HistoricBridges.org - National Bridge Inventory Data Sheet

2011 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

Ohio [39]	Cuyahoga County [035]	Cleveland [16000]	.57 MI. E. OF JCT. I-71	41-29-00 = 41.483333	081-41-29 = -81.691389

1809393	Highway agency district 12	Owner: State Highway Agency [01]	Maintenance responsibility: State Highway Agency [01]		
Route: 90		I-90	Toll: On free road [3]	Features intersected: CUY. RIV VALLEY-RTA45	

Design - main	Steel [3]	Design - approach	Steel continuous [4]	Kilometerpoint	2454 km = 1521.5 mi
9	Truss - Deck [09]	33	Stringer/Multi-beam or girder [02]	Year built: 1959	Year reconstructed: N/A [0000]
				Skew angle: 0	Structure Flared: Yes, flared [1]
				Historical significance	Bridge is not eligible for the NRHP. [5]

Total length	1547.8 m = 5078.3 ft	Length of maximum span	121.9 m = 400.0 ft	Deck width, out-to-out	35.5 m = 116.5 ft	Bridge roadway width, curb-to-curb	33.5 m = 109.9 ft
Inventory Route, Total Horizontal Clearance	15.9 m = 52.2 ft	Curb or sidewalk width - left	0.9 m = 3.0 ft	Curb or sidewalk width - right	0.9 m = 3.0 ft		

Deck structure type	Concrete Cast-in-Place [1]
Type of wearing surface	Other [9]
Deck protection	
Type of membrane/wearing surface	

Weight Limits

Bypass, detour length	Method to determine inventory rating	Load Factor(LF) [1]	Inventory rating	14.3 metric ton = 15.7 tons	
0.3 km = 0.2 mi	Method to determine operating rating	Load Factor(LF) [1]	Operating rating	18.8 metric ton = 20.7 tons	
	Bridge posting	Equal to or above legal loads [5]	Design Load	MS 18+Mod / HS 20+Mod [6]	

Functional Details

Average Daily Traffic	119420	Average daily truck traffi	8 %	Year	2007	Future average daily traffic	165755	Year	2029

Road classification	Principal Arterial - Interstate (Urban) [11]	Lanes on structure	8	Approach roadway width	33.5 m = 109.9 ft
Type of service on bridge	Highway [1]	Direction of traffic	2 - way traffic [2]	Bridge median	Closed median with non-mountable bar
Parallel structure designation	No parallel structure exists. [N]				
Type of service under bridge	Highway-waterway-railroad [	Lanes under structure	20	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	99.99 m = 328.1 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	4.42 m = 14.5 ft	Minimum vertical underclearance reference feature	Railroad beneath structure [R]		
Appraisal ratings - underclearances	Basically intolerable requiring high priority of corrrective action [3]				

Repair and Replacement Plans

Type of work to be performed

Widening of existing bridge or other major structure without deck rehabilitation or replacement [33]

Work done by	Work to be done by contract [1]		
Bridge improvement cost	$6,570,000	Roadway improvement cost	$730,000
Length of structure improvement	304.8 m = 1000.0 ft	Total project cost	$7,300,000
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	Open, no restriction [A]	Appraisal ratings - structural	Basically intolerable requiring high priority of corrrective action [3]
Condition ratings - superstructur	Serious [3]	Appraisal ratings - roadway alignment	Equal to present desirable criteria [8]
Condition ratings - substructure	Satisfactory [6]	Appraisal ratings - deck geometry	Meets minimum tolerable limits to be left in place as is [4]
Condition ratings - deck	Fair [5]		

Scour	Bridge foundations (including piles) on dry land well above flood water elevations. [9]
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	Superior to present desirable criteria [9]	Status evaluation	Structurally deficient [1]
Pier or abutment protection		Sufficiency rating	19

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	November 2010 [1110]	Designated inspection frequency	12	Months

Underwater inspection	Not needed [N]	Underwater inspection date	
Fracture critical inspection	Every year [Y12]	Fracture critical inspection date	November 2010 [1110]
Other special inspection	Not needed [N]	Other special inspection date	

District: **12** | County **CUYAHOGA** | (101) Location: **.57 MI. E. OF JCT. I-71** | (102) Facility Carried: **I-90**
(2)FIPS Code: **CLEVELAND** | (103) Route On Bridge: **STATE (ODOT)** | (104) Route Under Bridge: **MUNICIPAL**
(9) Direction of Traffic: **2-WAY TRAFFIC** | (10) Temporary: **N** | (11)Truck Network: **Y** | (12)Parallel: **N**
(95) Insp: **OHIO TRAN DEPT** (96) Maint: **OHIO TRAN DEPT** (97) Routine: **OHIO TRA** | (100) Type Serv: (On): **HIGHWAY** | (Under): **HIGHWAY/WATERWAY/RAI**

Inventory Route Data

(3) Route On/Under: **ON** | Hwy Sys: **INTERSTATE HIGHWAY**
Route No.: **00090** | Dir: | Des: **MAINLINE** | Pref:
(4) Feature Intersected: **CUY. RIV VALLEY-RTA45**
(5) County: **CUY** | Mileage: **1524** | Special Desig:
(6) Avg. Daily Traffic(ADT): **132,090** | (7) ADT Year: **2010**
(8) Truck Traf: **5,990** | (14) NHS: **YES** - **N** | (15) Corridor: **Y**
(16) Functional Class: **INTERSTATE-URBAN** | (19) Strahnt: **Interstate**

Intersected Route Data

(22) Route On/Under: **UNDER** | Hwy Sys: **U.S. NUMBERED HIGHWAY**
Route No.: **00422** | Dir: | Des: **1** | Pref:
(23) Feature Intersected: **IR-90**
(24) County: **CUY** | Mileage: **0065** | Special Desig:
(25) Avg. Daily Traffic(ADT): **15,170** | (26) ADT Year: **2010**
(27) Truck Traf: **940** | (28) NHS: **YES** - **H** | (29) Corridor: **N**
(30) Functional Class: **OTHER PRINCIPAL ARTERIAL-URBAN** | (36) Strahnt: **Interstate**

Clearance On the Bridge

(154) Min Hriz on Bridge: NC: **52.0** Ft | Card: **52.0** Ft
(155) Prac Max Vert On Brg: **9999.9** Ft
(67) Min Vrt Clr On Brg: NC: **0.0** Ft | Card: **9999.9** Ft
(80) Min Latl Clr: NC: **1.7 / 1.7** Ft | Card: **1.7 / 1.7** Ft
(81) Vrt Clr Lft: **0.0** Ft

Structure Information

(38) Bypass Length: **02** Miles
(39) Latitude: **41 Deg 29.0 Min** | Longitude: **81 Deg 41.5 Min**
(40) Toll: **ON FREE ROAD**
(41) Date Built: **07/01/1959** | (42) Major Rehabilitation:
(43) No. Lanes On: **8** | No. Lanes Under: **20**
(44) Horiz Curve: **01 Deg. D30M Min.** | (45) Skew: **0** Deg
(49) App. Rdw Width: **110** Ft | (50) Brg. Rdw Width: **110.0** Ft
(51) Deck Width: **116.3** Ft | Deck Area: **590739** Sq. Ft
(52) Median Type: **RAISED MED / CONCRETE B / OPEN JOINT**
(53) Bridge Median: **CLOSED MEDIAN WITH NONMOUNTABLE BARRIERS**
(54) Sidewalks: (left) **3** Ft | (right) **3** Ft
(55) Type Curb or Sidewalks:
(Left) Matl: **STEEL** | Type: **SIDEWALK(>2')**
(Right) Matl: **STEEL** | Type: **SIDEWALK(>2')**
(56) Flared: **Y** | (57) Composite: **non-composite**
(58) Railing: **STEEL POST & STEEL PANEL (DECORATIVE)**
(59) Deck Drainage: **DRN TROUGH UNDR OPEN JNTS**
(60) Deck Type: **REINF CONCRT (PRESTRSD, PRECAST**
(61) Deck Protection: External: **NONE**
Internal: **NONE**
(62) Wearing Surface: **SUPERPLASTICIZED DENSE CONCRETE (SDC) OV**
Thickness: **2.0** in | (119) Date of Wearing Surface:
Slope Protection: **CONCRETE (CAST-IN-PLACE)**

(63) Main Spans Number: **9** | Type: **STEEL / TRUSS / DECK**
Approach Spans Number: **33** | Type: **STEEL / BEAM / CONTINUOUS**
Total Spans: **42** | (65) Max Span: **400** Ft | (66) Overall Leng: **5078** Ft

(70) Substructure	(71) Foundation and Scour Information	
Abut-Rear Matl: **CONCRETE**	Type: **STUB GRAVITY**	Fnd: **CIP REINF CONCRETE PILES(OTHER DIAMETER)**
Abut-Fwd Matl: **CONCRETE**	Type: **STUB GRAVITY**	Fnd: **CIP REINF CONCRETE PILES(OTHER DIAMETER)**
Pier-Pred Matl: **CONCRETE**	Type: **CAPPED COLUMN**	Fnd: **CIP REINF CONCRETE PILES(OTHER DIAMETER)**
Pier-Other Matl: **CONCRETE**	Type: **CELLULAR OR "U"**	Fnd: **STEEL H PILES (OTHER SIZE)**
Pier-Other Matl: **NONE**	Type: **NONE**	Fnd: **OTHER**
No of Piers Predominate: **18**	Other: **10**	Other: **NN**

(86) Stream Velocity: **005.2** | (74) Scour: **FND/PILES ABOVE FLOOD WATER ELEVATIONS**
(189) Dive: **N Freq: 0** | Probe: **N** Freq: **0** | (75) Chan Prot: **SHEET PILING**
(189) Date of last Dive Insp: | (152) Drainage Area: **UUU** Sq Mi

Clearance Under the Bridge

(156) Min. Horiz Under Clear: NC: **83.0** Ft | Card: **79.2** Ft
(157) Prac Max Vrt Under Clear: **15.6** Ft
(77) Min Vert Under Clear: NC: **15.6** Ft | Card: **14.5** Ft
(78) Min Lat Under Clear: NC: **0.0 / 0.0** Ft | Card: **0.0 / 0.0** Ft

Load Rating Information

(48) Design Load: **HS/20-44 & ALTERNATE MILITARY LOADING**
(83) Operating: **21** Ton
Inventory: **16** Ton
Ohio Percent of Legal Load **100**
Year of Rating: **2009**
(84) Analysis: **LOAD FACTOR (LF)**
(85) Rate Soft: **SAP/STAAD, OTHER** Analyzed by: **REL**
Analysis on Bars: **NOT ON BARS [DEFAULT]**

(88-89) Appraisal

(Including calculated Items)
(88) Waterway Adequacy **9**
(89) Approach Alignment **8**
Calc Gen Appraisal: **3**
Calc Deck Geometry: **4**
Calc Underclearance: **3**

Approach Information

(109) Approach Guardrail: **STEEL BEAM**
(110) Approach Pavement: **BITUMINOUS** | (111) Grade: **FAIR**

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 **RIVETED BUILT-UP STEEL** | (122) Moment Plate: **RIVETED OR BOLTED**
(169) Expansion Joint: **METAL FINGER**
(124) Bearing Devices: **OTHER/NONE**
(126) Navigation: **Control- N** | Vert Clr: **0.0** Ft | Horiz Clear:: **0.0** Ft
(193) Spec Insp: **N** | Freq: **0** | Date:
(188) Fracture Critical Insp: **Y** | Freq: **24** | Date: **2010-11-05**
(138) Long Member: **THREE OR MORE TRUSSES (RIVETED)** | (135) Hinges: **PINS AND HANGERS**
(141) Structural Steel Memb: **UNKNOWN** | (139) Framing: **NONE**
Railing: **UNKNOWN**
Pay Wt: **45,389,352** pounds | Prime Loc: **FIELD** | Paint: **PAINT SYSTEM A WITH INTERMED. TIE**
Bridge Dedicated Name:

General Information (Continued)

(---) Hist Significance: **NOT HISTORIC**
(69) NBIS: **Y**
(---) Hist Builder: **HOWARD NEEDLES TAMMEN & BERGENDOFF**
Hist Build Year: **1959**
(69) Hist Type: **CANITLEVER**
(161) Special Features (see below):
(105) Border Bridge State: Resp % (106) SFN:

Proposed Improvements

(90) Type Work: **33 - BRG/STR WIDENING W/O DECK REHAB OR REPL**
(90) Length: Ft
(90) Bridge Cost ($1000s): **0**
(90) Roadway Cost ($1000s): **0**
(90) Total Project Cost ($1000s): **0**
(90) Year:
(91) Future ADT (On Bridge): **0**
(92) Year of Future ADT: **2029**

Programming Info

PID Number: **24166**
PID Status: **IA-OTHER**
PID Date: **06/12/2003**

Inspection Summary

(I-8) Deck:	**5**
(I-32) Superstructure:	**3**
(I-42) Substructure:	**6**
(I-50) Culvert:	
(I-54) Channel:	**7**
(I-60) Approaches:	**6**
(I-66) General Appraisial:	**3**
(I-66) Operational Status:	**A**
Inspection Date:	**10/14/2011**
(94) Desig Insp Freq:	**12 Months**

(I-69) Survey Items

Railings:	**0 DOES NOT MEET CURRENT STANDARDS**
Transitions:	**1 MEETS CURRENT STANDARDS**
Guardrail:	**1 MEETS CURRENT STANDARDS**
Rail Ends:	**1 MEETS CURRENT STANDARDS**
In Depth:	**N NONE N/A**
Fracture Critical:	**N NONE N/A**
Scour Critical:	**N NONE N/A**
Critical Findings:	**N NONE N/A**
Insp. Update Date:	**02/16/2012**

SFNs Replacing this retired bridge: **-**
SFNs That where replaced by this bridge: **-**
This bridge was retired and copied to:
The bridge was copied from:

Original Plans Information

(142) Fabricator:
(143) Contractor: **HORVITZ CO.**
(144) Ohio Original Construction Project No.: **046154**
(---) Microfilm Reel: **CUY016**
(151) Standard Drawing:
Aperture Cards: Orig: **Y** Repair: **Y** Fabr: **Y**
Plan Information Available: **1PLAN INFORMATION AVAILABLE**

(153) Repair Projects

1. **/ 020**	2. **720546 / 044**	3. **770201 / 099**
4. **780828 / 044**	5. **790121 / 044**	6. **820407 / 044**
7. **830588 / 040**	8. **/ 020**	9. **/ 020**
10. **/ 020**		

Utilities

(46) Electric:	**U**
Gas:	**U**
Sanitary Sewer:	**U**
Telephone:	**U**
TV Cable:	**U**
Water:	**U**
Other:	**U**

Special Features

(161) Lighting:	**Y**
Fencing:	**N**
Glare-Screen:	**N**
Splash-Guard:	**N**
Catwalks:	**N**
Other-Feat:	**U**
(184) Signs-on:	**Y**
Signs-Under:	**N**
(162) Fence-Ht:	**0.0** Ft
(163) Noise Barr:	**N**

INV Field Bridge Marker: **CUY-00090-1524 -**
INT Field Bridge Marker: **CUY-00422-0065 -**

PONTIS CoRe elements and Condition States

Elem No.	CoRe Element Description	Total Quantity	Unit Meas.	Condition State Percents(*)				
				1	2	3	4	5
22	CONCRETE DECK PROTECTED W/RIGID OVERLAY	1	EA	0	0	0	100	0
131	PAINTED STEEL DECK TRUSS	10154	LF	0	100	0	0	0
215	REINFORCED CONC ABUTMENT	233	LF	0	0	100	0	0
234	REINFORCED CONC CAP	2093	LF	0	100	0	0	0
303	ASSEMBLY JOINT/SEAL	233	LF	0	0	100	0	0
321	REINFORCED CONCRETE APPROACH SLAB	2	EA	0	100	0	0	0
330	METAL BRIDGE RAILING	20308	LF	0	0	0	100	0

(*) Percentages Should add to 100%

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION REPORT

BR-86 REV 02-95

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

Bridge Number **CUY 00090 1524** (CO ROUTE UNIT) **CLEVELAND** **Date Built 07/01/1959**

District **12** Bridge Type **STEEL/TRUSS/DECK** Type Service **1** **18 CUY. RIV VALLEY-RTA45** **CUY**

DECK Out/Out 116.3				THCK = 2.0	
1. Floor 1-REINF CONCRT (PRESTRSD 8	2	2. Wearing Surface A-SUPERPLASTICIZED DENSE 41			2
2-STEEL		W.S. Date =			
3. Curbs, Sidewalks, Walkways 2-STEEL 9	2	4. Median 42			2
5. Railing 6-STEEL POST & STEEL PAN 10	2	6. Drainage 5-DRN TROUGH UNDR OPEN J 43			2
7. Expansion Joints 1-METAL FINGER 11	2	**8. Summary** 44			5
SUPERSTRUCTURE MAX.SPAN=400					
9. Alignment 12	2	10. Beams/Girders/Slab 2-RIVETED BUILT-UP STEEL 45			3
TOT.LGTH=5078					
11. Diaphragms or Crossframes 13	2	12. Joists/Stringers 46			3
13. Floor Beams 14	3	14. Floor Beam Connections 47			2
15. Verticals 15	3	16. Diagonals 48			2
17. End Posts 16	2	18. Top Chord 49			2
19. Lower Chord 17	2	20. Lower Lateral Bracing 50			
21. Top Lateral Bracing 18		22. Sway Bracing 51			3
23. Portals 19		0-OTHER 24. Bearing Devices N-NONE 52			2
25. Arch 20		26. Arch Columns or Hangers 53			
27. Spandrel Walls 21		TYPE = 8-PAINT SYSTEM A WITH IN 28. Protective Coating System DATE = 01/01/1986 54			3
29. Pins/Hangers/Hinges 22	3	30. Fatigue Prone Connections 55			3
31. Live Load Response 23	S	**32. Summary** 56			3
SUBSTRUCTURE 2-CONCRETE		PIERS=28 SPANS = 9			
33. Abutments 2-CONCRETE 24	2	34. Abutment Seats 57			2
35. Piers TYPE = 2-CONCRETE 25	2	36. Pier Seats 58			2
37. Backwalls 26	2	ABUTMENT:=CIP REI / CIP REI 38. Wingwalls 59			1
39. Fenders and Dolphins 27		40. Scour 9-FND/PILES ABOVE FLOOD 60	1		1
41. Slope Protection 1-CONCRETE (CAST) 28	1	**42. Summary** DIVE DT=N/A 62			6
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			2
53. Waterway Adequacy 34	1	**54. Summary** 68			7
APPROACHES					
55. Pavement 2-BITUMINOUS 35	1	56. Approach Slabs 69			2
57. Guardrail 1-STEEL BEAM 36	1	58. Relief Joints 70			
59. Embankment BRDG.WIDTH=110.0 37	2	**60. Summary** PCT.LEGAL=100 71			6
GENERAL		ROUTINE.RESP: 1-OHIO TRAN DEPT			
61. Navigation Lights 38	4	62. Warning Signs MAINT.RESP: 1-OHIO TRAN DEPT 72			1
MVC ON=9999 UND=14.5					
63. Sign Supports 39	3	64. Utilities 73			3
65. Vertical Clearance 40	1	**66. General Appraisal & Operational Status** 74	COND 3	STAT A	

67. INSPECTED BY

SIGNED

6 8 1 7 7
76 PE

A G
78 INITIALS

68. REVIEWED BY

SIGNED

81 PE

83 INITIALS

DOT 2852

DECK AREA 590,739

Date 1 0 1 4 1 1
86 91

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

Date
100 105

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION REPORT

BR-86 REV 02-95

1	8	0	9	3	9	3

1 Structure File Number 7

Bridge Number **CUY** (CO) **00090** (ROUTE) **1524** (UNIT)

Date Built 07/01/1959

District **12** Bridge Type **STEEL/TRUSS/DECK**

Type Service **1** **1** **8**

CUY. RIV VALLEY-RTA45

Deck	FLOOR: The floor is in fair condition. The only portions
Deck	of the floor that are visible are located at both
Deck	approaches. The truss portion is covered by stay in place
Deck	forms which have surface corrosion. At the East Approach,
Deck	there are random locations of spalling with exposed rebar.
Deck	Most of the heavier spalling occurs along the fascia and
Deck	cantilever portions. The West Approach has abundant
Deck	spalling with exposed rebar as well as random locations of
Deck	hairline transverse cracks with efflorescence. Majority of
Deck	the spalling occurs at the cantilever portion between the
Deck	two bridges (EB & WB).
Deck	WEARING SURFACE: The wearing surface is in generally fair
Deck	condition with some transverse and map cracking, isolated
Deck	pot holes, and breaking up areas near joint armor that are
Deck	periodically repaired. There are also minor failures of a
Deck	few patches.
Deck	CURBS, SIDEWALKS AND WALKWAYS: There are multiple cracked
Deck	welds in the metal walkway and access hatch cover supports.
Deck	RAILING: The median barrier has vertical cracks and some
Deck	staining across the entire structure. There are also a few
Deck	minor spalls with rebar showing. A portable concrete
Deck	barrier has been placed in the north shoulder of the east
Deck	approach and appears to serve no purpose. There are
Deck	multiple cracks and missing bolts in the railing curb and
Deck	the edge railing. Most of the deterioration for the edge
Deck	railing occurs at the light pole supports which act as
Deck	railing post. The railing curb has cracked and broken welds
Deck	and is no longer continuous in some areas.
Deck	DRAINAGE: Some scuppers in the approach spans need to be
Deck	cleared out. The scuppers in the truss spans were generally
Deck	clear with a few containing minor amounts of debris. A few
Deck	downspouts and collectors are clogged. Several of the
Deck	drains at ground level are clogged. One drainpipe at the
Deck	west approach is broken. Water does effectively drain from
Deck	the roadway, but leaks all over the truss. Some of the
Deck	drain coverings on the deck are loose and make a loud noise
Deck	(see the 2011 Routine Bridge Inspection Report for exact
Deck	locations).
Deck	EXPANSION JOINTS: The vertical offset of the west end pier
Deck	joints was found to be <1". The damage to the fingers at
Deck	that location is still present. The finger joint between
Deck	Pier#s 1 and 2 have a vertical offset of #". Only the
Deck	finger joint between Pier 5 and Pier 6 was found to be
Deck	horizontally offset. The joints in the approach spans are
Deck	filling with debris.
Deck	CONTRACTION JOINTS: About 25% of these joints were not
Deck	level. Predominately those were also adjacent to a deck
Deck	drain. Most have at least minor debris. About 30% have
Deck	some gland damage. Minor to sever spalls were found at
Deck	every joint location. Five joints were missing portions of
Deck	their armor and four had snow plow damage.
Deck	ABUTMENT JOINTS: The abutment joints are in fair to good
Deck	condition.
Superstructure	BEAMS/GIRDERS: The girders are in fair condition.
Superstructure	Previously noted cracks have holes drilled to arrest the
Superstructure	crack growth. No cracks extended beyond the drilled holes.
Superstructure	The girders in Span 3E2 have fire damage. Span 5E1 has a
Superstructure	homeless camp set up underneath making inspection of the
Superstructure	area difficult. New cracks have been found in a few girders
Superstructure	that need holes drilled to stop the crack growth (see the
Superstructure	2011 Routine Bridge Inspection Report for exact locations).
Superstructure	JOINTS/STRINGERS: Typically, the stringers have light
Superstructure	surface corrosion except where the drains and expansion

Superstructure joints are located. Near the expansion joints and drains,
Superstructure the stringers have laminating corrosion with section loss to
Superstructure the web, flanges, and bearing stiffeners. Some of the
Superstructure stringer webs have corrosion holes and many have plated
Superstructure repairs, especially where cracks previously were noted.
Superstructure There are a few locations where the welded stringer splice
Superstructure is cracked and locations where there is a crack in the web
Superstructure beginning at the cope.
Superstructure FLOORBEAMS: The floorbeams have heavy corrosion, especially
Superstructure near the drains and expansion joints. They have laminating
Superstructure corrosion on the flanges and webs with noticeable section
Superstructure loss.
Superstructure FLOORBEAM CONNECTIONS: Several repairs have been made to
Superstructure the floorbeam connections, replacing rivets with bolts and
Superstructure adding additional supports. The repairs appear to be
Superstructure functioning well.
Superstructure VERTICALS: Many of the verticals have surface corrosion.
Superstructure Near the expansion joints and drains, the verticals have
Superstructure heavier surface corrosion, laminating corrosion, and section
Superstructure loss. Pack rust has formed between the gusset plate and
Superstructure vertical at several locations. Just above the bearings, the
Superstructure verticals have heavier corrosion and debris build-up. Pack
Superstructure rust is also forming between the components that make up the
Superstructure flanges and the web.
Superstructure END POST: The gusset plates at the end piers have
Superstructure deterioration and the verticals have painted over pitting
Superstructure with section loss to the rivet heads.
Superstructure TOP CHORD: The top chord is in good condition except where
Superstructure the expansion joints and drains are located. These areas
Superstructure have moderate to heavy laminating corrosion with section
Superstructure loss.
Superstructure LOWER CHORD: There are 9 lower chords that have had
Superstructure rehabilitation work done to improve their structural
Superstructure capacity. Some have angles bolted to the member and others
Superstructure have both angles and plates added. Many of the lower chord
Superstructure members have pack rust between the plates causing
Superstructure distortion.
Superstructure GUSSET PLATES: Many of the gusset plates have repairs.
Superstructure There are two types of repairs that occur. There is the
Superstructure repair consisting of angles being bolted to the gusset plate
Superstructure edges and repairs where a plate was bolted over the existing
Superstructure gusset plate. All repairs are functioning as designed.
Superstructure Typically, the gusset plates have section loss, laminating
Superstructure corrosion, and pack rust.
Superstructure TOP LATERAL BRACING: The top lateral bracing is in good
Superstructure condition except near the drains and expansion joints. In
Superstructure these locations, the bracing has peeling paint, surface
Superstructure corrosion, and in some cases laminating corrosion. The top
Superstructure lateral bracing gusset plates at these locations have
Superstructure section loss and are bowing and are in poor condition.
Superstructure SWAY BRACING: The sway bracing has moderate to severe
Superstructure corrosion with section loss near the expansion joints and
Superstructure the drains.
Superstructure BEARING DEVICES: 5 of the 14 rocker bearings at the West
Superstructure Abutment(Rear) have rotations between 9¤ and 14¤. 3 of the
Superstructure 16 rockers are rotated between 9¤ and 10¤ at the East
Superstructure Abutment (Forward). Several of the bearings at the W 14th
Superstructure St on-ramp abutment are missing bolts and/or anchors. The
Superstructure expansion rollers near Pier W-1 are rotated 8.6¤, 6.5¤, and
Superstructure 19¤, from south to north. The truss bearings at the West
Superstructure End Pier are rotated between 7¤ and 9¤. The East End Pier
Superstructure bearings are rotated between 1¤ and 6¤ and have section loss
Superstructure to the anchor bolts. Most of the truss bearings have only a
Superstructure small rotation with the exception of Pier 2, which is
Superstructure rotated between 7¤ and 9¤.
Superstructure PAINT: Greater than 20% and less than 30% of the total
Superstructure coating system has failed. The paint system is no longer
Superstructure effective and has exposed steel throughout with active
Superstructure corrosion.
Superstructure PINS/HANGERS/HINGES: There are seated hinges (expansion

Superstructure	rollers) at both approaches. Typically the expansion
Superstructure	rollers have laminating corrosion with section loss. Pack
Superstructure	rust has also formed where the tooth fits into the bar
Superstructure	groove. The expansion rollers at the on-ramp from W 14th St
Superstructure	are overly rotated, especially the roller at Girder S. The
Superstructure	East Approach has pins and hangers located in Span 2E2.
Superstructure	There is pack rust between the linkage members and the
Superstructure	girders.
Superstructure	FATIGUE PRONE CONNECTIONS: Multiple areas where tack welds
Superstructure	were used to hold plates together prior to riveting.
Superstructure	Crossbracing and stiffener attachments to beams.
Superstructure	LIVE LOAD RESPONSE: The excessive movement seen during the
Superstructure	previous inspections was not witnessed during the 2011
Superstructure	routine inspection.
Substructure	ABUTMENT SEATS: Minor spalls; water, dirt, and debris.
Substructure	PIERS: The west approach piers have minor isolated
Substructure	delaminations. Pier 6R (located under the expansion joint)
Substructure	has extensive delaminated areas. The east approach piers
Substructure	have minor isolated delaminations. The columns of Piers 7B,
Substructure	8B, and 9B have been wrapped. Piers 8B and 9B were more
Substructure	severely delaminated. The main truss piers have some
Substructure	delaminated areas. Some have extensive delaminated areas.
Substructure	The north column of Pier 5 has sections of missing concrete
Substructure	with exposed, rusting reinforcement at the top. The north
Substructure	column of Pier 7 has missing concrete and exposed
Substructure	reinforcement at one corner at the top.
Substructure	PIER SEATS: Most pier seats have spalls and deterioration
Substructure	with most spalling occurring between the outside bearing and
Substructure	the edge of the pier.
Substructure	BACKWALLS: Backwalls are wet when it rains and have some
Substructure	scaling. The forward abutment under the #3 and #4 lanes
Substructure	eastbound is in poor condition, with a large open
Substructure	construction joint between the #3 and #2 lanes eastbound.
Channel	PROTECTION: There is some section loss on the east side,
Channel	but the west side is in good condition.
Approaches	PAVEMENT: There are cracks in the asphalt adjacent to the
Approaches	expansion joints in some locations. The pavement away from
Approaches	the joints is in good condition.
Approaches	APPROACH SLABS: The approach slabs that do not have an
Approaches	overlay are in good condition.
Approaches	GUARDRAIL: The crash attenuator at the Broadway exit ramp
Approaches	is damaged.
Approaches	EMBANKMENT: Erosion at north end of Forward Abutment and
Approaches	south end of Piers 1E-2 and 2E-1.
General	NAVIGATION LIGHTS: All six lights are burned out or
General	extremely dim. The navigation light in Span 2 on the south
General	truss is not attached. Currently, it is sitting on top of
General	the lower chord.
General	SIGN SUPPORTS: There is heavy corrosion on the sign support
General	with section loss. There is also debris build-up on the
General	horizontal surfaces.
General	UTILITIES: One of the light posts in Span 9 is attached to
General	railing that is heavily corroded. The railing has corrosion
General	holes. New electric conduit broken in some locations and
General	the old conduit and wiring are deteriorated & falling.
General	There are several light posts and junction boxes are missing
General	covers.