



## DOCENT MANUAL

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**Table of Contents**

Introduction.....2

    What does a docent do? .....2

    Docent Position Description .....2

    Docent Tips: Dos & Don’ts .....4

Tours .....6

    General Museum Tour.....6

        Outline for Standard 1-Hour to 1.5-Hour Tour.....6

        Sample Narrative for 1-Hour Tour.....9

    Heritage Area Walking Tour ..... 18

        Outline for Heritage Area Walking Tour ..... 18

        Sample Narrative for Heritage Area Walking Tour (Pending) ..... 22

    School Tours (Pending)..... 23

Resources ..... 24

    The Erie Canal ..... 24

        Facts to know about the Erie Canal..... 24

        Travel Facts about the Erie Canal ..... 26

        Typical Canal Boat Styles ..... 26

        Facts about the Frank Buchanan Thomson line boat..... 27

    A History of the 1850 Syracuse Weighlock Building..... 28

        Facts about the Weighlock Building ..... 28

        Tolls..... 29

        Weighlock Building Personnel ..... 30

    Salt & Its Contribution to the Development of Syracuse ..... 31

        Salt Facts..... 31

    Facts to Know ..... 32

    Suggested Reading ..... 33

## Introduction

### ***Welcome!***

Thank you for choosing to become an Erie Canal Museum docent. Your knowledge and enthusiasm will share the great American adventure story of the Erie Canal with visitors from all over the world. Although leading tours can be challenging, the results can be very rewarding. This manual is a compilation of information that you will use on your tour, as well as additional background information that will help add context and meaning to your tour. Your knowledge will grow throughout your time as a docent at the Museum, but some information must be mastered before you give your first tour.

### **What does a docent do?**

As a docent you will lead guided tours at the Museum. For many visitors, you will be the key person that they interact with during their visit. Visitors arrive at the Erie Canal Museum from a variety of backgrounds. Some people don't know anything about the Erie Canal, and others have an extensive knowledge on the subject; however, all visitors will look to you as an authority on the topic, and will be eager to learn from you. Your job is to provide visitors with a memorable learning experience that is also fun, while supporting the Museum's mission.

The mission of the Erie Canal Museum is to showcase the only remaining weighlock building in the United States, collect and preserve Canal material, and provide engaging educational experiences that champion an appreciation and understanding of the Erie Canal's transforming effects on the past, present and future.

As a docent you will also act as a steward of the Museum's collection. While on tour, you are responsible for your entire group and must remain aware of where each person is at all times. Docents lead by example, and if you respect the collection your visitors will too.

### **Docent Position Description**

Position Description and Objectives:

- Facilitates meaningful discussion with tour participants.
- Promotes an appreciation and understanding of the Erie Canal's transforming effects on the past, present and future.
- Uses accurate information to educate students and visitors to spark their interest in the legacy of the Erie Canal and its relevance today.
- Creates a professional and welcoming atmosphere for visitors.
- Acts as a steward of the Museum.

Skill Sets and Interests:

- Passion for engaging adult and student audiences with new ideas.
- Ability to guide and effectively manage tour groups throughout their visit, ensuring the group stays together at all times.
- Have an interest in learning about contemporary trends in museum interpretation and education.
- Ability to problem-solve, be flexible, and work well with other team members.
- Be physically able to stand, walk, and speak for hour-long durations at a time.

#### Commitment:

- Arrive ten minutes before each shift and stay for the duration of the shift.
- Contact the Operations Manager immediately if an emergency prevents you from making your scheduled shift commitment.
- Attend docent orientation and enrichment sessions as required.
- Pursue opportunities for continuing self-guided inquiry into the Erie Canal, and museum interpretation and education.
- Maintain the safety of visitors, staff, and the site by observing Erie Canal Museum security and visitor services guidelines.
- Keep track of all hours volunteered in the blue Volunteer Hours Log located at the front desk.
- Be open to having your tour shadowed by Museum staff who will identify strengths, weaknesses, and areas that need improvement.
- Maintain a professional and courteous attitude when interacting with Museum staff, other volunteers, and visitors.
- Dress Code: In an effort to maintain a professional Erie Canal Museum image, we ask appropriate attire for a business or casual business setting – please no ripped jeans, shorts, cut offs, tank tops, or flip flops. Comfortable shoes are highly recommended for docents due to the active nature of the work.
- Always wear your nametag.
- If a visitor offers a volunteer a monetary tip, please encourage the visitor to place the money in the donation box. Volunteers may not accept payment for services rendered.
- If a member of the staff or a visitor does or says something inappropriate that makes you feel uncomfortable, speak with the Executive Director so the issue may be resolved.

#### Training:

- All docents must be certified to lead each type of tour. The certification process includes attending a training session with a Museum staff member, shadowing at least two tours, and then leading a tour for a Museum staff member.
- The Erie Canal Museum provides docent training at least annually on the best practices of historical interpretation and museum education. We encourage continuing education throughout the year through making use of historical documents, manuals on best museum practices, and historical reference texts available to docents.

#### Benefits:

- A one-year Basic Membership to the Erie Canal Museum is available at the start of each calendar year to all volunteers who recorded twenty (20) hours of volunteering in the previous year.
- Access to research library.
- Annual volunteer recognition event.
- Opportunity to come together with other individuals interested in history and the Erie Canal.
- Opportunities to attend webinars or online seminars offered by the American Alliance of Museum or the American Association for State and Local History.

## Docent Tips: Dos & Don'ts

Leading guided tours for the public is a challenging, but rewarding experience. It requires good public speaking skills, confidence, and enthusiasm. No one is a perfect docent, but these tips should be used as helpful reminders in order to provide your visitors with the best experience possible.

### Do

- Docent Behavior
  - Maintain eye contact with visitors, and good posture throughout the tour.
  - Smile! Be friendly. Introduce yourself.
  - Be enthusiastic: your enthusiasm is contagious and will keep your group's attention for the full hour.
  - Be confident: even if you lose your train of thought. Visitors look to docents as teachers and want to hear what you have to say.
  - Personalize your tour. Your personality is an important part of the tour.
  - Use the active voice and speak clearly.
  - Create interest at the beginning of the tour so your visitors want to follow you to hear more. First impressions are important.
- Docent Responsibility
  - Take charge of your group; you are responsible for them while they are in the Museum.
  - Know where everyone in your group is at all times. Visitors may want to linger in a space, but it is your job to keep everyone together.
  - Be aware of where you are standing in relation to your group. Everyone should be able to see and hear you in each space.
  - Guide visitors through the Museum using both your voice and body position. Let your group know which room you are headed to next.
  - Follow a logical train of thought: if you jump around, people will become confused and stop listening to you.
- Tour Content
  - Familiarize yourself with exhibits in the changing spaces prior to leading a group through the Museum.
  - Be confident and comfortable in what you're saying. Work from an outline rather than a pre-written script. You will sound more natural and you will hold the tours attention far more effectively than by simply reciting a script learned through rote memorization.
  - Keep some information for questions. Visitors like to ask questions and are often likely to come up with good ones.
  - Say "I don't know." You will be asked questions throughout the tour. If you don't know the answer there is nothing wrong with simply saying so. It is never a good idea to try and make up an answer. When your tour is finished, try to remember the question and ask a member of the staff. Over time your knowledge will increase and you will have a wide variety of knowledge to answer even the most obscure of questions.
- Docent-Patron Relations
  - Listen to your visitors – you can learn from them!

- Connect to the audience's frame of reference. Provide background and context to your stories so visitors can understand the big picture.
- Encourage questions.
- Use suspense throughout the house to maintain interest; you don't have to say everything at once.

## **Don't**

- Docent Behavior
  - Avoid using 'um,' 'uh,' 'like,' and other filler words. It is better to pause to gather your thoughts.
  - Don't start talking in a space until your entire group is with you.
  - Avoid walking and talking at the same time. If you have a large group, many people will miss what you said. This is especially important on the stairs: don't distract people as they navigate them.
  - Don't turn your back on a group while talking – it makes it hard for everyone to understand you.
  - Don't speak with your hands in your pockets or lean on gallery walls. This gives off the impression that you are not enthusiastic about being a docent, and the children will be less likely to listen and be engaged.
- Docent-Patron Relations
  - Never argue with a visitor: People who visit the Museum come from a variety of backgrounds and may have different ideas, thoughts, and beliefs than you. If a visitor tries to argue with you, politely tell them you would be happy to talk to them more after the tour.
  - Don't let one or two problem visitors ruin everyone else's time. Deal with issues quickly.
  - Don't be afraid to tell a visitor you don't know the answer to their question. You can offer an educated guess based on what you do know, and offer to look up the answer after the tour.
  - Never make a visitor feel stupid if they ask a strange or illogical question. Just answer it as best you can and move on.
- Tour Content
  - Don't read from a script. It is okay to start with a script, but develop an outline that works for you and rehearse until you are comfortable.
  - Don't overload visitors with dates and figures. An hour after someone leaves they won't remember a specific date, but they will remember a story that puts that date into context. There are only a few major dates that need to be used on your tour. Instead, use relative dates such as 'five years later.'
  - Never tell a visitor how much an object is worth. This is not information that the Museum shares with its visitors; let them know this firmly, but politely.

## Tours

### General Museum Tour

General Guided Tours of the Erie Canal Museum are currently offered by reservation only. Large groups may schedule a docent led tour through the Operations Manager. In January 2019, we would like to begin offering a guided General Museum Tour every day. If only one tour is being offered at a time, you will start in the Lobby. Up to three tours could occur within the Museum at one time. Should this occur, one of the alternate outlines should be used.

**REMEMBER: You are not trying to tell the visitors everything you know about the Erie Canal! You are also not just reciting the information they could get from a self-guided tour. Keep it interesting and story-oriented.**

**Goals:** Visitors should leave knowing:

1. why and how the Erie Canal was constructed,
2. the national impact of the Erie Canal,
3. that the Erie Canal is still an active waterway/corridor, and
4. why there is an Erie Canal Museum in downtown Syracuse.

### Outline for Standard 1-Hour to 1.5-Hour Tour

- **Intro: Lobby**
  - Greet the tour and introduce yourself. Cover applicable building rules (stay together, bathroom location, etc.). Provide a brief introduction to the Museum and an overview of what the tour will cover.
- **Stop 1: New York State Map**
  - Introduce the geography of New York State and why a canal made sense.
- **Stop 2: Hoist Map**
  - Discuss the politics surrounding the development of the canal, including major players.
  - Explain why and how the route of the canal was selected.
- **Stop 3: Engineers**
  - Note that construction began on the Fourth of July in 1817 in Rome, NY.
  - Explain canal construction and the various problems solved along the way.
- **Stop 4: Flight of Five**
  - Explain why locks were needed and how they work.
  - Note that the Flight of Five in Lockport last thing completed.
- **Stop 5: Grand Celebration**
  - Explain the festivities in October 1825 surrounding the completion of the canal, including the cannons, Governor Clinton's flotilla, and the Wedding of the Waters.
  - Transition from the chronological The Erie Canal Made New York exhibit into the Weighlock Building
- **Stop 6: Link Gallery**
  - Provide information on current exhibit and give tour a few minutes to look around.
- **Stop 7: Model of Weighlock Building Scale**

- Give a history of the Weighlock Building including why it was needed, how it worked, and what it was used for after tolls stopped being collected.
- Explain that during the heyday there were seven weighlock buildings across the whole canal system (Rochester, Syracuse, Troy, Albany, Utica, Oswego, and Waterford), but now this is the only one remaining.
- Briefly tell the story of how the Museum was founded, opening in October 1962.
- **Stop 8: Clinton Square Painting**
  - Explain the role banking played in the construction of the canal.
  - Briefly describe Clinton Square, which was the center of Syracuse.
- **Stop 9: Uniquely Syracuse**
  - Talk about commerce and industry in Syracuse in the canal era.
  - Explain that goods, people, and ideas all flowed along the Erie Canal, making this region a hotbed for social movements like abolitionism and women's rights.
  - Transition to the boat, telling guests to notice the Weighmaster's Office on the way out. Provide some information about the staff in a weighlock building like ours.
- **Stop 10: Frank Buchanan Thomson stern**
  - Remind the tour of the weighlock model they saw already and explain that they are now in the weigh chamber where that wooden cradle was.
  - Look out the windows to point out where the Oswego Canal and towpath were.
  - Explain that our boat is a model of a line boat. Describe types of boats.
  - After providing information on how the different boats were used, transition to the front of the boat, giving them a few minutes to look around.
- **Stop 11: Passenger Cabin**
  - Explain the role the canal played in immigration during the 19<sup>th</sup> century.
  - Make a comparison between a line boat and packet boat.
  - Transition back to The Erie Canal Made New York chronology
- **Stop 12: Building a Bigger Canal**
  - Explain that despite construction challenges, the Canal was my successful than anyone could have imagined, and so the bigger Enlarged Canal was built.
  - Call back to description of how the weighlock worked and why it was needed. Show historic photos of the building.
- **Stop 13: Mother of Cities**
  - Paint the big picture of Canal's impact on the state and the nation, using the panels as illustration.
- **Stop 14: Light Up Map**
  - Give a brief history of the Barge Canal, which opened in May 1918, and impact that had on the historic canal.
  - Use the map to show the difference between the historic canal and the canal today.
  - Reiterate three iterations of canals, each one is unique, but they are all related: Clinton's Ditch (original canal), Enlarged Canal (the canal of historic photographs), and the Barge Canal (today's New York State Canal System).



- Give examples of how the canal corridor is used today.
- Transition back to the lobby
- **Stop 15: Lobby**
  - Point out and explain the double ender mural as transition to upstairs, where you'll talk more about life in a canal town.
  - Call back to previous statements about the elevation change in New York State to set up for mural in the staircase.
- **Stop 16: General Store**
  - Walk around the bar to get this stop.
  - Give a description of life in a canal town and how they interacted with the canal and canallers.
  - Explain the goods, people, ideas, and now also entertainment were transported on the canal.
  - **IF THERE IS NO EXHIBIT IN THE WEIGHLOCK GALLERY:** Thank them for visiting. Encourage them to spend more time with the exhibits throughout the museum, especially the interactive displays. Offer to (try to) answer any questions. Promote Museum Membership as a great way to show their support of the Museum (and get 10% of their shop purchases today), explaining that you don't need to be a local to become a member, but locals get great discounts on future programs.
  - **IF THERE IS AN EXHIBIT IN THE WEIGHLOCK GALLERY:** Transition back into the Weighlock Building.
- **Stop 17: 2<sup>nd</sup> Floor Weighlock Gallery**
  - Provide information about the current exhibit.
  - Thank them for visiting. Encourage them to spend more time with the exhibits throughout the museum, especially the interactive displays. Offer to (try to) answer any questions. Promote Museum Membership as a great way to show their support of the Museum (and get 10% of their shop purchases today), explaining that you don't need to be a local to become a member, but locals get great discounts on future programs.

Alternate starting places:

- **Stop 16: General Store**
- **Stop 7: Model of Weighlock Building Scale**

## Sample Narrative for 1-Hour Tour

Do not memorize this script. It is for example and reference only. Your tour should be individualized to you and your tour group. And remember, you won't have time to tell them everything – select your favorite stories to share.

- Intro: **Lobby**
  - Welcome to the Erie Canal Museum! My name is (STATE YOUR NAME), and I'm going to guide you through the Museum today. *(For large groups: And this is So-and-so and So-an-so. We are going to be your guides through the Museum today.)* But first, just a little house keeping. I'm going to ask that you all stay with me throughout the tour. The Museum isn't that big, but it can be a little confusing if you don't know the layout well. The only exception to that rule is if you need to use the restroom. Those are located at the top of the stairs, which are just through that doorway, and to the left. We ask that you do not bring any food or drink with you on the tour, but bottles of water are okay. Photographs are allowed in the Museum, but I do ask that you keep cell phone use to a minimum during the tour, as they can be distracting to others. Any questions about those rules? Great! Moving right along.
  - Today we're going to talk about the Erie Canal and how, as Dewitt Clinton stated (gesture to quote on the wall), "as a bond of union between the Atlantic and the Western States...it [created] the greatest inland trade ever witnessed." The Erie Canal did have a significant impact in New York in cities like Syracuse, but the impact of the canal goes far beyond the state's borders.
  - How many of you are from the area? From far away? Who is from the farthest away? How many of you already know a fair bit about the Erie Canal? And how many of you are about to learn a lot of new things? One this tour we're going to cover both floors of the Museum, including the 1850 Syracuse Weighlock building. By the time we are done, you should know about the history of the Erie Canal, why it was important, why we have a Museum all about it here in downtown Syracuse, and what the canal is up to today.
  - *(For larger groups: We're going to break you out into groups now. Some of you follow So-and-so upstairs to start with life in a canal town. Be sure to pay notice to the mural in the staircase on your way up. And some of you are going to follow So-and-so into the Weighlock Building. Have fun!)*
- Stop 1: **New York State Map**
  - First, let's start with some geography. Come circle up around this map with me.
  - For the early American colonist wishing to travel westward, there existed a formidable natural barrier: the Appalachian Mountain Range. These mountains stretch over 1,500 miles, all the way from Canada to central Alabama. To early surveyors of the land, it became clear that the most promising passageway through the mountains was in New York State. The Hudson and the Mohawk Rivers meet to form a natural break in the mountain ridges and a possible connection to the Great Lakes.
  - Prior to construction of the canal, the population of the country, which was still very young, really hugged the eastern seaboard. Pretty much everything past the Appalachian Mountains was the "west." Where we are standing right now was the "west." Can you imagine? When the

canal opened up in 1825, New York was already an important port city, but so were Philadelphia, Boston, Baltimore, and New Orleans. Within 15 years of the Canal's opening, New York was the busiest port in America, moving tonnages greater than Boston, Baltimore and New Orleans combined. The Erie Canal ensured the status of New York City as America's premier seaport, commercial center, and gateway to the interior.

- Cities like Syracuse grew up along its banks – In 1820, Syracuse was a small settlement of 250 people who lived in houses on stilts because this was a swamp. A newspaper editor said, “It would make an owl weep to fly over it.” But by 1900, the population of Syracuse was over 100,000 – just 80 years later.
- Looking back at this map, New York City is here. This is where the Hudson River meets the Mohawk. You can see here the elevation of the state, at its lowest point where the rivers meet. And then we follow the Erie Canal across the state. Syracuse is here in the middle portion – this nice, flat swampy portion. This flat portion will come up again later. And then we keep going up and up until we reach Lake Erie.
- Now that we have some understanding of the geography, let's get into the nitty-gritty of how this thing got built.
- **Stop 2: Hoist Map**
  - Many early Americans made note of this break in the mountain range, including George Washington. By 1800, New York State had established a Board of Canal Commissioners to investigate the idea of an inland waterway. In 1809, Syracuse's own Joshua Forman traveled to Washington to discuss the project with President Thomas Jefferson. Jefferson is quoted as saying that building the canal is “a little short of madness,” believing that the project was a century ahead of its time. New Yorkers, however, were not deterred by the ambitious project. They took the project on as their own led by Assemblyman Joshua Forman, who claimed “the state of New York would never rest until [the canal] was accomplished.”
  - And so they got to work, surveying the state and making plans for canal construction without financial help from the federal government. One major issue that needed to be sorted out was the route of the canal – so looking at a map of New York State again. If the goal is to get from the Atlantic Ocean, via the Hudson River, to the Great Lakes, the closest Great Lake is Ontario – here, following the route of the Mohawk River. There were a few problems with that plan, though. New York State does not have a western port on Lake Ontario, but our neighbors to the north do. There is also a small problem with the western end of Lake Ontario – this little thing called Niagara Falls, and the best way to get around Niagara Falls is through this little peninsula here, which again belongs to our neighbors to the north. (In fact, a canal was constructed and opened here just four years after the Erie, and still exists today in an updated form.) SO those neighbors to the north, you can see on this map were at the time Great Britain. At this time, we had just recently been in a little scuffle with Great Britain, called the War of 1812, much of which had been fought in the Great Lakes. If this project was going to be as successful as New Yorkers knew it was going to be, we didn't want to share any of that success with Canada. And so, the longer, 363 mile, interior route was chosen. So now we have a route, how are we going to get done?

- In DeWitt Clinton, New Yorkers found a leader who was willing to take a chance on the canal. He was mayor of New York City, had served on the Canal Commission, and had larger political aspirations. In 1817, he ran for governor of New York State on the promise that he would get the canal constructed. And so he did! After his election, Clinton persuaded the New York State legislature to authorize loans for \$7 million to build a canal from Albany to Buffalo. And so work began!
- **Stop 3: Mile by Mile**
  - On the Fourth of July in 1817 construction on the canal, then called the Grand Canal, began in Rome, NY. Why Rome? Remember that flat portion of the state? The canal engineers decided to start in that portion because they hoped it would be easier and they could learn a few things before tackling the harder parts. Because, all of these men that you see on the walls here, with the exception of Canvas White here, well they'd never even seen a canal. But how hard could to be, building a 363 mile long, 40' wide, 4' foot deep ditch?
  - A lot of on the job problem solving occurred during canal construction. How would they get the tree stumps out of the way? Well, they invent a massive stump puller, a model of which you can see in the case there. How would they deal with the natural waterways that the canal encountered along the way? (Remember, the original Erie Canal was a completely man-made body of water.) They'd design and construct 18 aqueducts, or water bridges, like this massive one here. You can visit New York's only functional aqueduct in Camillus only about 20 minutes from here where the canal crossed over Nine Mile Creek. And what would they do about the water seeping between the giant stones used to construct the aqueducts? That's where Canvas White comes in. He was an ambitious young man who traveled to England on his own dime and walked all 2,000 miles of the canal system to learn about the tools and equipment used to build their canals, especially the waterproofing. The English used a limestone mix that was too costly to import, so Canvas White learned the science, came back to New York and found a limestone only about half an hour from here that would work. Over 500,000 bushels of this hydraulic cement were manufactured for the construction of the canal.
  - And so mile by mile, it was built, figuring it out along the way. By 1819, just two years into construction, the first portion of the canal through that flat part of the state from Utica to Syracuse, was completed and opened up for use.
  - But what was done to navigate the elevation change?
- **Stop 4: Flight of Five**
  - 83 locks we constructed to get the canal up and down the over 550 foot change in elevation between Albany and Buffalo. The water of the canal needed to be fairly calm to allow boats, which were all animal powered, to easily travel in both directions. Locks made it possible for these boats pulled by animals to go uphill or downhill.
  - Locks are essentially water elevators. Let's say a boat is going up. It pulls into the lock and the gates shut behind it. A smaller gate, called a sluice gate, was opened in the gate ahead of the boat where the water is higher. The water naturally flows through the sluice gate and into the lock until it is level with the water on the other side. There is no electricity or pumps. They don't need it. Once the water is level, the lock gates are opened and the boat continues on its way. A

boat wanting to go down can now enter that lock and the process is repeated, only this time the water flows out of the lock.

- The last locks to be completed and actually the last thing completed for the whole canal was the Flight of Five in Lockport. This series of five locks in a row, like stairs, got boats up the 70 rise at the Niagara Escarpment. A problem that had to be solved in order when them to be constructed was that the stone was so hard, a blacksmith invented a new star-head drill bit that could make holes in the stone walls large enough to insert some of DuPont's recently created black powder. There was not yet dynamite. The story goes that young boys were often used to light the black powder because they were slightly more nimble and quick, so they could better get out of the way. The canal is often romanticized, but it has a dark side too.
- But with that, the canal was completed!
- **Stop 5: Grand Celebration**
  - With \$7 million dollars invested and eight years of construction, the 363 mile long, 40' wide. 4' deep ditch was completed, and it worked! To celebrate, Dewitt Clinton, who was again governor of New York State, boarded a boat in Buffalo on October 26, 1825. Canons were fired off in succession all along the banks of the canal and the Hudson River down to New York City. News-via-cannon took only 90 minutes to travel from Buffalo to New York, which was pretty fast for news in 1825! The Governor's flotilla then took a 10-day journey to New York Harbor, which communities holding celebrations all along the way. When they made it to New York City, Governor Clinton poured a keg, which looked very much like that one although that is a replica, of Lake Erie water into the Atlantic ocean in what was called the "Wedding of the Waters."
  - We're going to take a small break from the chronology to venture into the historic 1850 Syracuse Weighlock Building, which is, after all, the reason there is an Erie Canal Museum in downtown Syracuse.
- **Stop 6: Link Gallery**
  - This space we call our Link Gallery, since it is a link from one building to the other. We use it for small changing exhibits, usually to showcase contemporary canal-related art. This display is... I can give you just a few moments to look around, and then we'll all meet in the next room.
- **Stop 7: Model of Weighlock Building Scale**
  - This is a model of the Weighlock Building, showing what the weighing mechanism looked like. In order to pay back the loans taken out to build the canal, all boats that used it paid a toll. This weighlock building was not the first in Syracuse, but earlier weighlocks needed to be replaced because boats were getting larger. There were once seven weighlock buildings in New York State (Rochester, Syracuse, Utica, Albany, Troy, Waterford, and Oswego). There was no standard design for weighlocks, so each one was a little different, but only this one remains today.
  - In order to assess a toll, the boats were weighed, as the name implies. Boats entered the lock chamber, which we'll head out to in just a moment, water was drained through a culvert under the city into Onondaga Creek a few blocks west of here, and the boat settled onto a wooden cradle attached by rods to a scale, much like that one, although that is not the actual scale used in the building. All boats were weighed empty at the start of the navigation season, so unloaded boat weight was subtracted from the measured loaded weight to determine the weight of the

cargo. The toll was then charged based on that weight, what the boat was carrying, and how far it was going. It took about 15 minutes to weigh a boat and the building operated 24 hours a day. If you are wondering whether anyone ever tried to cheat the system, the answer is undoubtedly yes, however, New York State still made more than enough money from the tolls to pay for the construction, maintenance, and enlargement of the canal.

- In 1883, New York State stopped charging a toll on the canal. By this point, over \$121 million dollars had been raised in tolls. The canal system was now competing with railroads for business as well. The amount of tolls collected was not as high as it once was, and operating the weighlock buildings was costly. So, for those and probably more reasons, this building no longer needed to serve its originally intended purpose. It did, however, keep the weigh chamber space as an emergency drydock for a number of years.
- New York State continued to use the Syracuse Weighlock Building, which is conveniently located in the center of the state, as an office building. It served as the headquarters for the central division of the Department of Public Works until 1954. A portion of the New York State Barge Canal system was planned in this building and the interstate system that comes through Syracuse was planned out of this building. One of the last things planned before New York State moved its offices just across the street to the State Office Building was a design for interstate 81 that included a significant interchange right here. Perhaps the engineers wanted to look out their windows to admire their handiwork. This interchange would have led to the demolition of the Weighlock Building and Syracuse City Hall. City residents found out about this plan, and led by the Junior League of Syracuse and the Canal Society of New York State, they got to work. Their numerous letters and phone calls paid off when plans for the interstate were changed and New York State gave Onondaga County the Weighlock Building for the express purpose of opening a public canal museum, which we have been since 1962.
- **Stop 8: Clinton Square Painting**
  - This painting depicts Clinton Square, which is just three blocks west of where we are right now. It still looks very much like this. Clinton Square was the center of the city, and purposefully built to be grand. The canal brought a lot of industry and money into the city, and therefore there were a lot of banks. In this painting alone, there are at least four bank buildings, all of which are still standing. Thanks to the Erie Canal, Syracuse was a bustling city.
- **Stop 9: Uniquely Syracuse**
  - The bustling nature of Syracuse made it possible for individuals like John Marsellus to become very successful. John came to Syracuse on a canal boat and decided he liked it enough to stay. He started his casket company in 1878, and a successful family run company for three generations, employing over 300 people at one time. The business is no longer open, but most recently, Nancy Reagan was buried in a Marsellus casket. But caskets were only one type of industry found in Syracuse. Traffic lights, typewriters, bicycles, loafers, washing machines, candles, and more were all manufactured in Syracuse. Syracuse had an incredible salt industry, that actually predated and helped pay for the canal. Around 1860, about 50% of the nation's salt came from Syracuse!

- With so many talented minds in canal communities, it's no surprise that the canal also served as a corridor for sharing ideas, making cities like Syracuse hotbeds for social movements, including women's rights and abolitionism.
- We're going to head out into the weigh chamber now, passing the weighmaster in his office on our way. He would have been one of many employees, including a toll collector, engineers, and a canal commissioner. Make sure you wave to him on our way out.
- **Stop 10: Frank Buchanan Thomson stern**
  - Just a few stops back we looked at the model of the Weighlock Building, not here we are, right where that cradle structure would have been.
  - The view from here is great for picturing what it might have looked like during the canal era. Imagine from here to the sidewalk across the street was water. And that one block diagonal road, that was water, too. Because where we are standing was actually the junction of two canals. The east-west Erie and the north-south Oswego Canals. The Oswego Canal was a 38 mile long canal that went from right here to Lake Ontario. It opened in 1828, by which point some of the War of 1812 bitterness had passed and the Erie Canal was already proving successful enough to take the risk of sharing the success.
  - Across the street where the sidewalk is is where the towpath would have been. You'll notice out mule and driver over there, waiting for the Frank Buchanan Thomson to finish being weighed. Look out the windows to point out where the Oswego Canal and towpath were. Mule drivers were often young boys, many of which were orphans. There is evidence that these orphans would spend the canal season hard at work as drivers, and then when the canal closed for the season, they would commit some sort of petty crime in order to spend the winter in jail. And when the canal opened again, they'd all be released. Work on the canal was grueling, so I am not sure which would have been better. All season long, these boys would work 6 hour shifts on the canal, and then have 6 hours off, during which time they'd need to care for the animals and themselves before starting another shift on the canal.
  - Which brings me to a quick point. How many of you know the famous Erie Canal song? "I've got a mule and her name is Sal, 15..." what? Miles? Actually, the original lyric to the song was "15 years." The song is about a mule driver who'd been working on the canal for 15 years, but those days were ending, as the towpath era canal was closing. At some point "miles" was switched in for years, I think because it is probably a more lovely word to sing, and so explanations for 15 miles have been superimposed on the incorrect lyric. 15 miles means nothing! The most common explanation is that's how long a shift was, but they were 6 hours, which could be more or less than 15 miles depending on what you encountered along the way. If you had to get through the flight of 5 at Lockport, you might not make it 15 miles, but through the flat Utica to Syracuse part, you might get even a little further. I don't consider "miles" wrong though. It's a folk song! It should adapt over time.
  - Our boat here is an example of a line boat, which would have been owned by a shipping line and carried both cargo and passengers. Traveling on a line boat was not luxury travel, however, as you'll see in the front passenger cabin. Packet boats were the more luxurious way to travel, as they were designed specifically to hold people. There were also bullheads like the Nathan Roberts there and lakers, which were both for carrying cargo. All of these boats, however, had a

crew quarter on them. Bat crews were often family who sometimes would live on these boats year round, docking in New York City for the winter.

- I'm going to give you a few minutes to walk through the boat, the crew quarters in the back, cargo in the middle, and passengers in the front. I'll meet you up front.
- **Stop 11: Passenger Cabin**
  - Line boats like this provided transportation to many new immigrants to the United States during the canal era. It was a relatively inexpensive way to make your way west. It was up to the captain to determine how many people he'd cram into this space, but I imagine it wasn't comfortable. However, if you really needed a break from all of your new found friends, you could always hop off for a bit to stretch your legs. The speed limit on the canal was only 4mph, so the boat wouldn't get too far away from you, and there's sure to be a line at the next lock.
  - We're going to head back in and pick up the chronology again. Remember, construction of the canal is complete, and the thing really works!
- **Stop 12: Building a Bigger Canal**
  - The success of the Erie Canal led to a canal building boom, covering the state in a web of waterways. Some, like the Oswego Canal, were New York State projects, but many were private enterprises as well. They saw varying levels of success, but overall, the whole system was, at least for New York State, wildly successful.
  - Within a decade of the Erie Canal being completed, construction began to enlarge the canal to 70' wide and 7' deep. This process would, however, take about 30 years because of an economic depression. It was for what we call the Enlarged Canal that our weighlock building was built.
  - You can see the building here in these two photographs. This one looking from the Oswego Canal and this one looking east. Is that how you pictured it while we were standing on the boat?
- **Stop 13: Mother of Cities**
  - The thousands of boats bustling up and down the Erie Canal gave rise to the growth of cities. The Erie Canal was called "the Mother of Cities." Many small western outposts, like Syracuse, were transformed almost overnight by new industries, such as iron, steel, textile, cigar and beer. Nearly all of the major cities in upstate New York, Albany, Utica, Syracuse, Rochester, and Buffalo, can credit the Erie Canal for their growth. And beyond New York State, Cleveland, Detroit, Chicago, Milwaukee all owe the Erie Canal a thank you. New Orleans, however, perhaps lost its chance to become the country's most important port city and gateway to the interior. The Erie Canal proved easier to navigate than the Mississippi River.
- **Stop 14: Light Up Map**
  - But alas, by 1900 the heyday of the canal has ended. New York State, spearheaded this time by then-governor Teddy Roosevelt, thought perhaps what was needed was a bigger, better, modern canal system. Construction began on the New York State Barge Canal System around the turn of the 20<sup>th</sup> century, and it opened in May 1918. This brought an end to the era of the historic canal. Some places, like Syracuse and Rochester, paved over the historic canal to make way for automobiles, but there are still some places, including the nearby Erie Canal State Historic Park, where you can still see the old canal.



- But don't be sad that you cannot see the canal here in Syracuse! The current New York State Canal System is still fully operational! You can still get anywhere you want, via water, from right here in central New York.
- The original canal, which was once mocked as but now fondly called, Clinton's Ditch made way for the Enlarged Canal and the Enlarged Canal made way for the Barge Canal (today's New York State Canal System). There are two major differences between those historic canals and the current system: 1) boats are no longer pulled by animals! And 2) the current system is largely made up of canalized natural waterways rather than being completely manmade.
- Today's Canal System (illustrate with lights) is used predominately for recreation, on the water and on land, but there is still commerce that moves along this historic waterway, including just last year giant beer fermentations tanks that were brought all the way to Genesee Brewing in Rochester via canal.
- We've gotten a lot of the history out of the way, so now we're going to talk a little bit more about what it was like to live in a canal town.
- **Stop 15: Lobby**
  - While we're here in the lobby, I want to point out the mural outside. It depicts a special canal-side building called a double-ender. These buildings did not have a front or a back – just a canal side and a street side. Both sides were important for business, but the canal side also provided a place for goods to be delivered. You see those guys unloading goods from a boat on to the second floor? Just down the block from here are some great examples of canal side double-enders.
  - Now we're going to head upstairs. Pay attention as we go up the stairs to see a to-scale illustration of the change in elevation across New York state. We're starting down here in Albany and heading up to Buffalo.
- **Stop 16: General Store**
  - Canal towns, like Syracuse, were full of small businesses like your tavern, general store, post office, and theater. The tavern offered more than a barroom for many. It was a place to gather and exchange information, to meet people, and also to rent a room for the night. Without radio, TV, or the internet, the local tavern was vital. The general store was, in many ways, the center of community life. In addition to dry goods ranging from medicines to mousetraps, the store often housed the community's Post Office. The canal allowed for a greater supply of goods due to lower shipping costs. Unlike a modern day grocery store, however, the general store did not carry perishable items like meat and produce. For those you'd go directly to the butcher or farmer's market.
  - We've talked some about how the canal moved both goods and ideas, but another industry to benefit from the canal was entertainment. The canal made it easy for performers to move from town to town, performing in front of a new audience every night. Some large scale shows would even load cast, crews, and sets up on canal boats and perform in cities like Syracuse before debuting on Broadway in New York City.
  - The canal really did touch every aspect of life in cities like Syracuse and even beyond. And while the canal played a monumental part in New York State's history, it is still playing a big part in the present, and will continue to play a role in the future. Right now we are in the middle of

celebrating the eight year bicentennial of the canal's construction and this year is the centennial of the Barge Canal opening. There is a lot of excitement and energy surrounding this historic waterway.

- **IF THERE IS NO EXHIBIT IN THE WEIGHLOCK GALLERY:** I am so glad you chose to come visit and spend some time learning about the transforming effects of the Erie Canal. Please feel free to spend more time with the exhibits throughout the museum, especially the interactive displays downstairs. If you have any questions, I'm happy to try to answer them or tell you how to submit a research request on our website. And if you enjoyed your time today, a great way to support the Museum is by becoming a member, which you can do at the front desk, and then save 10% off all of your purchases in the shop. Membership has benefits for locals who want to come back for programs, but we have members who support the Museum from all over the country. But again, I want to thank you for spending your time with me, and I hope you'll come back to visit again soon.
- **IF THERE IS AN EXHIBIT IN THE WEIGHLOCK GALLERY:** Our final stop is back into the Weighlock Building where we have our larger changing exhibitions.
- **Stop 17: 2<sup>nd</sup> Floor Weighlock Gallery**
  - This exhibit is...
  - Before I leave you to look around, I want to thank you for spending some time with me today. Please feel free to spend more time with the exhibits throughout the museum, especially the interactive displays downstairs. If you have any questions, I'm happy to try to answer them or tell you how to submit a research request on our website. And if you enjoyed your time today, a great way to support the Museum is by becoming a member, which you can do at the front desk, and then save 10% off all of your purchases in the shop. Membership has benefits for locals who want to come back for programs, but we have members who support the Museum from all over the country. But again, I'm so glad you chose to spend some time today learning about the transforming effects of the Erie Canal, and I hope you'll come back to visit again soon.

## Heritage Area Walking Tour

The Heritage Area Walking Tour is offered several times throughout the spring, summer, and fall. We would like to offer it more regularly as well. The tour is about a mile-long loop, starting at the Museum, circling through Clinton and Hanover Squares. It takes about an hour to complete. There is a booklet of historic images for participants to use during the tour.

### Outline for Heritage Area Walking Tour

- Intro: Lobby
  - Welcome
  - Name
  - Historic Tour
  - Questions
  - Erie Canal still operational
  - Tour Route
- Stop 2: Mule & Driver statue
  - Erie Canal in Syracuse Brief Overview
    - Opened in 1825
    - By 1820, 94 miles from Montezuma to Utica open
    - Quote from Onondaga or Reminiscences of Earlier and Later Times, by Joshua V. H. Clark, A.M., 1849, “The first packet-boat on the canal, named the Montezuma, arrived at Syracuse on the 21st of April, 1820. [...] Its arrival created great excitement; hundreds of anxious spectators lined the banks of the canal, to witness this mighty wonder. This practical illustration of the benefits of canal navigation was not without its use. It hushed the hostility of canal opponents, and subdued the fears of the more timorous; visionary theory yielded to simple fact, and wild speculation to the test of experiment.”
  - Syracuse population before canal: 250 people, by 1900, over 100,000
  - Weighlock Building history
    - Greek revival
    - All materials locally quarried and produced
    - Purpose
    - Stopped in 1883 - \$121,461,871 collected
    - Headquarters for Barge Canal
    - Offices for State Engineer & Surveyor
    - Department of Transportation
    - Once 7, now 1
  - Mule Statue
    - Tow path
    - Mule drivers
  - Junction
    - Busy Syracuse
    - Major north/south {Lake Ontario} and east/west “highways” of the time
    - Change bridge for mule team to change sides of canal

- Collected more tolls
  - Banks
- Stop 2: Erie Boulevard & South Warren Street
  - Double-enders
    - Store fronts on both sides with product moving in and out
    - Swung into rear of building from boats
    - Photo is from West Street, but shows the concept
  - Arterie
    - Collaboration with PATF
    - Public art tribute to the Erie Canal
    - Aims to celebrate the historical relevance of the canal
    - Two block stretch
    - “becomes water again through the modern application of blue paint”
- Stop 3: Clinton Square at Night Mural in bank parking lot
  - Mural
    - Picture for some reference
    - Murals popular along the canal
    - Corky Goss
      - Local
      - 25 across state
        - ◆ Outside the Museum and staircase
      - Took a year to complete because teller window
  - Third National Bank
    - Medina Sandstone=NYC brownstones
  - Salina Street
    - Main drag for some time
    - 5 different bridge
      - Picture shows final lift bridge
        - ◆ Stationary, swing, lift
      - Lift bridge explanation
      - Boats had right of way
      - Warren Street had required by fire dept fixed bridge
      - About a bridge every mile, over 300 bridges, many were only pedestrian
- Stop 4: Exposed canal walls on west end of Clinton Square
  - Canal Walls
    - Located on North Side, 2 spaces excavated to expose walls of the canal
    - Onondaga Limestone
      - 4 mph speed limit
    - Clinton Square wide waters
      - Original canal (Clinton’s Ditch) 40’ x 4’, enlarged canal 70’ x 7’
      - Packet Dock

- ◆ Packet Boats carried people
  - Clinton Square cluttered with Cargo
    - ◆ First farmers market
    - ◆ Peddlers' carts, Hawkers, Street entertainers
  - 1910 Dedication of Soldiers and Sailors Monument
- Gridley Building
  - 1867, Onondaga County Savings Bank (moved 1897)
  - Four-sided clock cities official time piece for many years
- Syracuse Savings Bank
  - 1876, Joseph Silsbee, Italian stonecutters
  - Tallest Building, 170' tower
  - City's first passenger elevator, 10 cents
  - Photos looking each direction
  - Boat pulling into weighlock
  - Back towards West
- Third National Bank
  - Architect Archimedes Russell
  - erected in 1885
- Clinton Exchange
  - 1928 Post Office and Federal Building
  - Designed with Canal in mind, but canal gone by opening – entrance added on Erie Blvd.
  - 1985 Office Building (renovations with care)
- Jerry Rescue
  - Hotbed for abolitionists
  - Fugitive slave act
  - 1851
  - Jerry captured freeman held at police station
  - Crowd of Syracusans broke open door, rescued Jerry, sent to Oswego
- Several Redesigns
  - Canal to Parking Lot to Reflecting Pond
  - 2001 return to former glory
  - Reflecting pond
  - Many old activities back
    - Farmer's market
    - Ice skating
- Stop 5: Hanover Square
  - Hanover Square
    - First shopping district
    - Right off canal
    - Renovation 1981
    - 1820s collection of shops called Hanover Arcade, name stuck

- The triangular shape of the square was formed in the early 19th century when the city's new grid street system was superimposed on the diagonal route of the early Genesee Turnpike Historic Erie
  - Gere Building, 1894, bank
    - Charles Colton, architect
    - Erected in 1894
  - Bank of Syracuse, 1896
    - built in 1896,
    - designed by Albert Brockway
  - M&T, Onondaga Savings Bank, 1897, first steel frame structure
  - Phoenix Buildings
    - 1834, oldest in Syracuse
    - Build after fire (hence name)
    - Double-enders
  - Underground restrooms demolished in 1962
- Stop 6: Water St. and Montgomery outside of Locktender's Garden
  - Wide waters for boats to get into weighlock
  - City Hall
    - Charles Colton, 1892
    - Onondaga Limestone
  - Story of saving museum and city hall
  - Museum 1962
  - Opened doors Oct. 25, 1962
  - 55 years

### **Sample Narrative for Heritage Area Walking Tour (Pending)**

Available soon! Once it is completed, it will be added to the docent manual.

## School Tours (Pending)

We are working on new school experiences for middle and high school aged students. Once they are completed, we will add them to the Docent Manual.



## Resources

### The Erie Canal

As early as the 18<sup>th</sup> century, Americans realized that their country lacked the important resource of an inland waterway. America was expanding and moving westward and needed an inexpensive and direct route to the western part of the country. Stage coach travel, which was dangerous and tiresome, was the only means of transportation until the idea of a canal was sparked.

New York State was one of the few places that could accommodate a westward waterway. The Mohawk Valley provided one of the few natural passes in the Appalachian Mountain chain, but the Mohawk River itself was dangerous and had unpredictable water levels. This required travelers to go through a series of boat changes and wagon trips to avoid low water and rapids.

In 1815, Dewitt Clinton, former mayor of New York City and nephew of George Clinton, New York's first governor, wrote a memorial supporting the canal. He also decided to make the canal proposal his theme for his campaign for governor. The canal proposal passed, and the planning began.

In 1816, the New York State Legislature appointed five canal commissioners to orchestrate the canal project. In that same year, President Madison vetoed the bill which would have supplied federal funds for the Erie Canal. Funds were raised through efforts in New York State, and on July 4<sup>th</sup>, 1817, ground was broken in Rome, New York. Eight years later the entire 363 miles of the canal were completed.

### Facts to know about the Erie Canal

- A canal across New York had been discussed since the mid-1700s.
- Serious consideration began when James Geddes received funds from the legislature to do a canal survey in 1808.
- Travelling across New York (Albany to Buffalo) by roads took four to six weeks. After the Erie Canal was built, travel time lasted only six to eleven days.
- Salt produced in Syracuse in 1788 (little more than an encampment at the time) cost \$6 / barrel to ship by land to New York City. After the EC, a barrel of salt cost 60 cents to ship.
- In 1817 Dewitt Clinton was elected governor, and canal construction was authorized.
- Digging started on July 4, 1817, near Rome where the ground was level and soft. At the end of the year 15 miles had been constructed, 40 feet wide at the top, 28 feet wide at the bottom, and 4 feet deep.
- In spite of an 1808 federal report calling for support for transportation, the EC was built with no federal funding. New York State financed, built, and owned it.
- From 1817 until 1825 the state spent \$7,143,789.66, built 363 miles of canal and towpath, 83 locks, 18 aqueducts, and almost 300 bridges. The towpath was 10 feet wide. Total rise and fall of the route west was 568 feet.
- Bridges were most commonly constructed so that farmers whose lands had been divided by the EC could cross the canal and work their land. The bridges were built low to save construction costs, hence the famous, "Low bridge, everybody down . . . ."
- Major engineers were Benjamin Wright, oldest and most experienced; James Geddes, who had particular success with mechanical structures; and Canvass White, Wright's former assistant who, in 1818, discovered a source for the limestone that was used in hydraulic cement, a cement product that set up under water. Since the discovery of this limestone, hydraulic cement was used in all Erie Canal construction. (NOTE: Canvass White did not invent hydraulic cement.)

- Builders were primarily small contractors who agreed to build a certain length of the canal, to specifications, for a certain price. Irish immigrants made up roughly one fourth of the work force, the remaining three quarters were reported as “born among us,” i.e. born in American.
- Boats used each section of the EC as it was completed; they did not wait until the EC was completed in 1825. The first boat operated out of Utica in 1819.
- In 1826 the canal was open and operating from late February through early December. Freezing cold weather necessitated closing the waterway each winter.
- The Erie Canal reduced freight costs from \$90 - \$125 per ton to \$4 per ton in 1835.
- In order to pay off the \$7 million construction cost, the state charged tolls, just as was done to pay off the thruway system. Seven weighlocks were constructed to collect the tolls. The Erie Canal Museum, site of the last remaining weighlock, is located in the 1850 Weighlock Building.
- Total tolls collected at the end of 1882 were \$121,461,871.09. With construction costs (original and first enlargement) of \$78,862,153.89 and repair, staffing and toll collection costs of just under \$30 million, the Erie Canal actually turned a modest profit. The tolls were abolished in 1883.
- Canal boats were pulled by horses or mules. Horses were considered more stylish and used for packet boats carrying passengers. Mules were preferred for line boats hauling freight because they were harder to spook and they would not drink contaminated water. Because they were more sure-footed than horses, mules had an easier time going from on-board stables to the canal path without mishap.
- The legal speed limit on the canal was four miles per hour. A line boat could average about two miles per hour on the canal, while the packet boats were able to travel at the canal speed limit. The speed limits were imposed to keep wakes from the boats to a minimum to avoid washing away the banks of the canal.
- Soon after the canal was opened, it was evident that it needed to be bigger. The first enlargement of the canal took from 1825 to 1832, with the second enlargement dragging from 1837 to 1862. After the completion of the second enlargement the new dimensions were 70 feet wide at the top and 52 to 56 feet wide at the bottom, with a depth of 7 feet.
- The original Erie Canal was such a success that it sparked construction of nine additional, lateral and branch canals between 1825 and 1836. They were not all such financial successes, but they served to open up the state to the south and north of the Mohawk River Valley.
- At the turn of the century ideas were proposed for what is now the Barge Canal system. Construction began in 1905, navigation began in 1918, and it remains in use today.
- The dimensions of the Barge Canal varied with its geographical location. Through earthen sections it was 123 feet wide at the top, and 75 feet wide at the bottom, with a depth of 12 feet. Through rock it was 94 feet wide; and in river sections channels 200 feet wide were dredged. The depth of the canal was increased to 14 feet at a later date.
- Technological development and extensive use of rivers and lakes meant that the Barge Canal diverged greatly from the route of the old Erie Canal.
- Standard lock size on the Barge Canal is a minimum of 338 feet between gates.
- In 1917 navigation was officially ceased on the enlarged Erie Canal, marking the end of Erie Canal use.
- Many sections of the Erie Canal were filled in using anything that could be found. Old canal boats and soda ash from Solvay Process are two examples of filler. The section of the canal running through downtown Syracuse, in front of the Weighlock building, was filled in 1922.
- The Locktenders Garden on the west side of the building combines a kitchen garden with apothecary herbs and flowers. The Erie Canal Museum invited the Syracuse Garden Club to create a typical locktender’s garden. Raised beds and barrels contain popular, typical 19<sup>th</sup> century flowers such as hollyhocks.
- The life size bronze sculpture of a mule and mule driver was commissioned in 1987 by the Erie Canal Museum to commemorate its 25<sup>th</sup> anniversary. The sculpture, created by Tom Tischler, stands on the site of the canal towpath, across from the museum’s 1850 Weighlock Building.

## Travel Facts about the Erie Canal

- The first boat on the canal was the Chief Engineer of Rome, operating out of Utica in 1819.
- By 1825 there were over 13,000 boats using the canal. Over 4,000 passengers passed through Utica in 1825.
- In the 1820's, packet (passenger) boat fares were as low as 4 cents per mile and included board of 3 large meals a day, or 3 cents per mile without board. Line boats (passage and freight) charged one third less, or about 1.5 cents per mile.
- Travel time across the state was cut from four to six weeks by land to six days by canal boat. Packet boats traveled four miles per hour (the speed limit). Repair scows, also called hurry-up boats, could go as fast as ten miles per hour.
- Shipping costs dropped to \$4 per ton on average in 1835.
- Traffic jams occurred at crowded locks, and battles erupted over which boat should lock through first.
- Eastbound boats generally carried freight; westbound boats carried more passengers.
- The quick packet boats carried only passengers and hand luggage and were not the primary vehicles for emigrant families heading west. Emigrant families traveled on line boats which carried cargo and passengers and allowed livestock, household goods, and other possessions to be brought aboard.
- It is estimated that in 1845 there were 4,000 boats with 25,000 men, women, and children working on them.
- Crews numbered from two to six. A company-operated packet boat might have two steersmen, a cook, a deckhand, and two drivers working alternating six hour shifts. Steersmen's wages were about \$20 a month with room and board.
- Boats were usually pulled by teams of two or three mules. Horses were used, but mules were much more common as they were sturdier and more sure-footed.
- Drivers walked with the mules/horses on the towpath. Pay was \$12 a month for a grown man, \$10 a month for a boy. The difference in pay between adult drivers and boys led to exploitative and sometimes abusive child labor. The work day was two, six hour shifts, rain or shine.
- Boats were steered with an extremely large rudder. The responsibilities of the steersmen included: counteracting the tendency of the team to pull the boat into the bank; maneuvering when overtaking a slower boat, being overtaken by a faster one, or meeting a boat headed in the opposite direction; locking through.
- The towpath ran on one side of the canal so when boats were headed in different directions; or were overtaking one another, great caution had to be used and rules were established to deal with the difficulties. The westbound or slower boat, depending on the situation, would pull over to the non-towpath side of the canal, stop its team, and drop its line. The eastbound or faster boat would then pass over the dropped line; and, once clear, the stopped boat could pick up its line and resume travel.
- During the winter months the canal was drained for repair. Boats and people either wintered in canal towns, where the boats would rest on the bottom of the drained canal, or in flotillas in New York or Buffalo, where the boats would be tied together forming huge groups in the harbors.
- In 1846 the cost of shipping a 216 pound barrel of flour from Buffalo to Albany was 64 cents; from Albany to Buffalo it would have been approximately 85 cents.

## Typical Canal Boat Styles

- **Line boats** were slower than packets and often ran only during daylight, with 50-60 miles per day a typical rate.
- **Packet boats** were long narrow boats which carried only passengers and hand luggage.
- **Lakers** were canal freight boats with tight holds for carrying grain. They could be lashed together and towed by steamboat for use on the lakes.

- **Bullheads** were well built boats much like the lakers, but with a forward stable and a cabin-like cover running the full length to protect the cargo. It was one of the most expensive boats to build and was used for cargoes requiring an absolutely dry cargo hold, such as flour and grain.
- **Scows** were flat- bottomed canal boats with squared off ends, used for hauling bulk items such as lumber.
- **The Frank Buchanan Thomson Line Boat** This reproduction line boat in the museum's weighlock chamber was named for the late Frank Buchanan Thomson, the founding director of the Erie Canal Museum. He served as director for 14 years.

### Facts about the Frank Buchanan Thomson line boat

- The Frank Buchanan Thomson is 65 feet long and 14 feet wide, and would draw 3 ½ feet of water. It is a waterline model of a line boat, which means it is an accurate representation of a canal line boat from the waterline up. Boats were both smaller and larger, but the common size for a boat was 80 feet by 14 feet.
- The crew's quarters, located in the stern, was the area where crew members would have slept, eaten meals, and relaxed aboard the boat. The cook prepared the meals and the captain kept his log in the crew's quarters.
- The cargo hold, located midship, is a dark or dimly lit area where the cargo was stored. In the FBT the cargo hold is filled with 13 display cases which illustrate the growth of Syracuse from swamp to city.
- The forward cabin, located in the bow or forward section of the boat, housed the passengers. On average, 25-30 people could be accommodated in the forward cabin.
- The two sculptured figures in the forward cabin capture the dangers and difficulties experienced by immigrants to America.
- The figures, Ruth O'Neill and Fredericke Brunhuber, represent two of the largest immigrant groups which came to America during the 1800's – the Irish and Germans, respectively. Their stories, as explained in the letters on the trunks, are fictional but are based on typical situations immigrants would have faced in the time period.
- The figures were created by Ivan and Elliot Schwartz of New York City, who have designed and constructed such figures for many years. They use a plastering process which involves a body cast and the construction of clothing to assure historical authenticity.
- The boat itself was constructed by JD Taylor Company of Syracuse, based on the design plans and specifications provided by the Erie Canal Museum. Underwater archaeological studies as well as extensive research by canal boat expert Dr. Robert Hager were used when designing the boat.
- The color scheme for the boat was taken from a 19<sup>th</sup> century print of a canal boat. Boats were painted in a variety of colors.

## A History of the 1850 Syracuse Weighlock Building

From 1825 until 1850, the Erie Canal was the principle means of transportation for both people and produce between New York City, Central New York, Lake Erie and the West. The advent of the railroads in the middle of the 19<sup>th</sup> century tended to reduce traffic on the canal but this did not lessen the importance of this manmade waterway. The canal remained extremely influential to the development of upstate New York and the mid-western states.

A tariff was charged to the canal boatman, according to the weight of the boat's cargo. This was the main source of revenue for payment of debt, service, maintenance and profit to private investors. At seven points along the canal, large scales were built on which the boats were weighed to determine the amount to be charged. These scales were housed in "weighlock" buildings. The sole surviving example of these seven structures is located on Erie Boulevard in Syracuse, New York.

During the 19th century boats would enter the Syracuse weighlock chamber to be weighed. The present day east and west walls of the lock chamber were not there; the structure was open to allow the boats to pass through. Once the boats were inside, the chamber functioned similar to a lock. Water was routed out through a culvert, and the boat was left to rest on a cradle of scales. State workers inside the building read the scales and calculated the tolls which were used for canal maintenance and construction. Water was then allowed back into the chamber, the lock gates where opened, and the canal boat could continue on its journey on either the Erie Canal or the Oswego. New York weighlock buildings were located at the ports of Rochester, Syracuse, Troy, Albany, Utica, Oswego, and Waterford.

In 1882, the canal had paid for itself in tolls. The State of New York, also aware of the economic competition with the railroads, stopped charging tolls on the Erie. Although tolls no longer were collected, the Weighlock Building stayed open for canal use; the lock gates and scales remained until the 1890's. The weighlock chamber served as an emergency dry dock for boat repairs, and the building served as the State Headquarters for Engineers of the Middle Division. (See the Weighlock Building Personnel section on page\_\_ for a description of the divisions of the canal.)

In 1903, the Barge Canal Referendum was passed, and the building became the headquarters for the construction of the Barge Canal in Central New York.

For several years the Canal Society of New York State and others fought to save the only remaining weighlock building. Their efforts paid off, and on October 25, 1962, the Erie Canal Museum was opened to the public.

## Facts about the Weighlock Building

- This weighlock building is the third weighlock built in Syracuse. The first building used hydrostatic displacement, (See description below) and was not enclosed in any way. The second had a cradle scale, and the limited enclosure with the pillars around the lock section. The third building, today's version, also had the cradle scale mechanism, but the second story was added over the weighlock. Greek revival architecture dates back to 1850, the end of the first enlargement of the canal.
- Tolls were collected on the canals very much as they are on highways today. All boats paid tolls. On passenger boats it was a toll per passenger, and on freight boats it was a specific rate per unit of weight of type of cargo. Different types of cargo were assessed different tolls.
- The original canal had three weighlocks: Troy, Utica, and Syracuse. The enlarged Erie had seven: Rochester, Syracuse, Troy, Albany, Utica, Oswego, and Waterford.

- The three original weighlocks on the Erie Canal were hydrostatic; a boat's weight was calculated from the amount of water it displaced. The boat entered a chamber that held a known quantity of water, and then the depth of the water was measured. Next, the water was let out into a receptacle (positioned either under or beside the weighlock) and measured again. The difference between the measurement with the boat and the measurement without the boat allowed for the determination of the displacement; and from this information, the weight of the loaded boat could be calculated. The loaded weight was compared to the empty weight (kept on record as well as noted on an empty weight certificate held by the captain), and tolls were assessed on the difference.
- The weighlocks on the enlarged Erie were scale types. A boat entered the lock chamber, and the water was drained into a tunnel. The boat settled onto a wooden cradle that was suspended by rods from a scale. The unloaded boat weight (taken from the boat's empty weight certificate) was subtracted from the measured loaded weight, and the tolls were assessed on the difference.
- Tolls were calculated from the weight of the cargo, the rate for that specific type of cargo, and the distance traveled. The captain paid the toll (or showed that he had paid it earlier) the chamber was filled, the gates opened, and travel resumed. It took about 15 minutes to go through the weighlock, and the weighlocks operated around the clock, using at least two shifts of workers. The Syracuse Weighlock Building was very busy since two canals, the Oswego and the Erie, came together in front of the building.
- Tolls were often assessed for cargo in terms of cents per 1000 pounds per mile traveled, or in "mills" per 1000 pounds. A "mill" was 1/1000 of a dollar.
- In 1846 most agricultural products, such as pork or grain were being assessed at 4 mills, per 1000 pounds, per mile.
- The Syracuse Weighlock is the third chamber built in Syracuse. This Greek revival building dates from 1850-1853, and it is the only remaining weighlock building of its type in the world. It was the last administrative structure built on the original canal.
- A towpath master (or walker) patrolled a ten-mile section of the canal and path with a sack of manure and hay to plug small leaks. Larger problems were handled by a repair boat and crew, known as "hurry-up boats". Muskrats burrowing in the sides of the canal caused many leaks.
- In 1880 a weighmaster made \$650.00 a year; his assistants \$60.00 a month (only while the canal was operating). The Toll Collector made \$750.00 a year; and his assistants \$65, \$50, and \$45 a month. The state provided postage, light, fuel and furniture for the station through a voucher system.
- Tolls were abolished in 1883, and the building then served as an administration center and emergency dry-dock. 1903 to 1907 the Weighlock Building served as headquarters for the construction and then maintenance of the Barge Canal system.
- State offices moved to new headquarters across the street in 1957, and the Syracuse Weighlock Building was almost destroyed. A group of Syracusans fought a successful battle to save the building, the last surviving weighlock on the Erie Canal. The same determined group opened the building's doors as the Erie Canal Museum in 1962.
- The Syracuse Weighlock, now the Erie Canal Museum, is listed on the National Register of Historic Places.

## Tolls

### Proper procedure for toll collection:

After the captain had taken on cargo, the following procedure was followed for toll collection.

- Stop at the next weighlock along the route.
- Hand over slip stating the empty weight.
- Be weighed with the new cargo on board.
- Weighmaster would figure the toll.
- The toll would be collected

- Fill out a bill of lading and a clearance (a clearance was a paper given by the collector of tolls. It showed the name of the boat, its captain, the items on the bill of lading with places of origin and destination, number of miles to be travelled toll free with this clearance, and the amount of toll paid.)
- Clearance was exhibited to subsequent collectors along the canal until new additions were made to the cargo, and a new toll was paid.

#### Common scam:

Captains reported cargo as taken on short of the actual distance it had traveled. i.e. Tolls would be paid only to the next village beyond the collector's office. In reality the cargo was dropped at a point just short of the next weighlock building, much further down the canal.

Cargo that was taken on and dropped between collector's offices was never really accounted for satisfactorily. i.e. Loaded on the west side of Syracuse and unloaded on the east side of Rochester, there by not needing to go past either weighlock building.

Toll rates were changed once a year. Tolls were driven by economic and political winds, so there was no rhyme or reason to rate fluctuations.

(Toll information taken from Erie Water West, by Ronald Shaw. University Press of Kentucky, 1966, pp. 243-6)

### **Weighlock Building Personnel**

#### **CANAL COMMISSIONER:**

The 3 commissioners (east, mid and west) were charged "to keep in complete repair all toll houses, weighing scales, offices and other edifices, already built or purchased for the use of the canals." They were also required to inspect their section of the canal every 30 days (during the navigation season). The first reference to an office here in Syracuse is in 1852, but no permanent office existed here until 1858, on the second floor.

#### **ENGINEERS:**

The state engineer was required to inspect the entire canal each year. Like the Canal Commissioners, there were three divisions of engineers in charge of three sections of the canal. The middle division commissioner was stationed at the weighlock building on the second floor starting in 1854. The resident engineer was next under him and had the power to appoint assistants who consisted of levelers, surveyors, draftsmen and clerks. The number of these positions varied.

#### **SUPERINTENDENT**

The superintendent was responsible for ordinary repairs of sections of the canal and was directly responsible to the area canal commissioner. He was also in charge of hiring foremen and locktenders. His office was likely located on the second floor of the Weighlock Building.

#### **COLLECTOR**

The collector of tolls and statistics was to collect and keep account of all tolls received. Tolls were deposited at the designated local bank and annually sent to Albany. The collector could place individuals under oath and prosecute them. The collector had an office in the Weighlock Building with direct access to the weighlock chamber.

## BOAT INSPECTOR

In several instances the collector served as boat inspector, but at the Syracuse Weighlock Building the boat inspector worked for the collector. The boat inspector was responsible for detecting fraud.

## WEIGHMASTER

The weighmaster performed the actual task of weighing the boats and determining the figures on which the collector would base his tolls. The weighmaster and his two assistants also had an office on the first floor. The weighmaster worked directly under the collector.

## Salt & Its Contribution to the Development of Syracuse

The first European visitors to the area were French traders and Jesuit priests who arrived as early as 1643 and won the confidence of the League of Nations. In 1654 the area's centrally located salt springs around Onondaga Lake were shown to Father LeMoynes by the Native Americans. Then, in 1656, the French established the Jesuit mission of Ste. Marie De Guannetaha on the east side of the lake.

European interest in North America grew, and Onondaga Lake became a pressure point in the conflict between the English and French for control of North America. Sir William Johnson won the confidence of the Iroquois nation, and the English established control of the region in the French and Indian War.

The settlers commenced making salt in 1788, and Nathaniel Loomis sold the first bushel for \$1.00 in 1789. Syracuse salt was important because it was the only inland source of salt at the time, so salt did not need to be shipped from the coast. Salt's importance came from its use as a preservative for meat; without the salt, the settlers would have no way to keep their meat from spoiling. Salt was also used to cure animal hides.

Discussion about a navigable water route to connect east and west portions of New York began prior to the American Revolution. A canal system was seen as the way to settle the frontier of western New York and increase the internal trade of salt, gypsum, lime and other agricultural products.

## Salt Facts

- Salt springs bubbled to the surface in the area just north of Syracuse called Salina. Syracuse was named after Siracusa in Sicily for this reason. Ground water carried the salt from a large deposit over 1000 feet deep located about 17 miles west of here. This deposit was left behind by an ancient salt lake.
- Salt was essential for preservation of meat. It was as important as our refrigerators are to us today.
- Organized production of salt began in 1788. The land for one mile around Onondaga Lake (20,000 acres) was sold by the Onondaga Nation to New York State for the common benefit of the State of New York for the purpose of making salt.
- Salt was produced by two methods. One was to boil the salt water, or brine, to evaporate the water. Buildings that housed up to 50 kettles were called boiling blocks. This was a very efficient method, though short lived, since the forests used as fuel soon were gone. There was also a great risk of fires and accidents in such buildings. This method produced a fine salt.
- The second method was solar evaporation. (See large photo in *salt exhibit room*) Brine pumped from wells was transported to large vats to air dry. Sliding covers were used when rain threatened. At the peak of salt production over 6,000 acres were covered with such vats. This method produced a coarse salt.
- The opening of the Erie and Oswego canals allowed the salt industry to boom. Syracuse was the first city to prosper as a result of the Erie Canal because of its salt production. The Oswego Canal, running north



from Syracuse, was especially instrumental since the main markets for the salt existed to the north. This canal opened in 1828. From 1825 until 1830 the population of Syracuse nearly tripled due to the success of the salt industry and transportation on the canals.

- There was a 12 ½ cent tax on each bushel of salt. This money paid for more than one half of the entire construction cost of the Erie Canal. Because of this, the canal was dubbed “The ditch that salt built”.
- Toward the end of the 19<sup>th</sup> century inland salt mines were discovered. Mining proved to be a simpler and cheaper way to get the salt than boiling or evaporating, so this competition slowed business for Syracuse.

## Facts to Know

Find out what your comfort level is with Erie Canal trivia! Sit down with Museum staff or with another docent to compare your answers.

1. When was the Erie Canal built?
2. Why was the Enlarged Erie Canal closed?
3. When was the Erie Canal paved over in Syracuse?
4. How does a lock work? How does the water get into and out of the lock chamber?
5. How did they weigh boats?
6. Why weren't packet boats weighed?
7. Where can I see the Erie Canal today? Locks? Aqueducts?
8. Where were the seven weighlocks?
9. How long was the original (Clinton's Ditch) Erie Canal?
10. When did the Barge Canal open?
11. What are the different canals that make up the current New York State Canal system?
12. How long did it take to travel for Albany to Buffalo before the Canal? After the Canal?
13. Describe a packet boat, line boat, and work scow.
14. What type of boat is the *Frank Buchanan Thomson*? The *Nathan Roberts*?
15. Who was the man behind the canal politically?
16. Where did canal construction begin? When?
17. What was the “Wedding of the Waters”?
18. Why was the salt industry important to both Syracuse and the canal?
19. What was the width and depth of the original Erie Canal? The enlarged Erie Canal?
20. How many locks, aqueducts, and bridges were on the original Erie Canal?
21. How long was a typical canal boat?
22. What did canallers do in the winter when the Canal was closed?
23. How did the animal-powered boats pass each other on the historic canal?
24. What types of products were shipped on the canal?
25. How is the present day canal system used?
26. Where did the canal flow through Syracuse?
27. When was the Syracuse Weighlock Building built?
28. What were the original lyrics to *Low Bridge* (“The Erie Canal Song”)?
29. When is the Erie Canal Museum open?
30. Is there an admission fee to get into the Erie Canal Museum?

## Suggested Reading

*Wedding of the Waters: The Erie Canal and the Making of a Great Nation* by Peter L. Bernstein

*The Artificial River: The Erie Canal and the Paradox of Progress, 1817-1862* by Carol Sheriff

*Erie Water West: A History of the Erie Canal, 1792-1854* by Ronald E. Shaw

*Bond of Union* by Gerard Koeppe

*Common Labor: Workers and the Digging of North American Canals, 1780-1860* by Peter Way

*Heaven's Ditch: God, Gold, and Murder on the Erie Canal* by Jack Kelly