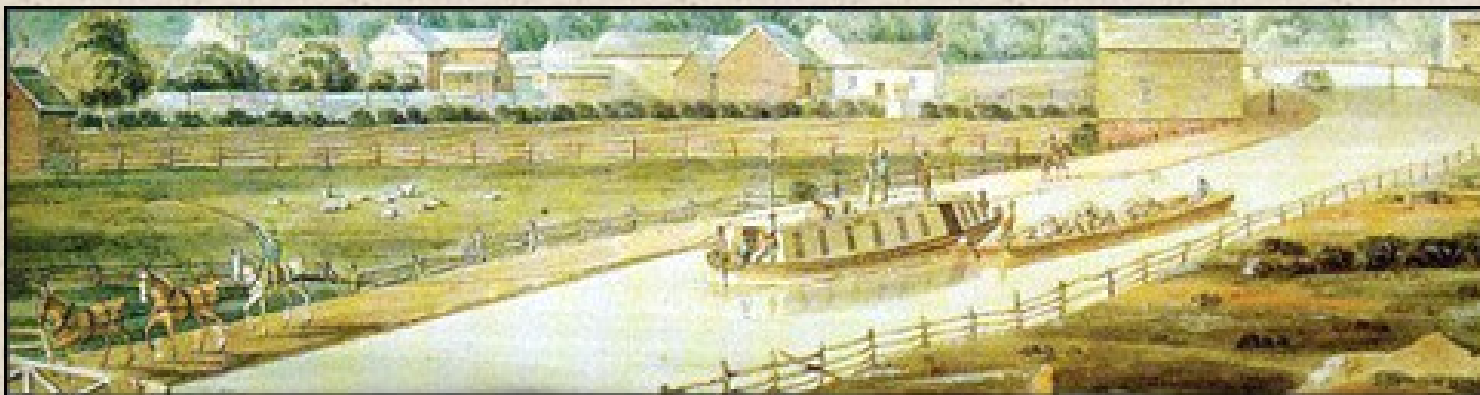
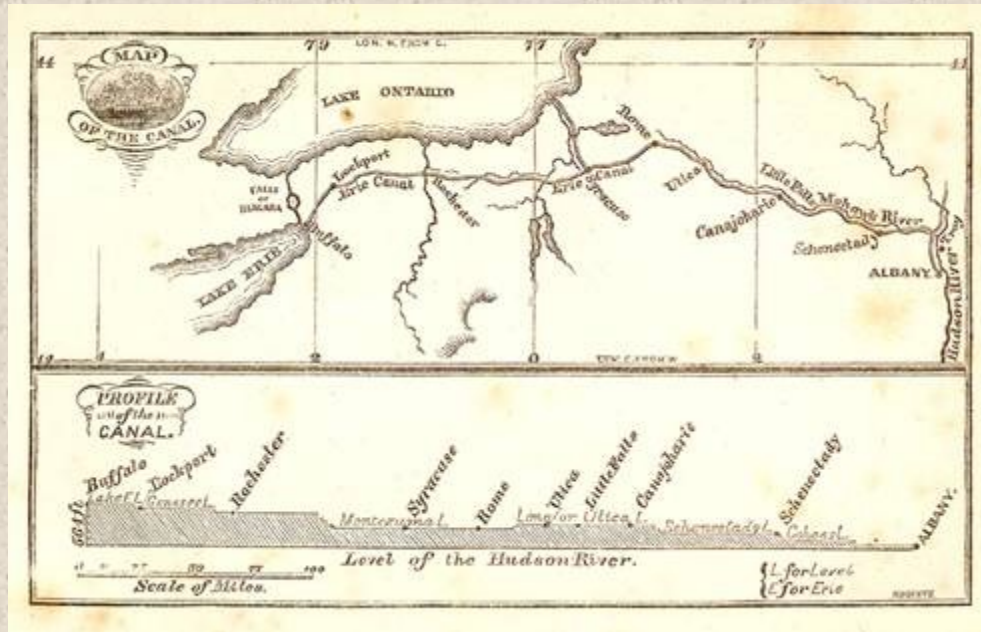


# Canals



*View on the Erie Canal*  
(Watercolor by John William Hill)

An equally significant transportation improvement was the building of canals, man-made waterways. In the U.S., canals were often little more than shallow ditches filled with water funded through private and public investments. Canal barges were towed by horses walking along the side of the canal on a towpath. The water bore most of the weight of the load, which enabled each horse to pull far more than it could pull while traveling on land. One horse could pull less than a ton over roads but it could pull up to 30 tons of cargo loaded in a canal barge.



**Erie Canal map and profile**

*(Front piece from Marco Paul's Voyages & Travels, Erie Canal by Jacob Abbott, 1852)*

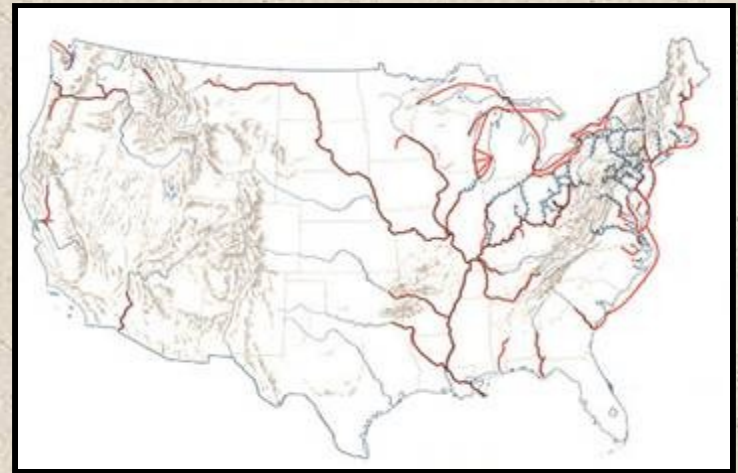
The Erie Canal was one of the earliest and most successful canal projects in the U.S. It stretched 363 miles across New York State from the Hudson River in the east to Lake Erie in the west. It was 12 times longer than any previously built canal. The Erie Canal connected the old Northwest to New York Harbor and the Atlantic Ocean. Started in 1817, it turned a profit long before it was finished in 1825. It sparked a canal boom as others tried to copy its success linking eastern cities to the Great Lakes and western rivers.

Before the Erie Canal was built, it took 3 weeks to haul one ton of goods from New York City to Buffalo. The financial cost was \$95 to \$125 per ton. The canal reduced the time required for the journey to 8 days and the dollar cost to just \$4 within ten years of completion.

The Erie Canal helped make New York City the largest and richest city in the nation. Some say it is the reason New York, not Baltimore, became the most important city on the East Coast.



*Canal Travel 1825*



*Canal Travel 1860*

In 1816 there were only about 100 miles of operative canals in the entire nation. The success of the Erie Canal caused a canal-building frenzy with states borrowing millions of dollars (primarily from Europe). By 1850 there were about 3,800 miles of canals. The cost to ship one ton of freight for one mile via canal was as little as one penny per ton, 1/15 the lowest cost of transporting one ton for one mile via horse and wagon. These maps show the boom in canal building that lasted until the Civil War.

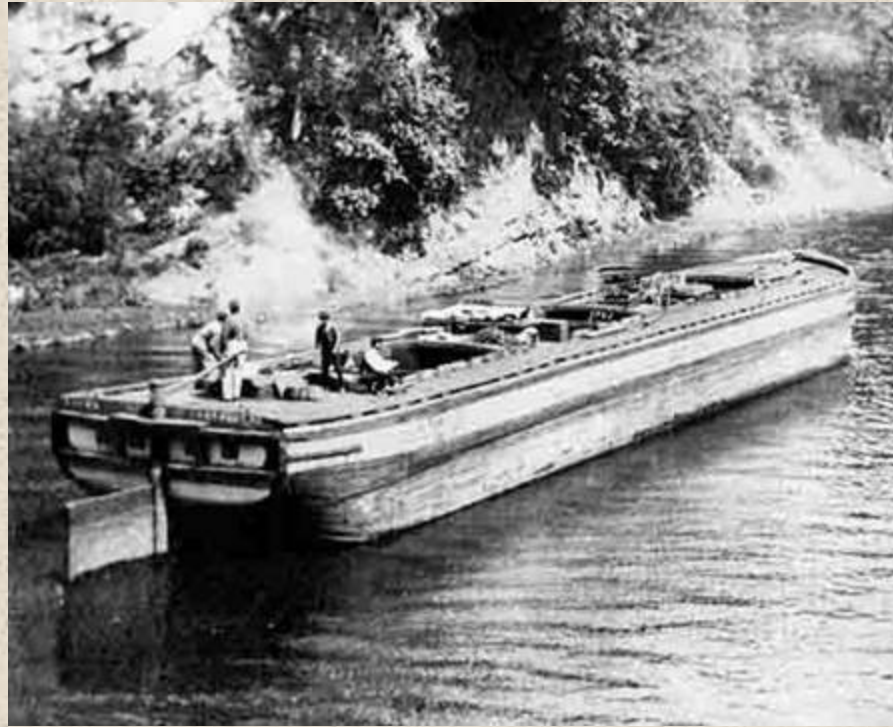


Did you notice that the waterways on the 1860 map include all of the Great Lakes? This was because another very important canal opened in 1855. The Sault Sainte Marie Canal (popularly known as the Soo Canal or Soo Locks) allowed ships to bypass the rapids of the St. Marys River. The canal uses locks to lower boats and other vessels from Lake Superior to the other Great Lakes.

**Find the Soo Canal on this map.**

Soo Canal





*Boat built to transport coal  
on the Schuylkill Canal in Pennsylvania*

Canals became a vital means for transporting heavy loads needed for the economic and geographic expansion of the era. Notable freight being moved included:

- Stone and gravel used to make road improvements;
- Grain from the western frontier to populated eastern cities; plus
- Iron, coal and timber required to build and operate new industries and homesteads.