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

West Virginia [54]	Brooke County [009]	Unknown [00000]	0.34 MI WEST JCT WV 2	40-21-30 = 40.358333	080-36-24 = -80.606667

00000000005A006	Highway agency district: 6	Owner: State Highway Agency [01]	Maintenance responsibility: State Highway Agency [01]		
Route: 200		WV ROUTE 2 SPUR	Toll: On free road [3]	Features intersected: OHIO RIVER & OHIO RT 7	

Design - main: Steel [3]	Design - approach: Steel continuous [4]	Kilometerpoint: 0.2 km = 0.1 mi			
1	Suspension [13]	8	Mixed types [20]	Year built: 1904	Year reconstructed: 1981
				Skew angle: 0	Structure Flared:
				Historical significance: Bridge is not eligible for the NRHP. [5]	

Total length: 546.8 m = 1794.1 ft	Length of maximum span: 213.4 m = 700.2 ft	Deck width, out-to-out: 6.5 m = 21.3 ft	Bridge roadway width, curb-to-curb: 6.3 m = 20.7 ft				
Inventory Route, Total Horizontal Clearance: 6.3 m = 20.7 ft	Curb or sidewalk width - left: 0 m = 0.0 ft	Curb or sidewalk width - right: 1.4 m = 4.6 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	Method to determine inventory rating: Allowable Stress(AS) [2]		Inventory rating: 0 metric ton = 0.0 tons		
0.3 km = 0.2 mi	Method to determine operating rating: Allowable Stress(AS) [2]		Operating rating: 0 metric ton = 0.0 tons		
	Bridge posting:		Design Load:		

Functional Details

Average Daily Traffic	0	Average daily truck traffi	0 %	Year	2008	Future average daily traffic	0
Year	2028						
Road classification	Other Principal Arterial (Urban) [14]	Lanes on structure	2	Approach roadway width	6.4 m = 21.0 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	Highway-waterway-railroad [	Lanes under structure	4	Navigation control	Navigation control on waterway (bridge permit required). [1]		
Navigation vertical clearanc	22.5 m = 73.8 ft	Navigation horizontal clearance	207.2 m = 679.8 ft				
Minimum navigation vertical clearance, vertical lift bridge		Minimum vertical clearance over bridge roadway	3.35 m = 11.0 ft				
Minimum lateral underclearance reference feature	Highway beneath structure [H]						
Minimum lateral underclearance on right	1.2 m = 3.9 ft	Minimum lateral underclearance on left	2.5 m = 8.2 ft				
Minimum Vertical Underclearance	4.95 m = 16.2 ft	Minimum vertical underclearance reference feature	Highway beneath structure [H]				
Appraisal ratings - underclearances							

Repair and Replacement Plans

Type of work to be performed

Bridge rehabilitation because of general structure deterioration or inadequate strength. [35]

Work done by	Work to be done by contract [1]		
Bridge improvement cost	3000000	Roadway improvement cost	421000
Length of structure improvement	546.8 m = 1794.1 ft	Total project cost	3421000
Year of improvement cost estimate	2009		
Border bridge - state	Unknown [395]	Border bridge - percent responsibility of other state	10
Border bridge - structure number	0		

Inspection and Sufficiency

Structure status	Bridge closed to all traffic [K]	Appraisal ratings - structural	
Condition ratings - superstructur	Imminent Failure [1]	Appraisal ratings - roadway alignment	Better than present minimum criteria [7]
Condition ratings - substructure	Imminent Failure [1]	Appraisal ratings - deck geometry	
Condition ratings - deck	Imminent Failure [1]		

Scour	Bridge foundations determined to be stable for the assessed or calculated scour condition. [8]
Channel and channel protection	Bridge closed because of channel failure. Corrective action may put back in light service. [1]

Appraisal ratings - water adequacy	Equal to present desirable criteria [8]	Status evaluation	Structurally deficient [1]
Pier or abutment protection	None present but re-evaluation suggested [5]	Sufficiency rating	30

Culverts	Not applicable. Used if structure is not a culvert. [N]

Traffic safety features - railings	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - transitions	
Traffic safety features - approach guardrail	
Traffic safety features - approach guardrail ends	

Inspection date	September 2010 [0910]	Designated inspection frequency	12	Months

Underwater inspection	Unknown [Y60]	Underwater inspection date	September 2010 [0910]
Fracture critical inspection	Every year [Y12]	Fracture critical inspection date	September 2010 [0910]
Other special inspection	Every year [Y12]	Other special inspection date	September 2010 [0910]

District: **11** County **JEFFERSON**
(2)FIPS Code: **STEUBENVILLE**
(9) Direction of Traffic: **2-WAY TRAFFIC** (10) Temporary: **N**
(95) Insp: **OHIO TRAN DEPT** (96) Maint: **BORDER STATE** (97) Routine: **BORDER S**

(101) Location: **.68 MI N OF CONRAIL RR**
(103) Route On Bridge: **MUNICIPAL**
(11)Truck Network: **N**
(100) Type Serv: (On): **HIGHWAY**

(102) Facility Carried: **MARKET ST-WVA2SPUR**
(104) Route Under Bridge: **STATE (ODOT)**
(12)Parallel: **N**
(Under): **HIGHWAY, WITH OR WIT**

Inventory Route Data

(3) Route On/Under: **UNDER** Hwy Sys: **STATE HIGHWAY**
Route No.: **00007** Dir: Des: **MAINLINE** Pref:
(4) Feature Intersected: **PT.MARKET ST.BR.OVR SR7**
(5) County: **JEF** Mileage: **1642** Special Desig:
(6) Avg. Daily Traffic(ADT): **16,010** (7) ADT Year: **2005**
(8) Truck Traf: **2,640** (14) NHS: **YES** - **N** (15) Corridor: **Y**
(16) Functional Class: **OTHER FREEWAY OR EXPRESSWAY-URBA** (19) Strahnt: **Not Applicable**

Intersected Route Data

(22) Route On/Under: **ON** Hwy Sys: **MUNICIPAL STREET**
Route No.: **WV2SP** Dir: Des: **1** Pref:
(23) Feature Intersected: **SR7,RR.& OHIO RIVER**
(24) County: **JEF** Mileage: **0000** Special Desig:
(25) Avg. Daily Traffic(ADT): **500** (26) ADT Year: **1970**
(27) Truck Traf: **0** (28) NHS: **NO** - **X** (29) Corridor: **N**
(30) Functional Class: **MINOR ARTERIAL-URBAN** (36) Strahnt: **Not Applicable**

Clearance On the Bridge

(154) Min Hriz on Bridge: NC: **0.0** Ft Card: **34.0** Ft
(155) Prac Max Vert On Brg: **13.5** Ft
(67) Min Vrt Clr On Brg: NC: **0.0** Ft Card: **13.5** Ft
(80) Min Latl Clr: NC: **0.0 / 0.0** Ft Card: **0.0 / 0.0** Ft
(81) Vrt Clr Lft: **0.0** Ft

Structure Information

(38) Bypass Length: **00** Miles
(39) Latitude: **40 Deg 21.5 Min** Longitude: **80 Deg 36.7 Min**
(40) Toll: **ON FREE ROAD**
(41) Date Built: **07/01/1905** (42) Major Rehabilitation:
(43) No. Lanes On: **2** No. Lanes Under: **4**
(44) Horiz Curve: **Deg. Min.** (45) Skew: **0** Deg
(49) App. Rdw Width: **34** Ft (50) Brg. Rdw Width: **24.0** Ft
(51) Deck Width: **34.0** Ft Deck Area: **4898** Sq. Ft
(52) Median Type: **NONE** / **NON BARRIE** / **NO JOINT**
(53) Bridge Median: **NO MEDIAN**
(54) Sidewalks: (left) **0** Ft (right) **6** Ft
(55) Type Curb or Sidewalks:
(Left) Matl: **STEEL** Type: **SIDEWALK(>2')**
(Right) Matl: **STEEL** Type: **SIDEWALK(>2')**
(56) Flared: **N** (57) Composite:
(58) Railing: **STEEL POST & STEEL PANEL (DECORATIVE)**
(59) Deck Drainage: **OTHER-NATURAL(OFF THE BRIDGE ENDS)**
(60) Deck Type: **STEEL GRID - OPEN**
(61) Deck Protection: External: **NONE**
Internal: **NONE**
(62) Wearing Surface: **OTHER**
Thickness: **0.0** in (119) Date of Wearing Surface:
Slope Protection: **NONE-NATURAL PROTECTION(GRASS,BUSHES)**

(63) Main Spans Number: **12** Type: **STEEL** / **SUSPENSION** / **THRU**
Approach Spans Number: **1** Type: **STEEL** / **TRUSS** / **THRU**
Total Spans: **13** (65) Max Span: **112** Ft (66) Overall Leng: **144** Ft

(70) Substructure	(71) Foundation and Scour Information	
Abut-Rear Matl: **CONCRETE**	Type: **GRAVITY**	Fnd: **UNKNOWN (OR OLDER BRIDGE BEING ADDED)**
Abut-Fwd Matl: **CONCRETE**	Type: **GRAVITY**	Fnd: **UNKNOWN (OR OLDER BRIDGE BEING ADDED)**
Pier-Pred Matl: **STEEL**	Type: **OPEN COLUMN**	Fnd: **UNKNOWN (OR OLDER BRIDGE BEING ADDED)**
Pier-Other Matl: **NONE**	Type: **NONE**	Fnd: **UNKNOWN (OR OLDER BRIDGE BEING ADDED)**
Pier-Other Matl: **NONE**	Type: **NONE**	Fnd: **UNKNOWN (OR OLDER BRIDGE BEING ADDED)**
No of Piers Predominate: **11**	Other: **NN**	Other: **NN**

(86) Stream Velocity: **NNN** (74) Scour: **BRIDGE NOT OVER WATERWAY**
(189) Dive: **N Freq: 0** Probe: **N** Freq: **0** (75) Chan Prot: **N/A**
(189) Date of last Dive Insp: (152) Drainage Area: **NNN** Sq Mi

Clearance Under the Bridge

(156) Min. Horiz Under Clear: NC: **44.0** Ft Card: **40.0** Ft
(157) Prac Max Vrt Under Clear: **15.9** Ft
(77) Min Vert Under Clear: NC: **15.2** Ft Card: **15.8** Ft
(78) Min Lat Under Clear: NC: **0.0 / 0.0** Ft Card: **0.0 / 0.0** Ft

Load Rating Information

(48) Design Load: **H/10**
(83) Operating: **14** Ton
Inventory: **10** Ton
Ohio Percent of Legal Load **15**
Year of Rating: **1997**
(84) Analysis: **ENGINEERING JUDGEMENT [DEFAULT]**
(85) Rate Soft: **NO SOFTWARE USED** Analyzed by: **WVHD**
Analysis on Bars: **NOT ON BARS [DEFAULT]**

(88-89) Appraisal

(Including calculated Items)
(88) Waterway Adequacy **N**
(89) Approach Alignment **5**
Calc Gen Appraisal: **3**
Calc Deck Geometry: **3**
Calc Underclearance: **3**

Approach Information

(109) Approach Guardrail: **NONE**
(110) Approach Pavement: **BITUMINOUS** (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 **ROLLED STEEL** (122) Moment Plate:
(169) Expansion Joint: **SLIDING METAL PLATE ANGLE**
(124) Bearing Devices: **SLIDING (BRONZE)/NONE**
(126) Navigation: **Control- X** Vert Clr: **0.0** Ft Horiz Clear:: **0.0** Ft
(193) Spec Insp: **N** Freq: **0** Date:
(188) Fracture Critical Insp: **N** Freq: **0** Date:
(138) Long Member: **NOT APPLICABLE** (135) Hinges: **NOT APPLICABLE**
(141) Structural Steel Memb: **UNKNOWN** (139) Framing: **NONE**
Railing: **UNKNOWN**
Pay Wt: **0** pounds Prime Loc: **UNKNOWN** Paint: **OTHER**
Bridge Dedicated Name: **MARKET STREET**

General Information (Continued)

(---) Hist Significance: **NON-REGISTERED HISTORIC BRIDGE** (69) NBIS: **Y**
(---) Hist Builder: **OHIO STEEL ERECTION COMPANY** Hist Build Year: **1905**
(69) Hist Type: **NONE N/A**
(161) Special Features (see below):
(105) Border Bridge State: **543** Resp **99** % (106) SFN: **052SPUR0.011664**

Proposed Improvements

(90) Type Work: **-**
(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: **2031**

Programming Info

PID Number:
PID Status:
PID Date:

Original Plans Information

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

(153) Repair Projects

1. **590304 / UUU**	2. **/ 020**	3.
4.	5.	6.
7.	8.	9.
10.		

Inspection Summary

(I-8) Deck:	**7**
(I-32) Superstructure:	**3**
(I-42) Substructure:	**4**
(I-50) Culvert:	
(I-54) Channel:	
(I-60) Approaches:	**4**
(I-66) General Appraisial:	**3**
(I-66) Operational Status:	**P**
Inspection Date:	**03/12/2012**
(94) Desig Insp Freq:	**12 Months**

(I-69) Survey Items

Railings:	**0 DOES NOT MEET CURRENT STANDARDS**
Transitions:	**0 DOES NOT MEET CURRENT STANDARDS**
Guardrail:	**0 DOES NOT MEET CURRENT STANDARDS**
Rail Ends:	**0 DOES NOT MEET 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:	**05/03/2012**

Utilities

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

Special Features

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

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

INV Field Bridge Marker: **JEF-00007-1642 -**
INT Field Bridge Marker: **JEF-WV2SP-0000 -**

PONTIS CoRe elements and Condition States

Elem No.	CoRe Element Description	Total Quantity	Unit Meas.	Condition State Percents(*)				
				1	2	3	4	5
28	STEEL DECK - OPEN GRID	1	EA	0	0	0	0	0
215	REINFORCED CONC ABUTMENT	68	LF	0	0	0	0	0
304	OPEN EXPANSION JOINT	68	LF	0	0	0	0	0
321	REINFORCED CONCRETE APPROACH SLAB	2	EA	0	0	0	0	0
330	METAL BRIDGE RAILING	3586	LF	0	0	0	0	0

(*) Percentages Should add to 100%

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION REPORT

BR-86 REV 02-95

4	1	0	0	9	6	4

1 Structure File Number 7

Bridge Number **JEF** (CO) **00007** (ROUTE) **1642** (UNIT) **STEUBENVILLE** **Date Built 07/01/1905**

District **11** Bridge Type **STEEL/SUSPENSION/THRU** Type Service **2** **11** **PT.MARKET ST.BR.OVR SR7** **JEF**

DECK Out/Out 34.0			2. Wearing Surface THCK = 0.0		
1. Floor 5-STEEL GRID - OPEN 8	1		0-OTHER 41		1
3. Curbs, Sidewalks, Walkways 2-STEEL 2-STEEL 9	1		4. Median W.S. Date = 42		
5. Railing 6-STEEL POST & STEEL PAN 10	1		6. Drainage 0-OTHER-NATURAL(OFF THE 43		1
7. Expansion Joints 2-SLIDING METAL PLATE AN 11	1		**8. Summary** 44		7
SUPERSTRUCTURE MAX.SPAN=112					
9. Alignment 12	1		10. Beams/Girders/Slab 1-ROLLED STEEL 45		3
TOT.LGTH=144					
11. Diaphragms or Crossframes 13			12. Joists/Stringers 46		3
13. Floor Beams 14	3		14. Floor Beam Connections 47		3
15. Verticals 15	2		16. Diagonals 48		3
17. End Posts 16	2		18. Top Chord 49		2
19. Lower Chord 17	3		20. Lower Lateral Bracing 50		
21. Top Lateral Bracing 18			22. Sway Bracing 51		2
23. Portals 19	2		24. Bearing Devices 3-SLIDING (BRONZE) N-NONE 52		2
25. Arch 20			26. Arch Columns or Hangers 53		
27. Spandrel Walls 21			28. Protective Coating System TYPE = 0-OTHER DATE = 01/01/1982 54		9
29. Pins/Hangers/Hinges 22			30. Fatigue Prone Connections 55		3
31. Live Load Response 23	S		**32. Summary** 56		3
SUBSTRUCTURE 2-CONCRETE			PIERS=11 SPANS = 12		
33. Abutments 2-CONCRETE 24	2		34. Abutment Seats 57		2
35. Piers TYPE = 5-STEEL 25	3		36. Pier Seats 58		2
37. Backwalls 26	1		ABUTMENT:=UNKNOWN / UNKNOWN 38. Wingwalls 59		
39. Fenders and Dolphins 27			40. Scour N-BRIDGE NOT OVER WATERW 60		
41. Slope Protection N-NONE 28			**42. Summary** DIVE DT=N/A 62		4
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			X-N/A		
51. Alignment 33			52. Protection 67		
53. Waterway Adequacy 34			**54. Summary** 68		
APPROACHES					
55. Pavement 2-BITUMINOUS 35	3		56. Approach Slabs 69		2
57. Guardrail N-NONE 36			58. Relief Joints 70		
59. Embankment BRDG.WIDTH=24.0 37	1		**60. Summary** PCT.LEGAL=15 71		4
GENERAL			ROUTINE.RESP: Z-BORDER STATE		
61. Navigation Lights 38	1		62. Warning Signs MAINT.RESP: Z-BORDER STATE 72		1
MVC ON=13.5 UND=15.2					
63. Sign Supports 39	1		64. Utilities 73		1
65. Vertical Clearance 40	1		**66. General Appraisal & Operational Status** 74	COND 3	STAT P

67. INSPECTED BY 68. REVIEWED BY

SIGNED 76 PE C C 78 INITIALS SIGNED 6 7 6 7 0 81 PE W K 83 INITIALS

DOT 2852 DECK AREA 4,898 Date 0 3 1 2 1 2 (86–91) 0 0 0 0 N N N N (92 69 Survey 99) Date 0 5 0 3 1 2 (100–105)

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION REPORT

BR-86 REV 02-95

4	1	0	0	9	6	4

1 Structure File Number 7

Bridge Number **JEF** (CO) **00007** (ROUTE) **1642** (UNIT)

Date Built 07/01/1905

District **11** Bridge Type **STEEL/SUSPENSION/THRU**

Type Service **2** **1** **1**

PT.MARKET ST.BR.OVR SR7

Deck	1.) OPEN GRID FLOOR. MINOR LOSS OF SECTION.
Deck	2.) SEE #1.EPOXY COATING ON WALKWAY,WITH WIRE LINK FENCE.
Deck	5.) SEVERE LOSS OF SECTION.
Deck	6.) NO DRAINAGE SYSTEM ON THIS STRUCTURE. HAS OPEN GRID
Deck	FLOOR.
Superstructure	10.) LOSS OF SECTION.
Superstructure	12.) LOSS OF SECTION. SOME PLACES COMPLETELY RUSTED THROUGH.
Superstructure	13.) SEVERE LOSS OF SECTION. PERFORATION THROUGH WEBS. SEE
Superstructure	#19.
Superstructure	14.) SEVERE LOSS OF SECTION,ALSO PERFORATIONS AND CRACKS.
Superstructure	SEE #19.
Superstructure	15.) LOSS OF SECTION.
Superstructure	16.) LOSS OF SECTION.
Superstructure	17&18.) LOSS OF SECTION.
Superstructure	19.) LOSS OF SECTION. RIVETS MISSING @ & ADJACENT TO FLOOR
Superstructure	BEAM GUSSETS.
Superstructure	20.) GUSSET PLATES,SEVERE SECTION LOSS.
Superstructure	21.)TOP LATERAL BRACING HAS LOSS OF SECTION, FEW SECTIONS
Superstructure	BOWED OR BENT. LOWER LATERAL BRACING HAS SEVERE SECTION LOSS
Superstructure	WITH PERORATIONS.
Superstructure	22.) LOSS OF SECTION.
Superstructure	23.) LOSS OF SECTION AT BOTTOMS.
Superstructure	28.) NEW PAINT IN 2011.
Superstructure	30.) MUCH WELDING DONE ON FLANGES AND WEBS. SEVERE LOSS OF
Superstructure	SECTION ADJACENT TO BRACING.
Superstructure	31.) 5 TON LOAD LIMIT.
Superstructure	32.) NEW STEEL IN PLACES.
Substructure	33.) MUCH DETER., CRACKING, AND SOME SCALING.
Substructure	34.) CRACKING AND MINOR BREAKING. MUCH DEBRIS ON SEAT.
Substructure	35.) MUCH HEAVY RUST, LOSS OF SECTION.
Substructure	CRACKING OF CONCRETE PIER & CAN SEE DETIORIATION OF
Substructure	CONC WHEN LOOKING DOWN FROM WALKWAY.
Substructure	36.) LOSS OF SECTION.
Substructure	41.) 3'X3'X2' DEEP SINK HOLE UNDER LEFT SIDE NEXT TO
Substructure	WALKWAY.
Approaches	55.) MUCH CRACKING, RUTTING & BREAKING UP, MUCH SETTLING
Approaches	AND PATCHING.
Approaches	56.) CRACKING AND SCALING.
General	62.) NEW LIGHTING AND CONDUIT ON BRIDGE. 10' CLEARANCE SIGN
General	POSTED.
General	63.) SEE #62.
General	64.) ELECTRIC TO LIGHTS.
General	66.) BRIDGE CLOSED TO TRAFFIC FOR REPAIRS AT TIME OF
General	INSPECTION 2010 & 2011.