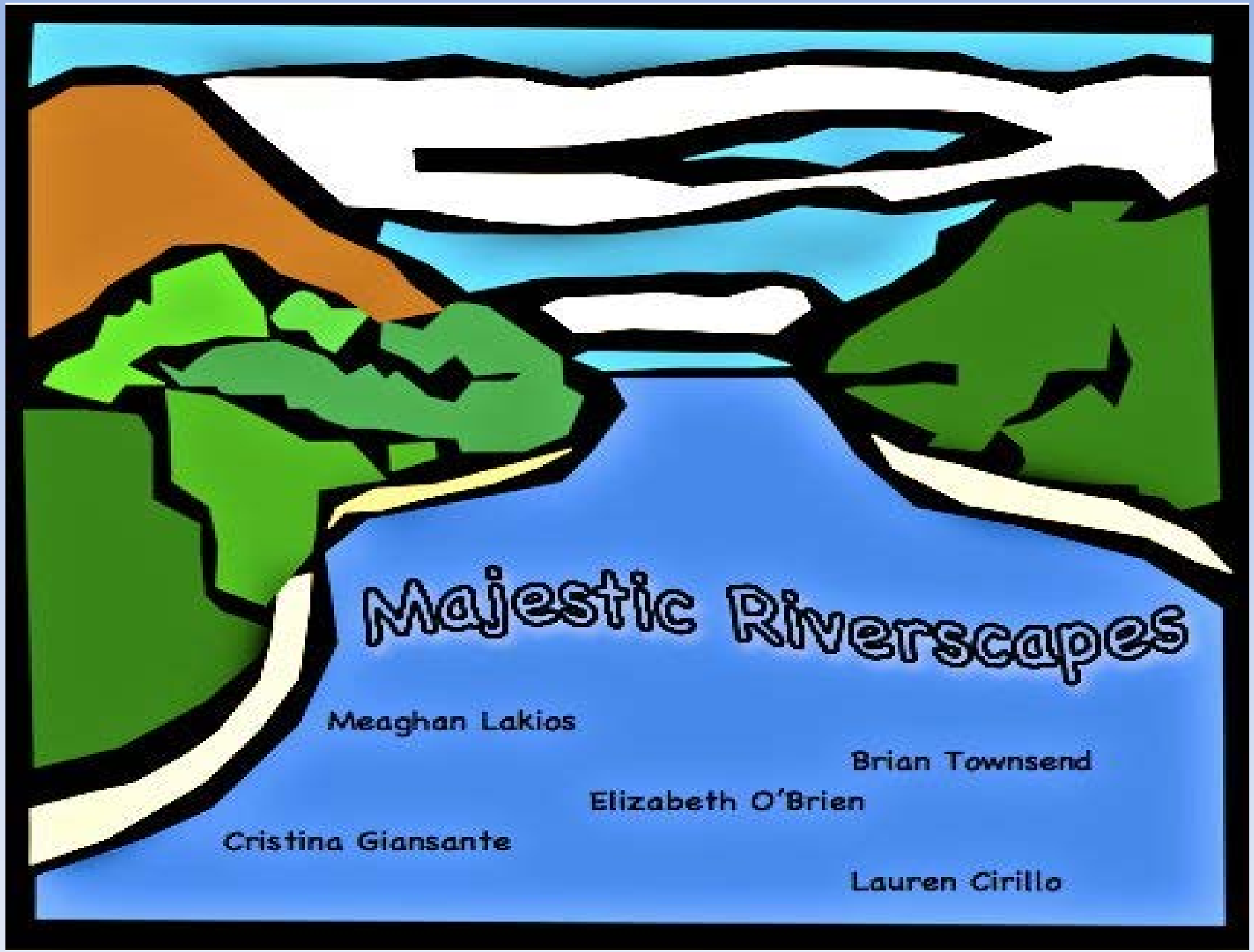
A few weeks ago in a Fontaine classroom five total strangers began a journey together that seemed impossible…

A 25 page syllabus contained the only details to mastering the journey. The only way to survive was to work together as a team…**a Majestic TEAM.**

As time went by the team fought through long and enduring journal entries, field trips, detailed lesson plans, and portfolios armed with pizzazz.

Now, one final event stands between them and the rest of their future…A final case study.

This case study will change the way these students view canals…and possibly the rest of their lives…


Majestic Riverscapes
Meaghan Lakios
Brian Townsend
Elizabeth O'Brien
Cristina Giansante
Lauren Cirillo

# Table of Contents:



# Overview of Erie Canal

- The Erie Canal stretched from Buffalo to Albany, Interstate 90 also stretches this length.
- It would make  best sense to take Interstate 90 to get to the important cities along the Erie Canal: Albany, Waterville, Cohoes, Rome, Canastota, Syracuse,  Rochester, Pendleton and Buffalo.

- **Benjamin Wright** was born on October 10, 1770 in Wethersfield, Connecticut.
- Wright was chosen to be one of the three engineers to design and build the Erie Canal.
- He was the chief engineer and directed all construction to what would be the greatest man made waterway in the world.
- He was elected to the New York State Legislature in 1794 and appointed as a New York Country Judge. On August 24, 1842
- Benjamin Wright died at the age of 72. He is buried in the New York Marble Cemetery in Manhattan.

# Overview (cont.)

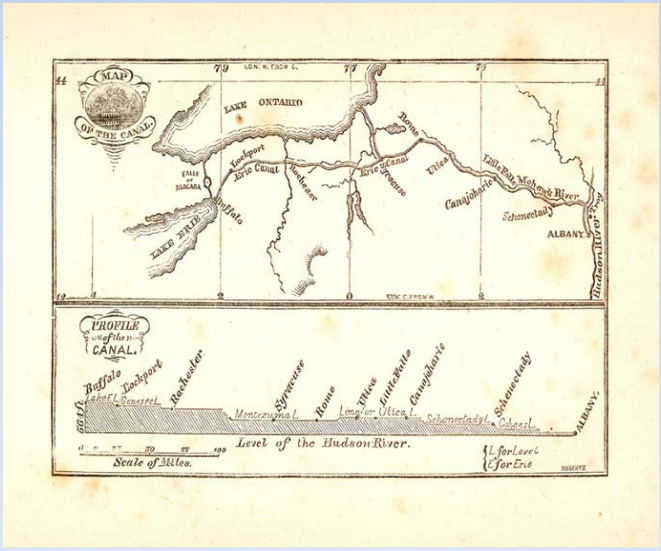
- Jesse Hawley proposed the Erie Canal in 1805.
- New York Governor DeWitt Clinton believed that if the seaboard cities, like New York City, were connected, travel time and expenses would be drastically cut and there would be more trade options.

- Ground broke on July 4, 1817 in Rome, New York even though President James Madison denied federal funding, the state backed the canal.
- The canal opened on October 26, 1825.
- The canal was enlarged from 185-1865 for bigger ships to pass through.

- By 1840 New York City was Americas busiest seaport.
- From 1905-1918 the New York State Barge Canal was built with more natural waterways but still used some parts of the Erie.


# Overview of Erie Canal (cont.)

- A clay, sand, and water type mixture was used as a base in order to waterproof the canals to ensure that no water escaped.
- All canals must be level.
- Lock gates were made of wood from the trees and the lock chambers were lined with wood, stone, or bricks.
- In 1827, case iron was used to build the locks and gates.
- The first canal trimming and lining machines were invented in 1946 by an American company.
- Today, canals are made of concrete, steel, and iron.

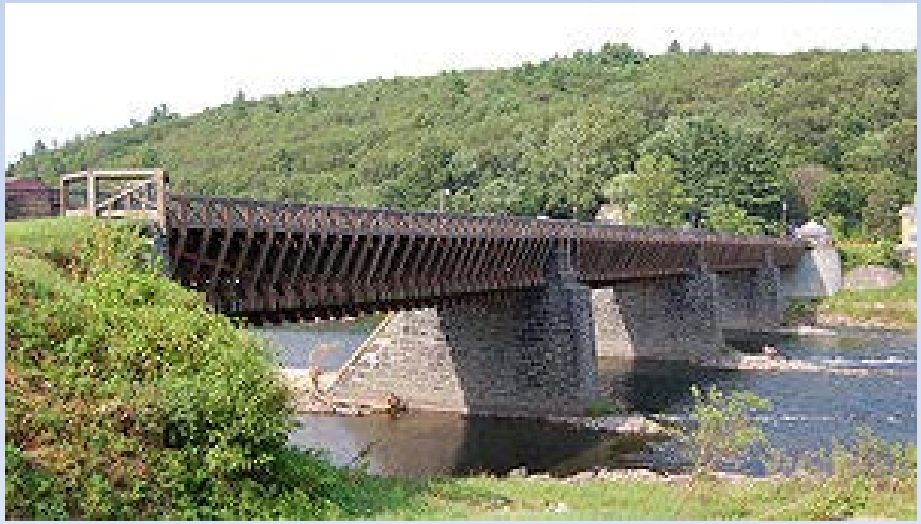


# Overview of Delaware-Hudson

- The Delaware-Hudson Canal stretches between Honesdale, PA and Kingston, NY.
- In 1823 the Wurts brothers were given permission by the Delaware and Hudson Canal Company to construct the canal.
- On April 23, 1823 New York passed the law to grant permission for the canal and on March 13th Pennsylvania also grated permission.
- Estimated cost was nearly 1.6 million dollars at the time. This was America's first privately owned million-dollar job.


# Overview of Delaware-Hudson Canal (cont.)

- The Delaware and Hudson Canal Company hired engineer Benjamin Wright and his assistant John Jervis (creators of the Erie Canal.)
- The canal began at Rondout Creek, where the creek fed into the Hudson River in Kingston.
- The finished canal ran a total of 108 miles from Honesdale to Kingston
- Benjamin Wright : The Wurts brothers approached him to survey the route of the Delaware and Hudson Canal.



# Lesson Plan


**Title**: Let's Take a Trip!

**Grade**: 6

**Objectives**: Students will:

- individually complete a worksheet about each site.
- be broken up into 5 teams and each team will create a brochure about their assigned key site.
- then present their brochures to the class and they will be posted on the bulletin board in the classroom as well as on the class's website.

**Standards**:

- **Standard 1: History of the United States and New York:** Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in the history of the United States and New York. - Students will learn about canals that impacted New York.
- **Standard 1: Language for Information and Understanding**-Students will listen, speak, read, and write for information and understanding. As listeners and readers, students will collect data, facts, and ideas; discover relationships, concepts, and generalizations; and use knowledge generated from oral, written, and electronically produced texts. As speakers and writers, they will use oral and written language that follows the accepted conventions of the English language to acquire, interpret, apply, and transmit information.- Students will gain information about canals through visiting the key-sites and then using this knowledge create a brochure for their assigned site.
- **Standard 4: Language for Social Interaction**: Students will listen, speak, read, and write for social interaction. Students will use oral and written language that follows the accepted conventions of the English language for effective social communication with a wide variety of people. As readers and listeners, they will use the social communications of others to enrich their understanding of people and their views.- Students will be working in groups to create their team's brochure. They will do this by discussing their answers to the worksheet and collaborating these to make one complete informative brochure.

**Learning Styles**:

- **Interpersonal**: Students will be working in teams to create a brochure on their assigned key-site. They will be required to work together and listen to other's views and opinions to complete the brochure.
- **Verbal/Linguistic:** Students will use their words and language to create a brochure that would attract visitors of all ages.

**Materials:** Worksheets (one per student), Computer, Markers, Pens, Craft Paper, Sample Travel Brochures, Folders

**Teacher Resources:**

- The Erie Canal Museum: http://www.eriecanalmuseum.org/
- Camillus Erie Canal Park: http://www.eriecanalcamillus.com/
- Erie Canal Village: http://www.eriecanalvillage.net/
- Chittenango Landing Canal Boat Museum: http:www.chittenangolandingcanalboatmuseum.com/
- The Delaware & Hudson Canal Historical Society and Museum: http://www.canalmuseum.org/

**Motivation:** Students will be introduced to the Erie Canal and the Delaware-Hudson Canal by watching a short video on them. They will also be shown some travel brochures so that they can gain ideas on how to make theirs. As a class, we will discuss what they think should be included in the brochures and this will be the basis of the worksheet.

**Procedure:**

**Before:** Students will watch the videos about the two canals: the Erie Canal and the Delaware-Hudson Canal. The class will be broken up into 5 teams: Team 1: The Erie Canal Museum, Team 2: Camillus Erie Canal Park, Team 3: Erie Canal Village, Team 4: Chittenango Landing Canal Boat Museum & Team 5: The Delaware & Hudson Canal Historical Society and Museum. They will also learn about what goes into a brochure and discuss what they think should be included in their teams' brochures; based on the class discussion the teacher will create a worksheet to organize the important information from the field trips.

**During:** Students will tour each of the key-sites throughout the year and complete the worksheets. Each student will be given a folder that will be kept in class that he or she will keep their key-site worksheets in. As each teams' assigned key-site is visited, the team will have a week to complete their brochure based on the information that they collected on the worksheets. The team will have the opportunity to meet together as well as with the teacher during free time each day during that week to create their brochure. As the teams complete their brochures they will hang them on the class's "Let's take a trip around New York" bulletin board.

**After:** At the end of the year, the teams will each present their brochures to the rest of the class; parents will also have the opportunity to come see this presentation to view something that the students have been working towards all semester.

**Summary:** Students will learn about two canals in the Hudson River Valley area: the Erie Canal and the Delaware-Hudson Canal. Students will visit five key-sites throughout the semester that have to do with the history of these canals. Students will work together in teams to create a brochure of one assigned key-site. By creating the brochures, students will have an understand of what goes into a travel brochure and will be able to persuade visitors to visit these keys-sites. After completing the brochures, the class will have a presentation day, on which they will present their team's brochure to their classmates and their parents.

**Evaluation:** Students will be evaluated:

- indirectly as they discuss their worksheet answers and create their brochure.
- based on the completion of the students' worksheets.
- based on the completion of each team's brochure. Meaning that all components of the brochure that were discussed in class are included and that the language used in the brochure is persuasive.

Lesson Plan Worksheet!

- Guidebook


ERIE CANAL MUSEUM


014774
ECLIPSE
FRICK CO
WAYNESBORO PA


BOATYARD
WELCOME
ELDER-
HOSTELERS
OCT. 2-9

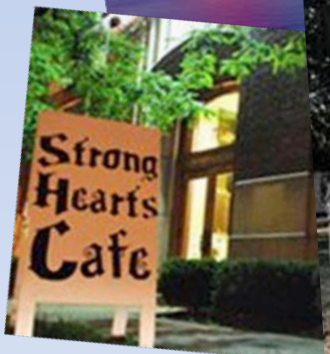
# Itinerary


Front of the historic museum.


ERIE CANAL
VILLAGE


ERIE CANAL
MUSEUM


Strong Hearts
CAFE


Strong
Hearts
Cafe


The
Brewster
Inn


All aboard for the 19th century!
ERIE CANAL
Village


THE DELAWARE & HUDSON
CANAL
MUSEUM


WELCOME TO
HISTORIC
WURTSBORO
FOUNDED 1863


THE DELAWARE & HUDSON
CANAL


CHITTENANGO LANDING
CANAL BOAT MUSEUM

# Wayside Exhibits

At the completion of the canal in 1817 , it was 363 miles, 40 feet wide, 4 feet deep, descended 555 feet, and contained 83 locks.

All of the work was done by horse, mules, hand tools, wheel barrels, and a ton of unskilled workers. Farmers whose farms fell along the route were contracted to build tiny portions of the canal which would be connected to other tiny portions.

## The Erie Canal

# Did you know?

- The New York State Canal System is a navigable 524-mile inland waterway that crosses upstate New York.
- The Canal System includes four Canals: the Erie, Champlain, Oswego and Cayuga-Seneca.

- The Canal System, which links the Hudson River with Lake Champlain, Lake Ontario, the Finger Lakes, the Niagara River and Lake Erie, passes through 25 counties and close to 200 villages and towns.
- The NYS Canal System is 524 miles long.
- It takes approximately five (5) days to cruise between Albany and Buffalo on the Erie.

# Impact on Trade

- Opened in 1825, the Erie Canal made New York the top commercial city in the United States.
- Within the first fifteen years opened, the Erie Canal made New York one of the busiest ports in America.
- The Canal affected most people in New York State because most major cities were relatively close to the trade route established by the Erie Canal (The Erie Canal: A Brief History).

- Trade exploded immediately after the Canal was opened. Traveling from Buffalo to New York, freight rates went from $100 per ton by road to $10 per ton by Canal.
- The amount of bushels of wheat increased dramatically as well. In 1829, 3,640 bushels were transported from Buffalo and in 1837 500,000 bushels were being transported (The Erie Canal: A Brief History).

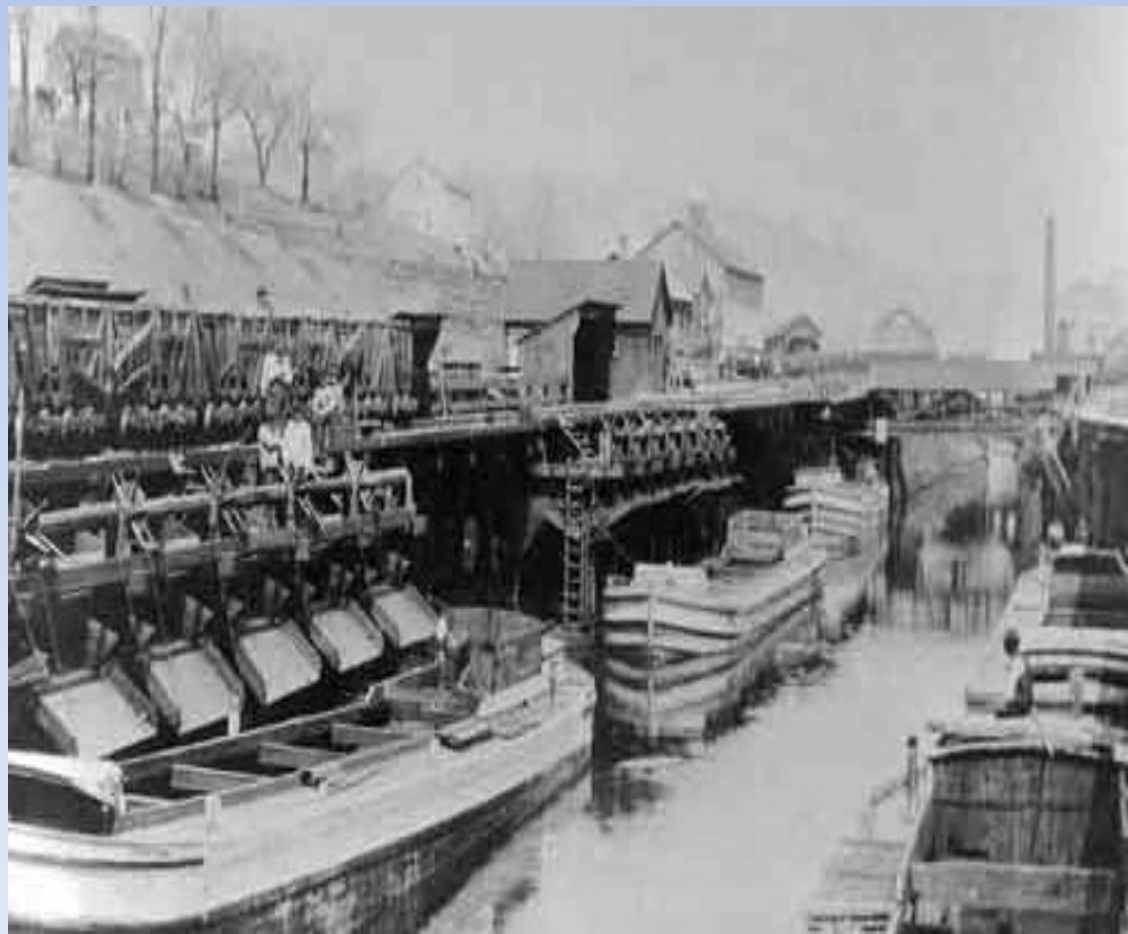

# The Delaware-Hudson Canal

Once complete the canal ran 108 miles long, ending at the city of Kingston. It was 4 feet deep, 32 feet wide and changed a total of 1075 feet in water elevation.

The Delaware-Hudson canal was started in 1825 and opened for navigation in October of 1828. The canal was built by over 2500 unskilled workers.

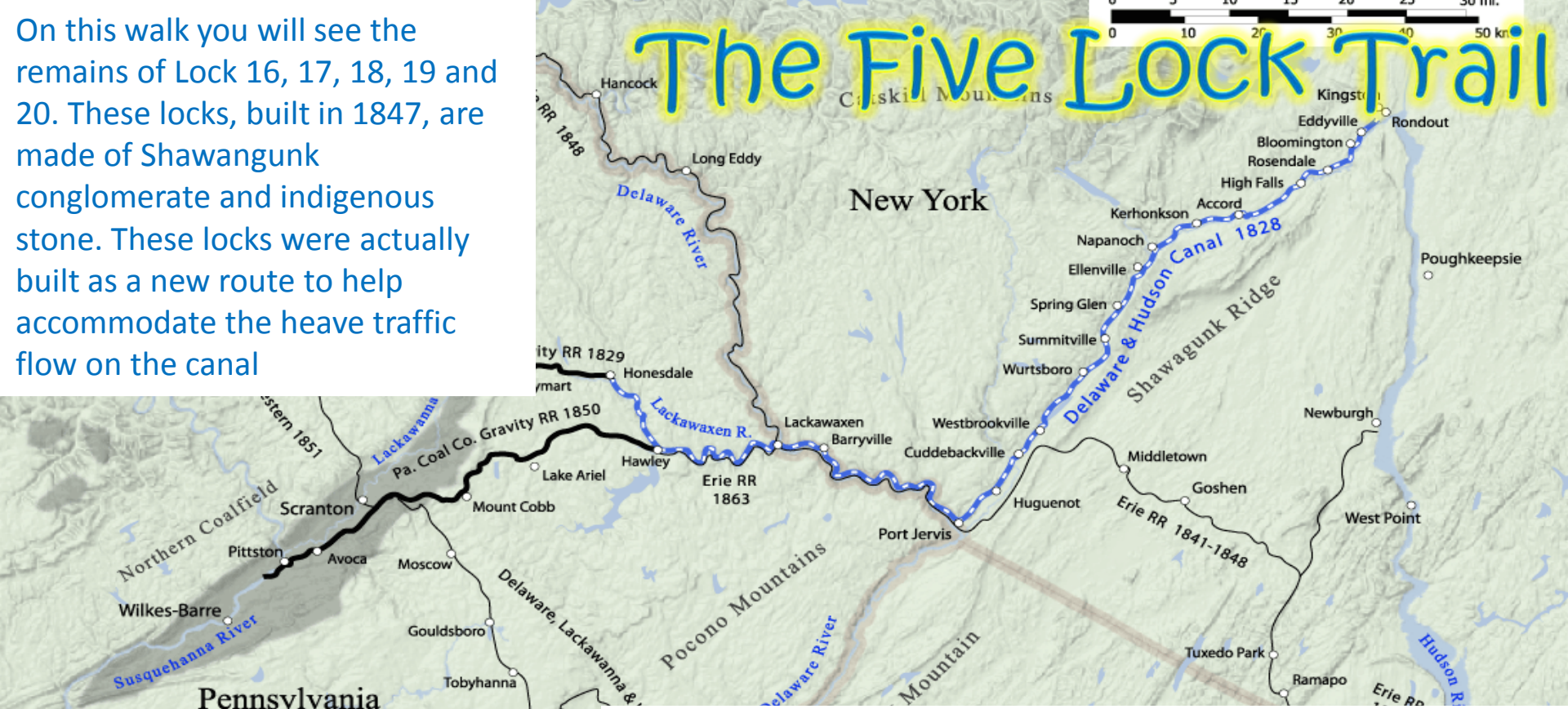
# The Pennsylvania Coal Company

- In 1850, the Pennsylvania Coal Company constructed its own gravity railroad from the coal fields to the port at Hawley and the Delaware-Hudson canal enjoyed increased traffic, carrying over 300,000 tons of PCC coal in the first season.
- However, the relationship between the two companies soured after the canal attempted to raise tolls under the argument that canal improvements had reduced costs for the PCC.
- The dispute led to the courts and was decided in 1863, but by that time the Erie Railroad constructed its extension to Hawley and the PCC moved its shipments to the railroad.



# The Five Lock Trail

On this walk you will see the remains of Lock 16, 17, 18, 19 and 20. These locks, built in 1847, are made of Shawangunk conglomerate and indigenous stone. These locks were actually built as a new route to help accommodate the heave traffic flow on the canal




## What is a Lock?

A lock is used in a canal to move a ship from either lower to higher water levels or higher to lower water levels. It is a stretch of water with gates on both sides built into a canal. How does it work? When a ship needs to be raised to higher level it enters the lock and the gate behind the ship closes. Water is then let in or out of the lock until the water level is the same as the water ahead. The front gate then opens and the ship progresses on its journey. The locks are controlled by either electric or hydraulic power. Culverts, which the water is poured into or out of, are built into the structure of the lock walls (Canal Lock).

# Line Boats

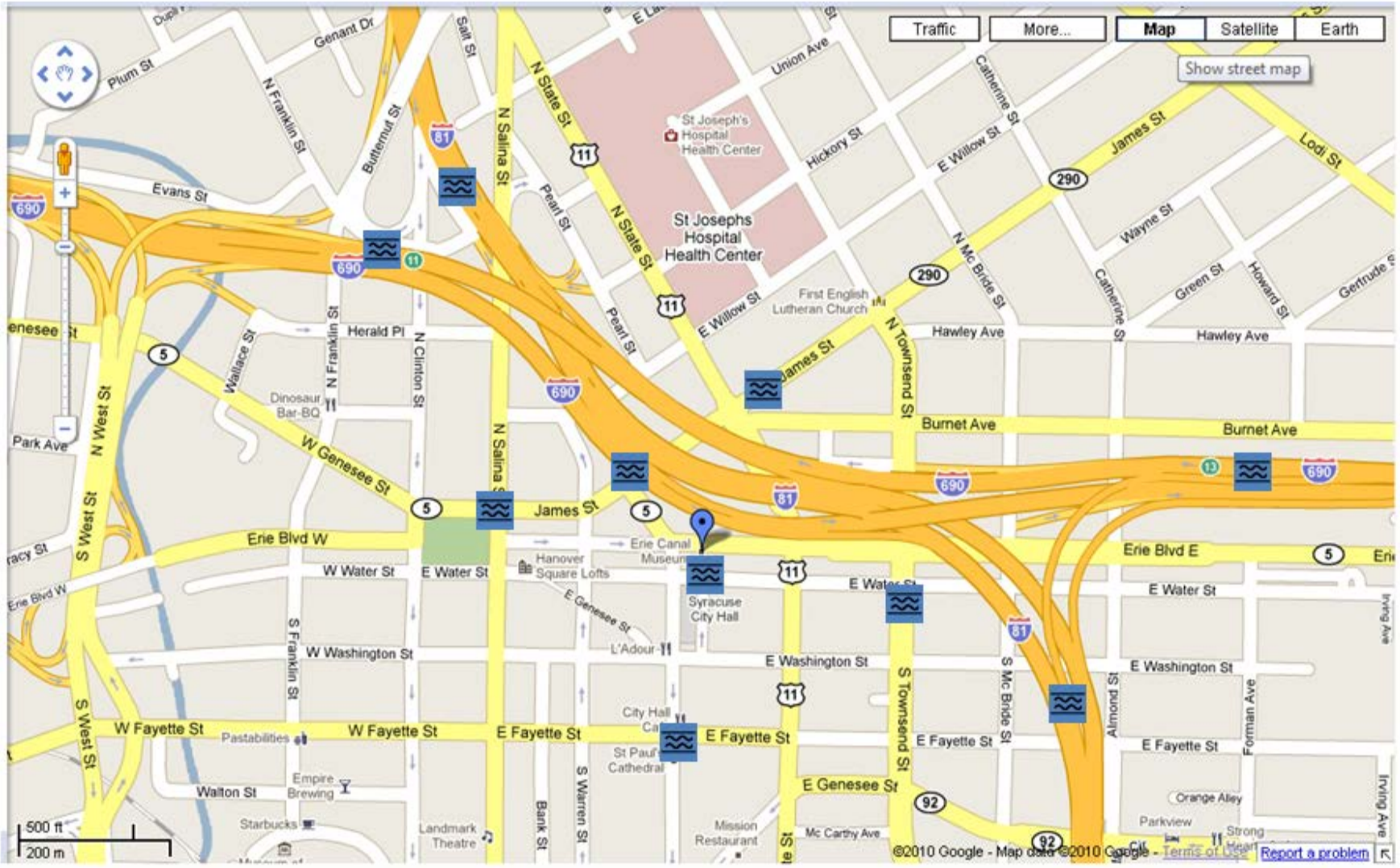
- Line boats or working boats could carry either freight or people.
- The boats would carry lumber, gravel or agricultural products east and the manufactured products west.
- People were able to get to the Northwest Territories, now areas around Ohio and Michigan, to take advantage of their products with the help of the line boats.
- Sometimes the boats were even homes for families.
- The line boats were all different sizes and configurations however they were all restricted to a certain size to the size of the Locks (Boats on the Erie Canal).

# Highway Route Markers


Sign that marks the east end of the Erie Canal. Erected by the Canal Society of New York State
http://www.hmdb.org/marker.asp?marker=5174

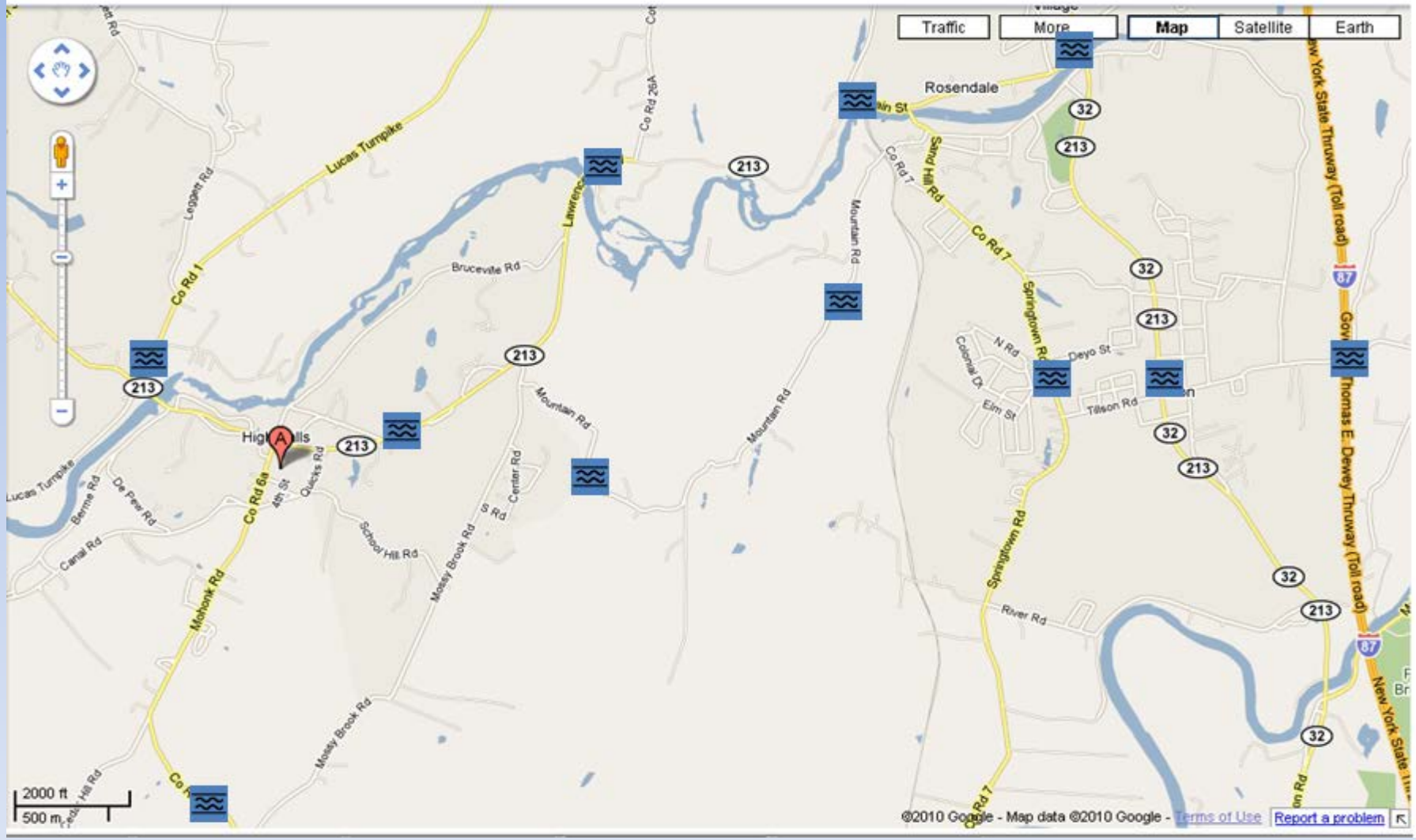
Highway Symbol indicating Canal as a point of interest.
http://commons.wikimedia.org/wiki/File:Symbol_canal.svg

# Erie Canal Museum




= Highway Symbol indicating Canal as a point of interest.

# Delaware and Hudson Canal

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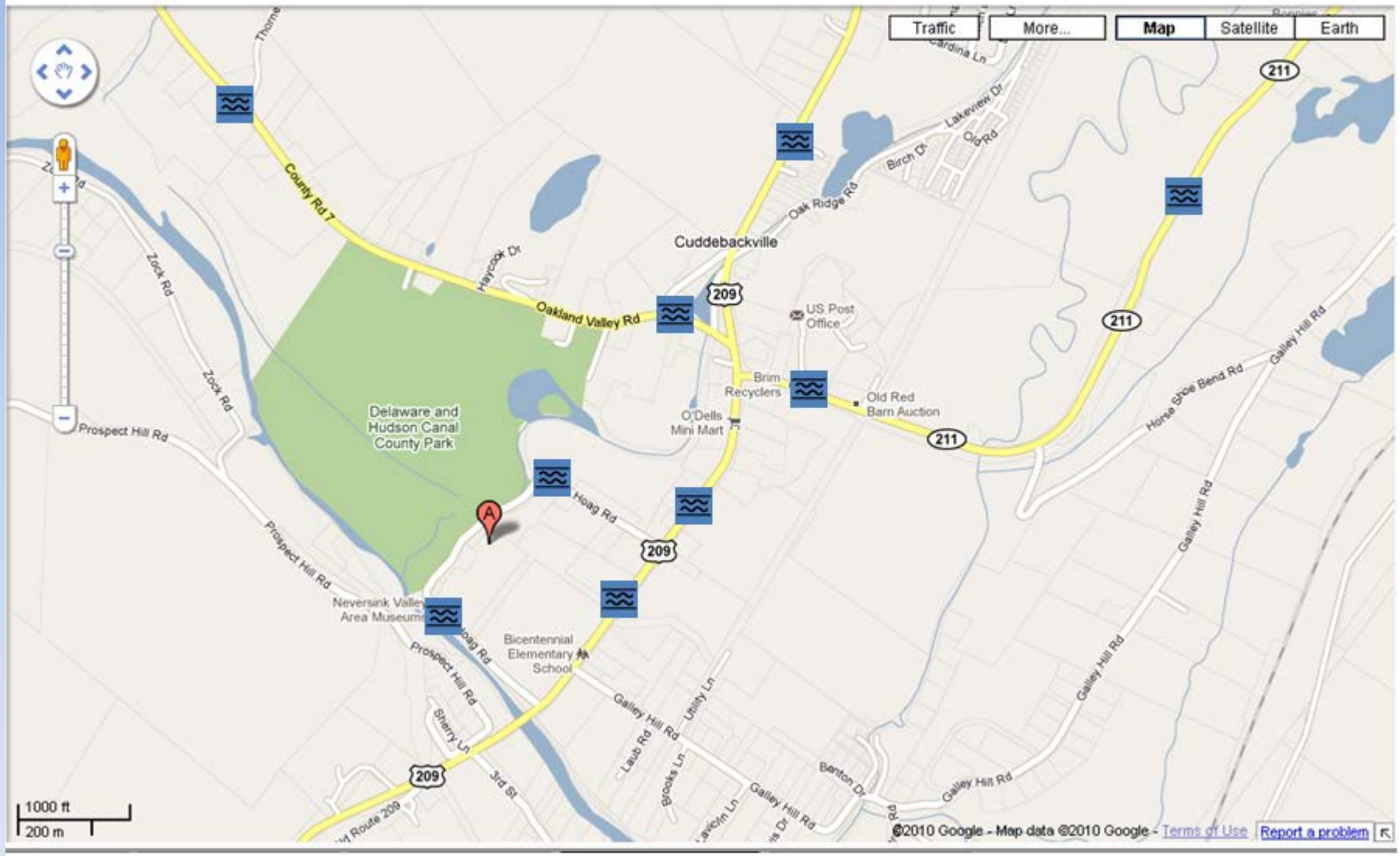
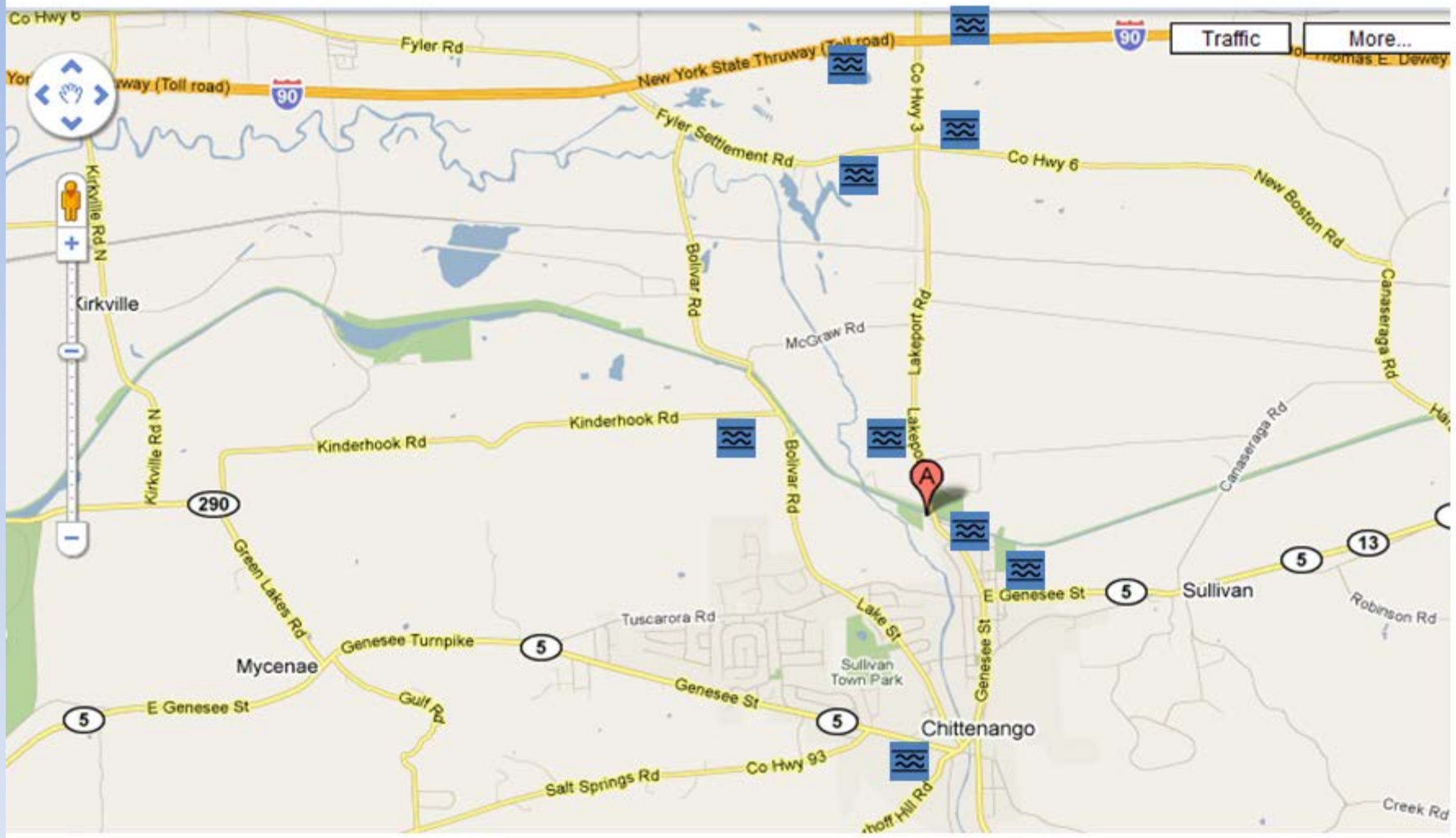
# The Neversink Valley Museum of History and Innovation



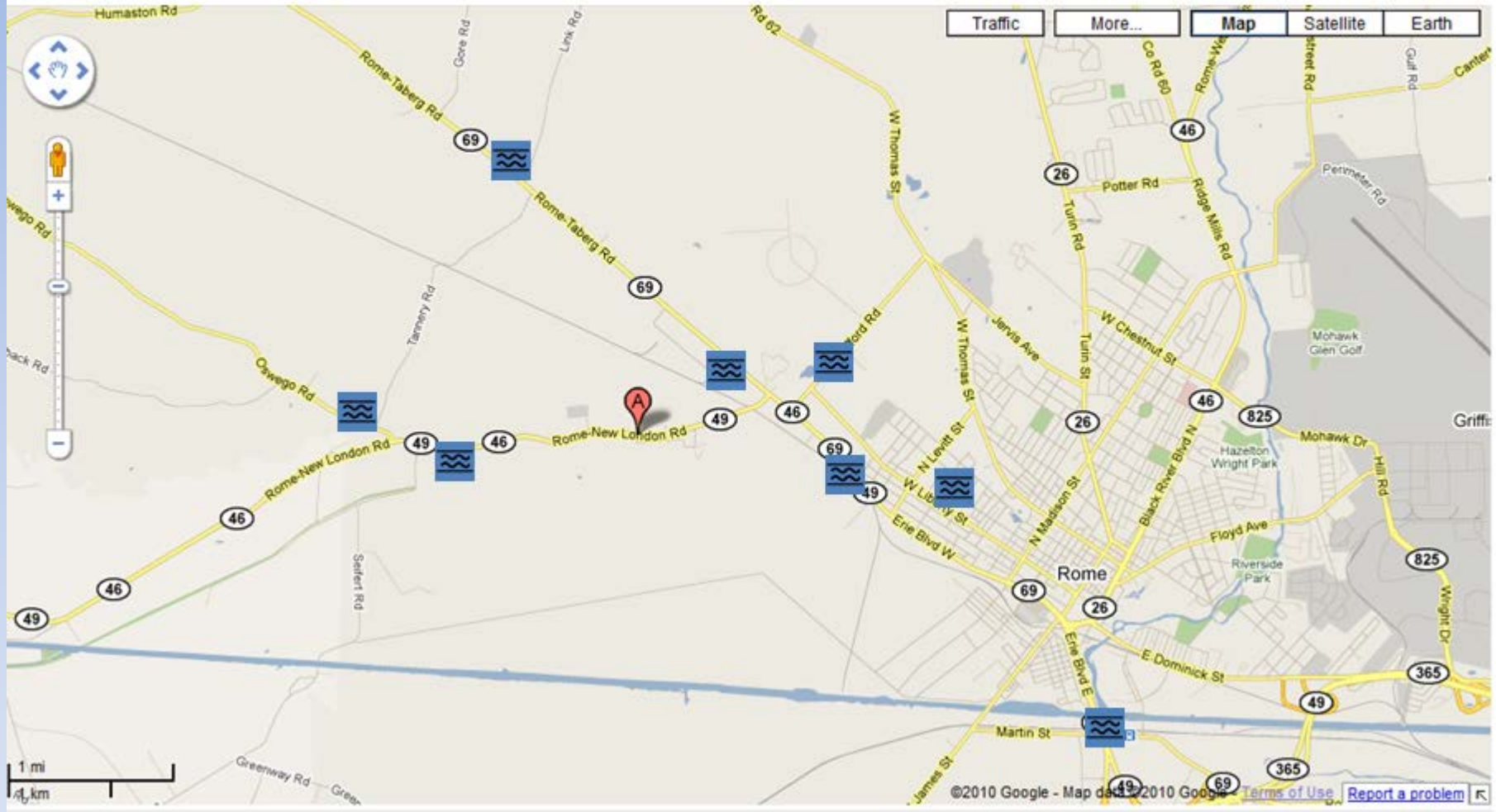

= Highway Symbol indicating Canal as a point of interest.

# Chittenango Landing Canal Museum




= Highway Symbol indicating Canal as a point of interest.

# Rome Erie Canal Village

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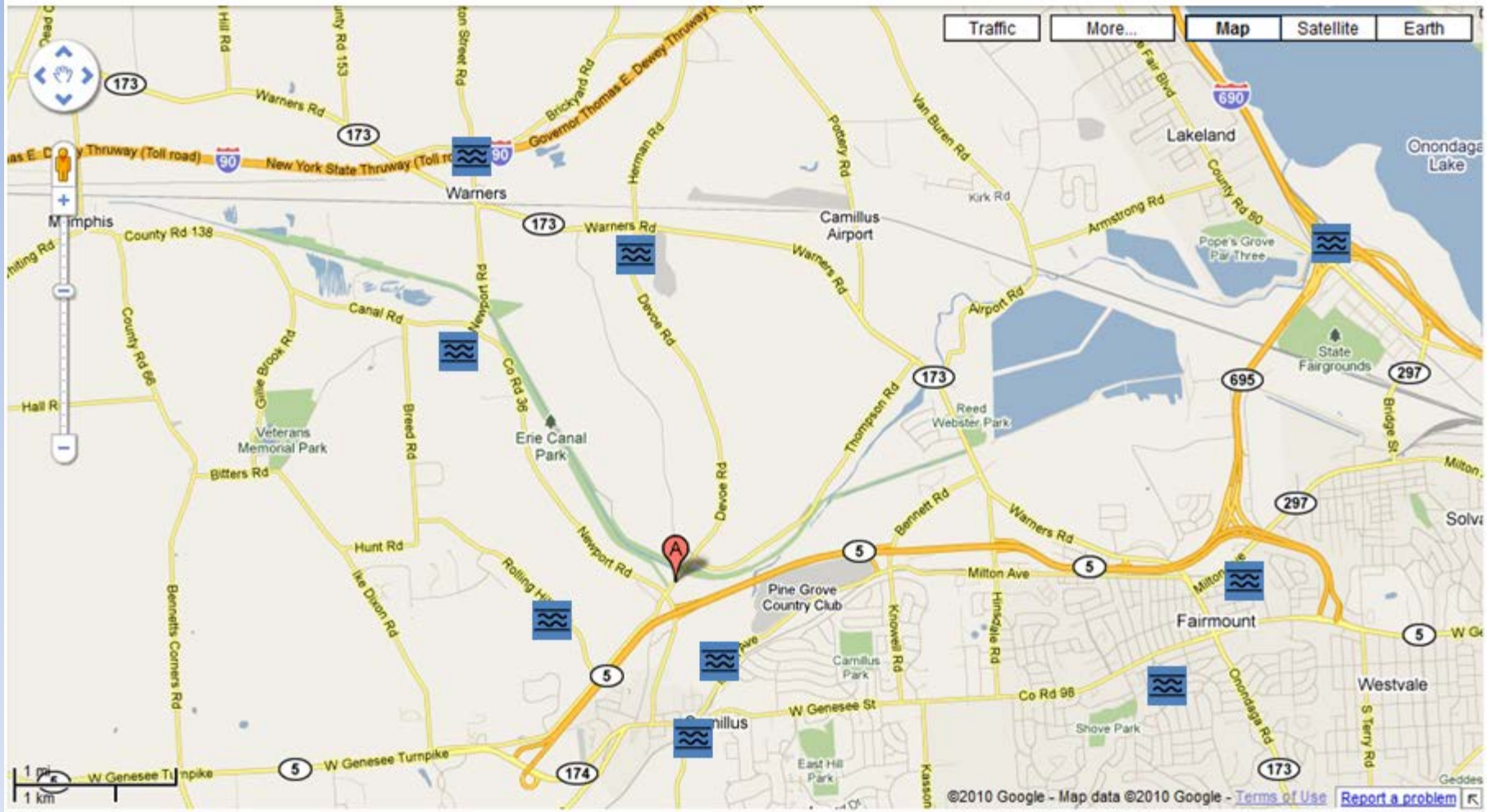
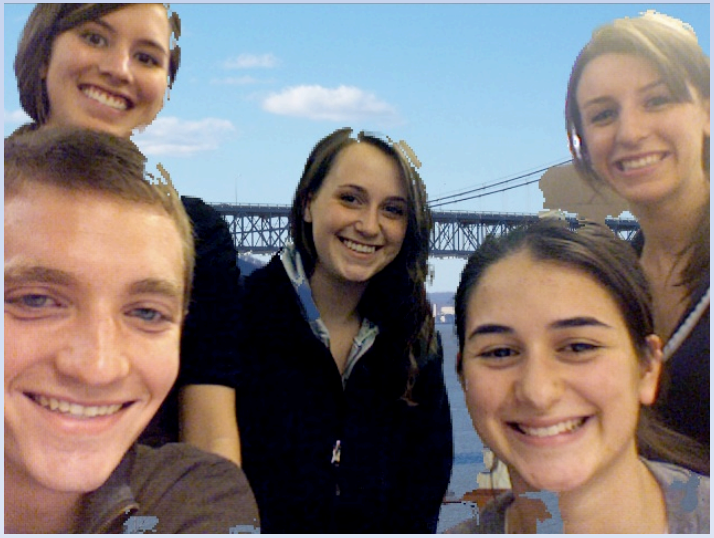
# The Steam Engine Exhibit




= Highway Symbol indicating Canal as a point of interest.

# Useful Websites

- http://www.canals.org/educators/curriculum/The_Delaware_and_Hudson_Canal
- http://www.canalmuseum.org/
- http://www.eriecanal.org/
- http://www.canals.ny.gov/



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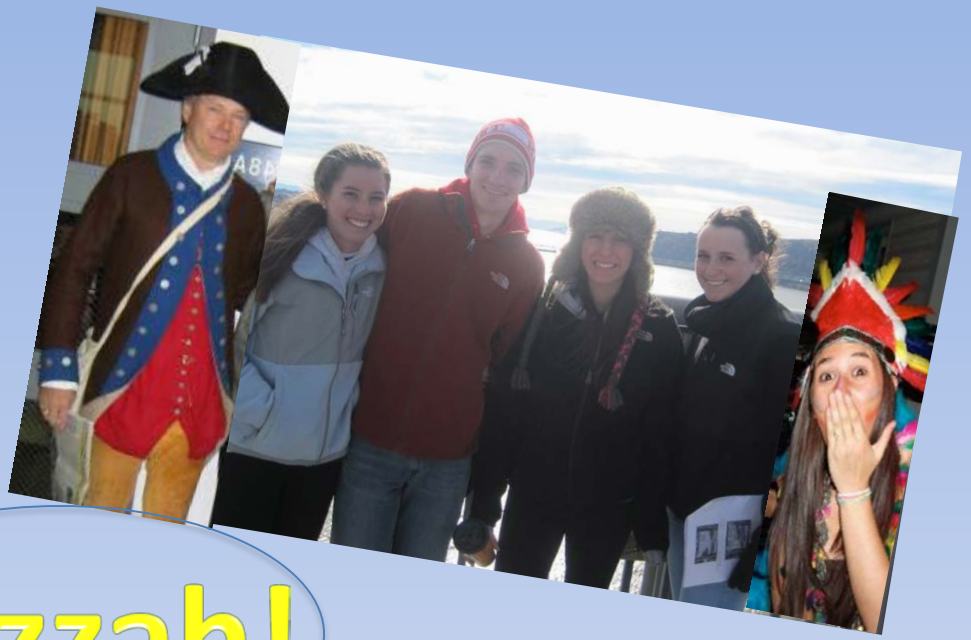
Note: Used for biography of John Roebling

Huzzah!