## **Description of Study Area**

The BHJ region consists of three counties: Brooke and Hancock Counties in West Virginia and Jefferson County in Ohio. The adjoining cities of Steubenville, Ohio, and Weirton, West Virginia, serve as the region's core in terms of population and employment.

The major transportation facilities within the region are Ohio State Route (SR) 7, West Virginia (WV) 2, WV 27 and US 22. SR 7 stretches from Lawrence County in southern Ohio to beyond the northern border of Jefferson County. SR 7 is the main north-south route west of the Ohio River. It connects the region to Wheeling, West Virginia, and to I-70 to the south and I-80/I-76 in Youngstown to the north. WV 2 parallels SR 7 on the east banks. It connects the region with two other large West Virginia cities, Wheeling and Parkersburg. WV 27 connects to WV 2 and provides access to Washington, PA and the Pennsylvania Turnpike. US 22 is the only major east-west thoroughfare in the region because the geographic terrain makes a fluent east-west travel pattern difficult. US 22 is very important because it connects the region to Pittsburgh, Pennsylvania, the closest major metropolitan area. US 22 also connects with I-77 in Ohio, allowing drivers' convenient access to Steubenville/Weirton, East Liverpool/Chester as well as to southern Ohio and the Canton-Akron-Cleveland area, see Figure 1.

There are currently three opportunities to cross the Ohio River within the region. The Fort Steuben Bridge connects Freedom Way in West Virginia to SR 7 and US 22 in Ohio. The bridge is adjacent to the Half Moon Industrial Park and experiences a relatively high amount of truck traffic. The Veterans Memorial Bridge connects the two states via US 22. The Market Street Bridge connects WV 2 with downtown Steubenville. This bridge has a weight restriction of 5 tons, prohibiting large trucks.

The Phase II Study Area is bounded on the north by the Fort Steuben Bridge and extends downstream south of Brilliant near Beach Bottom. See Figure 2.

## **Existing Bridges**

The three existing bridges examined in this study are, from north to south, the Fort Steuben Bridge, the Veterans Memorial Bridge, and the Market Street Bridge. Traffic volumes<sup>1</sup>, based on Average Daily Traffic (ADT) counts, on the three bridges are as follows:

	<u>Vehicles</u>	Percent Trucks
• Fort Steuben Bridge	5,500 ADT	17%
<ul> <li>Veterans Memorial Bridge</li> </ul>	32,500 ADT	10%
<ul> <li>Market Street Bridge</li> </ul>	6,700 ADT	0%

It should be noted that the closest river crossing points beyond the study area are at Wheeling, 25 miles south of Steubenville, and at East Liverpool, Ohio, 25 miles north of Steubenville.

<sup>&</sup>lt;sup>1</sup> Source: Ohio and West Virginia DOT and BHJ for the year 2002.







BROOKE - HANCOCK - JEFFERSON REGIONAL BRIDGE SYSTEM STUDY

## FIGURE 1 REGIONAL LOCATION







