### **Bridges of West Virginia**





### **Ohio River**

Jennings Randolph Bridge – US30 – East Liverpool and Chester - 1977



The Jennings Randolph Bridge, built in 1977, is the largest Pratt truss bridge in North America. It spans ~3,400 feet (1,000 m) over the Ohio River between Chester, West Virginia and East Liverpool, Ohio, with main span of 745 feet (227 m). The bridge is located on U.S. Route 30 and is named after U.S. Senator Jennings Randolph (D-WV). It replaced the 1897 Chester Bridge.[1] On December 11, 2023, the West Virginia Division of Highways (WVDOH) closed the bridge after a federally mandated inspection discovered cracking in two

welds on the steel bridge structure. In the end, 20 defects were found the T-1 steel that used to build the bridge. The bridge was reopened on January 8, 2024.

#### Wayne Six (Newell) Toll Bridge - East Liverpool and Newell - 1905



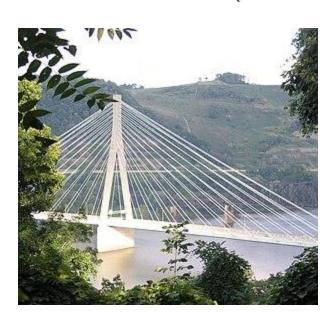
The Wayne Six Toll Bridge, formerly the Newell Toll Bridge is a privately owned suspension bridge over the Ohio River on the Golding Street Extension between Newell, West Virginia and East Liverpool, Ohio, United States. It carries two lanes of roadway and a pedestrian path along the west side. Tolls are charged for all road users at varying rates depending upon vehicle; pedestrians are also tolled. The bridge is one of the last suspension bridges on the Ohio River.[1]

In July 2023, the bridge was renamed in honor of its longtime caretaker, Wayne Six.

Fort Steuben Bridge - SR 822 - Steubenville and Weirton - 1928 (demolished 2012)



The Fort Steuben Bridge, originally the Weirton-Steubenville Bridge, was a suspension bridge which spanned the Ohio River from Steubenville, Ohio to Weirton, West Virginia and carried U.S. Route 22 and then Ohio State Route 822 during its existence. Completed in 1928 and opened as a toll bridge, the Fort Steuben Bridge was a more direct route for the flow of traffic across the river; particularly for trucks and heavy vehicles from the industrial area. The Fort Steuben Bridge was weight-restricted in 2006 and closed in 2009 due to deterioration. The bridge was demolished by Joseph B. Fay Co. on February 21, 2012.



Veterans Memorial Bridge, also known as the New Steubenville Bridge, is a cable-stayed bridge which carries U.S. Route 22 across the Ohio River between Steubenville, Ohio and Weirton, West Virginia. The bridge succeeded the Fort Steuben Bridge, which was built in 1928, though was still operational until 2009.

-n-

\*

Planning for the bridge began in 1961 in Ohio and in 1964 in West Virginia. The bridge's construction was approved by the Federal Highway Administration in 1978. Construction began in 1979, and the bridge opened on May 1, 1990. The final cost of the bridge was \$70 million.

**Steubenville Railroad Bridge** 



Market Street Bridge - WV 2 Spur - Steubenville and East Steubenville - 1905



The Market Street Bridge is a suspension bridge connecting Market Street in Steubenville, Ohio and West Virginia Route 2 in Follansbee, West Virginia over the Ohio River. As a project of the Steubenville Bridge Company, it was constructed in 1905 by the Ohio Steel Erection Company, the framework was created by the Penn Bridge Company, and the original steel was done by Jones and Laughlin Steel Company and Bethlehem Steel. The bridge spans a length of 1,794 feet (547 m) with a width of 20.7 feet (6.3 m). As of 2002, the average daily traffic was estimated around 15,000 vehicles. It was listed on the National Register of Historic Places in 2019.

Wheeling–Pittsburgh Steel Railroad Bridge - Wheeling and Lake Erie Railway - Steubenville and Coketown - 1917



Wabash Bridge - CSX Pittsburgh and West Virginia Railway line - Mingo Junction and Follansbee -1904



#### Wellsburg Bridge - Wellsburg and Brilliant – 2023



The Wellsburg Bridge is a tied-arch bridge that crosses the Ohio River and connects Brooke County, West Virginia and Jefferson County, Ohio (near the cities of Wellsburg, West Virginia and Brilliant, Ohio). The grand opening celebration was on September 20, 2023, and the bridge opened to motorists the following morning. The project cost \$131 million. The bridge is to be renamed when the West Virginia Legislature convenes in January 2024. In preparation for the naming, West Virginia state senator Ryan Weld of Brooke County, West Virginia solicited input from local residents on social media.



Aetnaville Bridge (crosses back channel only) - Pedestrian - Martin's Ferry and Wheeling Island – 1891 (closed 1988)



The Aetnaville Bridge is a through truss bridge spanning the back channel of the Ohio River between Bridgeport, Ohio and Wheeling, West Virginia. The bridge was built in December 1891 and used for vehicular traffic until December 1988, when it was closed to cars due to safety concerns. The structure was used by pedestrians until its complete closure in 2016.

During the late 1800's and early 1900's, the bridge was used for streetcars until service ceased in 1937. The bridge is now used mostly as a way for pedestrians, bicyclists, and joggers, to cross without having to go all the way around to the new Bridgeport Bridge. The bridge was closed from October 19 to 23, 2015, to be evaluated for safety. Local residents are fighting to save this bridge, because it is a popular pedestrian footwalk, and part of a proposed bicycle and jogging trail. As of January 20, 2016, there have been metal fences barricading the bridge pending further decision-making as to how to proceed with possible repairs.

## Military Order of the Purple Heart Bridge (crosses back channel only) - US 40 / US 250 - Bridgeport and Wheeling Island - 1998

The Military Order of the Purple Heart Bridge, named after the Military Order of the Purple Heart,[2] carries U.S. Route 40 and US 250 over the Ohio River back channel between Wheeling Island, West Virginia and Bridgeport, Ohio. Construction began in 1995 and finished in 1998.

The bridge was built to replace the adjacent Bridgeport Bridge which had fallen into disrepair.

Fort Henry Bridge - I-70 / US 40 / US 250 - Bridgeport, Wheeling Island and Wheeling - 1955



The Fort Henry Bridge is a crossing of the Ohio River main channel in Wheeling, West Virginia. The tied-arch bridge carries two lanes in each direction of Interstate 70 (I-70), U.S. Route 40 (US 40), and US 250. The bridge opened after four years of construction work on September 8, 1955, costing \$6.8 million, \$1.8 million over budget. The bridge, along with the aging Wheeling Suspension Bridge, are the only two road links from Wheeling Island to downtown Wheeling. In 2009, the structure carried an average of over 60,000 vehicles per day.



Wheeling Suspension Bridge (crosses main channel only) - WV 251 - Wheeling Island (WV) and Wheeling - 1849



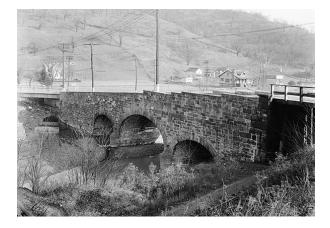
The Wheeling Suspension Bridge is a suspension bridge spanning the main channel of the Ohio River at Wheeling, West Virginia. It was the largest suspension bridge in the world from 1849 until 1851. Charles Ellet Jr. (who also worked on the Niagara Falls Suspension Bridge) designed it and supervised construction of what became the first bridge to span a major river west of the Appalachian mountains.[5] It linked the eastern and western section of the National Road, and became especially strategically important during the American Civil War. Litigation in the United States Supreme Court concerning its obstruction of the new high steamboat smokestacks eventually cleared the way for other bridges, especially needed by expanding railroads. Because this bridge was designed during the horse-and-buggy era, 2-ton weight limits and vehicle separation requirements applied in later years until it was closed to automobile traffic in September 2019.

The main span is 1,010 feet (310 m) from tower to tower. The east tower rests on the Wheeling shore, while the west tower is on Wheeling Island. The east tower is 153.5 feet (46.8 m) above the low-water level of the river, or 82 feet (25 m) from the base of the masonry. The west tower is 132.75 feet (40.46 m) above low water, with 69 feet (21 m) of masonry.[6] Detailed analysis of the bridge was conducted by Dr. Emory Kemp.

The Wheeling Suspension Bridge was designated a National Historic Landmark on May 15, 1975.[4] It is located in the Wheeling Island Historic District.



#### Elm Grove Stone Arch Bridge – US 40 – Wheeling



In the early history of bridges, stone was a preferred construction material, but such bridges were expensive and time-consuming to build. The Elm Grove Stone Arch on U.S. 40 near downtown Wheeling off Lumber Ave., visible from I-70 was built in 1817 by Moses Shepherd. The oldest extant bridge in the state and possibly the oldest bridge of any kind still being used for traffic, the architects were Shepherd, Moses. The bridge was sprayed with gunnite in 1958 to help preserve and strengthen it.



#### Vietnam Veterans Memorial Bridge - I-470 - Brookside and Wheeling - 1985



The Vietnam Veterans Memorial Bridge is a four-lane tied arch bridge in the United States. It carries Interstate 470 over the Ohio River between Bellaire, Ohio and Wheeling, West Virginia.

Construction on the tied-arch bridge began in 1975, and was scheduled to be completed by 1981. Frays in the vertical hanger cables delayed the opening of the bridge, which was scheduled to open in July 1981. Additionally, delays in completing Ohio State Route 7 along the western shores of the river and Interstate 470 also resulted in the bridge not fully opening. The estimated cost to construct the span was about \$54 million.

÷ *\_\_\_\_* 

# Bellaire Bridge (Closed, Demolition planned) - Bellaire and Benwood – 1926 - (closed 1991)



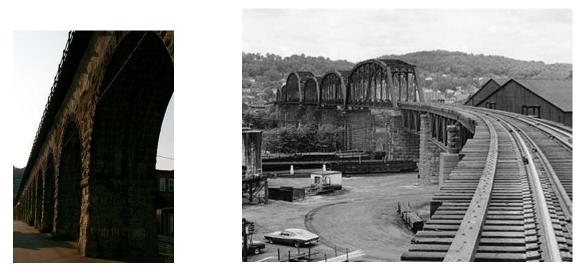
The Bellaire Bridge or Interstate Bridge is a privately owned, closed cantilever truss toll bridge that spans the Ohio River between Benwood, West Virginia (near Wheeling) and Bellaire, Ohio (near Martins Ferry).[1] It provided a link for commuters between southern Ohio border towns and West Virginia steel mills from 1926 to 1991.[2]

The overall length of the bridge is 2,770 feet (840 m), including the approach of 850 feet (260 m) on the West Virginia side and 670 feet (200 m) on the Ohio side of the river. The highest point in the bridge is 350 feet (110 m) above the water line.[1]

Built in 1926, the bridge is likely the oldest cantilever truss bridge in West Virginia, and is the second oldest vehicular truss bridge over the entire Ohio River.[3] It is currently unused, and missing approach spans on the Ohio side. As of September 2022, the bridge remains standing, with status regarding demolition unknown.

\*------\*

### B & O Railroad Viaduct - CSX Baltimore and Ohio Railroad line - Bellaire and Benwood - 1870



The B&O Railroad's first bridge across the Ohio River, built in 1857, served a rail line through Parkersburg, West Virginia. But the growing center of Chicago, Illinois, made a span between Benwood, West Virginia, and Bellaire more desirable.

In 1865, the B&O obtained the Central Ohio Railroad and later the Sandusky, Mansfield & Newark Railroad. These acquisitions linked Bellaire to the port of Sandusky on the shore of Lake Erie, and thence to Chicago. The proposal to build a bridge at Bellaire threatened a ferry business there, whose owners sought and obtained an injunction was filed in court. The railroad fought the injunction to the U.S. Supreme Court and won.

Discussions into the building of the bridge began in the late 1860s and it was decided that the bridge would be a long-span wrought-iron-truss. The design of the bridge was handled by Jacob Linville, president of the Keystone Bridge Co., which manufactured its trusses. The bridge was completed in 1871. The approaches are made of cut sandstone blocks that elevate the rail line to the recommended height. The bridge itself consists of all wrought-iron trusswork resting on six cut stone piers sunk into the river bed.

The bridge was featured in the 2010 film Unstoppable starring Denzel Washington and Chris Pine. Filming on the bridge in Bellaire ran from November 9 to 14, 2009.



Moundsville Bridge - WV 2 Spur / SR 872 - Mead Township and Moundsville - 1986



The Moundsville Bridge is a four-lane through arch bridge that connects Mead Township, Ohio and Moundsville, West Virginia across the Ohio River. The approach routes to the bridge carries Ohio State Route 872 (SR 872) on the Ohio side and the unsigned West Virginia Route 2 Spur on the West Virginia side. The bridge is also officially known as the Arch A. Moore Bridge, named after the former West Virginia governor Arch A. Moore, Jr.

#### New Martinsville Bridge - SR 536 / WV 7 - Ohio Township and New Martinsville - 1961



The New Martinsville Bridge, or the Korean War Veterans Memorial Bridge, is a steel through truss bridge over the Ohio River between West Virginia and Ohio. It carries West Virginia Route 7 over the river between Hannibal, Ohio and New Martinsville, West Virginia.

Sistersville Ferry - Jackson Township and Sistersville - 1817



The Sistersville Ferry crosses the Ohio River between Sistersville, West Virginia and the unincorporated community of Fly, Ohio. Known as the oldest ferry in West Virginia, it has been in continuous operation since 1817. It is one of five ferries left on the Ohio River, and the only one along the 277 mi (446 km) stretch of the river on the West Virginia border; the others, located at Augusta, Anderson, Rising Sun and Cave-in-Rock, are all downstream, on the Kentucky portion of the river.



Hi Carpenter Memorial Bridge - SR 807 / WV 807 - Newport Township and St. Marys - 1973



The Hi Carpenter Memorial Bridge is a cantilever bridge over the Ohio River between Newport, Ohio and St. Marys, West Virginia. It carries Ohio State Route 807 (SR 807) and West Virginia Route 807 (WV 807) and serves to connect WV 2 with OH 7.

The Hi Carpenter Memorial Bridge was completed in 1977. This bridge replaced a 1928 eyebar suspension bridge that was closed immediately following the collapse of the similarly-designed Silver Bridge in 1967.[3] SR 807 was established in 1977 with the completion of the current Hi Carpenter Memorial Bridge. The bridge is named in honor of Hiram A. Carpenter (December 3, 1880 – April 19, 1970), a well-known riverman who began his career ferrying mail between Raven Rock and Leith, Ohio, when he was 13 years old. He was successful in many enterprises, including the sand and gravel business, farming thirteen Ohio River islands that he owned at one time, apple raising, road construction, transportation, and his greatest undertaking, building the Short Route Bridge in 1928.

Marietta–Williamstown Interstate Bridge - I-77 - Marietta and Williamstown - 1967



The Marietta–Williamstown Interstate Bridge is a four-lane truss bridge carries Interstate 77 between Williamstown, West Virginia and Marietta, Ohio. The bridge was completed in 1967 and it was rehabilitated in 2003.



#### Williamstown Bridge - SR 60 / WV 31 - Marietta and Williamstown - 1992



The Williamstown Bridge is a bridge over the Ohio River between Williamstown, West Virginia, and Marietta, Ohio. The bridge carries West Virginia Route 31 and Ohio State Route 60. U.S. Route 21 was also formerly routed along this bridge.

The original bridge at this site was constructed in 1903. It was the first inland cantilever highway bridge in the United States and also site of the first strike, in 1902, by the United Steel Workers union.

The current Williamstown Bridge was completed in 1992. It reuses some of the piers from the prior bridge, although the Marietta approaches were relocated to a new connection with Ohio State Route 7. This bridge is a continuous truss, the 28th-longest in North America.

Memorial Bridge - Belpre and Parkersburg - 1954



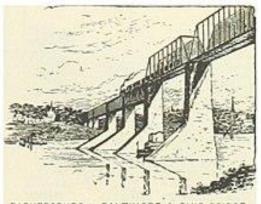
The Memorial Bridge, locally known as the t``oll bridge, crosses the Ohio River connecting Belpre, Ohio and Parkersburg, West Virginia. The bridge is an alternate route to access U.S. Route 50 in Ohio from central Parkersburg.

The bridge was completed c. 1954, and is of a steel through truss design, a combination of two camelback-Warren through trusses, and a 3-span cantilevered Warren through truss. It accommodates two lanes of traffic, one in either direction.



## Parkersburg CSX Bridge - CSX Transportation Marietta Subdivision - Belpre and Parkersburg - 1871, 1905





PARKERSBURG : BALTIMORE & OHIO BRIDGE.

The Parkersburg Bridge crosses the Ohio River between Parkersburg, West Virginia, and Belpre, Ohio. Designed by Jacob Linville, the bridge has 46 spans: 25 deck plate girders, 14 deck truss, 6 through truss, and 1 through plate girder. 50,000 cubic yards (38,000 m3) of stone were used for the 53 piers. The bridge was constructed from May 1869 to January 1871 by the Baltimore and Ohio Railroad. At the time of its completion, the bridge was reportedly the longest in the world at 7,140 feet (2,180 m).

The approach spans were replaced 1898–1900, and the river spans were replaced 1904–1905. The original piers were retained. The steel structure atop the piers was rebuilt between about 1914 and 1917. One channel span was replaced in 1972 after a barge transporting an empty gasoline tanker[4] exploded under the bridge.

The bridge was a part of the B&O's Baltimore – St. Louis mainline and offered the railroad easy access to Ohio in transporting coal and other materials to the east coast. Currently the bridge handles the traffic of the Belpre Industrial Parkersburg Railroad.



#### Parkersburg-Belpre Bridge - SR 32 / WV 618 - Belpre and Parkersburg - 1980



The Parkersburg–Belpre Bridge is a four-lane cantilever bridge that connects Parkersburg, West Virginia, to Belpre, Ohio, across the Ohio River. The bridge was completed in 1980. The bridge had been signed U.S. Route 50 (US 50) until June 13, 2008, when that highway was re-routed to the Blennerhassett Island Bridge a few miles to the west, as part of the completion of the Corridor D project around Parkersburg. The American Discovery Trail uses the bridge to cross the Ohio River.



Blennerhassett Island Bridge - US 50 - Belpre and Lubeck - 2008





Blennerhassett Island Bridge, with a network arch design,[1] carries U.S. Route 50 (Appalachian Development Highway System's Corridor D) over the Ohio River and the historic Blennerhassett Island between Belpre Township, Ohio and Washington, West Virginia in the United States. Construction of the bridge was overseen by the Walsh Construction Company of Chicago, and it opened to traffic on June 13, 2008. [2] The completion of the span completed Corridor D between Interstate 275 east of Cincinnati to Interstate 79 at Clarksburg, West Virginia.

A network arch bridge is a tied arch bridge with inclined hangers that cross each other at least twice.

#### Ravenswood Bridge - US 33 - Lebanon Township and Ravenswood - 1981



The William S. Ritchie Jr. Bridge,[1] more commonly known as the Ravenswood Bridge, is a two-lane cantilever bridge in the United States, connecting Ravenswood, West Virginia and rural Meigs County, Ohio, across the Ohio River. It has a total length of 2,710 ft (830 m) with a main span of 900 ft (270 m). The bridge was completed in 1981.[2]

The bridge replaced a ferry that had crossed the river between Ravenswood at Walnut Street and rural Lebanon Township since at least 1908.[3][4] When the bridge opened in 1981, on the Ohio side of the river, the bridge and its approach route carried the 0.57-mile-long (0.92 km) Ohio State Route 824 (SR 824).[5] The crossing originally led to a winding two-lane SR 338. On the West Virginia side, the bridge carried West Virginia Route 338.[6][1] In 2003, the SR 824 and WV 338 designations were removed when the US 33 relocation in Meigs County was completed and the US 33 designation was moved onto the bridge.

#### Pomeroy–Mason Bridge - WV 62 Spur / SR 833 - Pomeroy and Mason - 2008





The Bridge of Honor, commonly known as the Pomeroy–Mason Bridge is a cable-stayed bridge over the Ohio River between the American cities of Pomeroy, Ohio and Mason, West Virginia. With construction being carried out by the C.J. Mahan Construction Company and overseen by the Ohio Department of Transportation, it was completed on December 30, 2008.[3][4] Ownership of the bridge was transferred to the West Virginia Division of Highways upon completion.[1] The crossing carries Ohio State Route 833 and West Virginia Route Spur 62. At night, the bridge is illuminated by purple lights shining on the cables and towers.

## Point Pleasant Rail Bridge – Kanawha River Railroad - Addison Township and Point Pleasant - 1885, 1919



The Point Pleasant Rail Bridge is a truss bridge that carries the West Virginia Secondary over the Ohio River between Gallia County, Ohio and Point Pleasant, West Virginia. At the present time, the bridge is being used by the Kanawha River Railroad for transporting goods from point to point via rail, but it was once used by Norfolk Southern, Conrail, Penn York Central Railroad.

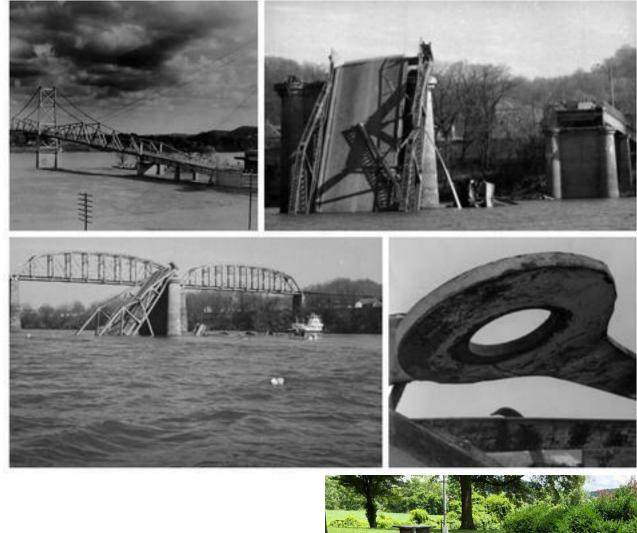
#### Silver Bridge – US 35 – Point Pleasant and Gallipolis - 1928



The Silver Bridge was an eyebar-chain suspension bridge built in 1928 which carried U.S. Route 35 over the Ohio River, connecting Point Pleasant, West Virginia, and Gallipolis, Ohio. Officially named the Point Pleasant Bridge, it was popularly known as the Silver Bridge for the color of its aluminum paint.

On December 15, 1967, the Silver Bridge collapsed amid heavy rush-hour traffic, resulting in the deaths of 46 people, two of whom were never found. Investigation of the wreckage soon pointed to the failure of a single eyebar in one of the suspension chains as the primary cause — a finding noted in a preliminary report released within 10 months of the collapse. However, to explain why that eyebar failed — a failure triggered by a flaw just 0.1 inches (2.5 mm) deep, which led to a fracture — required significantly more time and effort to uncover, with the final accident report taking three years to complete. The collapse led to significant changes in the way bridges in the U.S. are inspected and maintained.











Silver Memorial Bridge - US 35 - Addison Township and Henderson - 1969



The Silver Memorial Bridge is a cantilever bridge that spans the Ohio River between Gallipolis, Ohio, and Henderson, West Virginia. The bridge was completed in 1969 as a replacement for the collapsed Silver Bridge, although it is located about 1 mile (1.6 km) downstream (south) of the original. The bridge carries US 35 across the river and serves as a major crossing for people and goods traveling between Charleston, West Virginia, and Southern and Central Ohio. The speed limit on the bridge is 65 mph (105 km/h). No toll is imposed at either end.



#### Frank Gatski Memorial Bridge - SR 775 / WV 106 - Proctorville and Huntington - 1985



The East Huntington Bridge (officially the Frank Gatski Memorial Bridge, also called the East End Bridge or the 31st Street Bridge) is a 900-foot (270 m) cable-stayed bridge crossing the Ohio River at Huntington, West Virginia. It carries West Virginia Route 106 on the West Virginia approach and OH 775 on the Ohio approach.[1]

The northern approach (from Ohio State Route 7) is the recently extended Ohio State Route 775; its southern terminus is a pair of ramps (northbound on-ramp from Fifth Avenue, southbound offramp to Third Avenue) connecting it to U.S. Route 60.

\*-----<u>\_\_\_\_</u> ⊹

Robert C. Byrd Bridge -SR 527 / WV 527 - Chesapeake and Huntington - 1994



The Robert C. Byrd Bridge is a 720-foot (220 m) continuous truss bridge that crosses the Ohio River between Huntington, West Virginia and Chesapeake, Ohio. The crossing was constructed to replace an old, narrow, two-lane structure that was demolished after 69 years of service in a spectacular implosion on July 17, 1995. The previous bridge, opened in 1926, was Huntington's first bridge across the Ohio River and was designed in a gothic style, complete with four two-ton spires that rested on top of each peak.



#### West Huntington Bridge - US 52 - Union Township and Huntington -1970



The West Huntington Bridge (officially named the Nick Joe Rahall II Bridge, also called the West End Bridge or the 17th Street West Bridge) is a two-lane, 562-foot (171 m) cantilever bridge on the west side of Huntington, West Virginia, United States. It crosses the Ohio River and carries U.S. Route 52 between Ohio State Route 7 and Interstate 64. The bridge was completed in 1968 at the cost of \$5.2 million as part of the West Huntington Expressway.

The bridge can also be seen in the closing scene of the 2006 biopic *We Are Marshall*. A female character is seen traveling across the bridge, going into Ohio from Huntington.



#### Norfolk Southern Bridge - Norfolk Southern Railway - South Point and Kenova - 1913



The Norfolk Southern Railway Ohio River crossing connects South Point, Ohio with Kenova, West Virginia.

The bridge is featured prominently in the Warner Bros. film *We Are Marshall* in a scene in which Jack Lengyel (played by Matthew McConaughey) visits William "Red" Dawson (played by Matthew Fox) at his home. The scene was filmed at a private residence on Barger Hill in Kenova, which overlooks the town and the three states converging at the confluence of the Ohio and Big Sandy Rivers. The bridge can be seen in the background. In the scene Lengyel makes reference to the train crossing it and uses it as an analogy for putting one's life back on track.