

# **BHJ Freight Study**

*Issues, Opportunities, Recommendations and Strategies*

## **technical memorandum**

*prepared for*

**Brooke-Hancock-Jefferson Metropolitan Planning Commission**

*prepared by*

**Cambridge Systematics, Inc.**



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## *Issues, Opportunities, Recommendations and Strategies*

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*prepared for*

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The Metropolitan Planning Organization for  
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# 1.0 Introduction

The purpose of the BHJ Freight Study is to provide guidance to the stakeholders of the greater Steubenville-Weirton area to help them understand the nature and critical value of goods traveling to, from, and through the region. This study will help the region proactively plan for future growth, while at the same time, take advantage of the freight infrastructure that is currently in place to identify economic development opportunities.

The previous Technical Memorandum, *Inventory and Profile*, documents the initial tasks in the study that include an inventory and profile of the region's current and future freight system, in addition to a variety of stakeholder involvement activities. The second phase of the Freight Study, which is documented within this Technical Memorandum, builds on the inventory and profile data and stakeholder input to identify the region's freight related issues and opportunities. These issues and opportunities are identified for each mode of transportation (highway, rail, water and air), as well as for land use and policy. Taking the issues and opportunities one-step further, the final task of the study develops an implementation plan by identifying and evaluating a variety of recommended capital improvements and strategic policies for enhancing the freight system in order to achieve the region's economic benefit goals while minimizing impacts and related costs.

This technical memorandum is the final in a series of documents to address BHJ's freight related goals and objectives. Below is a brief description of each section included in this document corresponding to the tasks performed in the final phase of this study:

- **Section 2 - Goods Movement Issues and Opportunities** addresses the region's current freight assets and articulates how they can be used to shape the future of the region's freight system; and
- **Section 3 - Recommendations** describes and prioritizes a variety of potential infrastructure and policy enhancements to help the region move toward achieving its freight related goals.



## 2.0 Goods Movement Issues and Opportunities

Based on evaluation of freight assets and economic conditions of the greater Steubenville-Weirton area summarized in the previous Technical Memorandum, *Inventory and Profile*, goods movement issues and opportunities were identified. Section 2.0 of this report describes these issues and opportunities, and in doing so, assesses how existing infrastructure and other assets can serve as a catalyst for future development. The following subcategories are included in this assessment of issues and opportunities:

- Section 2.1 - Infrastructure Issues and Opportunities
- Section 2.2 - Land Use Issues and Opportunities
- Section 2.3 - Policy Issues and Opportunities

Table 2.1, below, provides an index of these issues and opportunities by subcategory.

**Table 2.1 Index of Issues and Opportunities**

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## 2.1 INFRASTRUCTURE ISSUES AND OPPORTUNITIES

### Highway Infrastructure

#### #1 – Roadway Condition

Based on information obtained during the course of this study, and as summarized in Tables 2.2 through 2.4, the roadway and bridge infrastructure on major routes in the greater Steubenville-Weirton area is in above-average condition. Specifically, Table 2.2 shows bridge condition ratings for the deck, superstructure, and substructure of the Ohio River highway bridges in the BHJ region. While there are five Ohio River highway crossings shown in the table, the Ohio Department of Transportation (ODOT) has closed the Fort Steuben Bridge (OH SR 822) to traffic and has slated the bridge for demolition starting in November 2011. The Market Street Bridge (WV SR 2 Spur) is currently undergoing a major renovation meant to extend the bridge's lifetime for another ten years. The other three bridges in the study area are in generally good condition. The Veteran's Memorial Bridge on U.S. 22 has a deck rating of "Satisfactory", a superstructure rating of "Fair", and substructure rating of "Good". The Newell Toll Bridge and the U.S. 30 Bridge have similar ratings.

**Table 2.2 Ohio River Bridge Condition Ratings**

Ohio River Bridges (Autos and Trucks)	2010 NBI Condition Ratings		
	Deck	Superstructure	Substructure
U.S. 30	6	7	7
Newell Toll Bridge	5	6	7
Fort Steuben Bridge	2	4	5
U.S. 22 (Veteran's Memorial Bridge)	6	5	7
OH SR 822 (Market St., east side)	7	3	3
OH SR 822 (Market St., west side)	5	3	4

Source: National Bridge Inventory.

Notes: The Fort Steuben Bridge is currently scheduled for demolition. The Market Street Bridge is currently undergoing a major renovation. Ratings range from 0 ("Failed") through 5 ("Fair") to 9 ("Excellent").

Table 2.3 shows the bridge condition ratings for all of the bridges in the study area, by County. On average, all the bridges range from "Satisfactory" to "Good" in their ratings. Bridge conditions in the 3-county region are largely similar throughout the area.

**Table 2.3 Bridge Condition Ratings by County**

All Bridges (Average rating by county)	2010 NBI Condition Ratings		
	Deck	Superstructure	Substructure
Jefferson	5.93	6.16	6.18
Brooke	6.98	6.87	6.72
Hancock	6.57	6.46	6.58

Source: National Bridge Inventory.

Notes: Condition is average of all bridge data points in each county. Bridge condition ratings are on the same scale as in Table 2.2

Pavement condition of the region's major highways is also generally good, as shown in Table 2.4. This table depicts pavement Present Serviceability Index (PSI - rating of a pavement road roughness, profile, and cracking) for U.S. and state routes in the 3-county region. The 5-point scale PSI considers pavement condition scores between 2.01 and 3.0 as "Fair," while ratings above 3.0 are considered "Good" or "Very Good."

Two roadways stand out in this table. The first is U.S. 30; nearly 20 percent of this roadway has a PSI rating in the "Poor" category below 2.0. This route, which cuts through the northeastern corner of the BHJ region, has a low-rated segment about 0.65 miles long. The other roadway of concern is WV SR 67 located in the southern portion of the region. The PSI ranking lists 10 percent of this roadway as "Poor". Similar to U.S. 30, this is a short roadway, and the

poorly rated segment is slightly less than a mile long. All other U.S. and state routes in the region appear to have few problems with pavement condition.

**Table 2.4 Pavement Condition**

Route	% Miles by PSI Category		
	1.02-2	2.01-3	3.01+
<b>U.S. Routes</b>			
22 (WV segment)	1%	55%	44%
22 (OH segment)	0%	28%	72%
30	18%	27%	55%
250	0%	0%	100%
<b>U.S. Route total</b>	<b>2%</b>	<b>34%</b>	<b>60%</b>
<b>WV Routes</b>			
2	1%	28%	71%
8	<i>Data not available</i>		
27	4%	33%	63%
67	10%	51%	39%
88	5%	54%	41%
105	0%	0%	100%
<b>WV Route total</b>	<b>4%</b>	<b>37%</b>	<b>58%</b>
<b>OH Routes</b>			
7	0%	18%	82%
43	0%	18%	82%
150	0%	4%	96%
151	0%	1%	99%
152	0%	4%	96%
164	0%	7%	93%
213	0%	1%	99%
524	0%	0%	100%
626	0%	2%	98%
647	0%	0%	100%
822	0%	21%	79%
<b>OH Route total</b>	<b>0%</b>	<b>8%</b>	<b>92%</b>
<b>Grand Total</b>	<b>1%</b>	<b>16%</b>	<b>70%</b>

Source: Ohio DOT, WV DOH

Notes: PSI = Present Serviceability Index. Score of 3+ is Good/Very Good, 2-3 is Fair, below 2 is Poor.



Maintaining the condition of the roadway and bridge network in the greater Steubenville-Weirton area is necessary to ensure high-quality freight mobility in the region. The region must be cognizant of its vulnerability due to the heavy reliance placed on bridge infrastructure for cross-state connectivity. However, because of the good condition of the majority of existing assets, the region has an opportunity to tout the high-quality roadway and bridge network when marketing to attract freight-related businesses.

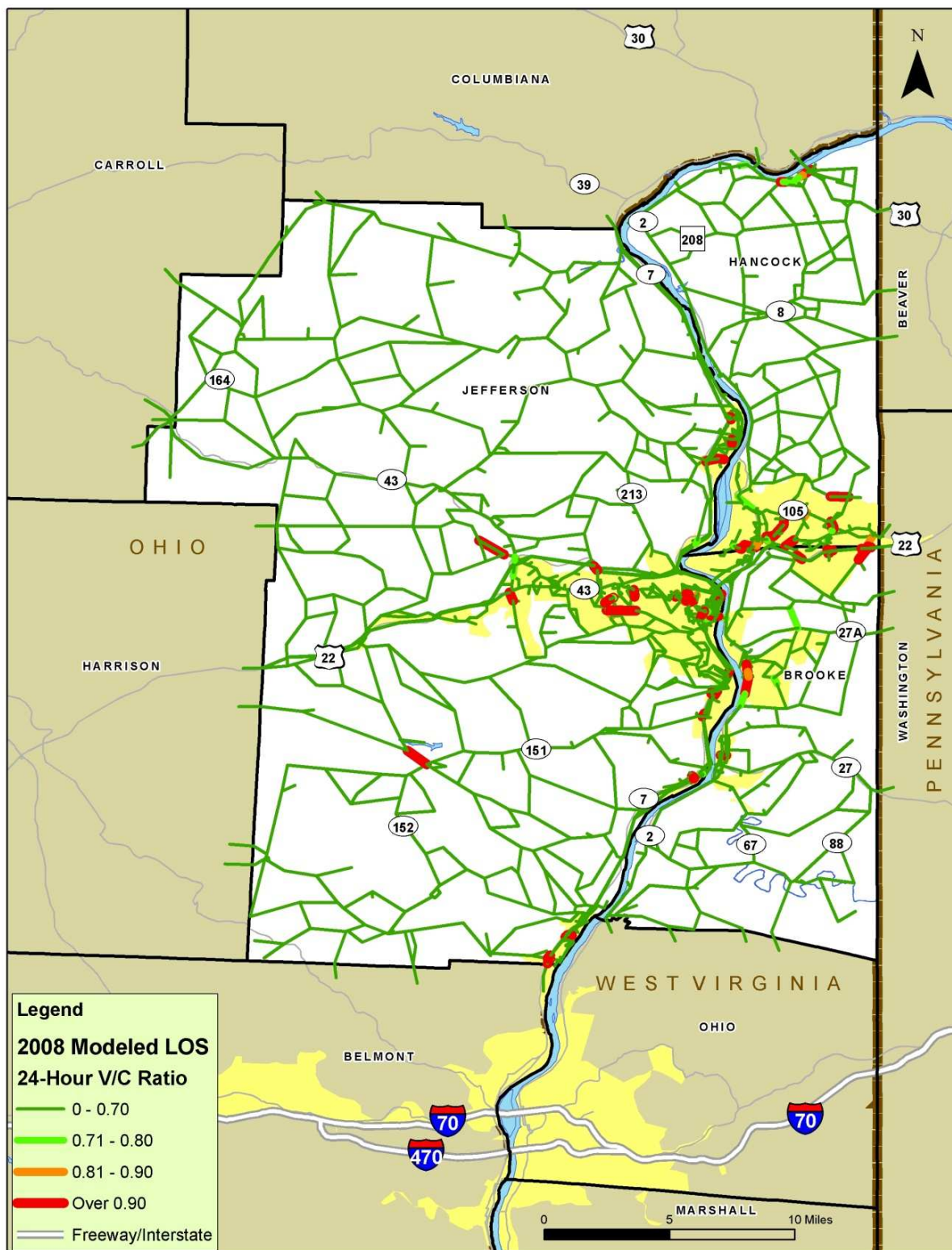
## *#2 – Roadway Capacity*

As shown in Figure 2.1 and 2.2, the BHI Travel Demand Model indicates that roadway congestion should change little between now and 2030, primarily because future year traffic forecasts hinge on future population and employment trends, both of which are expected to decrease over the next twenty years. A further examination of the BHI model network to identify places where increases in capacity may have resulted in lower “Volume to Capacity” (V/C) ratios showed only on a handful of relatively minor links in the model network where this may occur.

While the future traffic trends discussed above indicate overall that the regional congestion levels are not expected to worsen between now and 2030, several locations would benefit from infrastructure investment. Focusing investments on these existing and future bottlenecks can be a way to increase the region’s roadway network capacity efficiently.

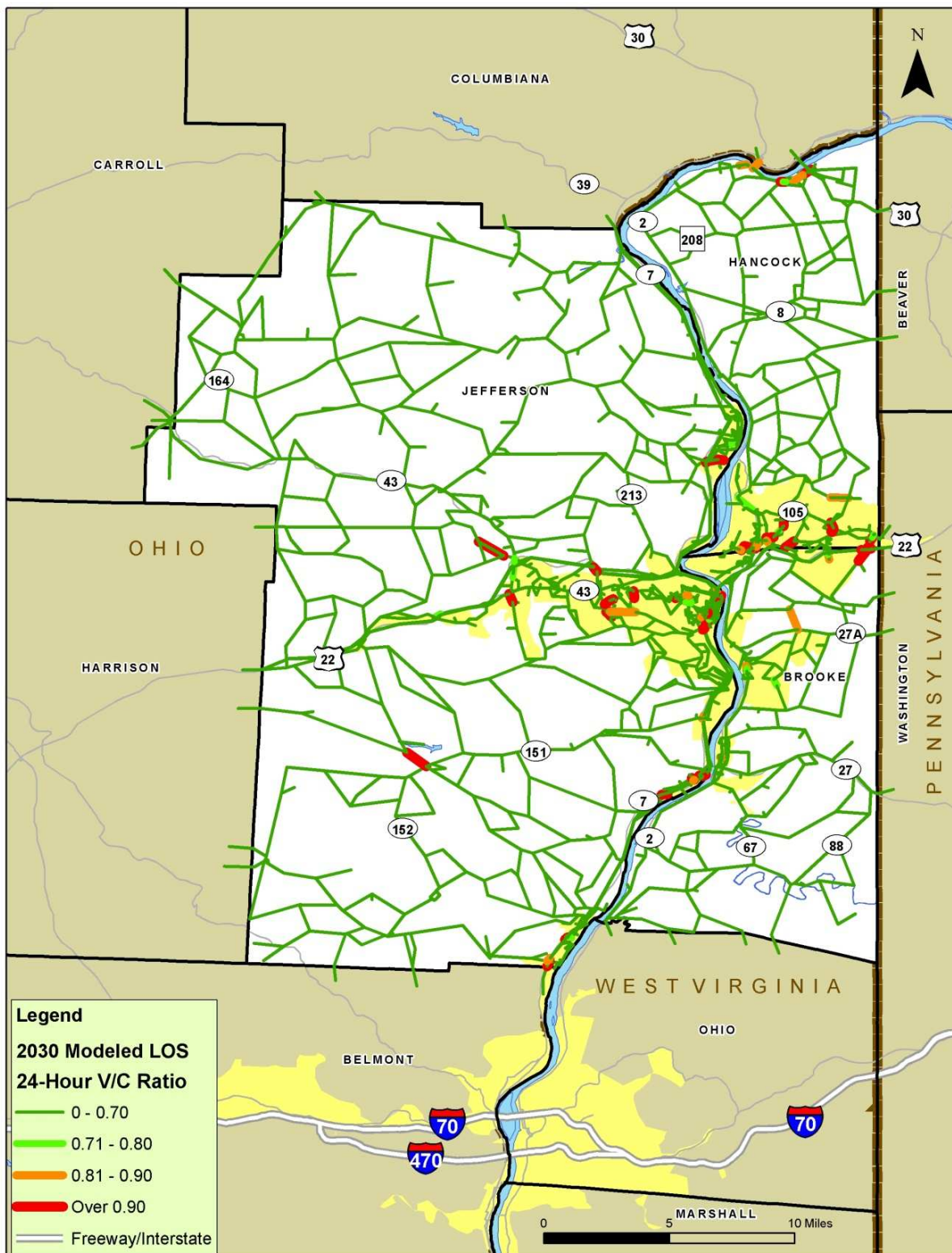
Ultimately, the projected reduction in congested travel throughout the BHI region could have a positive impact on the trucking industry in the area. Low levels of congestion may improve the greater Steubenville-Weirton area’s ability to attract freight-related industries in the future.

Figure 2.1 Roadway Level of Service, 2008



Source: BHJ MPC.

Figure 2.2 Roadway Level of Service, 2030



Source: BHJ MPC.

### *#3 – Truck Parking Areas*

Shippers are generally required to deliver freight during delivery windows set by the receivers of goods and, in some cases, by local ordinances. Often these delivery times are short windows of time (usually 2 hours) so that a truck must “stage” its delivery to ensure that it is within that window. The staging of deliveries often requires trucks to arrive near their delivery prior to the designated time and park and wait until the delivery window is open. Such staging is required as truckers must plan for traffic congestion or other variables and ensure that they arrive during the delivery window.

Another factor that influences truck parking is the hours of service rule that restricts the number of consecutive hours truckers may drive. When truckers reach the consecutive hours of service limit, they are required to stop and rest, regardless of their location. If parking is not available in a safe and convenient location, truckers may resort to parking on interchange ramps or other locations not intended for truck parking.

Truckers also have needs for various services when they are at rest. At locations for parking trucks, truck cabs need electrical connections for heating or air-conditioning as well as other electrically operated devices. If electrical connections are not provided, truckers may idle their engines to generate power, resulting in both noise and air quality impacts.

The stakeholder interview process helped identify a shortage of truck parking, truck stops, and rest areas within the study area, in particular around the Wal-Mart Distribution Center in Wintersville and other large truck generators.

### *#4 – East-West Connectivity*

One limiting factor for east-west connectivity in the region is the presence of the Ohio River. Of the five highway bridges crossing the river, ODOT has permanently closed the Fort Steuben Bridge, and the West Virginia Department of Transportation (WVDOT) has temporarily closed the Market Street Bridge for repairs, painting, and major renovations. To help remedy future disruptions to travel over the river, BHJ, ODOT, and WVDOT have undertaken a series of planning studies to locate a new river crossing south of Wellsburg, WV connecting to Brilliant in Wells Township, Ohio. This and other potential new crossings would provide increased east-west connectivity, allowing for better traffic flow, more efficient routing, and additional options for emergency routing.

The three-county BHJ region has no Interstate highways running east-west within it. To the south of the area is I-70, while I-76 is to the north. OH SRs 7 and 11 serve as options to connect the BHJ region to these Interstate facilities. In addition, U.S. 22 is a 4-lane corridor that runs through Weirton, Steubenville, and Wintersville, towards Pittsburgh to the east. There are on-going discussions regarding the possibility of extending and 4-laning this corridor from Hopedale,

Ohio directly to Columbus. This would place the Steubenville-Weirton area on the only 4-lane corridor connecting these two major economic centers.

The recently completed Findlay Connector (PA Turnpike 576) is a toll road that extends southwest from PA SR 60 at the Pittsburgh International Airport to U.S. 22. This route significantly enhances access to the airport from the BHI area, cutting several miles and significant travel time from the trip.

## **Rail Freight Infrastructure**

### *#5 – Funding for Railroad Infrastructure Improvements*

Railroads, one of the most capital-intensive industries in the country, rely on their own private investments for infrastructure enhancements. For hauling goods, railroads are in direct competition with the trucking industry, which uses highways that receive significant public investment for infrastructure enhancements. Because of their private ownership, railroads place their capital funds where they receive high returns on their investment.

Due to reduced traffic on a number of rail lines traversing the study area, and resulting lower revenues, railroad operators have made fewer investments for line preservation and track maintenance. Reduced track maintenance often results in a need for speed reductions on line segments. Additionally, lack of automated signals may also require slower operation (especially in the case of hand thrown switches). Therefore, rail systems have spent fewer dollars for improvements that would normally result in increased speeds and enhanced safety.

In many instances, Class I Railroads often spin off less-productive lines to Short Line Railroads. In return, Short Lines Railroads, in many cases, may qualify for funding assistance from State (through the Ohio Rail Development Commission (ORDC) in Ohio) and Federal sources through either low interest loans or grants. While there are currently no funding programs for the Short Line Railroads available in West Virginia, the ongoing West Virginia Statewide Rail Plan is looking at potential Short Line assistance programs similar to surrounding states. Generally, maintenance, replacement, and expansion of track for Class I railroads is completely funded from operating revenues, with no assistance from government sources.<sup>1</sup> For example, the ORDC recently awarded American Recovery and Investment Act (ARRA) dollars for improvements to the Gould Tunnel on the state-owned Panhandle Line. This line is currently operated by the Columbus & Ohio River Railroad through a five-year lease by its parent company, the Connecticut-based Genesee & Wyoming Inc. The \$7 million in improvements included stabilizing the walls, improving drainage, and repairing track.

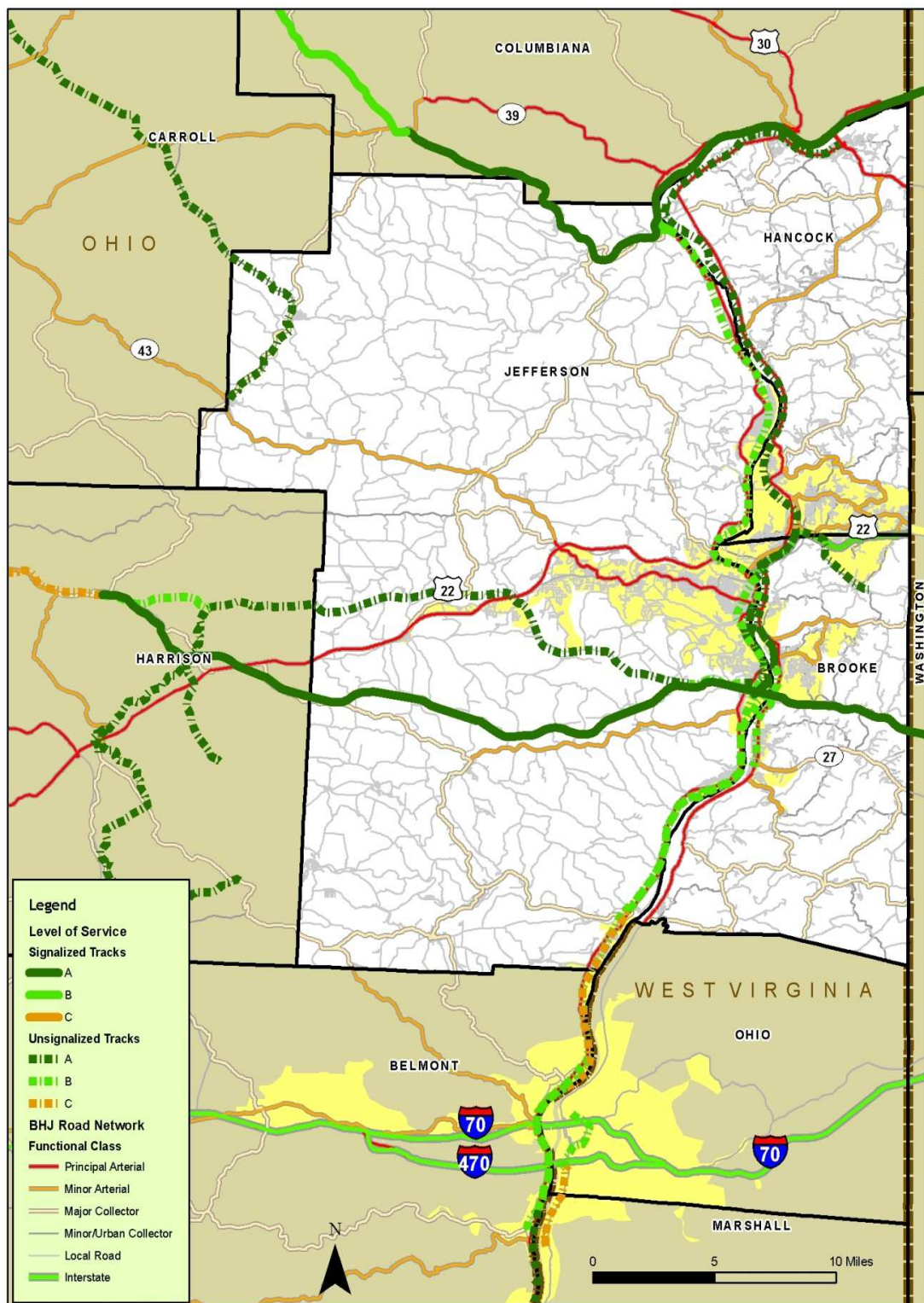
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<sup>1</sup> <http://utcm.tamu.edu/tfo/rail/>

Figure 2.3 shows railroad congestion for the BHJ study area based on the current Railroad Level of Service. This measure is comparable to the Highway Level of Service in that it is calculated by dividing the volume of trains per day by the maximum capacity in trains per day a rail is capable of handling. Railroad planners define capacity using a complex formula that accounts for the number of tracks, type and spacing of the signal control system, number, spacing, and length of sidings, mix of train types, and operating and maintenance plans. Figure 2.3 shows no major congestion problems in the region, but an unsignalized section of track along the Ohio River in the southern part of the study area is currently operating at Level of Service C.



Figure 2.3 Current Railroad Level of Service



Source: BHJ MPC

## *#6 – Railroad Abandonments*

Throughout the greater Steubenville-Weirton area, railroad abandonments are an issue. The region has historically had high amounts of railroad-dependent industries such as steel manufacturing, which resulted in the creation of many miles of rail lines. Norfolk Southern Corporation, Ohi-Rail Corporation, and Wheeling & Lake Erie Railway each own and operate freight rail lines in the area. Columbus and Ohio River Railroad operates a rail line owned by the State of Ohio. With recent slowdowns in some of the region's most rail-dependent industries, and a changing mix of industries in the region, several parts of this rail infrastructure are threatened.

The most significant railroad abandonments that have taken place in the BHJ region are a result of the 1997 acquisition of Conrail by Norfolk Southern and CSX. As early as 1988, Conrail petitioned the Interstate Commerce Commission to abandon the Panhandle Line that connects Pittsburgh, PA west to Columbus, OH through the Steubenville-Weirton area. However, with assistance from county governments, the State of Ohio agreed to purchase the corridor west of the Ohio River connecting Mingo Junction to Columbus. Today the ORDC maintains an operating lease on the Panhandle Line with Genesee & Wyoming, Inc (GWI). In turn, GWI hauls freight on this line as the Columbus and Ohio River Rail Road Company. Conversely, Conrail successfully abandoned the Panhandle Line on the east side of the Ohio River, between Weirton Junction and Pittsburgh. This removed a significant piece of connectivity between the Steubenville-Weirton area and the major market of Pittsburgh. Years earlier, Conrail also abandoned another portion of a rail line south of Wellsburg in Brooke County to Wheeling. Both corridors are preserved and maintained as recreational rails-to-trails.

## *#7 – Changing Commodity Mix*

As the region has experienced a shift from steel manufacturing to metallurgical coke manufacturing, it has seen a corresponding transition from steel shipments to coke. Today, most of the metals carried by the railroads in the region are scrap. Currently, steel industry related shipments make up about 30 percent of the region's rail tonnage, while the remaining 70 percent is predominantly coal and municipal waste. As a result of this changing commodity mix, Class I railroads such as Norfolk Southern have shifted their dependence on the steel industry to those industries that have spun off from the steel industry.

Coal primarily comes into the region from Virginia and Huntington, WV. It commonly moves by both train and barge, destined to either the coke-processing facility in Follansbee, Brooke County, WV or the two coal-fired power plants found in the region (Cardinal Operating in Brilliant and William H. Sammis in Stratton, Jefferson County, OH). Mountain State Carbon, a coke manufacturer in Follansbee, WV, owned by a joint venture between Wheeling-Pittsburgh Steel and SNA Carbon LLC, usually ships its product out of the area by train since it is



faster than most other modes. Transporting coke is very time sensitive, since it disintegrates quickly.

The economic recession of the last two years has hit the region's rail industry hard. Discussions with the railroads indicated that while business has fallen at the national level, the impact in this part of the country has been even worse, with above-average declines. While anecdotal information from stakeholders points to an increase in regional rail traffic over the next 5-10 years as the nation's economy recovers, FAF3 data analysis in the previous Technical Memorandum, *Inventory and Profile*, indicates long-term decreases in rail and water traffic in the region through 2040. The region has an opportunity to capitalize on available water and rail infrastructure to change these trends.

### *#8 – Additional Rail Service Opportunities*

One of the biggest assets that economic developers can use to convince businesses to locate and expand in the greater Steubenville-Weirton area is its extensive railroad network. Norfolk Southern has an industrial development department that works with freight-related businesses to help them locate along the NS rail network. Through this program, NS has brought in 60 new businesses to Ohio who have invested \$2.35 billion and created 1,413 new jobs within the past five years.<sup>2</sup> While their focus is to help businesses locate anywhere along their rail lines, they are willing to work with municipalities and economic development agencies to specifically target those local areas. The economic development offices located on both sides of the Ohio River in the BHJ region can take advantage of this opportunity.

The Ohio & Lake Erie Regional Rail Ohio Hub Study, completed in 2007, is a vision for investing in passenger rail service while increasing transportation capacity for freight rail movements.<sup>3</sup> One of the proposed passenger rail corridors in this study included a station in Steubenville, which would directly connect the BHJ region with Pittsburgh, PA and Columbus, OH. Although the timeframe for implementation of these projects is unknown, this would enhance the region's connectivity to major population centers. Introduction of passenger service on existing freight rail lines may result in improvements being made to the region's freight infrastructure.

The region should also look for opportunities to recapture business on the Piney Fork Line between Minerva and Amsterdam, Ohio which is currently owned by LWR, Inc. and operated by the Ohi-Rail. While the ORDC maintains the first right of refusal for \$75,000 if Ohi-Rail ceases operation or petitions for abandonment on this line, an amendment to this agreement was approved by

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<sup>2</sup> Norfolk Southern Railroad

<sup>3</sup> <http://www.dot.state.oh.us/Divisions/Rail/Programs/passenger/Pages/OhioHubOverview.aspx>

ORDC in 2009. This amendment would allow other purchasers of the line and would allow the State to exercise their right of refusal only if the Ohi-Rail ceases use of the line or abandons it. ORDC recently awarded a \$25,000 grant to complete a bridge repair project on this line.<sup>4</sup> This repair makes the line more attractive for shipments coming out of the DeNoon Lumber Company in Bergholz, and provides an opportunity to recapture other business opportunities in northwestern Jefferson County.

## **Waterborne Freight Infrastructure**

### *#9 – Waterborne Freight Capacity in Study Area*

The Ohio River provides an important waterborne freight corridor through the greater Steubenville-Weirton area. Two locks are located on the Ohio River on either side of the study area: the New Cumberland Dam on the north and Pike Island Lock & Dam on the south. Commodity flow records and interviews with stakeholders in the region indicate that waterborne carriers are picking up or dropping off very little freight tonnage on the river between these two locks. The locks are operating at approximately half capacity in handling freight and as a result, the river is currently underutilized.

Within the study area, 52 river terminals exist. Fifteen of these existing terminals have railway connections. The Columbiana County Port Authority<sup>5</sup> operates three of these ports with the remainder owned and operated privately.

As the economy recovers from the recession, future freight movements should increase on the river. There is some concern in the region though, that environmental regulations affecting coal-fired power plants or coke processing facilities may slow this growth.

The Weirton Port Authority, created in 2000, is relatively inactive. Most recently, they are looking for private partners to develop an intermodal terminal. The Weirton Port Authority District includes all of Brooke and Hancock counties, and has received full “Powers and Duties Resolution” from the West Virginia Public Port Authority (WVPPA).

The West Virginia Public Port Authority works with local port authorities to develop intermodalism and enhance economic opportunities.<sup>6</sup> They work to assist interested private or public parties in the development and operation of public port and intermodal facilities. The region has an opportunity to work

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<sup>4</sup> <http://www.dot.state.oh.us/DIVISIONS/RAIL/NEWSRELEASES/Pages/PanhandleAssignment.aspx>

<sup>5</sup> Columbiana County Port Authority. <http://www.ccpa-ohioriver.com/>

<sup>6</sup> WVPPA. <http://www.transportation.wv.gov/ports/Pages/default.aspx>

with the WVPPA and private partners to facilitate intermodal freight development in the area.

### *#10 – Waterborne Freight Commodities*

The waterborne freight system in the study area includes the Ohio River, a navigable waterway that allows for transportation of a variety of commodities. Records kept by the U.S. Army Corps of Engineers indicate coal, lignite, and coal coke shipments dominate freight flows on the Ohio River. These commodities made up three out of every four tons passing through the locks in the BHJ region. Other raw materials dominate the remainder of the list, and include crude materials, chemicals, petroleum, and farm products. About five percent of total shipments on the river are primary manufactured goods.

The characteristics of the transportation mode explain this commodity mixture. Waterborne freight is low cost, but generally slower than alternative modes. Because of this, it lends itself well to carrying heavy, high-volume, bulk goods of lower value.

The production of steel uses iron ore usually coming into the region from either Minnesota or New Orleans. Shipments from New Orleans can travel up the Mississippi River and onto the Ohio River to the region. Ores from Minnesota tend to travel over the Great Lakes, where shippers transfer the goods to rail or other modes for transport into the region.

Coal traffic on the river system destined for electric power plants has decreased due to the demand for cleaner electricity. Some power plants are now burning waste. Environmental regulations have had a major impact on coal shipments to coke plants, as well. This has had a carry-on effect for the waterborne freight system, since carriers move a lot of this coal via the river.

Containers on barge have not caught on except between New Orleans and Memphis, because the geography in many parts of the U.S. allows faster movement of containers by rail. Containers typically carry manufactured goods that have higher value and shipments are more time-sensitive than low-cost bulk commodities.

When new water ports are established, they are generally looking for special chemicals or specialty steels. Development of these industries would lead to better opportunities for investing in a new Ohio River port in the area.

### *#11 – Infrastructure Improvements*

The Pike Island Locks and Dam, built on the south side of the study area, opened in 1965. This facility has two locks and a gated dam, which control the water level upstream of the dam. The New Cumberland Lock and Dam, on the north side of the study area, opened in 1963. Both of these dams, with a design life of 50 years, are quickly approaching the end of their expected usefulness.

A significant issue for these locks and dams is that funding for improvements to water transportation is inadequate. A reason for this is that traffic on the river is down – 2009 river traffic was down over 20 percent from 2008 levels and had declined by over 30 percent since 2000. Without growing usage of the lock facilities, it will remain difficult to finance infrastructure improvements on the waterways in the region.

## **Air Freight Infrastructure**

### *#12 – Proximity of Cargo Airports to Study Area*

The closest cargo airport to the greater Steubenville-Weirton area is the Pittsburgh International Airport, approximately 30 miles east of the study area. This airport is a designated Foreign Trade Zone (FTZ), which means that it is outside of U.S. Customs Territory for the purpose of customs duty payment. As such, goods that enter the FTZ are exempt from tariff payments until they leave the zone.<sup>7</sup>

The region also has an opportunity to take advantage of the publicly owned Jefferson County Airpark in Wintersville, OH. Since 2008, the Airpark has opened a new terminal building and a heated conventional hangar.<sup>8</sup> Runway lengthening and widening has occurred, with more planned in the future. In total, the Airpark has received \$7 million in federal grants over the past several years for improvements. The Airpark serves general aviation, recreational, and corporate/business communities.

The Wheeling-Ohio County Airport is located on the border between Brooke and Ohio counties in West Virginia. Owned by the Ohio County Commission, the airport has had several capital investments. The airport serves both the general aviation community and the military.

Two private airports are located in the region. One is the Eddie Dew Memorial Airpark, northwest of Toronto in Jefferson County. The second is the Herron Airport near New Cumberland in Hancock County, WV. Both are privately owned and unattended. Neither capital improvement plans nor operating statistics are available for these facilities.

While today and likely in the future, the Pittsburgh International Airport is the closest air cargo airport, the additional aviation facilities in the BHJ area serve as regional assets for corporate jet activity associated with local industries.

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<sup>7</sup> International Trade Administration. <http://ia.ita.doc.gov/ftzpage/tic.html>

<sup>8</sup> Jefferson County Airpark. <http://www.jeffersoncountyairpark.org/>

## 2.2 LAND USE ISSUES AND OPPORTUNITIES

### *#13 – Available Land and Sites for Development*

As shown in Figure 2.4, a number of sites are available for sale or redevelopment in the 3-county region. The map shows brownfield sites, superfund sites, and parcels currently for sale or lease in the area. Data is from the Progress Alliance<sup>9</sup> and the Ohio Department of Development's (ODOD) Ohio Insite System for Jefferson County, and the Business Development Corporation (BDC) of the Northern Panhandle for Brooke and Hancock Counties.

A few clusters on this map stand out. One such cluster is in northern Brooke County, off U.S. 22's Three Springs Drive exit, with both brownfield and for sale/lease land available. A second cluster is along OH SR 43 in Wintersville, where there is a series of for-sale or for-lease properties as well as a superfund site available for redevelopment. Finally, clustered along the Ohio River are brownfield sites, superfund sites, and properties for sale or lease.

One common feature of these properties is access to the transportation system. Each of these clusters is located along a rail line or highway facility, and many have access to both. Many of these sites also have easy access to the Ohio River. As such, these sites should be attractive to businesses in freight-intensive industries that are looking to expand facilities in the greater Steubenville-Weirton area.

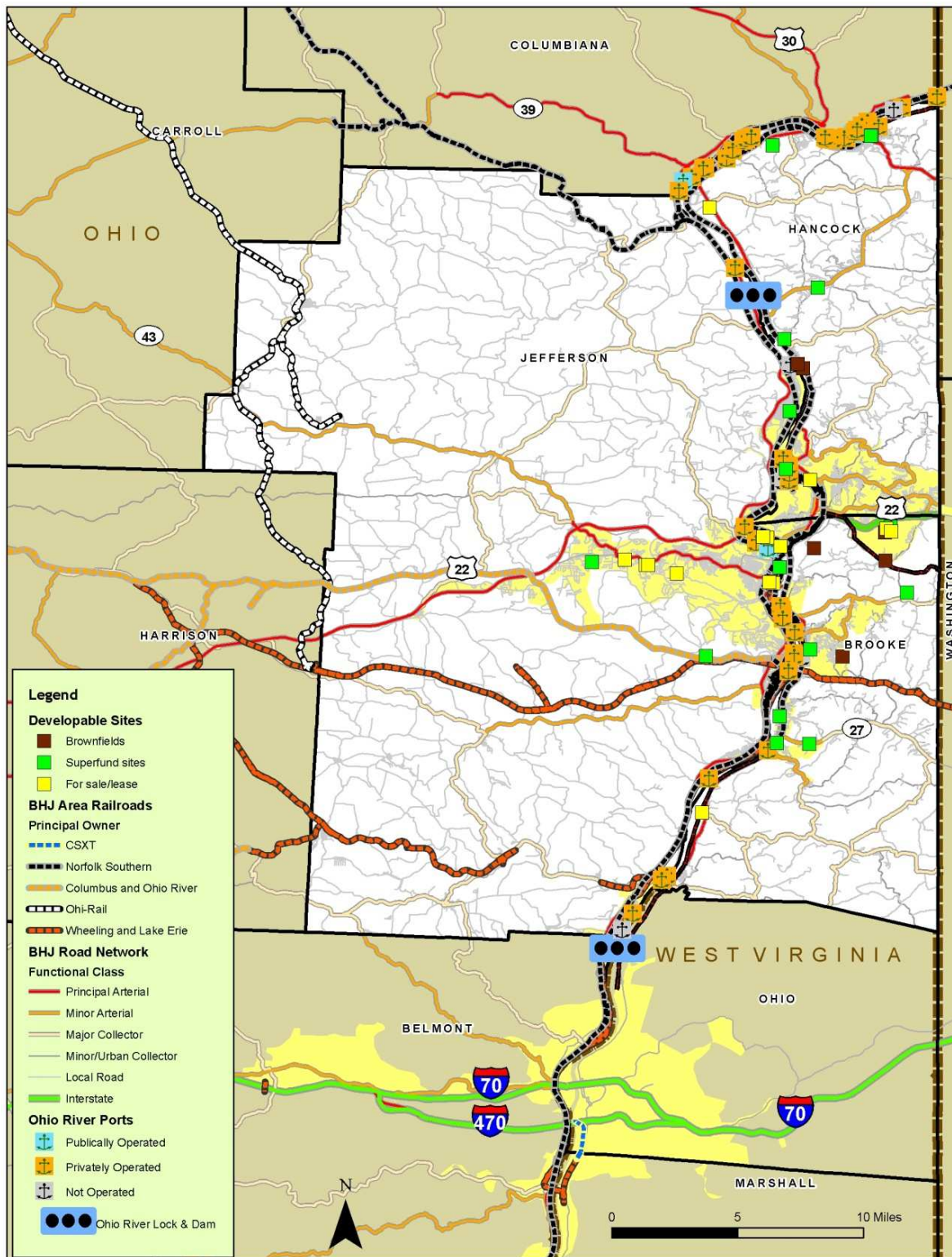
Promoting brownfield and superfund redevelopment is an opportunity to create investment in areas already integrated into the transportation network, utilities, and the community. These sites have previously had development, but past pollution or contaminants may complicate their reuse. Grants are available through the EPA and other sources to clean up these sites and make them ready for redevelopment.

The region has a wealth of existing freight-related industries. These include businesses in the fields of steel production, coke processing, chemical processing, warehousing and distribution, and power production. The presence of these facilities is a good starting point for marketing to businesses in related industries. Other marketing points include water supply, electricity, and the extensive multimodal transportation system.

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<sup>9</sup> Progress Alliance. <http://www.progressalliance.com/sites/>

Figure 2.4 Developable Sites in the BHJ Region



Source: BHJ MPC, Progress Alliance, BDC of Northern Panhandle.

Another consideration for the region is Marcellus Shale mine development. Recently discovered below large portions of West Virginia, Ohio, Pennsylvania, and New York as a significant source of natural gas, Marcellus Shale is black, low-density shale found in the subsurface.<sup>10</sup> Exploring the promise of mining this resource in the greater Steubenville-Weirton area has economic development potential. Local developers should evaluate the industry's impact on future freight movements in the context of available land and adjacent transportation infrastructure.

#### #14 – Site Selection Factors

In order to attract new industry to the region, marketing efforts should target those factors that businesses value and take into consideration when determining where to relocate or expand. *Area Development* magazine conducts an annual survey of corporations to understand the factors upon which they base their site and facility planning decisions. Shown in Table 2.5 is a comparison of the highest ranked site selection factors for 2008 and 2009. As can be seen, these site selection factors reflect a focus on highway accessibility, costs, and the labor pool in site selection decision-making by corporations.

**Table 2.5 Site Selection Factors**

Site Selection Factor Ranking	2009	2008
1. Labor costs	96.7	91.4
2. Highway accessibility	92.9	95.4
3. Tax exemptions	88.4	88.6
4. Energy availability and costs	88.0	87.9
5. Corporate tax rate	87.0	85.3
6. Availability of skilled labor	86.9	87.7
7. Occupancy or construction costs	86.7	90.4
8. State and local incentives	84.9	87.2
9. Availability of advanced ICT services	83.2	55.5
10. Inbound/outbound shipping costs	81.7	N/A
11. Low union profile	75.8	82.7
12. Available land	75.7	82.0
12T. Availability of buildings	75.7	80.8
14. Right-to-work state	74.0	76.6
15. Proximity to major markets	73.3	78.7

<sup>10</sup> <http://geology.com/articles/marcellus-shale.shtml>

Site Selection Factor Ranking	2009	2008
16. Expedited or "fast-track" permitting	72.2	72.5
17. Environmental regulations	71.2	76.1
18. Availability of long-term financing	65.4	64.2
19. Proximity to suppliers	63.9	69.2
20. Training programs	61.7	62.3
21. Raw materials availability	57.0	56.8
22. Availability of unskilled labor	55.5	62.9
23. Accessibility to major airport	49.0	53.3
24. Proximity to technical university	36.7	38.4
25. Railroad service	27.4	27.2
26. Waterway or oceanport accessibility	17.7	15.7

Source: The 24th Annual Corporate Survey, Area Development magazine

These site selection factors show the greater Steubenville-Weirton area as well positioned to market itself as an attractive business location. The region has good access to highways, which is consistently one of the two most important site selection factors. Costs are low in the region, especially when it comes to labor. As previously described, there are numerous clusters of sites available for development in the area. The BHJ region has a wealth of railroad service as well as easy waterway accessibility. It is also close to a major airport in Pittsburgh. All of these assets of the region can be used together to attract more businesses to relocate or expand their facilities in the greater Steubenville-Weirton area.

The table of top site selection factors also points to areas where the region could focus to be even more attractive. Providing local incentives for relocation is a possibility, as is offering worker-training programs. A permitting process that is fast and efficient can also make the area more attractive to businesses.

One example of a major success in attracting a freight-related business to the region was the Wal-Mart Distribution Center site selection.<sup>11</sup> The relatively new facility is located in Island Creek Township along OH SR 43 just north of U.S. 22 in Wintersville, Ohio. The facility encompasses 880,000 square feet and currently employs about 775 people – nearly double the number of employees when it opened in 2002-03. The facility focuses on grocery distribution serving the upper Midwest.

Factors that were the most important for selecting this site in the region included the labor quality and availability – even while unemployment was 4.8 percent during this time, officials were expecting up to five applicants per job opening.

<sup>11</sup> <http://www.siteselection.com/ssinsider/bbdeal/bd011008.htm>



Proximity to major markets including Pittsburgh, which is about 30 miles away, was another important factor. Because only trucks serve the distribution center, highway accessibility was critical for this location.

In addition to the attributes of the area, there were additional incentives provided by ODOD. These incentives included:

- Job Creation Tax Credit
- Warehouse Equipment Sales Tax Exemption
- Roadwork Development Grant
- Appalachian Infrastructure Grant
- Ohio Investment in Training Program Grant

In addition to Wal-Mart, economic development officials hope that the presence of the distribution center will help to attract related manufacturers, suppliers, and other businesses to the region.

## 2.3 POLICY ISSUES AND OPPORTUNITIES

### *#15 – Regional / Bi-State Coordination*

Two states split the region between three counties while bordering on a third state to the east. Overcoming these jurisdictional issues requires a commitment to regional coordination.

Of the port authorities currently existing in the area, Weirton and Columbiana County (Ohio), Weirton is inactive and Columbiana County is outside the three-county region. The greater Steubenville-Weirton area would benefit from a more active overarching port authority. Recommendation #13 in the following Section discusses this topic further.

## #16 – Funding

Essential to the planning and implementation of freight-related projects and strategies is the identification of applicable funding and financing sources for the improvements. The following tables categorize these funding and financing programs into five categories including: 1.) Federal Formula Highway Programs; 2.) Special USDOT Funding Programs; 3.) Special Non-DOT Funding Programs; 4.) Other Funding Options; and 5.) Special Financing Programs. In each of these categories is a listing of a number of funding and/or financing options along with a brief description of each.

**Table 2.6 Federal Formula Highway Programs**

Federal Formula Highway Programs	Features
National Highway System (NHS)	<ul style="list-style-type: none"> <li>Construction, reconstruction, resurfacing, rehabilitation on NHS facilities or connectors between the NHS and freight-related facilities</li> <li>Eligibility includes Interstate Highways, other principal arterials, Strategic Highway Network (StrHNet), major strategic highway connectors between military installations and StrHNet, intermodal connectors</li> </ul>
Surface Transportation Program (STP)	<ul style="list-style-type: none"> <li>Roadway projects</li> <li>Bridge projects</li> <li>Transit capital projects</li> <li>Rail projects that enhance grade crossing safety</li> <li>Eligibility includes Federal-aid highways, bridges on public roads, transit capital investments, bus terminals &amp; facilities (intracity and intercity)</li> </ul>

**Table 2.7 Special DOT Funding Programs**

Special DOT Funding Programs	Features
Congestion Mitigation and Air Quality (CMAQ)	<ul style="list-style-type: none"> <li>• Projects that improve air quality in non-attainment and maintenance areas</li> <li>• Eligibility includes intermodal facilities, barge operations, rail track rehabilitation, rail sidings, emission reduction, congestion mitigation activities, truck stop electrification</li> </ul>
Highway Bridge Program	<ul style="list-style-type: none"> <li>• Replacement, rehabilitation and systematic preventive maintenance of bridges</li> <li>• Eligibility includes Federal-aid highway bridges and off-system highway bridges</li> </ul>
Railroad Grade Crossing Program	<ul style="list-style-type: none"> <li>• Hazard elimination at highway-rail at-grade crossings</li> <li>• Installation or upgrade of protective devices at highway-rail at-grade crossings</li> <li>• 50% of funding allocation must provide for installation of protective devices at at-grade crossings</li> <li>• Includes grade separations, reconstruction of grade crossings, and elimination of grade crossings</li> </ul>
Truck Parking Facilities	<ul style="list-style-type: none"> <li>• New or expanded commercial vehicle parking facilities</li> <li>• Eligibility includes commercial vehicle parking facilities, turnouts, improved access to commercial vehicle parking facilities and truck parking electrification systems</li> </ul>
Rail Line Relocation Program	<ul style="list-style-type: none"> <li>• Rail line relocation and improvement projects that result in safety and other community benefits</li> <li>• At least half of funds for projects of \$20 Million or less</li> <li>• Program subject to annual appropriation</li> <li>• At-grade rail crossing safety enhancements are eligible</li> </ul>
FAA Airport Improvement Program	<ul style="list-style-type: none"> <li>• Airport planning and development projects that focus on safety, capacity, security, and the environment</li> <li>• Airports must be included in <i>National Plan of Integrated Airport Systems</i></li> <li>• Cargo airports must receive 100 million pounds of cargo annually</li> <li>• Private airports must have more than 10,000 annual enplanements</li> </ul>

**Table 2.8 Non-DOT Special Funding Programs**

Non-DOT Special Funding Programs	Features
USACE Harbor Maintenance Trust Fund	<ul style="list-style-type: none"> <li>Operations and maintenance dredging of channels for commercial navigation</li> <li>Ports must be located along Federally authorized navigation channels</li> </ul>
U.S. Department of Commerce – Economic Development Administration Funds	<ul style="list-style-type: none"> <li>Targeted at promoting job creation or retention through projects in economically distressed industrial sites</li> <li>Eligibility includes EDA-designated redevelopment areas or economic development centers</li> <li>Requires proof of economic distress</li> </ul>
Environmental Protection Agency – Brownfield Revitalization Program	<ul style="list-style-type: none"> <li>Projects focused on promoting brownfield site cleanup and redevelopment</li> <li>Eligibility includes local governments, development agencies and nonprofit groups</li> </ul>

**Table 2.9 Additional Funding Options**

Additional Funding Options	Features
Tolls	<ul style="list-style-type: none"> <li>Could be used for specialized toll facilities, such as bridges, tunnels, turnpike facilities, etc.</li> <li>From a freight perspective, could be used for truck-only-toll (TOT) lanes on congested truck routes</li> <li>Revenue from tolls on freight-related facilities could be used for operating and maintaining the facilities, with excess being used for additional freight improvements</li> </ul>
Congestion Pricing	<ul style="list-style-type: none"> <li>Based on a variable toll structure which provides incentives for traveling during off-peak or uncongested hours</li> <li>Toll rates may vary based on a fixed schedule, such as lower rates during a set off-peak period; or</li> <li>Toll rates could be set to change dynamically, based on level of congestion</li> <li>Excess revenue received from congestion pricing could be used to fund freight-related or other types of improvements</li> </ul>
Container / Lift Fees	<ul style="list-style-type: none"> <li>Fees assessed on container movements at marine ports, airports, freight terminals, or specific freight carrying facilities</li> <li>Fees assessed at intermodal facilities for lift movements</li> <li>Revenues could be used to fund other specific freight-related projects or go into a more general freight-</li> </ul>

Additional Funding Options	Features
Public-Private Partnerships (PPPs)	<ul style="list-style-type: none"> <li>infrastructure fund</li> <li>Enables private sector involvement in the financing and delivery of transportation projects</li> <li>Enables alternative delivery methods, resulting in an expedited project development process</li> <li>Could involve shared costs of infrastructure improvements by private and public sectors, when both sectors would benefit from the improvement</li> <li>Legislative action may be required</li> </ul>
Special Taxing	<ul style="list-style-type: none"> <li>Property taxes either on a permanent basis as a continuous revenue source for freight-related improvements, or on a temporary basis to fund specific improvements</li> <li>Dedicated sales tax</li> <li>Tax-Increment Financing (TIF)</li> </ul>

**Table 2.10 Special Financing Programs**

Special Financing Programs	Features
Transportation Infrastructure Finance and Innovation Act (TIFIA)	<ul style="list-style-type: none"> <li>Provides federal credit assistance through secured loans, loan guarantees, or lines of credit for regionally or nationally significant transportation projects</li> <li>Eligibility was expanded by SAFETEA-LU to qualifying private rail projects</li> <li>Loan repayment must come from tolls, user fees, or other dedicated revenue source</li> </ul>
Rail Rehabilitation and Improvement Financing (RRIF)	<ul style="list-style-type: none"> <li>Provides Federal loans and credit assistance for rail and intermodal projects</li> <li>Both private and public sector project sponsors are eligible</li> </ul>
State Infrastructure Banks (SIB)	<ul style="list-style-type: none"> <li>Enables the establishment of revolving loan programs by states, capitalized with Federal transportation funds, for transportation projects</li> <li>State matching funds required for capitalizing the SIB</li> <li>Loans may be issued to both public and private sector project sponsors</li> </ul>
Private Activity Bonds (PAB)	<ul style="list-style-type: none"> <li>Allows states and local governments to issue tax-exempt bonds for private sector sponsored transportation projects</li> <li>Promotes private investment in transportation infrastructure</li> </ul>

Special Financing Programs	Features
Grant Anticipation Revenue Vehicle (GARVEE) Bonds	<ul style="list-style-type: none"> <li>Enables states to issue debt based on anticipated future Federal-aid highway revenues</li> <li>Only approved Federal-aid debt-financed projects are eligible</li> </ul>

## #17 – Economic Development

Economic development, retention of existing business, and continued growth is crucial for the region. Unemployment has risen in the past decade, and has shown a marked increase in recent years. In the Steubenville-Weirton MSA, 26 percent of jobs in 1999 were in manufacturing, compared to 14 percent nationally. With the economic downturn, manufacturing jobs are down significantly and the region faces the decision of whether to try to revitalize the industrial job base or replace these jobs with those in another sector, such as the service industry. Because of the infrastructure put in place to accommodate the region's industrial base, it makes sense to revitalize the region with industries that build on those that existed in prior decades, while at the same time complementing them with new opportunities in the service industry sector.

The BHJ region lacks a coordinated region-wide economic development strategy. While there are two economic development agencies in the region, the Progress Alliance in Jefferson County and the BDC of the Northern Panhandle, these agencies focus on their own jurisdictions. While it can be a challenge to coordinate across state lines where funding assistance and other programs may differ, the region should use these two agencies to their advantage and build upon them, capitalizing on the opportunity to regionalize greater Steubenville-Weirton's approach to economic development. Increased coordination between these agencies on a coordinated, region-wide economic development strategy may also achieve a greater partnership on knowledge sharing, resource sharing and minimizing redundant efforts.

There are numerous incentives provided by both the states of West Virginia and Ohio to attract and retain businesses, such as the Enterprise Zone designation in Jefferson County that offers property tax incentives to companies that create new jobs and make new capital investments within the county. A possible incentive that the Steubenville and Weirton economic development partners could further jointly explore is that of a Foreign Trade Zone (FTZ). FTZs provide special customs procedures to U.S. plants engaged in international trade-related activities. FTZs are outside of U.S. Customs Territory for the purpose of customs duty payment; therefore, goods entering FTZs are not subject to customs tariffs until they leave the zone and then enter formally into a U.S. Customs Territory. Goods shipped to foreign countries from FTZs are exempt from duty payments, which is useful to firms that import components in order to manufacture finished products for export. While the Pittsburgh International Airport is a designated FTZ, a provision exists for creation of adjacent zones within 60 statute miles or 90

minutes driving time of the outer limits of a U.S. Customs and Border Protection port of entry. A public or public-type corporation can make applications for new general-purpose FTZs.

### #18 – Demographic Issues

Table 2.11 projects further population declines in the greater Steubenville-Weirton area over the next twenty years, continuing the region's trend of recent years. As shown in the Table 2.11, the population of the area in 2008 was about 124,000 people. This figure may fall by more than 10 percent by 2030, to below 110,000 people. While the predictions below indicate a population decline in all three counties, the decline is least severe in Brooke County, West Virginia, where the expected reduction is fewer than one thousand people. During this time, the projected population decrease for Hancock County, West Virginia is 13 percent, while Jefferson County, Ohio may experience the biggest drop where the projected loss is over 11,000 people – a decline of over 20 percent.

**Table 2.11 Projected Population in BHI Region**

County	2008	2014	2020	2030
Brooke	24,602	24,431	24,268	24,061
Hancock	31,971	30,965	29,961	28,223
Jefferson	67,523	64,381	61,236	55,992
<b>BHI Total</b>	<b>124,096</b>	<b>119,777</b>	<b>115,465</b>	<b>108,276</b>

Source: BHI MPC

Related to the projected decline in population is a parallel decline in the number of workers, defined as persons aged 16 years and older, either employed or unemployed and actively seeking employment. With over 51,000 workers in 2008, the region may well lose about 7,000 workers over the next 20 years. With more than half of this projected decline in Jefferson County, both Brooke and Hancock Counties are expected to follow the same trend. This loss of workers has implications for tax revenues collected, the health of local industries, and the ability to bring new industries into the region.

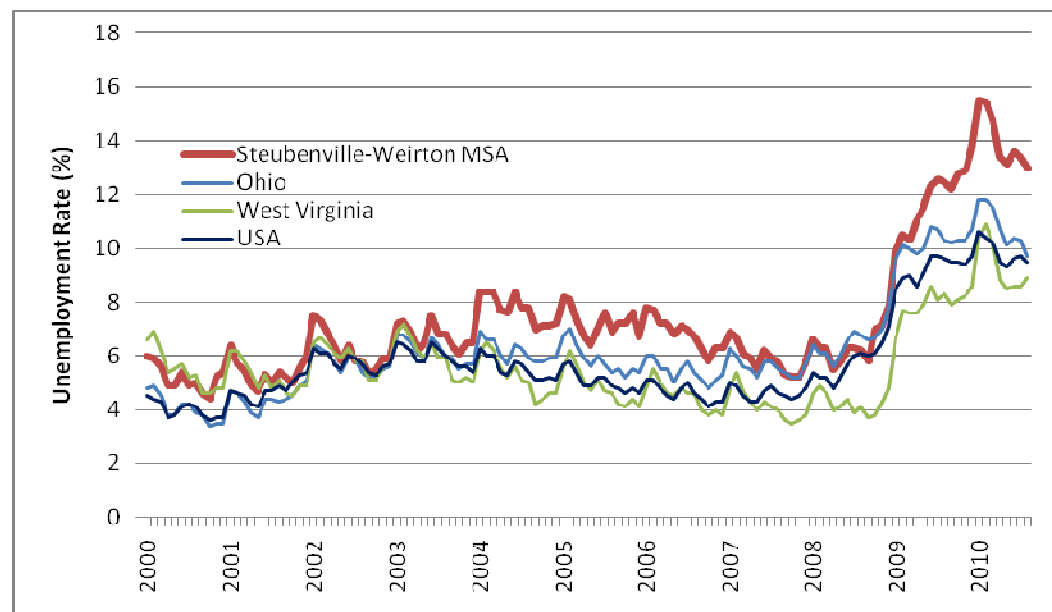
**Table 2.12 Projected Workers in BHI Region**

County	2008	2014	2020	2030
Brooke	10,445	10,327	10,194	10,016
Hancock	14,125	13,643	13,152	12,318
Jefferson	26,749	25,471	24,189	22,046
<b>BHI Total</b>	<b>51,319</b>	<b>49,441</b>	<b>47,535</b>	<b>44,380</b>

Source: BHI MPC

The past decade has seen an increase in the national unemployment rate that has especially affected the greater Steubenville-Weirton area. While the unemployment rate has risen across the country and for the states of Ohio and West Virginia as a whole, the Steubenville-Weirton MSA has seen even higher increases in unemployment, as shown in Figure 2.5. Peaking around early 2010 at nearly 16 percent unemployment, the figure remains above 12 percent for the region despite both Ohio and West Virginia's statewide rates falling to below 10 percent.

**Figure 2.5 Unemployment Rates**

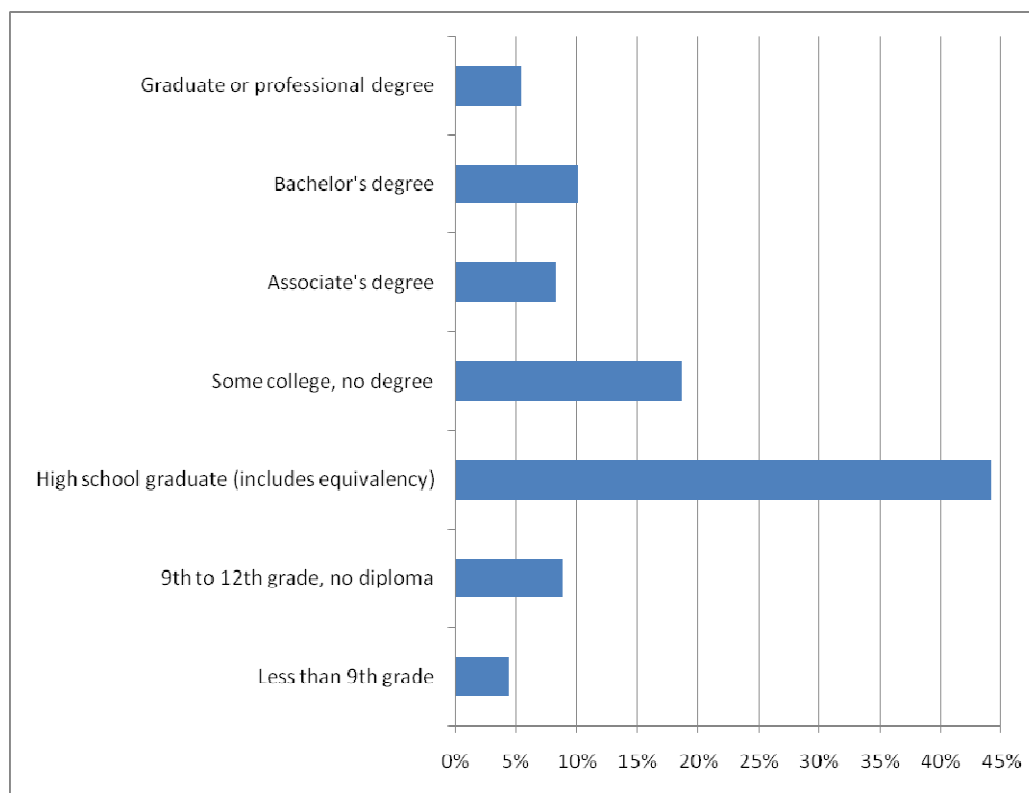


Source: Bureau of Labor Statistics

Figure 2.6 shows the educational profile of the Steubenville-Weirton MSA's adult population. About 57 percent of the population over age 25 in the area have not attended college, and less than a quarter of residents have earned an Associate's Degree or higher. This compares to a U.S. average of 45 percent not attending college and 35 percent with an Associate's Degree or higher.

As a result, business costs tend to be low in the region. This is because there is a skilled labor pool, but a labor pool that does not demand high pay and benefits typically associated with jobs that require a college education.



**Figure 2.6 Steubenville-Weirton MSA Educational Profile**

Source: American Community Survey, 2006-08.

Note: Data reflects Weirton-Steubenville MSA population over age 25.

### *#19 – 3-2-1 Jobs Initiative*

The Voinovich School at the Ohio University supports the BHJ regions 3-2-1 Jobs Initiative as part of a grant from the U.S. Department of Commerce's Economic Development Administration to assist communities in developing industry targeted economic growth strategies that will help sustain current jobs and lead to the creation of future ones. This initiative has identified two industry clusters that hold potential for future growth and expansion specific to freight - Transportation & Logistics and Manufacturing & Advanced Materials. Historically these industries have had a strong role in the growth of the region, and could today still provide legs for the region. BHJ is a partner on this initiative and should continue to collaborate efforts with Progress Alliance and the BDC of the Northern Panhandle to use these resources to identify new opportunities for attracting industry and workforce to the region.



## 3.0 Recommendations

Up to this point, the BHJ Freight Study has focused on understanding the greater Steubenville-Weirton areas freight movement, issues and needs, and uncovering opportunities for improvement. Section 3.0 of this memorandum outlines recommendations to assist the region in moving from the study/planning phase of the project into action.

This section of the report identifies both infrastructure and policy recommendations and associated action items that directly relate to previously identified freight-related issues and opportunities. The recommendations, summarized in Table 3.1, address the system needs and deficiencies identified through the stakeholder outreach and data analysis components of the project. In some instances, implementation of the policy recommendations will facilitate operational and infrastructure improvements. Best practices implemented in other regions of the country to address similar freight system needs are the basis for many of these recommendations.

Each recommendation underwent qualitative evaluation to determine low, medium, or high (relative) capital cost. Based on cost and need, each recommendation was prioritized by members of the BHJ Freight Study Steering Committee through a “dot voting” process at their meeting on January 12, 2011, which was translated into the categories of low, medium, and high priority, and then phased as short-term (0-2 years), mid-term (3-5 years) and long-term (greater than 5 years). In order to ensure these projects move forward, this document along with input from Steering Committee members, assigns a lead agency to each recommendation to follow it through to implementation. In most cases, implementation may fall upon multiple agencies to follow-through on recommended actions; for these cases, this document also serves as an organizing point to ensure that the appropriate stakeholders are involved and made part of the conversation.

This section organizes each recommendation into the following subcategories:

- Section 3.1 - Infrastructure Recommendations
- Section 3.2 - Land Use Recommendations
- Section 3.3 - Policy Recommendations

**Table 3.1 Summary of Recommendations**

Ref. No.	Description	Cost	Priority	Timeframe	Lead Agency	Page Number
1	Identify potential locations and funding sources for expanded truck parking / rest areas with appropriate amenities to enable compatibility with surrounding land uses.	Medium	Low	Short-term	BHJ, ODOT, WVDOT, Wal-Mart	3-4
2	Address the higher wear and tear on freight-impacted road surfaces with increased maintenance efforts.	Low/ Medium	Low	Mid-term	ODOT, WVDOT	3-4
3	Develop regional freight planning Geodatabase, including such items as truck restrictions, clearance issues, weight restrictions, parking and rest areas. Disseminate information to trucking companies, trucking associations, etc.	Low	Medium	Short-term	BHJ, Economic Dev. Groups	3-5
4	Support the development of an additional Ohio River highway crossing, in particular the Wellsburg Bridge that is currently under study.	High	Medium	Short-term	BHJ	3-5
5	Develop a process for ensuring rail corridor service and right-of-way preservation.	Low	Medium	Mid-term	ORDC, WVSRA, Port Authorities	3-6
6	Identify investment options that encourage expanded use of rail mode.	Medium/ High	High	Short-term	Railroads, ORDC, WVSRA	3-6
7	Explore opportunities to enhance intermodal connectivity between rail/water and highway/water modes.	Medium/ High	High	Short-term	BHJ, ODOT, WVDOT, Port Authorities	3-7
8	Explore development opportunities at Jefferson County Airpark.	Low	Low	Short-term	Progress Alliance, Jefferson Co. Comm., Jefferson Co. Airpark	3-7
9	Develop process for identifying freight-related development opportunities within the region, including brownfield re-use and the identification and marketing of designated "logistics corridors" which would encourage the "clustering" of freight-dependent industries.	Low	Medium	Short-term	BHJ, Economic Dev. Groups	3-8
10	Develop regional marketing strategy to promote the region's freight-related assets to potential freight-dependent industries.	Low	High	Short- to Mid-term	BHJ, Economic Dev. Groups	3-8

Ref. No.	Description	Cost	Priority	Timeframe	Lead Agency	Page Number
11	Include freight-related performance measures in project evaluation process to ensure the consideration of freight enhancing projects in the programming process.	Low	Low	Short-term	BHJ, ODOT, WVDOT, FHWA	3-9
12	Identify innovative strategies to better match new and available funds with freight system needs.	Low	High	Short-term	Regional, State and Federal Partners	3-9
13	Establish a governance structure, such as a Bi-State Port Authority, to identify issues, guide investments and advocate on behalf of the region through public outreach and education, promoting the BHJ region's economy and protecting the public interest.	Low	High	Mid-term	BHJ, Economic Dev. Groups, Port Authorities	3-10
14	Monitor logistics workforce needs and educational supply; work with educational institutions and employers to ensure compatibility.	Low	Low	Short-term	BHJ, Economic Dev. Groups, Community Colleges, DJFS	3-10
15	Educate the community (regional stakeholders) regarding the logistics industry.	Low	Medium	Short- to Long-term	BHJ, Unions, Media, Economic Dev. Groups	3-11
16	Establish a freight point-of-contact / technical lead for the BHJ region.	Low	Medium	Short-term	BHJ, Weirton Area Port Authority	3-11

*Acronyms –Brooke-Hancock-Jefferson Metropolitan Planning Commission (BHJ), Department of Job and Family Services (DJFS), Federal Highway Administration (FHWA), Ohio Department of Transportation (ODOT), Ohio Rail Development Commission (ORDC), West Virginia Department of Transportation (WVDOT), West Virginia State Rail Authority (WVSRA)*

## 3.1 INFRASTRUCTURE RECOMMENDATIONS

### Highway Infrastructure

**Recommendation #1:** *Identify potential locations and funding sources for expanded truck parking / rest areas with appropriate amenities to enable compatibility with surrounding land uses.*

- **Priority:** *Low*
- **Timeframe:** *Short-term*
- **Lead Agency:** *BHJ, ODOT, WVDOT, Wal-Mart*
- **Cost Category:** *Medium*
- **Action Items:**
  - i) Assess areas where current truck parking in the region is deficient.
  - ii) Identify potential sites for truck parking and/or rest areas that correspond to the areas of truck parking deficiency.
  - iii) Explore the potential for private development/operation of truck parking facilities.

**Recommendation #2:** *Address the higher wear and tear on freight-impacted road surfaces with increased maintenance efforts.*

- **Priority:** *Low*
- **Timeframe:** *Mid-term*
- **Lead Agency:** *ODOT, WVDOT*
- **Cost Category:** *Low/Medium*
- **Action Items:**
  - i) Identify candidate freight-impacted roadways for special consideration of enhanced design standards for heavy truck volumes. Include evaluation criteria that will enable these types of improvements to receive “points” based on the freight-related benefits (such as volume of truck traffic or number of freight-generating industries served) that will result from their implementation. (Recommendation #11 describes this in more detail.)
  - ii) Identify non-traditional funding sources, such as public-private partnerships, for funding the increased maintenance needs on freight-impacted roadways.

**Recommendation #3:** *Develop regional freight planning Geodatabase, including such items as truck restrictions, clearance issues, weight restrictions, parking, and rest areas. Disseminate information to trucking companies, trucking associations, etc.*

- **Priority:** *Medium*
- **Timeframe:** *Short-term*
- **Lead Agency:** *BHJ, Economic Dev. Groups*
- **Cost Category:** *Low*
- **Action Items:**
  - i) Develop database in GIS format, which includes information that would be useful to public and private sector freight stakeholders, for both freight planning and operations. At a minimum, the database should include truck restrictions, clearance issues, weight restrictions, parking and rest areas, traffic generators, and areas of recurring congestion. The lead agency(ies) should review and update this information on a regular basis, not to exceed 5 years.
  - ii) Identify means of distributing this information to the appropriate stakeholders, such as websites, mapping, real-time traffic, toll plazas, etc.

**Recommendation #4:** *Support the development of an additional Ohio River highway crossing, in particular the Wellsburg Bridge, that is currently under study.*

- **Priority:** *Medium*
- **Timeframe:** *Short-term*
- **Lead Agencies:** *BHJ*
- **Cost Category:** *High*
- **Action Items:**
  - i) Support ongoing and future studies for a new Ohio River crossing between Ohio and West Virginia by adopting resolutions in support of this project.
  - ii) Keep stakeholders informed and involved in the process.
  - iii) Meet with Legislators and Regional Legislative Coalitions to register support for additional river crossing projects in the region.

## **Rail Freight Infrastructure**

**Recommendation #5:** *Develop a process for ensuring rail corridor service and right-of-way preservation.*

- **Priority:** *Medium*
- **Timeframe:** *Mid-term*
- **Lead Agency:** *ORDC, WVSRA, Port Authorities*
- **Cost Category:** *Low*
- **Action Items:**
  - i) Explore opportunities related to State purchase of line to continue service to business when continued rail service becomes in jeopardy (as was done by the State of Ohio for the Panhandle Rail Line).
  - ii) Explore opportunities for including a step in the abandonment process through which respective State DOTs or other agencies are provided an option to purchase and preserve the threatened right-of-way for identified future transportation use (e.g. rail banking). A potential means of accomplishing this could be through corridor protection legislation.

**Recommendation #6:** *Identify investment options that encourage expanded use of rail mode.*

- **Priority:** *High*
- **Timeframe:** *Short-term*
- **Lead Agency:** *Railroads, ORDC, WVSRA*
- **Cost Category:** *Medium/High*
- **Action Items:**
  - i) Pursue opportunities to expand intermodal linkages between rail and other modes, specifically highway and water.
  - ii) Identify infrastructure investments for increasing competitiveness of rail mode.
  - iii) Host a forum to promote freight rail connectivity among regional railroad operators; explore opportunities for improved coordination of terminal railroad operations.
  - iv) Explore opportunities to recapture business on the Ohi-Rail's Piney Fork Line between Minerva, OH and Amsterdam, OH.
  - v) Explore funding sources for rail infrastructure enhancements.



## Waterborne Freight Infrastructure

**Recommendation #7:** *Explore opportunities to enhance intermodal connectivity between rail/water and highway/water modes.*

- **Priority:** *High*
- **Timeframe:** *Short-term*
- **Lead Agency:** *BHJ, ODOT, WVDOT, Port Authorities*
- **Cost Category:** *Medium/High*
- **Action Items:**
  - i) Pursue opportunities to expand intermodal linkages between water and other modes, specifically, rail and highway.
  - ii) Explore the establishment of a Bi-State Port Authority to oversee the Ohio River ports in the three-county region, and work with private sector partners to expand intermodal opportunities. Recommendation #13 includes a more detailed discussion of this Port Authority.
  - iii) Work with the West Virginia Public Port Authority and the Ohio Port Authority Council in encouraging the development of intermodal opportunities along the region's river frontage.

## Air Freight Infrastructure

**Recommendation #8:** *Explore development opportunities at Jefferson County Airpark.*

- **Priority:** *Low*
- **Timeframe:** *Short-term*
- **Lead Agency:** *Progress Alliance, Jefferson Co. Commissioners, Jefferson Co. Airpark*
- **Cost Category:** *Low*
- **Action Items:**
  - i) Identify the types of industries that depend on air freight for shipping commodities such as perishables, electronics, and other types of high-value, lightweight cargo.
  - ii) Conduct targeted outreach to developers associated with these types of industries through such venues as local and regional conferences and development seminars.
  - iii) Explore enhancements to corporate jet service to serve local industries better.

## 3.2 LAND USE RECOMMENDATIONS

**Recommendation #9:** *Develop process for identifying freight-related development opportunities within the region, including brownfield re-use and the identification and marketing of designated “logistics corridors” which would encourage the “clustering” of freight-dependent industries.*

- **Priority:** *Medium*
- **Timeframe:** *Short-term*
- **Lead Agency:** *BHJ, Economic Dev. Groups*
- **Cost Category:** *Low*
- **Action Items:**
  - i) Develop and maintain GIS database and mapping of sites available for development within the three-county region, including brownfield locations for potential re-use. The mapping should highlight transportation assets and proximity to related industrial developments. Agencies assigned to market potential developers of industrial properties will find this database very useful.
  - ii) Promote infrastructure improvements to brownfield sites to enhance their desirability.
  - iii) Provide incentives, such as tax increment financing, for brownfield site redevelopment.

## 3.3 POLICY RECOMMENDATIONS

**Recommendation #10:** *Develop regional marketing strategy to promote the region’s freight-related assets to potential freight-dependent industries.*

- **Priority:** *High*
- **Timeframe:** *Short- to Mid-term*
- **Lead Agency:** *BHJ, Economic Dev. Groups*
- **Cost Category:** *Low*
- **Action Items:**
  - i) Market the region’s rail infrastructure and excess rail capacity to rail dependent industries.
  - ii) Market the region’s accessibility to the Ohio River by identifying available sites along the river and the excess capacity of river transportation through the study area.

- iii) Market the region's proximity to major markets in the Midwest and East.
- iv) Market the area's proximity to Pittsburgh International Airport (approximately 30 miles).
- v) Take advantage of the region's assets that correspond to the most highly rated site selection factors for industrial development, as presented in Area Development's 24<sup>th</sup> Annual Corporate Survey (see Section 2.2, item #14). The highest rated factors include labor costs, highway accessibility, tax exemptions, energy availability and cost, and corporate tax rate, all of which bode well for the study region.
- vi) Through partner agencies, implement projects and operations strategies that address the freight infrastructure and operations needs and deficiencies for growing and strong industries in the BHJ region to facilitate industrial retention and expansion.

***Recommendation #11:*** *Include freight-related performance measures in project evaluation process to ensure the consideration of freight enhancing projects in the programming process.*

- ***Priority: Low***
- ***Timeframe: Short-term***
- ***Lead Agency: BHJ, ODOT, WVDOT, FHWA***
- ***Cost Category: Low***
- ***Action Items:***
  - i) Identify freight-related regional goals and objectives.
  - ii) Identify performance measures that relate to the existing goals and objectives.
  - iii) Use performance measures to identify freight needs and deficiencies.
  - iv) Incorporate freight-related performance measures into the project identification and evaluation process for short- and long-range plan development.

***Recommendation #12:*** *Identify innovative strategies to better match new and available funds with freight system needs.*

- ***Priority: High***
- ***Timeframe: Short-term***
- ***Lead Agency: Regional, State and Federal Partners***
- ***Cost Category: Low***
- ***Action Items:***

- i) On a case-by-case basis, match freight project needs with funding options identified in Section 2.3, Item #16, and others that may become available through upcoming new Federal Transportation Bill.

***Recommendation #13:*** Establish a governance structure, such as a Bi-State Port Authority, to identify issues, guide investments and advocate on behalf of the region through public outreach and education, promoting the BHJ region's economy and protecting the public interest.

- ***Priority: High***
- ***Timeframe: Mid-term***
- ***Lead Agency: BHJ, Economic Dev. Groups, Port Authorities***
- ***Cost Category: Low***
- ***Action Items:***
  - i) Explore legislative requirements for creating a regional bi-state freight governance structure for the three-county BHJ region.
  - ii) Define responsibilities of the governance structure.
  - iii) Identify board member representation.
  - iv) Form a committee to work with legislators to garner support for creating the Bi-State Port Authority, providing assistance with drafting proposed legislation.

***Recommendation #14:*** Monitor logistics workforce needs and educational supply; work with educational institutions and employers to ensure compatibility.

- ***Priority: Low***
- ***Timeframe: Short-term***
- ***Lead Agency: BHJ, Economic Dev. Groups, Community Colleges, DJFS***
- ***Cost Category: Low***
- ***Action Items:***
  - i) Identify and promote existing logistics related training and education opportunities and encourage additional programs, as appropriate for developing and sustaining logistics related workforce.
  - ii) Provide a forum for local educational institutions (colleges, universities, trade schools, etc.) to work with freight-related industries (shippers, carriers, transportation providers, warehousing, manufacturing, etc.) to match training needs to existing educational programs, identifying gaps that exist, and develop training programs to fill these gaps.

- iii) Work together with freight-intensive industries to market freight-related careers by sponsoring activities at high school and college career fairs and other recruiting events. Sponsor a Speakers' Bureau to provide presentations at these activities and other related venues.
- iv) Take advantage of existing freight-related training programs offered by Federal Highway Administration, National Highway Institute, National Cooperative Highway Research Program, National Cooperative Freight Research Program and Transportation Research Board.

***Recommendation #15: Educate the community (regional stakeholders) regarding the logistics industry.***

- ***Priority: Medium***
- ***Timeframe: Short- to Long-term***
- ***Lead Agency: BHJ, Unions, Media Economic Dev. Groups***
- ***Cost Category: Low***
- ***Action Items:***
  - i) Host a freight forum, encouraging both public and private sector participation, to educate the community on the opportunities that could come from encouraging freight-related development.
  - ii) Provide periodic freight-related articles on the BHJ website and in their newsletter.

***Recommendation #16: Establish a freight point-of-contact / technical lead for the BHJ region.***

- ***Priority: Medium***
- ***Timeframe: Short-term***
- ***Lead Agency: BHJ, Weirton Area Port Authority***
- ***Cost Category: Low***
- ***Action Items:***
  - i) Designate a "freight lead" within BHJ to serve as the point person for coordinating freight planning activities within the region.
  - ii) Provide a sustainable role for the Freight Study Steering Committee, ensuring a forum for maintaining public/private dialogue regarding freight issues and strategies for the region.