

Chickamauga Lock synopsis

The report “The Economic Impact of a Chickamauga Lock Closure” was completed in July of 2015.

Scope and significance of the project

The Tennessee Department of Transportation (TDOT) established a grant to the University of Tennessee Center for Transportation Research to determine the impacts of a permanent closure of Chickamauga Lock. Significant findings are as follows:

1. River traffic has declined through the years at the lock to under one million tons.
2. Upon closure, transportation costs to ship those commodities via different modes would increase. In the case of salt, the capacity of overland transportation might be insufficient to meet the Olin Corporation’s needs, transportation costs would rise, and rail would become a monopoly carrier.
3. If Chickamauga Lock closed for 30 days, TDOT’s cost would rise by \$1.5 million per year. Closures of 90 and 180 days would result, respectively, in annual increased costs of approximately \$3.0 million. The majority of the cost increase is found in salt.
4. Upon a permanent closure, salt used for deicing would be sourced to the Great Lakes deposits and would be delivered by rail. The logistics in securing salt from this source are more complicated than in sourcing from Louisiana. Some cities have been unable to secure all of the salt required to meet their needs.
5. Given the decline in traffic, likely plant closures, and the planned shifts to rail for some of the traffic, closure would not significantly affect highway congestion around Chattanooga nor would it materially cause an increase in highway degradation.
6. Employment at the industries using the lock stands at approximately 1,000, with associated payrolls of \$54 million. A substantial number of these jobs would likely be lost in the event of a closure.
7. The U.S. Coast Guard would remove the buoys and day markers above Chickamauga Dam.
8. The U.S. Army Corps of Engineers would significantly reduce the number of hours that Watts Bar, Melton Hill, and Fort Loudon Locks are available to process recreational craft. The number of available days per year could be reduced to 12 at each lock. This is the maximum number of days presently available at Melton Hill Lock.
9. The Tennessee Valley Authority would not alter their reservoir operations policies upon lock closure.
10. If the Christensen Yacht Company did complete their plant and manufacture large yachts, they would not be able to ship them through the lock, thus this plant would never be completed. Their plan was to hire 1,200 workers.
11. Large pleasure craft would be relocated below Chickamauga Dam, and marinas would suffer significant sales losses.
12. Given no change in reservoir operations, the manufacture of small pleasure boats would most likely remain unchanged. However, maintenance would no longer be available in the Tellico Pool for large craft located below Chickamauga Dam.

13. The Tennessee Valley Authority would be forced to change its business policy concerning the movement of overweight and/or oversized equipment in to and out of the upper Tennessee River. These large and heavy devices, currently shipped by barge, would be shifted to either truck transportation or be repaired on site, necessitating the construction of manufacturing plants upstream of the dam. Some of the devices are so large that highway shipment would be made by truck at speeds of one mph.
14. The movement of pleasure boats to University of Tennessee football games would be diminished.

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