SECTION 7 - PROJECT CONSIDERATIONS

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SECTION 7 - PROJECT CONSIDERATIONS

This section outlines the BHJ Metropolitan Region’s 20-Year transportation needs. The BHJ Metropolitan Planning Organization (MPO) developed these projects and programs through data collection, technical analysis, and input from public meetings for projects.

BHJ MPO is comprised of the Transportation Study Policy Committee, the Technical Advisory Committee, and professional staff. The following goals and objectives guided project selection process:

1. Prepare a Financially Responsible Plan that represents the region’s fair share of federal and state economic resources and political importance.

2. Encourage retention and expansion of existing Regional Industrial Centers plus re-development of Brownfield Sites by promoting intermodal (i.e. air, highway, rail, and water) transportation linkages. The objective is to enhance regional freight movement with land use and economic growth opportunities.

3. Maintain and construct a safe, secure, and flexible Ohio River Bridge System that is reliable for existing and future industrial growth in addition to commuters and residents that provides enhanced access within and outside the metropolitan area. A well-planned bridge system should support local and interstate commercial traffic moving into and throughout the metropolitan region.

4. Reconstruct the West Virginia State Route 2 highway corridor by realignment, capacity addition, and slope repair where practical to reduce recurring congestion, landslides, and rock falls. Thereby lessening the negative impacts of continual traffic delays and lost economic opportunities.

5. Design an efficient Public Transit & Human Service Transportation program that is coordinated and cost effective, makes the most of available resources, and avoids duplication of individual program efforts. Through the mission of the Regional Access Mobility Partnership, RAMP is dedicated to eliminate and reduce where possible, obstacles and barriers to transportation services regardless of governmental boundaries and provide opportunity for participation and cooperation among all public transit human service, and private transportation providers, as well as other social service agencies.

6. Create a sustainable Bicycle and Pedestrian Network that bridges the Ohio River, promotes a healthy quality of life, discourages automobile dependence, and supports a growing tourism economy. The Bicycle and Pedestrian Network should enhance the quality of community and family life, stimulate alternative commuter routes, a growing workforce, and promote opportunities for economic development.
PROJECTS ACCOMPLISHED IN YEARS 2011 THROUGH 2015

The initial step in the plan evaluation process is identifying projects or programs completed since the previously adopted Long Range Transportation Plan Update (LRTP) in June 2012. The Tables below are a summary of those transportation projects accomplished in State Fiscal Years 2011 through 2015. Once identified, the next step is to either remove these projects or programs from the plan or update the project phase.

### TABLE 1 - JEFFERSON COUNTY PROJECTS
Completed 2011-2015

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<td>CR22A (Cedar Rd)</td>
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### TABLE 2 - BROOKE / HANCOCK COUNTY PROJECTS
Completed 2011-2015

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### TABLE 3 - JOHN STUART COUNTY PROJECTS
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### TABLE 4 - JOHN STUART COUNTY PROJECTS
Completed 2011-2015

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<td>SR105 (Colliers Way) from US-22 to Weinton, WV</td>
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</table>

BHJ 2040 Transportation Plan – Projects Considered
June 2016
PROJECTS LISTED IN THE TRANSPORTATION PLAN UPDATE PROGRAMMED IN THE FY 2016-2019 TRANSPORTATION IMPROVEMENT PROGRAM

The next step is identifying projects or programs program in the current Transportation Improvement Program (TIP) for Fiscal Years 2016-2019. The following table is a summary of those transportation projects.

### TABLE 2 - JEFFERSON COUNTY PROJECTS Programmed 2016-2019

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veterans Memorial Bridge Access Improvements</td>
<td>Bridge System Study Priority #1 - Improve access to Veterans Memorial Bridge by capacity additions at SR67 &amp; University Blvd intersection, redesign of SR97/US30/US222 Interchange ramping, and relocation of marina access road.</td>
</tr>
<tr>
<td>Wellsburg Ohio River Bridge Jefferson County, OH to Brooke County, WV</td>
<td>Bridge System Study Priority #2 - Construct a new Ohio River Bridge connecting Ohio State Route 7 to West Virginia State Route 2 between Jefferson County, OH and Brooke County, WV. Ohio's share of project costs.</td>
</tr>
<tr>
<td>ODOT Bridge System Preservation</td>
<td>Projected funding available to ODOT to adequately maintain, resurface, and major reconstruction projects in Jefferson County not identified in this TIP.</td>
</tr>
<tr>
<td>Lawson Ave Bridge over SR43 (Washington St) Steubenville</td>
<td>Rehabilitate bridge by removing existing deck and replacing on existing beams over State Route 43 and replacement of concrete roadway approaches.</td>
</tr>
<tr>
<td>Titanium Way Bridge-Toronto-Municipal Bridge Replacement</td>
<td>Remove and replace Titanium Way bridge over Jeddo Run and Jeddo Run Rd. Work includes construction of 400-ft walkway adjacent to curb on west side of road and bridge, begin at Titanium Metals parking and ending at Valley View Place and improve Titanium Way/Franklin Ave intersection to increase radii for truck traffic.</td>
</tr>
<tr>
<td>Replace Bridge CRO-C74-1.91 over Cross Creek - Cross Creek Township</td>
<td>Replace Goulds Road Bridge over Cross Creek 0.24 mile south of CH-28 West of Mingo Jct in Cross Creek Township.</td>
</tr>
<tr>
<td>Replace Bridge SFR-C75A-0.15 over Yellow Creek - Springfield Township</td>
<td>Replace Bridge over Yellow Creek east of OH-164 South of Beldzno in Springfield Township.</td>
</tr>
<tr>
<td>Replace Bridge WAR-C13-1.68 over Little Short Creek - Warren Township</td>
<td>Replace Bridge over Little Short Creek on existing line and grade 2.00 miles south of OH-150 in Warren Township.</td>
</tr>
<tr>
<td>Replace Bridge ROS-C53-1.46 over Brush Creek - Ross Township</td>
<td>Replace Truss Bridge in Ross Township.</td>
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### TABLE 2 - BROOKE / HANCOCK COUNTY PROJECTS Programmed 2016-2019

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Location</th>
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<tr>
<td>Brooke Co - CR-2/23 from Log 0.00 to 0.20 (Wellsville Bridge)</td>
<td>Construct Wellsville Bridge over Ohio River between Well Twp, Jefferson County, OH and Brooke County, WV (Advance Construction Payback).</td>
</tr>
<tr>
<td>Hancock Co - CD206 from Log 0.92 to 6.35</td>
<td>Resurface CO-206 (Million Rd) in Hancock Co from CD-5 (Locust Hill Rd) to CD14 (Middle Run Rd).</td>
</tr>
<tr>
<td>Hancock Co - CD11 from Log 1.45 to 1.71</td>
<td>Install guardrail on CR11 (Kings Creek Rd) at Patricia Ave.</td>
</tr>
<tr>
<td>Hancock Co - CD7 from Log 1.00 to 3.23</td>
<td>Resurface with thin overlay asphalt CO7 (Hardin Run Rd) from West of CO71 (Mayhow Rd) to west of CO62 (Florance Rd).</td>
</tr>
<tr>
<td>Hancock Co - CD3 from Log 0.65 to 1.43</td>
<td>Resurface CR-3 (Washington School Rd) in Hancock Co from Jct of CR3/S (Six Rd) to Jct CR-12 (Shepherd Valley Rd).</td>
</tr>
<tr>
<td>Brooke Co - SR-27 from Log 0.12 to 1.30</td>
<td>Resurface with thin overlay asphalt from Wellsville Corp Line to CO 27/1 (Tar Run Rd).</td>
</tr>
<tr>
<td>Brooke Co - US0022 from Log 1.09 to 3.01</td>
<td>Full Depth Concrete Joint Repair from Exit 2 (Downtown Weirton) to Exit 3 (Harrison Court Rd).</td>
</tr>
<tr>
<td>Brooke Co - SR-27A from Log 0.40 to 1.40</td>
<td>Resurface Eldersville Rd from Follansbee Corp Line to CR 7/1 (Rockdale Rd).</td>
</tr>
<tr>
<td>Brooke Co - US0022 from Log 2.78 to 2.82</td>
<td>Slide repair on US-2 eastbound adjacent to Harmon Creek Exit Ramp in Weirton.</td>
</tr>
<tr>
<td>Brooke Co - SR0002 from Log 0.00 to 6.83</td>
<td>Resurface WV 2 from Brooke/Ohio County Line to WV-67 (Bethany PA).</td>
</tr>
<tr>
<td>Brooke Co - CR0001 from Log 2.13 to 4.13</td>
<td>Resurface CR1 (Harmon Creek Rd) 0.50 miles west of CR-1/2 (Sandage Rd) to Jct CR-1/7 (Halls Rd).</td>
</tr>
<tr>
<td>Hancock Co - US30 from Log 0.52 to 1.14</td>
<td>Unbonded Concrete Joint Repair and Concrete Overlay from Chester Corp Line to CO 30/6 (Old Route 30).</td>
</tr>
</tbody>
</table>
The following pages generally describe the each transportation project considered in this plan classified by the following project categories:

- Ohio River Bridge
- Major/New Highway
- Highway System Preservation
- Congestion Management/Safety
- Bridge Preservation
- Regional Rideshare Opportunities
- Regional Bike & Pedestrian Development
- Regional Public Transportation Development
OHIO RIVER BRIDGE PROJECTS

The current bridge system in the Steubenville-Weirton Metropolitan Area has sufficient capacity to handle present traffic volumes; however, it has a number of significant deficiencies. Efforts to address these deficiencies require a reconfiguration of the existing system that includes access improvements to the Ohio side approaches of the Veterans Memorial and construct a new bridge across the Ohio River south of Wellsburg, WV connecting to Brilliant, Wells Township in Jefferson County, OH. All Ohio River Bridge Projects listed are unfunded unless otherwise noted.

OBR-1 Veterans Memorial Bridge Access Improvements (Project is funded and listed in current FY 2016-2019 Transportation Improvement Program)

When the Upper Ohio Valley Bridge System Study, Phase 2 Report was completed in 2003, the number one priority project listed was to “Construct Roadway and Intersection Capacity Improvements” in the vicinity of the Veterans Memorial Bridge. One of the specific areas mentioned was State Route 7 and University Boulevard along with related approaches on the Ohio side of the bridge.

Demolition of the Fort Steuben Bridge in late winter 2012 and the limited service-life of the Market Street Bridge have placed increased demand for traffic accessing the Veterans Memorial Bridge. Greater than before network demand, operational issues, and safety concerns demonstrate the need to realign and widen several intersections and connecting thoroughfares adjacent to the bridge in Steubenville. The graphic below, Alternative 2b displays the existing roadway network. The next illustration, Alternative 14j is the preferred highway

Figure 1 – Alternative 2B No-Build Scenario for Veterans Memorial Bridge Access Improvements
realignment selected to improve access to the Veterans Memorial Bridge. Alternative 14j includes several upgrades to better facilitate traffic volumes circulating about the Veterans Memorial Bridge in the north end of Steubenville, OH. The proposed project widens SR-7 to provide northbound dual left turn lanes, widens Ramp D to provide a dual lane on-ramp, reduce eastbound US-22 to one lane between Ramp G and Ramp D, and relocates access to Labelle Avenue south of the NS Railroad Bridge. The proposed design also realigns Ramp G and Ramp D at University Boulevard, installs a traffic signal to control westbound University Boulevard traffic entering Ramp D. Finally, the plan proposes to control eastbound traffic turning left to enter Ramp D to the bridge from University Boulevard at Seventh Street by a protected only traffic signal phase and constructs a Continuous Flow Intersection (CFI) design at the SR-7 and University Boulevard intersection. The BHJ website contains a video of the CFI traffic operation at http://www.bhjmpc.org/veterans-memorial-bridge/.

The Ohio DOT received competitive bids in the second quarter of Fiscal Year 2016. The lowest bid submitted for the project was for a total cost $9.93 million funded through ODOT safety and District 11 Preservation funds. BHJ provided approximately $1.2 million in Ohio MPO Sub-allocated Congestion Management Air Quality (CMAQ) funds for Professional Engineering to complete the necessary environmental reports and the detailed project design. The expected project completion date is the fall of calendar year 2017.
OBR-2 / WVBR-02

Wellsburg Bridge over the Ohio River Connecting WV-2 South of Wellsburg, Brooke County, WV to OH-7 Brilliant, Wells Township, Jefferson County, OH (Project is funded and listed in current FY 2016-2019 Transportation Improvement Program)

The second priority of the Phase 2 Report of the BHJ Regional Bridge System Study was to construct a new Ohio River Bridge south of Wellsburg, West Virginia. The report further recommended that the project proceed forward by initiating a Phase 3 Report to identify alternative bridge locations, initiate a design report, and begin environmental studies for a preferred alternative scenario.

WVDOT initiated a Phase 3 Report in 2008 and contracted with HDR Engineering, Weirton, WV. In June 2009, HDR submitted a Design Report for an Ohio River Bridge to provide a connection between WV-2 south of Wellsburg, Brooke County, WV, and OH-7 at Brilliant, Wells Township, and Jefferson County, OH. Figure 3, taken from the June 2009 report, defines the Project Study Area.

The Design Report reviewed seven conceptual crossing locations narrowing the list to three alternative crossing locations. The report then discussed advantages and disadvantages of the three alternatives including probable cost, navigation issues and environmental and geotechnical overviews for each alternative. Through a series of Public Meetings and discussions between Ohio and West Virginia DOT officials, WVDOT with ODOT concurrence selected a preferred alignment for further review. Figure 4 taken from a revised July 2011 submission by HDR, displays the preferred alignment for an Ohio River Bridge south of Wellsburg, WV.

BHJ submitted an Ohio Transportation Review Advisory Council (TRAC) Application in June 2015 requesting funding for the Ohio share of the bridge project construction. The WVDOH provided an estimate of probable cost to construct the Wellsburg Bridge at $125,445,000. The TRAC application listed the funding

Figure 3 - Project Study Area

Figure 4 - Preferred Build Alternative 8B
share split for construction as $88.6 million by WVDOH and $36.8 million by ODOT. In October 2015, the Ohio TRAC announced approval of the funding for Ohio portion of the bridge construction. ODOT will make yearly payments of $3.7 million to WVDOH over 10 years per a mutual agreement. WVDOH will be the lead agency for construction and plans to solicit design-build proposals in late spring of 2016 with award of construction work anticipated to occur in the summer of 2016. WVDOH anticipates construction will take approximately four years. WVDOH plans to fund their portion of construction over a period of four years using a combination of Federal and State funds. To date, Ohio and West Virginia have both contributed $600,000 each for the Preliminary Engineering Reports and have committed $2.0 million and $6.40 million respectively for detailed design. Ohio committed $573,000 for right of way and utilities while West Virginia committed $10.6 million for this project phase.

**OBR-3 / WVBR-03  New Ohio River Bridge from OH-43 (Washington Street) in Steubenville, OH to WV-2 in Brooke County, WV**

The third priority listed in the Edwards and Kelcey Phase 2 Report of the BHJ Regional Bridge System Study was to construct a new Ohio River Bridge to connect West Virginia Route 2 with Steubenville at Washington Street. Currently, there is no funding available for this project. However, the region considers this location for a river crossing to be crucial its economic vitality.

**WVBR-04  New Ohio River Bridge from OH-7 Jefferson/Columbiana County to WV-2 Hancock County South of Chester, WV**

In September 2002, HDR Engineering submitted to the West Virginia DOT a Traffic Impact and Toll Study Proposed Ohio River Crossing between Hancock County, WV and Columbiana/Jefferson County, OH. The study’s purpose was to determine the amount of traffic that would use a new bridge spanning the Ohio River and “touching down” near the Mountaineer Race Track and Gaming Resort, located near Chester, WV. In addition to identifying a possible location for a new bridge, the study produced a conceptual cost estimate for the bridge, traffic analyses for the bridge connections, optimum toll rate, and toll rate potential for a 20-year planning horizon.

Figure 5 shows four conceptual bridge locations developed in the report. The study results determined Alternative D as the best potential for a bridge location with a conceptual cost estimate of $66 million. The study determined an optimum toll rate of $1.00 based on 20-year traffic trends. Further, based on anticipated costs, bond and interest rates, revenue, and operating costs over the 20-year horizon, the report concluded a shortfall of approximately $29.1 million. In conclusion, tolls alone would not generate sufficient revenue to pay the $66 million needed for construction. Currently, no funding is available for this project.
OTA-10 / WVTA-07 Veterans Memorial Bridge Decorative Lighting

The proposed project is to construct decorative lighting to enhance the unique structural characteristics of the Veterans Memorial Bridge (U.S. Route 22) that travels roughly 1,964 feet over the Ohio River between Weirton, WV and Steubenville, OH. Decorative lighting will, during the evening hours, accentuate the bridge’s majestic structural aesthetics, serve as a gateway for visiting motorists, and instill civic pride in Brooke and Hancock counties in West Virginia and Jefferson County, Ohio. The Veterans Bridge Lighting Project conceptual design is to spotlight the bridge’s unique signature architecture; a single 360-foot inverted Y-shaped tower that rises from the bridge’s center pier (located approximately 668-feet from the West Virginia shore abutments) and each of the 26-paired cables that radiate from the tower connecting to the bridge decking.

The Veterans Bridge Lighting Committee had secured $600,000 to design and construct the project. Project funding was committed from a variety of sources with eight percent of the funding coming from Transportation Enhancement allocations through the West Virginia Division of Highways (WVDOH) and the BHJ Metropolitan Planning Commission with twenty percent of the funding through private donations collected by the Jefferson County Community Foundation. However, since the Bridge Lighting Committee has not successfully negotiated a Maintenance Agreement to maintain the lighting project and pay for the utility costs with the cities and counties on both sides of the river, this project has been placed into the unfunded project list.

WVH-16 Redesign of Intersection at Freedom Way and Birch Drive in Weirton, WV

With the Fort Steuben Bridge removed from the traffic network, traffic has significantly declined on Freedom Way in Weirton west of the Birch Drive intersection. In addition, recent traffic studies have revealed that the traffic signal at the intersection is unwarranted requiring that the signal be removed. Before removing the signal, the West Virginia DOH needs to reconfigure the intersection to accommodate the heavy traffic flow travelling onto Birch Drive into the Half Moon Industrial Park to the west. Figure 6 displays a possible reconfiguration. The project estimated is $527,000, which includes design and minor right-of-way.
MAJOR/NEW HIGHWAY PROJECTS

Project classified as Major/New Highway Projects include construction programs that: (1) add capacity to the highway network, (2) have extraordinary costs, (3) a relocation of an existing highway or bridge, and/or (4) a major reconstruction of a functional transportation facility. These projects may represent the preservation of the existing transportation system or reconstruction of facilities to meet federal standards. All Major/New Projects listed are unfunded unless otherwise noted.

Ohio Project Considerations

OH-36  Improvements to Lovers Lane from Sinclair Avenue Road to State Route 43 (Sunset Boulevard); Steubenville, OH

Lovers Lane has insufficient roadway capacity due to narrow width. In addition, left turn movements to various driveways and minor cross streets as well as daily mail delivery vehicles block or delay daily through traffic throughout the entire corridor. Currently, Lovers Lane from Sunset Boulevard to Fort Steuben Drive is operating at LOS E and in the future may function at LOS F.

Due to construction costs and available funds, the City of Steubenville is planning to construct this project is in four construction phases.

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<th>Phase</th>
<th>Description</th>
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<td>Fort Steuben Drive and Lovers Lane Intersection Improvement (OH-12)</td>
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<tr>
<td>Phase 2</td>
<td>Lovers Lane and SR43 (Sunset Blvd) Intersection Improvement (OH-19)</td>
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<tr>
<td>Phase 3</td>
<td>Fort Steuben Drive to SR43 (Sunset Blvd)</td>
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<tr>
<td>Phase 4</td>
<td>Sinclair Ave to Fort Steuben Drive</td>
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</table>

Consideration for improving Lovers Lane should consist of the following alternatives:

- From Sinclair Avenue to Fort Steuben Drive reconstruct the existing roadway by full-depth pavement replacement and widen to permit two 12-foot lanes. Construction will also include curbs, walkways and curb ramps, as well as increased turn radii on certain intersecting streets.
- Improve the intersection at Lovers Lane and Fort Steuben Drive by installing a roundabout as an alternative in lieu of traffic signals. The project will include full-depth pavement replacement on Lovers Lane and improve the Fort Steuben Drive approach.
- From Fort Steuben Drive to Sunset Boulevard reconstruct the existing roadway by full-depth pavement replacement and widen to permit two 12-foot lanes. Construction will also include curbs, walkways and curb ramps, as well as increased turn radii on certain intersecting streets.
- At the Sunset Boulevard intersection of Lovers Lane, construct modified lane configurations at the eastbound, northbound, and southbound approaches. This includes an increased turn radius at the westbound approach.
Figure 7 above shows an exhibit showing the roundabout alternative used at the public information meetings held by the City of Steubenville. The City of Steubenville has selected the roundabout as the preferred alternative. The project is currently in the right-of-way acquisition phase with construction scheduled in fiscal year 2018.

Figure 8 below is an exhibit from an ODOT Crash Safety Report showing recommended improvements at SR43 (Sunset Blvd) and Lovers Lane. This project is currently in the design phase with construction scheduled in fiscal year 2019.
OH-36  **Lovers Lane from Fernwood Rd to Sinclair Ave; Steubenville, OH**

This section of Lovers Lane has a roadway width of 19 feet, while left turn movements to various driveways and minor cross streets as well as the daily postal service delivering mail via truck (since there is no sidewalk for foot delivery) in the project area block or delay the through traffic. Project improvement should consist of reconstructing the existing roadway by full-depth pavement replacement; widen to permit two 12-foot lanes and also include curbs, walkways and curb ramps, as well as increased turn radii on certain intersecting streets.

OH-07  **Reconstruct Ft. Steuben Drive/Mall Drive from Lovers Lane to John Scott Highway; Steubenville, OH**

A narrow 40-foot wide, four-lane urban collector street, Ft Steuben Drive/Mall Drive directs traffic through the region’s major commercial shopping area in the west end of Steubenville, OH. More than 13,420 vehicles travel on this city street to work or shop daily. In many instances, left turning vehicles block the through lane, there are no pedestrian walkways within the entire length of Ft Steuben Drive/Mall Drive, and finally, the route is a rapidly deteriorating concrete surface.

Considerations to improve Ft Steuben Drive/Mall Drive should consist of the following alternatives:

- Widen the entire length of the study area to 48-feet wide.
- Reconstruct the entire route at its current width and delineate median turn lanes at commercial driveways for left turn movements.
- Formulate a pedestrian and traffic calming plan to increase the attractiveness of the entire commercial shopping area.

OH-08  **County Highway 34 (Two Ridge Road) from County Highway 22A (Cadiz Road) to State Route 43 (Canton Road); west of Wintersville, OH**

County Highway 34 (Two Ridge Road) is a collector highway that links two principle arterial highways, Canton Road to Cadiz Road, west of Wintersville, OH. The County Route has realized a significant increase in traffic (2,800 in 1992 to 4,910 in 1997) since the completion of the U.S.22 bypass in 1994. Built on a rolling terrain resulting in a poor alignment, the roadway has many sharp curves and restrictive line-of-sight problems at many intersections along the route. Consideration for improving Two Ridge Road should consist of the following alternatives:

- Widen the entire county route to at least 24-feet with adequate shoulder width and drainage.
- Improve the overall alignment and grade of the existing route especially the two sharp s-curves 0.80 miles north of Cadiz Road.

The preferred alternative is reconstructing the entire roadway to satisfy the above
considerations. In addition, possibly consider installing bike lanes and/or pedestrian lanes adjacent to the entire route. This last concern could be part of an overall bicycle/pedestrian plan for Jefferson County, OH.

OH-25 CR77 (Sinclair Ave) from Lincoln Ave to Lovers Lane

This project is the joint responsibility of both the Jefferson County Engineer and the City of Steubenville. Sinclair Avenue is a two-lane roadway winding its way along a watershed valley known locally as Permars Run. The roadway width is less than 24 feet wide with few shoulder recovery areas. The project would improve horizontal and vertical curves where needed, widen the pavement to full 24 feet, add paved shoulders, replace culverts where needed, replace guardrail where needed and install new traffic control signs.

OH-26 SR7 from Mingo Junction North Corp to Steubenville South Corp

The existing roadway, built in early 1960s, is “cut” into the hillside that follows along the Ohio River Valley between Steubenville and Mingo Junction. The existing rock cut face is experiencing deterioration resulting in intermittent rock falls. The project would address the rock fall conditions by cutting back the slope of the rock face and providing a rock-fall recovery area at the toe of the slope.

OH-32 SR43 Curve Improvement – Amsterdam (Project is funded and listed in current FY 2016-2019 Transportation Improvement Program)

State Route 43 through the Village of Amsterdam in Springfield Township is a two-lane roadway with narrow lanes and shoulders. The roadway carries about 2,400 vehicles per day with 18 percent trucks. A tight reverse curve south of SR164 creates a safety problem for motorists. The reverse curve is so tight that truck must encroach into the opposite lane to traverse the curves. That condition combined with limited sight distance for approaching motorists create the potential for “under run” sideswipe crashes. BHJ worked with ODOT District 11 personnel to prepare a safety study to apply for ODOT safety funding. ODOT District 11 is in the process of preparing detailed construction plans. ODOT has scheduled project construction for fiscal year 2019 with an estimated cost of $415,000.

OH-46 Lincoln Ave and Wilson Ave Intersection Improvement

The signalized intersection of Lincoln Avenue and Wilson Avenue is in the southeastern part of the City of Steubenville. There is a tight curve “jog” in the alignment for east-west traffic. This jog is the result of a large power pole on the north side of Lincoln Avenue. The proposed improvement would address the poor east-west roadway alignment by relocating the power pole at an estimated cost in excess of $100,000. The City of Steubenville is encouraged to pursue innovative ways to possibly avoid this cost and still provide an alignment for traffic that meets acceptable standards. This plan projects project construction in fiscal year 2025.
**West Virginia Project Considerations**

**WVH-01  CR 13 (Three Springs Drive) from US Route 22 to CR 507 (Cove Road); Weirton, WV**

Three Springs Drive is an urban collector street that directs traffic through a regionally significant commercial activity center in Weirton, WV. The excessive number of commercial driveways along this route severely restricts street capacity. Capacity calculations estimate that the intersections at County Route 13 and St. Thomas Drive and Potomac Avenue are operating at LOS D while the intersection at Cove Road functions at LOS F. Traffic model projections indicate vehicle miles traveled on Three Springs Drive will increase by roughly 1.2% annually over the next twenty-five years. At this rate, projected traffic volumes will be severely compromised all capacity on Three Springs Drive within the next ten years and the entire route will be operating at LOS F.

Several suggestions that should improve capacity problems on Three Springs Drive are:

- Formulate an access-management plan throughout the entire corridor to minimize the number of commercial driveways and reduce the number of left turn conflict along the entire route.
- Develop a pedestrian plan to interconnect all the commercial centers along Three Springs Drive to reduce automobile dependency within the retail district.
- In conjunction with the pedestrian plan, encourage shared parking lots among all the individual business centers by creating frontage roads parallel to Three Springs Drive.

**WVH-03  US Route 30 from 0.80 miles east of the Ohio State Line to Pennsylvania State Line; Hancock County, WV**

US Route 30 is a principle arterial highway that runs roughly 3.50 miles through the most northern end of Hancock County, WV connecting Pennsylvania to the east bridging the Ohio River to East Liverpool, OH to the west. Starting at the Jennings Randolph Bridge over the Ohio River and ending just east of Chester, WV, about 0.90 miles west of the Pennsylvania State Line.

Daily traffic on US Route 30 ranges from 7,600 vehicles at the Pennsylvania State Line to 17,000 vehicles over the Ohio River Bridge between Chester, WV and East Liverpool, OH. At present, the four-lane section of US Route operates at LOS A with very little traffic congestion. The remaining two-lane section is operating at LOS C. Twenty-five year traffic projections taken from the Travel Forecast Model show that traffic volume on US Route 30 will increase by approximately 3.0% annually. At this rate, the entire section of US Route 30 through Hancock
County may begin operating at LOS D in 12 years when traffic volumes begin to exceed the route’s capacity. By 2025, US Route most likely will operate at LOS E and begin to experience moderate to severe congestion problems.

Two factors contribute to the anticipated increase in vehicle miles on US Route 30 over the next twenty-five years. First, is the anticipated completion of US Route 30 as four-lane limited access highway in Ohio from Canton to East Liverpool, and second, the projected growth of Mountaineer Casino Racetrack and Resort in Hancock County. Mountaineer anticipates becoming a major regional attraction to patrons in Pennsylvania as well as Ohio and West Virginia.

At a minimum, the West Virginia Division of Highways should consider relocating US Route 30 on a new alignment to eliminate the winding downhill section between State Route 8 and the four-lane portion. Then, rebuild the route as two-lane facility starting at the Pennsylvania State Line and ending at 0.25 miles east of Chester, WV where the four-lane highway begins, on an alignment that for future expansion to a four-lane limited access highway when needed.

**WVH-05  Relocate State Route 2 from New Cumberland South Corporate Limits to Chestnut Street; New Cumberland, WV**

Beginning at the south corporate limits of New Cumberland, State Route 2 (Ridge Avenue) is a confining two-lane street with a surface width that varies between 19 and 22 feet. Moving further north, the alignment from Clay Street to Jefferson Street, a section of State Route 2 known locally as “Station Hill,” State Route 2 begins to descend, down a steep grade. The road then bends sharply ninety-degrees (90°) to the west near the bottom of the hill. An at-grade crossing of the N&S Railway at Madison Street follows this quickly. Finally, State Route 2 continues back to the north with another close ninety-degree (90°) turn right at the intersection of Madison Street and North Chester Street. Large trucks with a length of 50 feet or more often block the two cramped intersections and the rail crossing at the bottom of the hill causing traffic delays and thereby creating a dangerous situation.

West Virginia Department of Highways recently prepared alternative exhibits for a public information meeting that held May 29, 2014. The Department presented five alternatives plus the no-build. Because of that public meeting, Alternative 5, as shown in Figure 8, has gained momentum with Village government officials as well as local businesses. That alternative re-aligns SR2 to the west beginning near the southern end of the Village and connects with existing SR2 at the intersection where SR2 currently approaches from the east. The estimated cost of Alternative 5 is over $10 million.
WVH-06/15 Relocate State Route 2 (Main Street) from County Route 7 (Bruin Drive) to County Route 8 (Archer Heights Road); Follansbee, WV

Main Street in Follansbee is the most congested highway in the BHJ Region. Traffic congestion occurs in Follansbee for a variety of reasons as previously discussed in Section 7 pages 7-8 through 7-10. The Regional Travel Patterns document listed five intersections in Follansbee on State Route 2 as high accident locations in Brooke and Hancock counties. These intersections are at the Brooke Shopping Plaza, Mark Avenue, Allegheny Street, Raymond Street, and State Street. Several solutions for future discussion to relieve traffic woes on State Route 2 in Follansbee are as follows:

- The most expensive solution would be a complete 4-lane limited-access bypass around Follansbee. The proposed route includes three interchanges, two at each terminus and one at Alternate State Route 27 (Allegheny Street).
- Continue construction of a 4-lane road with at-grade intersections on the existing alignment of State Route 2 through Follansbee.
- Eliminate on-street parking on State Route 2 through Follansbee and construct new off-street parking facilities. This would create surface width to delineate Main Street with a median lane for left turn movements. The project would also include an access- management and pedestrian plan to reduce the number of commercial driveways on Main Street and re-evaluate the traffic control patterns.
WVH-07  State Route 2 (Commerce Street) from State Route 67 (Bethany Pike) to 12th Street; Wellsburg, WV

This 0.80-mile segment of State Route 2 has a surface width of 30 feet for about 0.50 miles from 12th Street to 2nd Street that then widens to 44 feet near the intersection at State Route 67. The beginning of the 30-foot wide section of Commerce Street at the 12th Street intersection and ending just south of State Route 27 (Washington Pike) is three 10-foot lanes, allowing for a center left turn lane from southbound State Route 2 to eastbound State Route 27. The highway width is functionally obsolete creating unsafe and cramped traffic conditions that have led to numerous traffic crashes at or near this intersection. Continuing just south from the Washington Pike intersection, on-street parking is permitted on the northbound side of State Route 2 and the southbound side is lined by several commercial driveways segment south, further compromising capacity on Commerce Street in the south end of Wellsburg.

The prime solution to correct traffic problems in the south end of Wellsburg is, at a minimum; widen Commerce Street from 12th Street to Bethany Pike to 40 feet with 3-lanes and adequate space for pedestrian traffic and proper drainage. Another consideration is purchase adequate right-of-way to expand this section of highway to at least 60 feet wide for 5-lanes of highway and eliminate on-street parking as warranted by increases in future traffic volumes.

WVH-08/09  State Route 2 from Ohio County Line to State Route 67; Brooke County, WV

This project is a continuation of current expansion of State Route 2 in Ohio County and south Brooke County. Constructing this segment of State Route 2 to a 4-lane highway from Ohio County Line to Wellsburg would be the natural progression of expanding the state highway. The project’s intent is to eliminate several dangerous rock fall and mudslide areas near Beech Bottom, by stabilizing the hillside on the east perimeter of the road. Furthermore, improvements to widen the existing route can provide better and direct access to Wheeling, WV, and expand industrial opportunities in south Brooke County along the Ohio River.

WVH-10  Improvements to State Route 105 (Pennsylvania Avenue) from State Route 2 (Main Street) to Pennsylvania State Line; Weirton, WV

Projects to improve Pennsylvania Avenue are in several stages of development. Overall, WVDOT has developed this project in several phases, divided into three stages of construction beginning with: (1) Cove Road to the Pennsylvania State Line, (2) Cove Road to 12th Street, and (3) 12th Street to Main Street. Each construction phase should improve drainage, traffic flow, and pedestrian safety. The first two projects include the addition of a center lane for left turn movements, while the third project eliminates a dangerous sharp curve 0.15 miles east of Weir Avenue.
WVH-14  SR2 (Commerce St) and SR27 (Washington Pk) Intersection Improvement; Wellsburg, WV

The intersection at SR2 (Commerce St) and SR27 (Washington Pk) has very tight geometry making it very difficult for trucks to make turns. Traffic count data shows approximately 19,000 vehicles use this intersection daily with approximately 5 percent trucks. This truck traffic increases when fracking operations are occurring in the area due to the high number of trucks hauling water. The project will widen the turning radii on all corners and add left turn lanes of adequate length on all approaches. A very preliminary cost estimate has been developed showing construction to be approximately $3 million for construction. This plan lists this important project in the unfunded table at this time. WVDOH is pursuing alternative funding sources.

WVH-17  CR7 (Cross Creek Rd) and CR7/1 (Rockdale Rd) Intersection Improvement; Brooke Co, WV

This proposed project will address the very poor geometry at the intersection of CR7 (Cross Creek Rd) and CR7/1 (Rockdale Rd). The geometry issues include both vertical and horizontal problems as well as very tight turning radii. A preliminary cost estimate is $2.7 million for right of way and construction. This plan shows this project is in the unfunded table.

HIGHWAY SYSTEM PRESERVATION PROJECTS

Construction programs classified as Highway System Preservation Projects preserve and maintain the current operation and safety standards of an existing transportation facility. These types of projects do not add capacity to the existing transportation network, are usually low-cost, and initiated on highway facilities that currently meet federal standards for highway construction. All Highway System Preservation Projects listed are funded unless otherwise noted.

Ohio Project Considerations

In Ohio, village, city, township, county and state government have certain responsibilities for maintenance of their respective highway facilities as delineate by the Ohio Revised Code. To begin, the Ohio Department of Transportation (ODOT) maintains all Interstate, United States, and State Routes that are included in the National Highway System (NHS). The Ohio DOT also maintains all State and US Routes outside incorporated areas designated as a City, a populated area greater than 5,000. On the other hand, maintenance of all State and United States Routes that are not designated NHS Routes within an incorporated city is the responsibility each respective city government. Further, the maintenance of all designated federal-aid highways that have an Administrative Classification of a County, Township, City or Village Route, is the responsibility of each respective level of government. This plan will attempt to identify Highway System Preservation Projects each responsible governmental unit in Jefferson County, Ohio
expects to complete on the federal-aid system.

**OH-9    Resurface County Highway 22A (Cadiz Road/Old US 22) west of Wintersville, OH**

This project is the responsibility of the Jefferson County Highway Engineer. The project area is an east/west principle arterial highway that was formerly designated US Route 22. Approximately 1.85 miles in length, the proposed project limit begins at the Reeds Mill Interchange of US Route 22 (STA-5.08) and ends at Springdale Avenue (STA-3.23) at the Wintersville, OH west corporate limits. This project includes milling and replacing flexible asphalt. The project is currently under contract with completion in the spring of 2016. Future work on this roadway segment should include renovation of the traffic signal at Springdale Avenue. Another consideration to include in a future project is a redesign of the Cadiz Road and Two Ridge Road (CR-34) intersection to provide an inside left turn option to address safety concerns.

**OH-10    Resurface South Commercial Avenue; Mingo Jct., OH**

This project is the responsibility of the Village of Mingo Junction. The project area is a north/south minor arterial street that runs parallel to State Route 7 in the south corporate limits of Mingo Jct. Approximately 1.60 miles in length, the proposed project begins at the Village’s south corporate limits and ends at the bridge over Cross Creek. This project includes milling and replacing flexible asphalt, replacement of curb, sidewalk and catch basins where needed as well as pavement markings and traffic control devices.

**OH-29    Old SR7 from Belmont Co Line to SR150A; Rayland, Tiltonsville and Yorkville**

This project is the responsibility of the Jefferson County Engineer and the Villages shown above. The project area is a north/south collector street that serves as the main north/south local access corridor for the areas of Rayland, Tiltonsville, and Yorkville. The project includes milling and replacing asphalt concrete, replacement of curb where needed, replacement of sidewalk where needed, pavement markings and replacement of traffic control signs.

**OH-31    Franklin Ave from Franklin Ave Extension to Trenton St; Toronto, OH**

This project is the responsibility of the City of Toronto. The project area is a north/south minor arterial street that serves as the main north/south local access corridor for the City. The project includes milling and replacing asphalt concrete, replacement of curb where needed, replacement of sidewalk where needed, pavement markings and replacement of traffic control signs.

**Additional Ohio System Preservation Projects**

The following are Basic System Preservation Projects that would involve milling the existing
asphalt-wearing surface and replacing the wearing surface with fresh asphalt concrete. Projects would also include installation of new pavement markings. These Federal Aid System projects need resurfaced every 20 to 25 years to preserve the highway system. See the project list tables for the planned year for each project.

**OH-01** SR43 (Washington St) from SR7 to 5th St; Steubenville, OH  
**OH-04** SR43 (Sunset Blvd) from Belleview Blvd to Brady Circle West; Steubenville, OH  
**OH-06** SR43 (Frank Layman Blvd) from Wintersville E Corp to Canton Rd; Wintersville, OH  
**OH-11** Franklin St Extension from Toronto W Corp to Franklin Ave; Toronto, OH  
**OH-13** Lovers Ln Connector from SR43 (Sunset Blvd to CR43; Steubenville, OH  
**OH-14** CR22A (Frank Layman Blvd) from Wintersville W Corp to SR43 (Canton Rd); Wintersville, OH  
**OH-15** SR43 (Sunset Blvd) from Brady Circle West to Steubenville W Corp; Steubenville, OH  
**OH-16** SR7 (Dean Martin Blvd) from Steubenville S Corp to Steubenville N Corp; Steubenville, OH  
**OH-27** John Scott Hwy from SR43 (Sunset Blvd) to Steubenville N Corp; Steubenville, OH  
**OH-28** Alexander Ave from SR7 to 4th St; Toronto, OH  
**OH-33** Fernwood Rd from CR33 (Airport Rd) to SR43 (Frank Layman Blvd); Wintersville, OH  
**OH-35** Commercial Ave from Mingo Jct S Corp to Cross Creek Bridge; Mingo Jct, OH

**West Virginia Project Considerations**

In West Virginia, the West Virginia Department of Transportation is responsible for the maintenance of all highways that have an Administrative Classification of Interstate, United States, State, or County Route. Therefore, this plan does not identify Highway System Preservation projects for Brooke County and Hancock County, West Virginia.

**CONGESTION MANAGEMENT / SAFETY PROJECTS**

Planned Hazard Elimination projects resolve safety problems at roadway hazardous locations and sections, and other transportation elements that present a danger to motorists, pedestrians, or bicyclists. These projects decrease traffic crashes thereby reducing deaths, injuries, and property damage. *All Congestion Management / Safety Projects listed are funded unless otherwise noted*
Ohio Project Considerations

**OH-20   SR7 Traffic Signal Renovations; Steubenville, OH**

This project is the responsibility of the City of Steubenville. The traffic signals along state Route 7 currently operate in a closed loop coordinated system, which the city and ODOT installed in the year 2000.

**OH-21 CBD Traffic Signal System; Steubenville, OH**

This project is the responsibility of the City of Steubenville. The traffic signals within the Steubenville central business district operate coordinated using a single timing plan and outdated interconnection cabling. Renovated over 30 years ago, the traffic signals are in need of replacement. A project to renovate the traffic signal installations, replace the interconnect cabling with fiber optic cable, install a closed loop master control system with limited traffic detection is proposed.

**OH-22 CBD Traffic Signal Renovations; Toronto, OH**

This project is the responsibility of the City of Toronto. The traffic signals within the Toronto central business district operate uncoordinated using a single timing plan and outdated equipment. The City of Toronto has not renovated the majority of these traffic signals since their original installation estimated to be over 50 years ago when SR7 traffic routed through the Toronto CBD. The first phase of this project would be to evaluate the necessity of the each traffic signal. The project would dispose of all signals found to be unnecessary signals and the remaining traffic signals renovated to current standards including control equipment, vehicle, and pedestrian signals. If the study finds it to be appropriate, the project would connect the remaining traffic signals into a closed loop system to provide orderly traffic flow.

**OH-23 SR43 (Sunset Blvd) Traffic Signal Renovations; Steubenville, OH**

This project is the responsibility of the City of Steubenville. The traffic signals along State Route 43 currently operate in a closed loop coordinated system, which the city and ODOT installed in the year 2000 and updated to use video camera detection in 2010.

**OH-24 Mall Area Traffic Signal Renovations; Steubenville, OH**

This project is the responsibility of the City of Steubenville. The traffic signals in the Fort Steuben Mall area currently operate in a closed loop coordinated system, which the city and ODOT installed in the year 2000 and updated to use video camera detection in 2014.
OH-39  SR43 (Frank Layman Blvd) Traffic Signal Renovations; Wintersville, OH

This project is the responsibility of the Village of Wintersville. The traffic signals along State Route 43 currently operate in a closed loop coordinated system, which the village and ODOT installed in the year 2010.

OH-44  SR7 and SR213 Traffic Signal Renovations and Improvements; ODOT

This project is the responsibility of the Ohio Department of Transportation. The department installed two traffic signals at this location with the constriction of the US22 bypass in the early 1990’s. Traffic volumes using these closely spaced intersections have increased causing excess congestion. New traffic signal installations are proposed using one controller to operate both intersections. Vehicle detection will be accomplished using state of the art microwave systems. The project also constructs a left turn lane on the eastbound approach to SR213.

OH-48  SR43 from US22 to SR646 Traffic Signal Renovations; Wintersville, OH

This project is the responsibility of the Village of Wintersville. The traffic signals along State Route 43 currently operate coordinated in a closed loop system with loop vehicle detection that ODOT installed in the year 2008. Renovations include updating the vehicle detection using either video or microwave systems.

West Virginia Project Considerations

WVH-21  Follansbee Traffic Signal System Renovations; Follansbee, WV

This project is the responsibility of West Virginia Department of Highways. The traffic signals along State Route 2 in Follansbee, installed over fifteen years ago, currently operate in a “closed loop” coordinated system.

WVH-22  Wellsburg Traffic Signal System Renovations; Wellsburg, WV

This project is the responsibility of West Virginia Department of Highways. The traffic signals along State Route 2 in Wellsburg, installed over fifteen years ago, currently operate in a “closed loop” coordinated system.

WVH-38  Chester Traffic Signal System Renovations; Chester, WV

The traffic signals through Chester on State Route 2 currently do not operate as a system. WVDOT should consider replacing the existing signals with a new coordinated “closed loop” type traffic signal system.
BRIDGE PRESERVATION PROJECTS

Identified bridge projects provide funding to replace or rehabilitate deficient highway bridges located on any public road in the BHJ Region. Through an intensive inspection and management programs, each respective state highway agency, ODOT and WVDOT, identify such projects. In Ohio, the County Engineers Association administers a local bridge program for structures that are not on the Interstate, United States, or State Route Federal-Aid System. The Ohio Department of Transportation is responsible for the maintenance and rehabilitation for all other bridge structures in Ohio. On the other hand, the West Virginia Department of Transportation assumes responsibility for all bridge structures in West Virginia. This plan attempts to identify a limited number of bridge projects that are essential to the integrity of the region’s highway network. All Bridge Preservation Projects listed are funded unless otherwise noted

Ohio Project Considerations

OBR-06 Lawson Ave Bridge over SR43 (Washington St); Steubenville, OH (Project is listed in current FY 2016-2019 Transportation Improvement Program)

This project within the City of Steubenville involves replacement of the bridge deck and total replacement of approach pavement. Constructed in the early 1970’s the composite girder/concrete deck bridge is showing signs of concrete deck deterioration due mainly to snow and ice control chemicals. Project is currently in the design phase with construction anticipated to begin in fiscal year 2017.

OBR-08 Titanium Way Bridge; Toronto, OH (Project is listed in current FY 2016-2019 Transportation Improvement Program)

This project involves the replacement of the Titanium Way Bridge over Jeddo Run Road and Jeddo Run adjacent to the intersection at Franklin Street Extension. The single span bridge is 40 feet long and is 32.0 feet wide. The current sufficiency rating is 40.1 and is structurally deficient. Erected in 1920 and rehabilitated in 1941 this bridge is a vital link in the area economy serving as the only access to Timet Corporation, a top ranked manufacturer of titanium metal.

The proposed replacement structure will likely consist of a single span precast concrete box beam super structure on cast-in-place reinforced concrete abutments. The new span will have an approximate length of 80 to 100 feet with a width of 32 feet with a concrete bridge railing constructed on both sides.

The project is the responsibility of the City of Toronto and is currently under contact for construction with a projected completion date of October 2016.
OBR-09  Trenton Ave Bridge; Toronto, OH

The project is the responsibility of the City of Toronto. This is a Bridge System Preservation project programmed to address normal repair and rehabilitation concerns. Constructed in the mid 1990’s with a projected lifetime of 50 years, this bridge will be in service for over 35 years during the life of this plan.

OBR-11  Bridge Replacement: CR74 over Cross Creek, Cross Creek Twp, Jefferson County Engineer

(Project is listed in current FY 2016-2019 Transportation Improvement Program)

The replacement of this bridge is the responsibility of the Jefferson County Engineer. Through inspection, the engineer found the existing truss bridge to be structurally deficient and immediately closed to traffic. To maintain traffic, the county installed a temporary “Bailey” type bridge. Design work is proceeding with environmental and right-of-way acquisition. The anticipated construction date is third quarter of fiscal year 2017.

OBR-12  Bridge Replacement: CR75A over Yellow Creek, Springfield Twp, Jefferson County Engineer

The replacement of this bridge is the responsibility of the Jefferson County Engineer. Design work is proceeding with environmental and right-of-way acquisition. The engineer anticipates construction to occur in fiscal year 2017.

OBR-13  Bridge Replacement: CR1 over Little Short Creek, Warren Twp, Jefferson County Engineer

The replacement of this bridge is the responsibility of the Jefferson County Engineer. The county has bid the project and construction is proceeding.

OBR-17  Bridge Replacement: CR53 over Brush Creek, Ross Twp, Jefferson County Engineer

The replacement of this bridge is the responsibility of the Jefferson County Engineer. Design work is proceeding with environmental and right-of-way acquisition. Anticipated construction date is in fiscal year 2017.

West Virginia Project Considerations

In West Virginia, the West Virginia Department of Transportation is responsible for the maintenance of all bridges that have an Administrative Classification of Interstate, United States, State, or County Route. Therefore, this plan does not identify Bridge System Preservation projects for Brooke County and Hancock County, West Virginia.
REGIONAL RIDESHARE OPPORTUNITIES

CommutInfo is a coordinated partnership of transportation management agencies and providers, as well as businesses and non-profit service organizations throughout Southwestern Pennsylvania and the Weirton-Steubenville, WV-OH Metropolitan Area, specifically the BHJMPO. The partnership provides commuter information and services for persons who desire commuter travel alternatives to driving alone to their jobs and/or school primarily into Southwestern Pennsylvania. With the growing number of single occupancy commuters starting in the Weirton-Steubenville, OH-WV Metropolitan Area and ending in Southwest, PA, the BHJMPO desires to continue its Vanpool/Rideshare Program in partnership with CommutInfo. Existing Park and Ride Facilities in the BHJ area are inadequate to handle increased interest in shared options. Therefore, BHJ is reviewing suitable locations in Jefferson and Brooke counties to site new Park and Ride locations to expand ridesharing opportunities. To date four locations are under review: Toronto, OH at the SR 7 and Franklin Street Interchange, north of Steubenville, OH adjacent to an existing Park and Ride lot at SR 7 & 213, and two in Weirton, WV the US 22 and Harmon Creek Interchange and the US 22 and Colliers Way Interchange.

ORS-04 Park and Ride: SR7 and SR150; Rayland, OH

Figure 9 is a conceptual plan to build a park and ride facility at SR-7 & SR-150 in southern Jefferson County near Rayland, OH. The plan creates 42 regular parking spaces and 2 handicap accessible parking spaces. There is a need for a park and ride in this area as evidenced by vehicles parked along the roadways and in local business parking lots. BHJ personnel working with ODOT District 11 personnel have the developed the project and is currently programmed for construction in fiscal year 2020.

Figure 10 – Concept Plan of Constructed Park-N-Ride Facility at SR 7 & SR150 in Jefferson County
REGIONAL BIKE & PEDESTRIAN DEVELOPMENT

Ohio Project Considerations

OB-02 Ohio River Front Trail

The City of Steubenville has proposed the development of a bicycle / pedestrian trail along the Ohio River.

OB-03 Converted Rail Trail from Jefferson/Harrison County Line to Dillonvale

If the owner of the railroad corridor between the Jefferson/Harrison County Line to Dillonvale ever proposes to abandon the rail line, it should be rail banked and converted for use as a rail/trail. This rail trail is a potential connection link between the Ohio & Erie Canal Bikeway in Cleveland, Ohio and the Brooke Pioneer Trail in West Virginia crossing the Ohio River at the new Wellsburg Bridge.

OB-04 Converted Rail Trail from Dillonvale to Rayland

An extension of OB-03, this project proposes to rail bank the existing rail corridor between Dillonvale and Rayland if the active rail line is abandoned. This rail trail is a potential connection link between the Ohio & Erie Canal Bikeway in Cleveland, Ohio and the Brooke Pioneer Trail in West Virginia crossing the Ohio River at the new Wellsburg Bridge.

OB-05 Converted Rail Trail and On-Road Trail from Yorkville to Toronto

If the owner of the existing railroad between Yorkville and Toronto ever abandons this rail line, the corridor should be rail banked and converted to a rail/trail. The trail would use existing roadways where rail lines are still active. This rail trail would provide north-south connection links to US Bike Route 50 in Steubenville as well as the Brooke Pioneer Trail and the Panhandle Trail in West Virginia.

West Virginia Project Considerations

WVTA-01 Panhandle Trail; Weirton, WV

The Panhandle Trail in Weirton, WV is a 4-mile rail trail running under U.S. 22 Harmon Creek Exit to the Pennsylvania State line near Colliers WV. This rail trail will link Weirton WV to the National Network of trails. The Panhandle rail Trail is a planned 29-mile pathway linking two states, three counties, and 14 municipalities. The trail connects with the Montour Trail in McDonald, PA and brings the Panhandle into a network of trails that lead to Washington, D.C. that includes the Great Allegheny Passage.
**WVTA-02**    **Brooke Pioneer Trail; Brooke County, WV**

The Brooke County Trail Committee has been actively working to expand and enhance a four-mile stretch of abandoned rail trails running which will extend from the city of Wellsburg (eventually encompassing residential areas of Short Creek, Beech Bottom, Wellsburg, Follansbee, and Colliers) to the Ohio County line. Trail advocates anticipate an extension of the Wheeling Heritage Trail and a connection with the Brooke Pioneer Trail at the Ohio County line.

BHJ and advocacy groups have considered developing an interconnected network of trails throughout Brooke County. However, due to the topography and the limited right of way available, this truly interconnected network may be difficult to develop, but planners have identified individual trail facilities. For example, the Town of Bethany and Bethany College have been working to develop their own series of trails. They have actually implemented several projects. The City of Wellsburg has considering developing a trail network tied into the historic section of town.

**WVTA-03**    **Wellsburg Yankee Trail; Wellsburg, WV**

Wellsburg has expressed an interest in developing a bicycle/pedestrian trail extending from the south end to the north end of the city. A trail of this nature would enhance the festivals currently held each year and would provide recreation for the city’s residents.

**WVTA-05**    **Ohio River Trail from Weirton to Tomlinson Run; Hancock County, WV**

This proposal uses the existing railroad corridor between Weirton and Tomlinson Run should the operator ever abandon parts of the active rail line. The trail would use existing roadways where rail lines are still active. This rail trail would provide north-south connection links to US Bike Route 50 in Weirton and points north along the West Virginia side of the Ohio River.

**WVTA-06**    **Converted Rail Trail from Follansbee to Weirton; Brooke County, WV**

If the operators of the existing railroad between Follansbee and Weirton ever abandon portions of the active rail line, the corridor should be rail banked and converted to a rail to trail. The trail would use existing roadways where rail lines may continue to be active. This rail trail would provide north-south connection link to US Bike Route 50 in Weirton and points south along the West Virginia side of the Ohio River.

**WVTA-09**    **Beech Bottom Sidewalk Improvements, Beech Bottom, WV**

This is a project to improve sidewalks along SR2 in Beech Bottom to address ADA accessibility and connectivity.

**WVTA-10**    **Charles St Streetscape; Wellsburg, WV**
This is a project to improve sidewalks along Charles Street in Wellsburg to address ADA accessibility, connectivity and to enhance the historic aspects of Wellsburg.

**WVTA-12  Tomlinson Run State Park to Chester, WV Trails; Hancock County, WV**

Tomlinson Run Park is a State owned and maintained park facility. Currently there is a network of trails covering the entire park. As more people within the area become active in biking and recreational hiking/pedestrian activities, park operators anticipated expanding the existing trail facilities.

Another consideration is developing trails connecting the Cities of Chester and New Cumberland to Tomlinson Run State Park. However, due to the topography and the limited right of way available this trail facility would be difficult to construct.

**REGIONAL PUBLIC TRANSPORTATION DEVELOPMENT**

Public transportation within the BHJ region has been an important form of transportation for many years. It provides a source of mobility for many individuals, particularly the elderly and disabled community, which would otherwise not have access to dependable transportation. As such, it is an integral part of the entire transportation system and must be maintained and modified to meet the changing demands of the region’s public transportation dependent residents.

**Ohio**

**OT-01/02/03  Steel Valley Regional Transit Authority (SVRTA)**

Funding is shown for annual operating, maintenance, capital (vehicle replacements), and planning.

**West Virginia**

**WVT-01/02/03  Weirton Transit Corporation (WTC)**

Funding is shown for annual operating, maintenance, capital (vehicle replacements), and planning.

**CONCLUSIONS**

Although each project proposed is important and necessary to enhance, maintain, and expand the existing transportation system, the planning and construction of the entire program is costly. Construction costs are continually rising and revenue sources are difficult to predict.
These facts make it difficult to fund and program high-cost projects. Even though federal, state, and local governments can reasonably fund many low-cost projects, virtually every project requires a significant level of state and/or federal government participation and cooperation.

As part of the federal requirements of this transportation plan, it is first necessary to evaluate funding sources and forecast potential revenue sources to determine each project’s feasibility. A separate financial forecast document summarizes project cost estimates by the year of expenditure and the distribution of anticipated federal, state, and local government funds. The next step is developing a staged “fiscally constraint” long-range transportation improvement program for the lifetime of this plan based on a sound financial plan demonstrating how each project is reasonably funded. Then, each “fiscally constraint” project must demonstrate that it will not adversely affect the environment by exceeding the ambient air quality standards set forth by the United State Environmental Protection Agency (USEPA).