

River at Risk

An Economic Analysis of Expanding Ohio River Locks

FACT SHEET

Background

The US Army Corps of Engineers (COE) has long relied upon traffic forecasting and certain transportation models to justify locks and dams on the Ohio River. The existing navigation system contributes to annual flooding on the river and is a leading reason that seventy percent of river habitat has been destroyed. This results in billions of dollars of property damage, business interruption costs, lost lives, and species extinction. In recent years the COE has recommended expansion of the navigation system based upon forecasts of increased traffic.

The COE is due to release a \$51 million Ohio River Mainstem System Study proposing certain navigation infrastructure investments on the Ohio River, including extension of auxiliary locks, that could cost taxpayers billions of dollars.

ORF Report

Dr. Phillip Baumel, a nationally recognized transportation economist, has authored a study, commissioned by ORF, to analyze COE traffic forecasting and modeling on the Ohio River. This study suggests that the Corps' model is fatally flawed and is not a sound basis for making multi billion dollar investment decisions. Changes are needed in the Corps' analyses to make them reliable tools in public investment decisions on proposed navigation improvements. Two National Research Council (NRC) reports made similar recommendations for the Corps of Engineers' benefit cost analyses of lock improvements on the Upper Mississippi River.

Key Report findings:

- COE models are unreliable and outdated
- COE traffic estimates for the last 15 years incorrectly project significant growth
- Actual traffic has stagnated on the Ohio River over the last 15 years
- Methodologies and data used in the Corps estimates of the benefits of \$355 million lock improvements at the J.T Myers and Greenup Locks and Dams were reviewed and found to be inconsistent with industry practices and economic theory.
- These inconsistencies and the greatly overestimated traffic forecasts are fundamental flaws in the analysis. These flaws make the Corps' analysis an unreliable tool in guiding public investment decisions in Ohio River navigation improvements.

RECOMMENDATIONS

Where lock extensions, such as those at JT Myers and Greenup, cost hundreds of millions of dollars, taxpayer benefits must be clear and distinguished from construction employment and barge industry benefits. It is clear that the Corps' analyses must be revised and corrected before any rational funding decisions can be made on proposals to extend or replace locks on the Ohio River.

Therefore, the Corps should:

- Develop, analyze, and implement a set of realistic non-structural options with positive benefit/cost ratios to reduce congestion. The NRC report strongly recommends that this should be done before attempting to re-estimate the benefits and costs of lock extensions,
- Incorporate actual economic criteria and market conditions by constructing a realistic price spatial equilibrium model
- Delay decisions on Ohio River lock improvements until it develops and implements realistic price spatial equilibrium models and several nonstructural options.
- A similar economic analysis should be made of all supporting engineering analyses and reports.