When completed in 1825, the Erie Canal was an engineering marvel. Geographic, political, and financial obstacles were overcome to create the most successful public works project in the nineteenth century.

The Erie Canal spanned New York for 363 miles, included 18 aqueducts crossing rivers and ravines, and required 83 locks to raise and lower boats the 568-foot change in elevation between the Hudson River at Albany and Lake Erie at Buffalo. The work was brutal. Laborers often had to blast through solid rock and used little more than picks and shovels to create the canal bed. There were no engineering schools in the U.S. when the canal was built; problems were solved as the construction proceeded.

When complete, the canal was 4 feet deep and 40 feet wide, with a ten-foot-wide path along one side for the horses and mules to walk as they towed the boat. The animals were rotated in six hour shifts; one set of animals rested, while the other set pulled. The Erie Canal lowered the cost of freight, reduced the travel time across New York State, and opened access to the Northwest Territory for settlement.

When the Erie Canal was first proposed, Thomas Jefferson was the third President of the United States. Jefferson thought it was too soon in our nation’s history to undertake such an expensive project. New York State political and business leaders tried over and over to gain federal support. James Madison, the fourth President, vetoed a bill that would have covered the cost of building the canal. Our fifth President, James Monroe, was also against New York’s canal. He thought that the cost to build it would be greater than the cost of running the entire U.S. government.
De Witt Clinton (1769-1828) was the strongest advocate for the Erie Canal. He served in the New York State Legislature, the U.S. Senate, and was Mayor of New York City. He was determined to make the canal a New York State project despite the loss of federal support. In 1816, when he was elected Governor, the act authorizing the building of the canal was passed by the New York State Legislature. On July 4, 1817, the first shovelful was turned. On October 26, 1825, DeWitt Clinton boarded a canal boat in Buffalo called the Seneca Chief and traveled across the state on the Erie Canal to Albany. From Albany, he took a steamboat down the Hudson River to New York City. On November 4, he poured water from Lake Erie into the Atlantic Ocean symbolically uniting the east coast to our nation’s interior.

The original cost estimate to build the canal was $7 million. Stock certificates and bonds were issued by the state to finance the canal. Stock and bond holders were promised that they would be paid back by tolls collected on the canal. In the first year the canal was open, $1 million was collected. By the year 1836 the loan was repaid. In this same year, the state began a massive project to enlarge the canal. When completed, the enlarged canal was 70 feet wide and 7 feet deep.

In the first years of operation, four times as many goods moved east than west on the Erie Canal. By 1852, the number of boats moving west was double the number moving east. In 1853, the Erie Canal carried 62% of all U.S. trade, twice as much as all other water routes combined including traffic on the Mississippi River.

By the end of the nineteenth century, railroads were moving more freight and people than waterways. In 1903, New York State decided to create a larger Barge Canal to compete with the railroads. Opened in 1918, its boats carried six times the amount of freight. Additionally, motors, not animals, were used to power the boats. If you travel on or visit the Erie Canal today, you will be on this Barge Canal.