

Section 2. Navigation System Value to the Nation

General.

The Ohio River Navigation System (ORS) is situated in the Ohio River Basin, a 204,000 square mile area drained by the Ohio River and its tributaries. The drainage area encompasses all or portions of fourteen states, including Alabama, Georgia, Kentucky, Indiana, Illinois, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia. The ORS is a major portion of the nation's inland navigation system and consists of more than 2,600 miles of commercially navigable waterways. It includes the Ohio River and the navigable portions of the Allegheny, Monongahela, Kanawha, Big Sandy, Green, Tennessee, Cumberland and Kentucky rivers. The Ohio River serves as a collector of system traffic for distribution to points within and outside the Ohio basin, while the tributary streams serve major mining areas and industrial concentrations within the Basin. Through interconnections with the Mississippi River and its tributaries, ORS traffic has access to mid-western states and deep-draft ports on the Great Lakes and Gulf Coast. ORS commodity traffic is valued at over \$30 billion.

The system of waterways that comprise the ORS handled 271 million tons of traffic in 2006. The main stem Ohio River is the dominant waterway in the ORS, though the tributaries act as major origins and destinations for traffic moving on the main stem Ohio. The Tennessee, Cumberland, Big Sandy, Kanawha, and Monongahela rivers handled over 20 million tons each.

Shippers and terminal operators manage the loading docks and terminals on the basin's rivers and waterway carriers operate towboats, barges, and maintenance facilities. Tows moving on the ORS system are configured to operate as efficiently as possible along each waterway segment. Currently, the Ohio River fleet consists mostly of jumbo open and covered hopper barges, though there are significant numbers of tanker barges available for handling liquid commodities. A typical Ohio River tow is a 4,500 horsepower towboat moving 15 barges, while tows on the navigable tributaries are smaller due to channel and lock restrictions. Stakeholders note that barge transportation is more energy efficient than either rail or truck, and that barge transportation is also more environmentally friendly, helping reduce overland congestion, accidents, and noxious pollutant emissions.

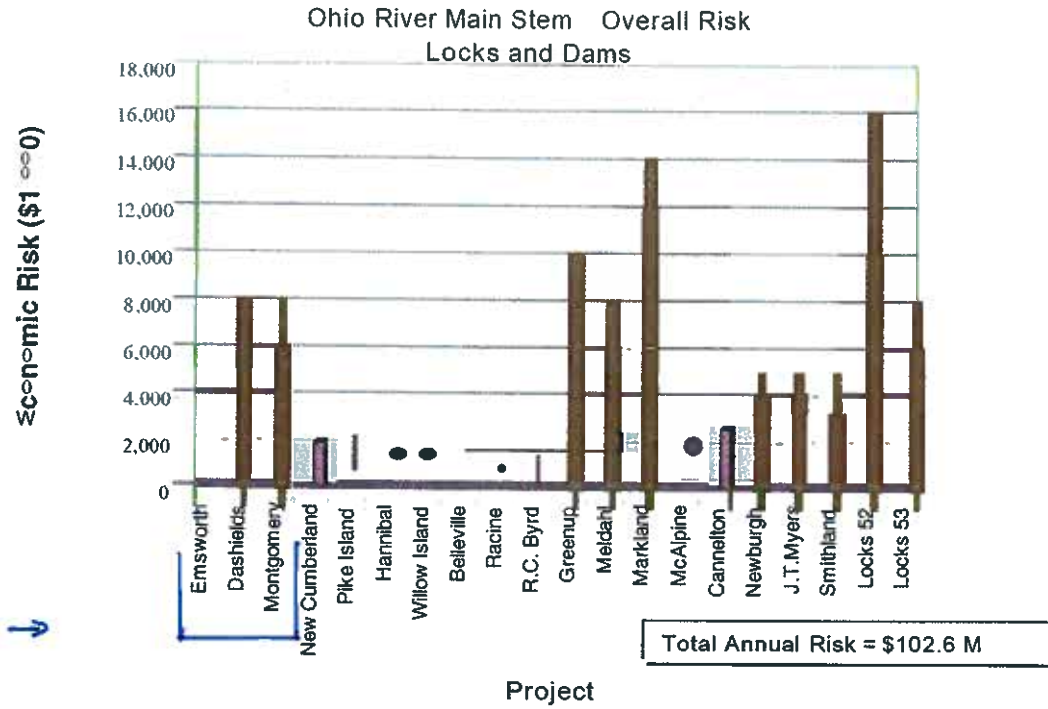
Between 1950 and 1965, traffic on the Ohio River doubled. Over the next 25 years, 1965-1990, traffic on the main stem doubled once again. Most of this traffic growth was driven by massive investments in waterside coal-fired electric generating facilities that were expanding to accommodate the needs of an expanding economic base. Electric utilities were locating new plants all along the waterways of the ORS and expanding their existing waterside facilities to take advantage of this extensive waterway system as a source of water supply and for low-cost waterway transportation of coal. Since 1990, main stem traffic has grown by another 25 million tons.

Shippers relying on the ORS realize over \$3 billion in transportation cost savings annually. These savings result in additional national output estimated at over \$11 billion, which made possible approximately 100,000 jobs and \$3 billion in income. While national impacts are large,

regional impacts can be larger still. For example, the Port of Pittsburgh estimates that the ORS directly generates almost 53,000 jobs and just over \$2 billion in income, most of this in the mining and manufacturing companies that rely on the waterway to ship and receive goods.

Major port cities like Pittsburgh, Cincinnati, Louisville, and Huntington have developed distribution centers for goods produced in the basin. Waterside developments include a long list of manufacturing and processing facilities that play a significant role in local economies, as well as the national economy. These include: electric power plants, coal mines, steel mills, coke ovens, aluminum smelters, chemical and cement plants, lime kilns, paper and pulp mills, stone quarries, corn and soybean processors, feed mills, and flour mills. In addition, it appears more likely that container facilities will be developed in some of these cities. Container-on-barge service is expected to develop and detailed plans for a new double stack container rail line from Norfolk to the Port of Huntington have been announced. This development suggests an expanded role for waterways in moving cargo in the United States and represents new opportunities for inland ports.

For elaboration on the value of the Ohio River Navigation System, see Appendix 1 “Navigation System Value to the Nation”.



Distribution of Ohio River Main Stem Risk By Project

