DWNSPTS	43
7. Expansion Joints	8-ELASTOMERIC STRIP SEAL	11	2	8. Summary		44
SUPERSTRUCTURE		MAX.SPAN=591				
9. Alignment		12	1	10. Beams/Girders/Slab	N-N/A (CULVERTS, TRUSSES	45
11. Diaphragms or Crossframes	TOT.LGTH=2656	13		12. Joists/Stringers		46
13. Floor Beams		14	2	14. Floor Beam Connections		47
15. Verticals		15	2	16. Diagonals		48
17. End Posts		16	1	18. Top Chord		49
19. Lower Chord		17	2	20. Lower Lateral Bracing		50
21. Top Lateral Bracing		18		22. Sway Bracing		51
23. Portals		19	2	24. Bearing Devices	8-FIXED ARCH-RIB 3-SLIDING (BRONZE)	52
25. Arch		20	2	26. Arch Columns or Hangers		53
27. Spandrel Walls		21		28. Protective Coating System	TYPE = 5-PAINT SYSTEM OZEU DATE = 07/15/1999	54
29. Pins/Hangers/Hinges		22	2	30. Fatigue Prone Connections		55
31. Live Load Response		23	S	32. Summary		56
SUBSTRUCTURE		2-CONCRETE		PIERS=12	SPANS = 1	
33. Abutments	2-CONCRETE	24	2	34. Abutment Seats		57
35. Piers	TYPE = 2-CONCRETE	25	3	36. Pier Seats		58
37. Backwalls		26		38. Wingwalls	ABUTMENT:=SPREAD / SPREAD	59
39. Fenders and Dolphins		27	3	40. Scour	8-STABLE: EVAL SCOUR ABO	60
41. Slope Protection	N-NONE	28		42. Summary		62
CULVERTS						
43. General		29		44. Alignment		63
45. Shape		30		46. Seams		64
47. Headwalls or Endwalls		31		48. Scour		65
49.		32		50. Summary		66
CHANNEL					3-SHEET PILING	
51. Alignment		33	1	52. Protection		67
53. Waterway Adequacy		34	1	54. Summary		68
APPROACHES						
55. Pavement	1-CONCRETE	35	2	56. Approach Slabs		69
57. Guardrail	0-OTHER	36	1	58. Relief Joints		70
59. Embankment	BRDG.WIDTH=72.0	37	2	60. Summary		71
GENERAL					ROUTINE.RESP: 4-CITY/LOCAL MAINT.RESP: 1-OHIO TRAN DEPT	
61. Navigation Lights		38	1	62. Warning Signs	ELEC/TEL/OTH/	72
63. Sign Supports	MVC ON=14.0 UND=0000	39	1	64. Utilities		73
65. Vertical Clearance		40	1	66. General Appraisal & Operational Status		74

67. INSPECTED BY

68. REVIEWED BY

SIGNED

76 PE

B C
78 INITIALS

SIGNED

6 9 9 9 1
81 PE

W W
83 INITIALS

DOT 2852

DECK AREA 226,205

Date 1 2 0 7 1 1
86 91

1 1 1 1 0 0 1 N
92 69 Survey 99

Date 1 2 0 7 1 1
100 105

STATE OF OHIO DEPARTMENT OF TRANSPORTATION
BRIDGE INSPECTION REPORT

BR-86 REV 02-95

1	8	0	0	9	3	0
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1 Structure File Number 7

Bridge Number **CUY 00006 1456**
 CO ROUTE UNIT

Date Built 07/01/1917 - 1997

District **12** Bridge Type **STEEL/ARCH/THRU**

Type Service **1 5 7**

(1499)CUY. RIVER & RTA

Deck FLOOR: Localized heavy spalling, exp. rebar with losses, cracking with heavy efflo. in west approach spans and tunnels.

Deck WEARING SURFACE: Isolated heavy deck spalls, typically w/ asphaltic patches. Worst in right east bound lane.

Deck DRAINAGE: Partially clogged curb drains, joints typically filled with debris, missing grating in north longitudinal sidewalk trough.

Deck EX.JOINTS: Heavy debris in glands, minor vertical misalignment resulting in plow damage.

Superstructure BEAM/G/S: Jack arches in the west approach and tunnel spans with heavily spalled areas, exp. rebar and section loss on reinforcement.

Superstructure DIAPHRAGMS OR CROSS FRAMES: Lower deck stringers with localized heavy losses, isolated rust reactivating at connections.

Superstructure FLOORBEAMS: Active pitting at areas that were previously cleaned and painted, localized, isolated holed-through sections typ. near arch conn's.

Superstructure VERTICALS: Locations below the upper deck level with active corrosion at connections.

Superstructure DIAGONALS: Localized areas with active corrosion at connections.

Superstructure LOWER CHORD: Locations below the upper deck level with active corrosion at connections.

Superstructure GUSSET PLATES: Localized advanced section losses, on gusset plate, at lower chord interface, panels 0-4 and 4'-0', typ.

Superstructure BEARING DEVICES: Moderate to heavy corrosion to truss bearing bolsters, isolated saddle bearings with 100% loss.

Superstructure PCS: Paint failures typical at truss connections below the upper deck.

Superstructure PINS/H/H: Moderate pitting at eyebar heads at the lower connections at isolated panel points.

Substructure ABUTMENTS: Minor cracking at the abutment concrete elements.

Substructure PIERS: Rotation progressing at South Tower B. Heavy cracking in cellular spans, Crack Gauge 2 indicating opening since installation.

Substructure PIER SEATS: Minor cracking at the truss bearing seats.

Substructure WINGWALLS: Soft concrete at the southwest wing, cracking and spalls at the curtainwalls is typical.

Substructure FENDERS AND DOLPHINS: Pier 3 is without collision protection.

Channel PROTECTION: West embankment is without sheet pile wall or other bank protection.

Approaches PAVEMENT: Minor cracking and shoving at both approaches.

Approaches GUARDRAIL: Isolated, minor impact damage noted.

Approaches EMBANKMENT: Minor erosion channel forming along the northeast wing.

General WARNING SIGNS: Warning Signs only placed at the through truss northeast and southwest corners.

General Warning signs are missing at the other two truss corners, and at all four corners of the bridge limits.
