

OVERVIEW OF THE VETERANS MEMORIAL BRIDGE ACCESS IMPROVEMENTS

Access to the Veterans Memorial Bridge (US 22) was identified as a capacity bottleneck during the early phases of a study undertaken to locate a new bridge over the Ohio River. In 2003, the Ohio River Bridge Study, Phase II final report identified several areas where projects should be undertaken to improve access to the Veterans Memorial Bridge. The following is an excerpt from the Executive Summary (page 3):

- Priority No.1: Construct roadway and intersection capacity improvements to better access the region's most modern bridge crossing, Veterans Memorial Bridge. These improvements are as follows.
- Realign and improve the Freedom Way and Birch Drive intersection in Weirton.
 - Improve the alignment and widen the intersection of Freedom Way and West Virginia Route 2 in Weirton.
 - Upgrade and improve the existing three lanes on Freedom Way in Weirton.
 - Improve access to Veterans Memorial Bridge at Steubenville through the realignment and widening of adjacent connecting thoroughfares State Route 7 (Dean Martin Boulevard) and University Boulevard.

Since 2003, the BHJ Metropolitan Planning Commission (BHJ) has encouraged West Virginia Department of Highways (WVDOH) and the Ohio Department of Transportation (ODOT) to pursue these "Priority 1" improvements.

In West Virginia, work has been completed to address bullets two and three by the WVDOH. Bullet one has not yet been implemented. BHJ assisted the WVDOH by obtaining traffic volume data at the intersection and preparing a preliminary plan showing the re-alignment of Birch Drive with Freedom Way. WVDOH is currently evaluating the data and preliminary drawing.

In April 2004, the engineering consulting firm of Edwards and Kelcey was authorized by the ODOT District 11 to prepare a study of the access issues to the Veterans Memorial Bridge and to develop alternative solutions. A draft report was prepared and submitted to ODOT District 11 in February 2005.

A review team composed of ODOT District 11 personnel, Steubenville City Engineer, and personnel from the local Metropolitan Planning Organization (BHJ Metro Planning Commission) met and reviewed the draft study recommendations. After much discussion over the course of several months, it became apparent that none of the study recommendations satisfactorily addressed the needs, concerns and constructability issues.

A sub-committee of the BHJ MPC Technical Advisory Committee (TAC) was formed to further flesh out area concerns and attempt to develop additional alternative solutions. This sub-

committee was composed of ODOT District 11 personnel, representatives from the City of Steubenville and City of Weirton, representatives from area businesses and personnel from BHJ MPC. This committee met as needed but generally every three months until the fall of 2006.

After meeting for over a year, the committee became well aware that the study site presents some unique challenges. There are a significant number of constraints in the area including an active railroad and the Ohio River on the east, a high hillside and large retaining wall system on the west, and an active railroad and elementary school to the south. An additional issue includes perpetuation and enhancement of access to the Steubenville Marina and industrial riverfront businesses via LaBelle Avenue.

In the fall of 2006, the sub-committee expressed the need to have a technical committee research and develop further alternatives that would meet the projected traffic needs. This technical committee was comprised of personnel from ODOT District 11, the Steubenville City Engineer and personnel from BHJ MPC. BHJ MPC personnel in conjunction with ODOT District 11 developed additional alternates. These alternates were modeled in Synchro/Simtraffic© software to determine feasibility.

The technical committee met as needed over the next two years. At an August 18, 2008, meeting, the consensus was that the committee had exhausted the number of alternates in order to address the traffic concerns and recommended that all developed alternates along with associated documents be consolidated into a packet which summarized the work completed. This packet also served to present the committee's findings to all interested parties and organizations.

Over 30 alternatives were developed. These alternatives were tested against projected year 2030 traffic (developed and certified by ODOT Technical Services) which considers the Fort Steuben Bridge and Market Street Bridge to be closed. Little traffic impact occurred when the Fort Steuben Bridge was closed in 2009 (demolished in 2012). The major impact to the study area will occur with the closing of the Market Street Bridge.

Four alternatives were developed for public input:

Alternative 2b – No build with Ft Steuben Bridge and Market St Bridge closed

Alternative 3b – Northbound left turn is widened to two lanes and extended to the railroad bridge, two lanes on ramp to eastbound US22 and relocated access to LaBelle Avenue south of the railroad bridge

Alternative 3c – Alternate 3b with relocated Ramps D & G, Westbound University Boulevard traffic entering ramp D is controlled by traffic signal and eastbound University Boulevard left turn entering Ramp D is protected phase

Alternate 14i – Continuous flow intersection (CFI) design with a two lane on ramp to EB US22

and relocated access to LaBelle Avenue south of the railroad bridge

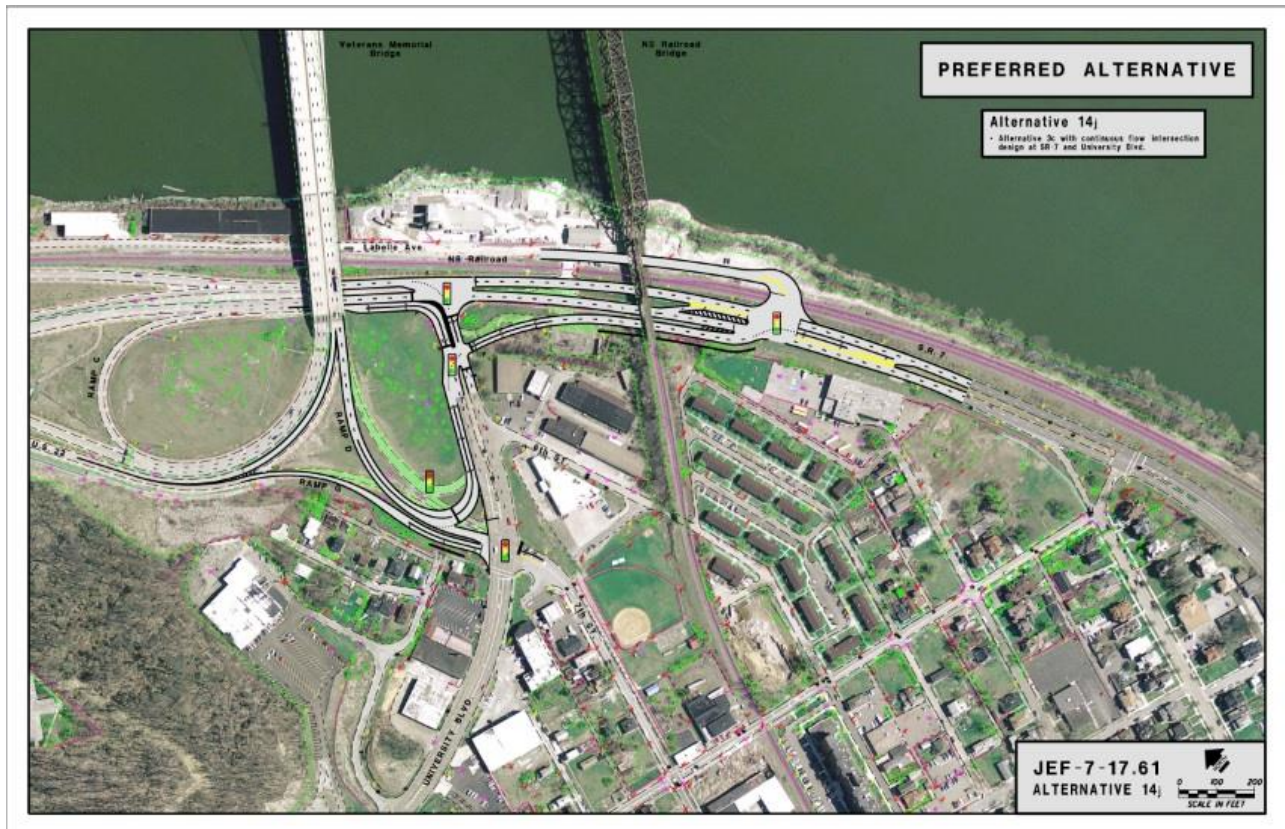
Public information meetings were held in December 2010 and May 2012. The preferred alternative was identified as Alternative 14j (Alternative 14i with a modification to eliminate the southbound movement on the frontage road in the southwest quadrant of SR7 & University Boulevard).

Purpose and Need

The following are the developed purpose and need statements for the project.

Purpose	To improve access to the Veterans Memorial Bridge at Steubenville through the realignment and widening of adjacent connecting thoroughfares of State Route 7 and University Boulevard.
Need	The intersection of State Route 7 and University Boulevard currently operates at a level of service C/D and was identified on the Ohio Department of Transportation's top 200 traffic crash site locations in 2005. The intersection traffic signal currently operates with a split phase sequence on State Route 7 to address the identified crashes but is operationally undesirable. The West Virginia Division of Highways has indicated they will keep the Market Street bridge open until such time that the bridge deterioration requires its closure. The current deteriorated condition of the Market Street Bridge which is approximately one mile south of the study area is such that this closure could occur at any time. Approximately 6300 vehicles per cross the Market Street Bridge. Closure of this bridge will have a severe traffic impact on the only remaining Ohio River Bridge crossing, the Veterans Memorial Bridge, especially the roadways serving the bridge, State Route 7 and University Boulevard.

The consulting firm of GPD Group, Columbus, Ohio completed the environmental document as well as contract construction plans. An overall schematic of the project is shown below.



Competitive bids were received by ODOT on October 22, 2015. The contract was awarded to Shelly and Sands, Inc. of Columbus, OH for a total of \$9,932,409.14.

On May 31, 2016, construction began on the new intersection along Route 22, State Route 7, and University Boulevard. Ramps and new intersections that connect State Route 7 south of the University Boulevard intersection, as well as a new intersection along University Boulevard, were completed. The ramps leading onto the Veterans Memorial Bridge from University Boulevard and from U.S. 22 to Seventh Street and University Boulevard were also reconfigured.

In September 2016, ODOT reported there were some issues regarding a lane that will pass through Norfolk-Southern Railroad property. Railroad officials were concerned that traffic on the railroad bridge will be disrupted. Those issues were resolved with ODOT agreeing to build a steel and concrete retaining wall beneath the railroad bridge along the lane's west side which will be made of steel pylons and concrete lagging. The wall will extend up to 20 feet beneath the railroad bridge over the highway.

As of September 2017, the project was 50% complete, with an expected completion date of December 01, 2018.