

#### AN INFRASTRUCTURE PROJECT THAT IMPACTS EVERY FACET OF U.S. MANUFACTURING—THE SOO LOCKS

The American manufacturing industry depends on a single piece of federal infrastructure with no redundancy and no backup plan. The navigational locks located in Sault Ste. Marie, Michigan are the key connection point between the raw material mines along Lake Superior and the manufacturing industries located on the other four Great Lakes. The U.S. Department of Homeland Security has called the Soo Locks "the Achilles heel of the North American industrial economy."

### The Importance of the Soo Locks to the North American Economy:

More than 90% of the 80-plus million tons of vital raw materials that move to and from Lake Superior ports each year transit the largest lock at Sault Ste. Marie ("Soo"), the Poe Lock, one of two operational locks. 94% of all U.S. tonnage moving through the Soo are restricted to the 49-year old Poe Lock, the lynchpin of American manufacturing. Iron ore for steel making is mined in Minnesota and Michigan and transported by U.S. Great Lakes ships to steel mills in Indiana, Michigan, Ohio, and Pennsylvania and in turn this steel is sent to automobile, appliance, and other manufacturers throughout the country.

A Department of Homeland Security (DHS) report warned that if the Poe Lock was out of service for just six months, a real potential, 11 million Americans would be unemployed and our economy would forfeit more than a trillion dollars. The failure of that single lock would plunge the United States into a severe recession<sup>1</sup>. The U.S. automobile manufacturing industry would begin to shut down within six weeks. DHS said, "In terms of an impact to North American economic output and employment, it is hard to conceive of a single asset more consequential than the Poe Lock."

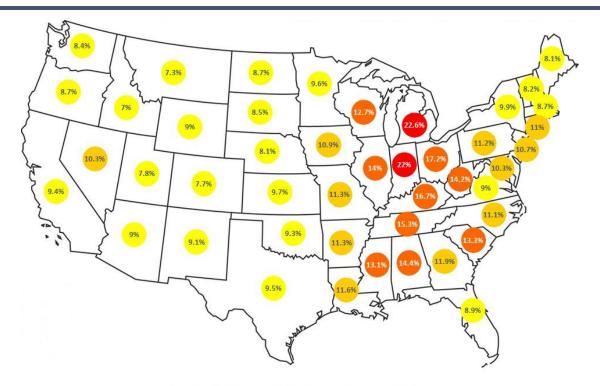
The Great Lakes states would suffer the most from a lengthy failure of the Poe Lock. DHS estimated unemployment could reach 22.6% in Michigan, 22.0% in Indiana, and double digit unemployment should be expected throughout most states east of the Mississippi but no state lower than 7% from the outage. The DHS map below shows the resulting high nationwide unemployment levels from a Poe Lock failure.

Where once there were four locks in service at the Soo, there are now two and both are showing their age. The smaller MacArthur Lock was built in 1943 and the larger Poe Lock was built in 1968. Both locks are increasingly experiencing unexpected outages during the March 25 – January 15 shipping season despite the Corps' best efforts to maintain them.

#### The Solution:

A solution exists: in 1986, Congress authorized construction of a second Poe-sized lock. The cost is estimated at \$922 million. But a flawed 2004 Corps study of the benefit/cost ratio (BCR) of this project inaccurately assumed that railroads could carry the cargo in case of a Poe Lock outage. They can't, at least not for less than a \$5-8 billion investment by the Corps' own estimate. Industry and key members of Congress pointed out the flaws in that study. It was only through Congressional intervention that the Corps reluctantly agreed to recalculate the BCR. But, the re-evaluation is stalled until additional funding is provided. The Corps has submitted a request to reprogram funds to the Office of Management and Budget (OMB) to address this need, but this reprogramming request has not been sent to the Congress. OMB must forward the reprogramming request to the Congress.

<sup>&</sup>lt;sup>1</sup> See "Unanticipated Closure of the Soo Lock," Department of Homeland Security, National Programs and Protection Directorate, Office of Cyber and Infrastructure Analysis, June, 2015.



Poe Lock Closure State Unemployment Rates

The Corps' economic benefit calculation is based on the probability of existing alternative transportation modes being used and the transportation savings provided by the project compared to using the existing alternatives. But, unlike other Corps navigation projects, there is no alternative mode. Rules dictate that the cost to build a currently non-existent alternative transportation alternative must be reduced by the probability that it won't be necessary. In reality, it would have to be fully built for an actual alternative to building another Poe-sized lock. The Principles and Guidelines for calculating the BCR will not provide an accurate assessment of the project's economic benefits. The economic revaluation must include two BCR calculations: one using the current rules and a second based on the full cost of constructing the least cost alternative transportation mode.

# A Resilient Supply System for America:

A second Poe-sized lock would ensure Great Lakes shipping can continue as mandatory repairs and upgrades are completed. Two of the needed repairs require shutting down the Poe Lock for as much as 6 months, the same time noted in the DHS report to plunge the U.S. into a major recession. The new Soo Lock construction project would also be a perfect vehicle for energizing the Midwest economy. Its construction would generate 1.5 million labor-hours for middle class workers. Construction of the new Soo Lock is supported by a broad, bipartisan group of governors, state legislators, Congressional members, and interest groups across the Midwest.

American manufacturing needs a resilient supply system. It needs a new lock for economic security. Building this critical infrastructure will help ensure a strong and vibrant American manufacturing base into the future.

# **Lake Carriers' Association**

Since 1880, Lake Carriers' has represented the U.S.-flag Great Lakes fleet, which today can annually move more than 90 million tons of cargos that are the foundation of American industry, power, and construction: iron ore, limestone, coal, cement, and other dry bulk materials such as grain and sand. Our members can transport more than 100 million tons of cargo per year and employ more than 1,500 men and women, all of whom are U.S. citizens or legally admitted aliens, and provide annual wages and benefits of approximately \$125 million. The cargos our members carry generate and sustain more than 103,000 jobs and have an annual economic impact of more than \$20 billion.