



Long Range Interpretive and Educational Plan

Lowell National Historical Park



Authors

David Byers

Mary Beth Clark

Kevin Coffee

Andrew Donovan

Emily Donovan

Kristin Gallas

Allison Horrocks

Sheila Kirschbaum

Cathy Neveux

Bridget Peregrino

Resi Polixa

Laurel Racine

Elizabeth Rodriguez

Tess Shatzer

Becky Warren

Lowell MA

May 28, 2019

Table of Contents

Section 1: Mission of National Park Service	page 5
Section 2: Mission of Lowell NHP	page 5
Section 3: Interpretive Themes	page 5
Section 4: Strategic Goals and Objectives	page 6
Section 5: Mission of TIHC	page 7
Section 6: Park Audiences	page 7
Section 7: Methodology	page 10
Section 8: Types of Programming	page 13
Section 9: Digital Media	page 16
Section 10: Professional Development	page 20
Section 11: Resources & Assets	page 26
References:	page 32

Seasonal Employee Training Handbook

Appendix A: CREI Strategic Plan (2019)

Appendix B: LOWE organization chart (2019)

Appendix C: Partner organizations

Appendix D: I&E program outlines.

Appendix E: *Foundations of Interpretation, Competencies for the 21st Century*

Appendix F: "What is Audience Centered Interpretation?"

Appendix G: Wayside and historic structure markers

Appendix H: Visiting Scholar essays (seminar held in 2014)

Appendix I: Example of cultural inventory historic landmark documentation

Introduction

This document is a guide to and overview of the public- and school-focused interpretive programming, aligned with the mission, interpretive themes, and strategic goals of Lowell National Historical Park. We conduct our interpretive and educational programming to advance that mission, explore those themes, and implement those strategic goals.

This document illustrates how we implement the Park's Foundation Document and how all of our programming meshes with the cross-divisional Strategic Plan adopted by the Divisions of Cultural Resources and the Division of Interpretation and Education at the start of 2019.

This document is considered 'long-range' because it explains how we are implementing our strategic plan going forward. It is not, however, exclusive or exhaustive. As we implement strategy, we look for ways to innovate and improve how we conduct our mission and strategy. This document also provides a spring-board for that innovation and an aid in the creation of new programs and activities in collaboration with our partners.

This document is the collective effort of staff across the Division of Interpretation and Education at LOWE, sharing their insight born of experience and of their study of the theory and practice of public history, museum education, curricular-centered programming, and classroom teaching.

The previous Long Range Interpretive Plan document was adopted in 1998. The intention in preparing this new document is not that it will remain unchanged for the next 20 years, but that it will be revised whenever necessary.

Every museum teacher, park guide, education specialist, ranger, and supervisor in the Division of I&E should read and reflect upon this guidance and use it to improve our shared contributions to advancing public engagement with Lowell National Historical Park.

Kevin Coffee
Chief of Interpretation and Education
Lowell National Historical Park
May 2019

(revised August 2019)

1. The Mission of the National Park Service

The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations. The Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

2. The Mission of Lowell National Historical Park

Lowell National Historical Park preserves and interprets the historic structures and stories of the Industrial Revolution and its legacies in Lowell, serving as a catalyst for revitalization of the city's physical and economic environment and promoting cultural heritage and community programming.

3. LNHP Interpretive Themes (Foundation Document, p. 10)

- **Work:** The creation of the Waltham-Lowell system helped to change the nature and meaning of work by revolutionizing labor relations in the United States and transforming gender, racial, and ethnic identities ultimately leading to socio-economic opportunity and inequity. *What is the value and meaning of work?*

- **Capitalism:** The accumulation of capital led to new investment opportunities in the United States centered on industrialization. Innovations in large-scale production systems in Lowell affected society in social, political, and economic ways and became a model for the future. *What are the effects of capitalism on society?*

- **Innovation:** Through innovations in textile production, transportation, water-power, and canal engineering, Lowell became a premier industrial city and helped propel the United States into a new industrial age. Cycles of innovation and technological development shaped and continue to shape the city and Lowell's influence on the world. *How does society balance the benefits and costs of technological progress?*

- **Environment:** The commodification and use of abundant natural resources in Lowell, as part of a global industrial revolution, changed human relationships with the environment and modernized societies throughout the world but resulted in environmental damage that present challenges today. *What are the effects of human use on the environment?*

- **Community:** Lowell is a microcosm of the historical and contemporary shifting of cultural identities and tensions brought about by broader social changes such as industrialization, urbanization, and globalization. *How do you define community?*

- **Urbanization:** From its earliest days as a planned industrial city, through boom and bust economic cycles to today's historic preservation renaissance, Lowell's urban landscape has evolved and now serves as a model of development and revitalization. *What shapes an urban landscape?*

4. Interpretation and Education Strategic Goals and Objectives

LNHP has set the following goal for all divisions.

• **Create a conservation community:** Working with partners, preserve, develop, and provide access to the park's historic structures, canals and walkways, and collections.

1. Continue the design and development of Lowell's walkways.
2. Decrease the park's deferred maintenance on high priority buildings.
3. Promote the use of Lowell's trails and waterways.
4. Advocate for the preservation of historic buildings within the park and preservation district.

The Cultural Resources and I&E divisions have identified the following five cross-cutting strategic goals and objectives, to guide all of our work.

• **Build greater relevance.** Working collaboratively with partners and neighbors, co-create content that broadens understanding of Lowell's history and reflects the experiences of its diverse communities.

1. Use the existing intellectual and physical resources of the Park and Preservation District to develop new, more inclusive content.
2. Collaborate with partners and community groups to identify gaps in the collections and underrepresented stories, and develop a plan to document that history.
3. Work with community groups to co-create Park offerings.
4. Connect contemporary issues and current events with Park themes and resources.

• **Craft engaging experiences.** Reimagine the visitor experience to be more engaging, enjoyable, inclusive, and accessible, enabling visitors to share and encounter various ideas and perspectives.

1. Create interactive and memorable experiences for all ages and abilities, providing broader access to the Park and its collections, stories, and staff.
2. Invite communities to tell their own stories and share the meanings they discover.
3. Utilize the results of research and evaluation to ensure that audiences are at the center of decision-making and planning.
4. Build empathy across time for Lowell's residents, workers, and entrepreneurs.

• **Contribute to positive change.** Promote civic engagement and resource stewardship, leading to positive change in the city of Lowell.

1. Encourage and enable everyone, including new generations, to embrace their shared responsibility for stewardship of historic resources, including those beyond Park boundaries.
2. Seek out new opportunities for learning in the Park and in Lowell's neighborhoods by building strong and sustained relationships with partners and continually working toward deeper community engagement and shared authority.
3. Advance social justice and social responsibility throughout the communities of Lowell.
4. Demonstrate excellent resource stewardship of Park assets.

• **Employ technology effectively.** Use current and emerging technologies to improve communication, enhance the visitor experience, and grow the Park's impact.

1. Develop a comprehensive digital strategy to communicate more effectively with audiences to highlight the Park's themes, collections, special events, and staff.
2. Create essential and respected online resources that serve users of all backgrounds and abilities.
3. Evaluate and improve the in-person visitor experience through the thoughtful use of appropriate technology.
4. Draw on the complementary expertise and capabilities of community organizations to develop relevant digital media and content.

• **Create a culture of collaboration and inclusion.** Embrace collaboration and recognize expertise – across the park, among partners in the community, and with audiences and visitors – to create a culture of learning, reflective practices, and continuous improvement.

1. Build strong working relationships internally and externally, involving partners early and strategically in the process of developing programs, events, exhibits, and experiences.
2. Support creativity, risk-taking, and organizational learning through the allocation of time and resources for prototyping and assessment.
3. Broaden the inclusion of voices at the table for discussion and decision-making, privileging all voices equally.
4. Encourage and support staff to participate in sharing and learning from expertise within the National Park Service and in other professional and academic networks.
5. Commit resources for building staff self-awareness and cultural competency to increase understanding of how one's worldview, biases, and assumptions impact relationships with others.

5. Mission of the Tsongas Industrial History Center

The Tsongas Industrial History Center is an education partnership between the University of Massachusetts Lowell College of Education and the National Park Service at Lowell National Historical Park. The mission of the Tsongas Industrial History Center is to inspire connections and understandings about America's industrial past, present and future through experiential learning, using Lowell's unique resources.

6. Park Audiences

While we often hear the term “general public,” that term implies a vast and homogeneous population that does not actually exist. American society is highly diverse and has a history that has produced its current socio-cultural diversity, and a spectrum of ancestries, customs, languages, beliefs and other social practices. While many visitors share experiences or interests, no visitor to LNHP is just like any other visitor, although many visitors may share a great many - perhaps more than they are aware - experiences, attitudes and understandings. As we perform our work as interpreters and educators, it is helpful to us to consider some of the shared practices that inform our visitors, as well as be receptive to how our visitors may be different from each other and from us. Our objective is not to insist that visitors “come be like us,” rather it is to facilitate their own experience of the cultural and natural resources that LNHP stewards. The park and staff provide opportunities for visitors to make their own connections to the resources and stories of LNHP. Following the model of 21st-century interpretation, the park also encourages visitors to share their own experiences and perspectives on park themes and resources with the park staff and with each other.

As a National Historical Park, we are a cultural and natural resource “for the enjoyment, education, and inspiration of this and future generations.” As such, we strive to be inclusive and accessible, and to promote an ethic of shared stewardship among all who visit.

Simultaneously, we acknowledge that our visitors bring with themselves a wealth and diversity of life experiences, including experience tempered by perceptions of world and American history and culture. We also acknowledge that community audiences bring their distinct interests in the park, its themes, its resources and its amenities. We are committed to engaging each of those users, according to their interests and needs.

It is important for us as interpreters and as educators to understand and value those interests and needs as they are enunciated or as we encounter them, rather than as we might imagine them to be.

Non-English speaking audience demographics

The cultural diversity of Lowell is one of its great strengths as well as an interpretive challenge. Not all city residents speak English or speak it as their first language. In our efforts to engage these audiences and to communicate our relevance to them, we conduct interpretive programming in Spanish, Khmer, English and other languages.

Organized K-12 School Groups

School-aged children typically visit the park with their classroom teachers as part of a curriculum-based field trip offered through the Tsongas Industrial History Center (TIHC), an education partnership between the University of Massachusetts Lowell College of Education and National Park Service at Lowell National Historical Park. The TIHC supports and encourages the teaching of industrial history using site-based, hands-on/minds-on experiences for more than 40,000 students and their teachers in grades 2 through 12 annually. Visiting classes use specially designed hands-on learning spaces in the Boott Cotton Mills Museum, as well as spaces and resources in the Mogan Cultural Center, Suffolk Mill, Moody Street Feeder Gatehouse, and other locations, including the UMass Lowell Bellegarde Boathouse.

The overarching objective for this type of group visit is to promote critical thinking about specific themes and subject matter through experiential learning that is grounded in Park collections and sites. TIHC workshops are designed to align with state curricular standards. Throughout the field-trip day, students actively engage in immersive experience of Park resources and in curriculum-based activities that further their understanding of LNHP's themes.

Lowell National Historical Park and its Tsongas Industrial History Center have a strong partnership with Lowell Public Schools to serve students in grades 3, 4, 5, 7, and 8. The guiding vision for that partnership is to instill in local students a sense of civic pride in the importance of their city. Other school groups visit from districts in Massachusetts and southern New Hampshire, and some school groups visit from more distant locations, in New England and beyond.

Educators

Additionally, hundreds of K-12 teachers from across the U.S. have participated in residential summer teacher workshops and institutes, informing and furthering the influence of TIHC programming and Lowell's heritage and historic resources.

Off-site K-12 school programming

In addition to on-site programming, TIHC staff provide off-site, in-school, curriculum-aligned programs to primary and secondary schools within a 50-mile radius.

Out-of-school and after-school programs

In addition to fieldtrip groups, there are also many student-aged youth who visit as part of extracurricular programs. These include youth groups from local organizations such as CMAA, Boys and Girls Club, and the YMCA, as well as Scouting groups and other organized youth activities. Frequently the park will combine a number of experiential learning opportunities for these groups. These guided tours (boat, trolley, or walking), use of the TIHC education workshop spaces and other staff-created interpretive programs such as ACE pop-ups, intentional making activities, scavenger hunts, etc. designed for encourage informal learning.

College students & faculty

College students and faculty visit the Park as class groups and individually. The objective of these visits is to further student understanding on specific subjects related to their coursework or research. Education staff are sometimes tasked with leading talks or tours related to that course content, on-site and off-site (on campus).

Other college classes and instructors arrange tours and visits that are essentially

standard park offerings. College students may visit the museum spaces or take a public tour in order to fulfill an assignment or gap in knowledge. Students are often motivated to learn about very specific subjects that the park interprets.

Young / Early Learners

Lowell National Historical Park has had a history of strong and successful programming for children. The Park has shifted the way that we view and label “children’s programming” towards a more inclusive “family programming” model. The intention of this shift was to acknowledge that children are coming to the Park and Park programs with caregivers. For an interpretive program to be engaging and successful, all members in a party should have a way to access the experience, not just the children. Research suggests that families are most engaged and have the most enjoyable time when experiences are structured to allow all members of the group to participate together, specifically to have conversations and challenges together (Dierking n.d.). The Park embraces an encompassing definition of family as any intergenerational group of two or more, typically a youth participant and their caregiver. The intergenerational groups who visit the Park come from both the local area as well as those from across the country and around the world.

Heritage tourists

Adult lifelong learners include heritage tourists interested in the social and cultural history of Lowell and informed by a variety of their own life experiences that may intersect or provide counterpoint to the historical or modern experiences of people in Lowell. These adult audiences often visit in pairs or larger cohorts and as a leisure activity centered in their own curiosity about the world. Confident of their own experience, these adults appreciate dialogic exchange, may ask pointed questions, and sometimes challenge responses.

Other tourists

Lowell NHP is home to an annual Folk Festival of world music, art and craft, and hosts a Summer Music Series of performance in Boarding House Park. These and several smaller-scale cultural events draw thousands of visitors to the city specifically to enjoy those attractions. Demographically, these visitors comprise a spectrum of audiences, adult and intergenerational, local residents and more distant tourists. LNHP has a presence in all of these events and they are excellent opportunities for LNHP to conduct outreach and to participate programmatically in the event.

Since its founding in the 1820s, Lowell has attracted people from around the globe, and a key narrative theme is to “preserve and interpret the stories and heritage of the people of Lowell, including the early female workforce (aka ‘mill girls’) and those who came from across the globe seeking opportunities. Today Lowell’s residents continue to shape the culture of the city and contribute to its revitalization.” As a city-in-flux, residents are not always aware of the existence of the park or of its relevance to their own lives and so engaging those residents is an important role of our public programming. These residents cross-cut across all of the identified audience segments.

7. Methodology

Public interpretation of cultural heritage is a relatively modern activity. The idea of the museum as a library of material culture dates to the late 18th century, and the oldest public museums in the United States were formed in the early 19th century. The interpretation of sites of heritage - such as Colonial Williamsburg - arose in the 20th century. In each of those instances, curation and interpretation of material and landscape was assumed to be the activity of specialists representing 'normative' attitudes and understanding.

In the latter half of the 20th century, that concept of cultural connoisseurship began to be emphatically challenged especially by those whose stories and built culture had previously been excluded from collections and displays. Those voices have advocated collections and interpretations of cultural heritage that value the narrative of 'ordinary' people and the diversity of their experiences and of roles in creating our shared heritage.

This New Museology, in its critical reassessment of functions and purpose, proposes that museums and similar organizations should be visitor-centered rather than curatorial- or collection-centered. The National Park Service's approach to 'interpretation in the 21st century' sits within that continuum of inclusion and accessibility to cultural heritage.

Inclusive, audience-centered and student-centered engagement

Our formal and informal learning programs reconceptualize audiences as active participants in the process of interpretation. We seek to draw upon the life experiences of visitors and to enable the past to talk back to the present by illuminating the continuities as well as the distinctions of time and space with our visitors' experiences.

Dialogic cognition and engagement

We all learn and learn to learn through social practice; by engaging with peers, in experimental activities, and by referring to more experienced peers for helpful guidance. 'No one is the first speaker in the universe' (Bakhtin 1986); we are continually entering into discourses in-progress. Our approach to I&E is likewise guided by this model of dialogic inquiry. Successful interpretation is not the simple recitation of facts, rather it facilitates deeper understanding by drawing on shared practices and the ways of thinking that arise from those practices.

Emotional / affective engagement

The importance of social practice to cognition is underscored by the effectiveness of immersive and emotional responses to narratives, to material culture and to place. Walking among the syncopated, belt-driven looms in the Boott Cotton Mills Museum, for example, conveys a strong emotional connection to the 'operatives' of the 19th century textile mill. Driving between the mill buildings that line the Lower Pawtucket canal conveys an appreciation of how the Lowell textile mills dominated the landscape of the city.

Experiential, material-centered inquiry

The site of Lowell National Historical Park is described with the standing structure, engineered canals, and other built material culture through which 'Mill Girls' animated the industrial revolution that created Lowell. Visitors to LNHP have the opportunity to engage with real, human-made evidence of the themes described in the LNHP Foundation Document. Simulations, such as employed by the Tsongas Industrial History Center, are intended to enable students and other audiences explore the human processes of industrialization and urbanization.

Other modes of community engagement

LNHP is a site for a wide variety of forms of cultural engagement for a diverse range of users, attracted to performing arts, literary arts, crafts, and visual arts. The park facilities - the Visitor Center, Boardinghouse Park, the Mogan Cultural Center, Boott Cotton Mills Museum - are each activated throughout the year by events and activities that draw new audiences and encourage new engagement with the park.

Research-based

Our interpretation and education activities are 'data driven' by the attitudes and understandings of our visitors, which we receive and assess as the qualitative information shared with us in conversation, via visitor comment books, on social media, and through other instruments. In that effort, we evaluate and compile historical/cultural and/or scientific research from a wide spectrum of sources; collaborate with others to synthesize and interpret evidence-based context, site stories and current social context; continuously incorporate new and historically excluded perspectives, reveal multiple personal and social truths, and represent current scientific and historic perspectives about site resources and issues.

Formal Pedagogy

Education staff (park rangers, program administrators, and contingent museum teachers) stay current with best practices in education, including object-centered, place-based museum education. The age range and needs of school visitors varies, even within same-age cohorts, and with cultural shifts over time. Workshops and fieldtrip activities are designed in consideration of the cognitive and emotional development of students. Education staff also master effective classroom management strategies to ensure that students, chaperones, and teachers have an enjoyable and successful visit.

Park rangers and education specialists coach part-time museum teachers, develop and manage programs and program spaces, and are involved with teacher professional development. The same resources are used for teacher professional development as are used for student learning: the Boott Cotton Mills Museum, Mogan Cultural Center, Suffolk Mill, trolley, canal, or riverboat tours, and the hands-on workshops in Boott Mill #6.

Accessibility

The National Park Service is committed to making facilities, programs, services, and employment accessible for visitors and employees with disabilities through compliance with the Architectural Barriers Act of 1968, the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990. The NPS works to ensure that people with disabilities can participate in the same programs, activities, and employment opportunities available to those without disabilities in the most integrated setting possible.

The general meaning of "accessible" is "being within reach," "capable of being used," and "easy to appreciate or understand." Beyond considering accessibility with regard to disability, the park embraces a broader approach that seeks to insure park experiences and interpretive opportunities are always "within reach," park staff are "easy to approach," and park facilities and media are "capable of being used" by all visitors.

Barriers to accessibility occur in a variety of circumstances. Though physical, cognitive, and developmental disabilities are most frequently thought of, non-disability situations such as visiting English language learners, or families with children in strollers can also be challenged in experiencing the park.

In an effort to provide a welcoming park experience to all visitors, Lowell National Historical Park aspires to the accessibility vision for the NPS as described in the 2012 All In! Accessibility in the National Park Service, 2015-2020 report:

“people with varying abilities and their families and friends will be seamlessly included in all the ways that visitors access park information and experience parks before, during, and after visits. All staff, volunteers, and partners will be skilled at reaching out to, and communicating with diverse populations and will be proponents of accessibility. The park will embrace and incorporate accessible and universal design principles to develop seamlessly inclusive and accessible facilities and programs.”

Please also refer to the Appendices, including *Interpretation in the 21st Century* and *Foundations of 21st Century Interpretation*.

8. Types of programming

LNHP interpreters and educators develop and conduct a variety of public and educational programs. Each of those programs - in subject matter and methodology - connect back to and are intended to further our implementation of that mission and strategic plan. Within those parameters, we continually innovate and improve our programming. The following are key types.

Self-directed visitors

Self-directed visitors typically visit the park as individuals, in pairs, or in small groups. Their curiosity is often expressed as a social activity, and their dialogic interaction with LNHP will often include discussion among themselves, prompted by objects, structures, landscape, and/or interpretive text/graphics they encounter in wayside graphics, museum exhibits, visitor center displays, etc. They may also engage interpretive rangers with questions as the opportunity arises with informal encounters throughout the site.

Inter-generational groups are an important subset of audience cohorts: parent-child, grandparent-grandchild, uncle-niece, etc. These groups are also combining socialization with what is perceived as meaningful learning activity. Adults in these groups intentionally play the role of mediator and interpreter, and rely on the available self-directed interpretive resources (texts, graphics, brochures, digital media) to assist them in that mediation. In some instances, adults in these groups are also intentionally modelling social behavior for the young members of their group.

LNHP has developed several programming types that enable inter-generational audiences to engage in mediated hands-on activity. These programs are thematically-centered and often leverage TIHC facilities, which are designed for 'hands-on' experiential learning. These programs are especially intended to engage local residents who are attracted to meaningful social leisure. Many of the family or inter-generational programs are designed to be drop-in in nature. This is intentional so that family groups may spend as much or as little time as they have available exploring the park's resources and interpretive themes through semi-mediated experiences. Examples of this type of program include Your City Saturdays and Hands-On History workshops.

Partner collaborations

LNHP is a strong partner with a range of organizations such as the YWCA, YMCA, Boys & Girls Club, Girls Inc., Cambodian Mutual Assistance Association, Coalition for a Better Acre, Community Teamwork Inc., religious organizations, and other community and civic organizations. We build these partnerships to work together on a mutually helpful project; to meet our strategic goals of relevance, collaboration, and positive change; and because partnerships are foundational to the park's existence. Rangers and educators represent LNHP in these collaborations and are instrumental in their success. Each collaborative activity provides an additional opportunity to solidify partner relationships and help develop effective institutional and organizational advocates for the park in the community.

Some of those collaborative projects are: Lowell Kids Week, Lowell Women's Week, Welcoming Week, Your City Saturday Family programs, International Women's Day, International Workers' Day, Archaeology Day, Learning Cities activities, and Earth Day.

On-site school groups

K-12 school group visits, as well as some college group visits, are determined by teachers and administrators, and typically organized to supplement specific curriculum. The pre- and post-visit activities performed by these visitors enhance their engagement(s) with the site, museum, objects, workshop processes, or other phenomena in the Park. Interactions with school groups are comprehensively planned by park educators to align with teaching/learning objectives, and with dialogic,

object-centered and experiential pedagogies.

Heritage tourists

Heritage tourists are attracted by 'expert' interpretation of the site, landscape, structures, etc. delivered as guided tours. These visitors arrive with their own subject expertise and are especially attentive to explanations by Rangers, Guides and other interpreters who can explain historical importance and the narratives that connect the past with the present. The canal boat tours have the added attraction of enabling unique viewpoints for appreciating the built history of the park. Dialogic interaction with these visitors is important for building upon their prior knowledge, involving their expertise, and sometimes to challenging misinterpretations.

A similar cross-section of visitor is attracted by 'expert' lectures and discussions about topics that align with LNHP themes and interpretive objectives. LNHP hosts lectures funded by the Moses Greeley Parker Foundation (aka Parker lectures) in which an expert speaker presents a primarily monological presentation of information. LNHP also organizes the series Lowell Talks as community-centered discussions during which experts and more experienced peers frame a topic for discussion and engage the audience attending in dialogic conversation as well as Q&A.

Visitor Center interactions

Visitor Center and on-the-street interactions involve a wide range of persons, including many who do not perceive of themselves as visiting the park. While we hope that everyone who stops in the Visitor Center will engage the park, the VC also provides widely useful social amenities (washrooms, drinking fountains, air conditioning in the summer) and a gift shop. A special challenge to front desk staff is to engage these visitors and convey to them the merits of an extended Park visit to the cultural resources that comprise central Lowell (such as buildings, canals, and museums).

Guide/Ranger-mediated experiences

Most interactions between staff and visitors in the museum and gallery spaces are conducted as informal interpretation, with staff engaging visitors, assessing needs and opportunities, and matching interpretive approaches and techniques to visitor interests. Many of these interactions center around the interactive elements on the Boott 2nd floor (carding, spinning, and weaving). More formal interpretive talks are also conducted as opportunities arise, with the most common talks given at the Boott Mills weave room observation area, Boott Mills 2nd floor mill model, Boott Mills 2nd floor loom, and the Mill Girls and Immigrants dining room and kitchen. The weave room staff offer short demonstrations of the working looms to visitors passing through the weave room and, as staffing allows, conduct short demonstration programs in the observation room or Boott second floor. Interpreters also provide short talks as introductions to the *Wheels of Change* at the Boott Mills, and the *Continuing Revolution* film at the Visitor Center.

Discovery cart activities are scheduled as drop-in interpretive opportunities a couple of times a day at the Boott Mills second floor during the summer season, and are unscheduled but available for staff use the rest of the year. The Discovery cart includes a collection of hands-on touchable artifacts, and activities that enhance visitor's understanding of textile manufacturing and the building of the industrial city. Interpretive props include raw and ginned cotton, drop spindles, carding machines, a cotton gin, granite splitting tools, cloth with weaving errors, etc.

Other community engagement efforts

An important part of our work is to build connections between LNHP and the wider community. In that effort, rangers and guides perform informational outreach at public events and activities outside the park boundaries.

The Park participates in local cultural events, such as the Southeast Asian Festival on the Merrimack River, the Festival of Lights on the Western Canal, BookFest in

Kerouac Park and the annual Lowell Folk Festival. Farther afield, LNHP staff often staff the regional NPS booth at the 'Big E' multi-state fair, and talk to fair-goers about visiting LNHP. All of these events and activities enable us to connect with new audiences and elevate our public profile.

Outreach events also serve a larger interpretive purpose. When attending events that are not specifically the Park's, effort is made to create intentional interpretive opportunities through the use of hands-on activities, interpretive talks and demonstrations, and conversations with participants about the Park's themes and resources. While we hope that people we encounter at public events and activities will come to the Park and experience the resource, we recognize that each outreach event in itself is an interpretive opportunity that allows people to engage both intellectually and emotionally with the ideas and themes of the Park.

Off-site educational outreach

The Tsongas Industrial History Center provides curriculum based outreach programs to students within a 50 mile radius of Lowell. Specific programs are designed to meet Massachusetts Curriculum Framework and Common Core standards. Other educational outreach programs such as with local high schools provide supplemental instruction via experiential learning and utilize site-specific, object-centered learning activities that support coursework in subjects such as environmental science and US history.

Primary school students in grade three participate in the "Farm to Factory" program which explores the transition from an agrarian to an industrial society via experiential activities. The program is sometimes used as a pre-visit activity before participating in the on-site "Change in the Making" program. Fourth grade classes may participate in "Exploring the Immigrant Experience," which is specifically aligned to grade four curricular standards regarding immigration and US history.

Eastern National store

The park store is often a place where visitors find a memento of their visit or of the city. The stores are also important resources for literature about the park and the themes we interpret. The park Guidebook is a popular item, as is cloth woven at Boott Mills, and the many books we carry about history and technology. The stores also present additional interpretive opportunities, and social activity and conversations around items in the store often help solidify themes that visitors have encountered earlier in their visit. Through the passport books and stamps, NPS-branded merchandise, and NPS books, the store also helps connect Lowell NHP to the broader National Park ecosystem.

9. Digital Media

The park utilizes a range of digital media tools to engage visitors, connect with new audiences, promote park events and programs, and foster a sense of community among supporters of Lowell National Historical Park. The park's primary digital media outlets are its website and social media accounts, including Facebook, Twitter, Instagram, and YouTube. Digital media efforts are very useful as marketing and outreach tools to encourage people to visit the park, but are also very important and valuable in their own right in helping virtual visitors, who may or may not ever visit the park, connect with the park's stories and themes.

Website

The park's official website (www.nps.gov/lowell) serves as the hub of LNHP's online presence. It is the definitive online home for park information, and an access point for visitors, researchers, and volunteers, and educators. All the information on NPS park websites are broken into three main categories: Plan Your Visit, Learn About the Park, and Get Involved. A taxonomy of park pages has been [created by WASO](#). Employing interface consistency enables easier navigation.

The [Plan Your Visit](#) section of the park's website is designed for users to chart out their trip to Lowell. Developed around a common NPS template, this cluster of pages includes valuable information for users before they arrive at the park. Pages including [Operating Hours and Seasons](#), [Guided Tours](#), and [Accessibility](#) are used often. Because of the constantly changing park offerings this section of the website must be monitored and edited throughout the year. Many of the Plan Your Visit pages also connect with the park's [Calendar](#) feature.

The [Learn About the Park](#) hub on the website is a resource center for digital visitors. Researchers can use these pages to explore Lowell's [history and culture](#), dive into [park collections](#), and investigate [photos and videos](#). Learn About the Park is also home to the [educator's materials](#) on our website, though much of that webpage links to the [Tsongas Industrial History Center](#) website. Going forward LNHP should explore ways to host these educator's resources on both sites, since many teachers currently search for classroom content through the [NPS Educator's Portal](#)

The [Get Involved](#) section of the website highlights the many ways you can work with Lowell NHP. Pages include [volunteering information](#), [youth employment programs](#), and [park employment opportunities](#). The park's employment page currently pulls job openings from USAJobs and displays them on our website. The recent addition of the [Volunteer Spotlight](#) series has added much needed new content to the "Get Involved" section, and increased the value of the website as a volunteer recruitment tool.

Social Media

Over the past ten years LNHP has created and maintained an array of social media accounts. Currently the park operates a [Facebook page](#), [Twitter account](#), [Instagram account](#), and [YouTube page](#). Each of these pages is run in accordance with [DOI policy](#), and is monitored by LNHP staff.

As noted in the CRIE plan, LNHP aims to employ technology effectively. We hope to use current and emerging technologies to improve communication, enhance the visitor experience, and grow the Park's impact.

As of mid-March 2019 the LHNP social media accounts were reaching thousands of people, with many of those followers being residents of the Merrimack Valley. Content for our social media sites can be broken down to a few broad categories: event and institution promotion, time-sensitive updates, special park and partner announcements, and local and community history.

Types of social media posts

Promotional

One of the most useful tools social media gives the NPS is a way to promote upcoming programming and special events. Since the NPS cannot spend money on promotion it has become beneficial to highlight events on our various accounts. By creating posts (Facebook, Instagram, Twitter) and creating events (Facebook), community members can receive updates, ask questions, and share their plans with friends.

Example: "[Water and Culture in Lowell MA Riverboat Program](#)" (9/2/18) Engaged over 700 people, including 7 comments and 39 shares. Also: "[Mindful Weaving Tweet](#)" (3/19/19)

Time-sensitive

Social media can be a powerful tool when the park needs to get a message out quickly. Having multiple platforms available allows park staff to easily spread the word about a snow day, cancelled event, or other important change. When posting about an important update web authors use Facebook, Instagram, and Twitter, and also update the [alerts page](#) of the website.

Example: "[Lowell NPS Closed Due To Snow](#)" (2/14/15). Also: "[Lowell Park Lot Closed For Folk Fest Tweet](#)" (7/25/18)

Local and community history

Many of LNHP's social media posts are interpretive posts highlighting community history or park themes. These pieces are researched and written by staff and usually accompanied by historic photographs. When possible we try to align posts with important dates (birthdays, anniversaries) or [national NPS themes](#). These types of posts are the most likely to garner community comments and conversations, with users sharing personal memories or family stories.

Example: "[Lucy Larcom Birthday](#)" (3/5/19). Engaged over 730 people, including 57 comments and 108 shares

Special announcements

We rely on community members to make Lowell vibrant and successful. Some of our posts connect users with volunteer and job opportunities, as well as other park management and organizational changes. LNHP also strives to be an active social media community member, sharing partner events and engaging other groups in online conversations.

Example: "[The Lowell Folk Festival Show](#) Volunteer Recruitment Video" (7/13/18). Received 1,200 views, over 30 reactions, and 19 shares. Also: "[LSMS Job Posting Tweet](#)" (3/2/19)

Digital accessibility

Creating accessible content is the responsibility of all media content creators here in Lowell. Digital accessibility refers to making digital content usable by people, regardless of any disability they might have. Though many of the aspects of our website are accessible by design, there are still actions we need to take to ensure our content is up to DOI and legal standards. The next three sections cover the most common accessibility responsibilities for park authors, however this is not an exhaustive list. Many in-depth guidelines can be found on the [Inside NPS Digital Accessibility Page](#) (The following sections draw extensively from that page)

Alternative (Alt) Text

Alt text is a written description of an image; it can be quite short, literally describing what an image shows. Whenever an image is uploaded to the website you are

prompted to create alt text.

Alt text is critical for people using screen readers. The screen reader will read aloud the alt text you've written, to help the user understand what the image is showing. You do not need to put in extensive context - just a useful description of the image. Your photo caption, or content on the webpage, can provide more context to the image. A much more in-depth guide was created by the [Social Security Administration](#).

Captions and descriptions

A person who is deaf cannot hear the audio track of a video. A person who is blind cannot see the visuals. To help each group, all videos must have captions and also audio description (if those audio descriptions are not built into the video as described below).

For web videos, captions should be closed, meaning the user can turn them on or off. Open captions, which display at all times and cannot be hidden by the user, are acceptable (but not preferable). Please note, however, that open captions are a requirement for videos physically shown at NPS facilities.

Audio description (sometimes also called "video description") for video is like alt text for an image—it is a description of visuals, so that a person who is blind can understand what is being shown. As is true for captions, Federal agencies are legally required to provide audio description along with all videos (or build audio descriptions into the video) whether they're shown in a visitor center, or shared via the web (on your own website, YouTube, Facebook, etc).

Over the past year there has been an active effort in the park to ensure all LNHP videos include captioning. Currently all online LNHP park videos (including Facebook Live videos) feature captions. Moving forward no new video content should be uploaded online unless it is captioned.

One of the next digital projects the park should undertake is creating audio description for our videos. Though some parks contract out audio-description to private companies, Lowell may want to explore in house remediation first. Since the park creates a fair number of video products each year, processing everything in the park could be the easiest and most cost efficient option. Examples of audio described videos can be found on the [Grand Canyon website](#) (make sure to click on the "AD)))" logo on the video player). More guidance for audio description can be found on the [American Council for the Blind's website](#).

Document Accessibility (508 Compliance)

Digital documents, such as PDFs, must meet many of the same accessibility standards as a website. Essentially, the same prescriptions that apply to web pages apply to PDF files. Text must be machine readable and images must be textually described.

Making PDFs accessible in-house is not impossible, but the complexity varies depending on the document. Regardless of complexity, here are some commonly-overlooked facets: Build the document with accessibility in mind from the beginning.

- Ensure title and language settings are appropriate.
- Provide alternative text for all images.
- Tag the reading order, so that a screen reader knows in what order to read parts of the PDF. This is particularly important when the layout means you have multiple columns, side-bars, call-outs, etc.
- Complete a visual check to ensure color contrast is appropriate (i.e. high contrast between text and background colors).

- Ensure Optical Character Recognition (OCR) scans accurately reflect the text.

Over the past year LNHP has remediated over 80 inaccessible documents on our website, nearly 90% of all LNHP inaccessible documents. This was achieved by either editing the document using Adobe Acrobat and reuploading to the website, turning PDF documents into web pages (ex. [Lowell Notes](#)), or deleting documents that were no longer needed on the website.

Going forward the National Park Service is working to move away from uploading PDFs whenever possible. PDF documents can be hard to make accessible, and they are also less likely to be picked up by search engines. Whenever possible a web page is preferred over a PDF. With that being said there will be times when PDFs are warranted. Before uploading a PDF to the park's website ensure that it passes the Adobe Acrobat accessibility check.

Traffic analysis

Many of the digital tools used by Lowell National Historical Park allow park staff to explore how people are utilizing our sites and who, demographically, is using the sites. Nps.gov domain analytics is powered by Google Analytics, giving web authors a wide variety of categories information to explore. Some of the most useful information includes landing page, exit page, city, state, language, gender, browser, and device.

LNHP's social media platforms offer analytics tools as well. Facebook, with the most robust set of tools, allows web authors to explore followers': age, gender, country, city, language preferences, and post engagement.

Portable devices

Education staff use iPads for note-taking, and in the Water Power workshop, where students record waterwheel testing data on iPads. A specially designed app enables classes to continue to manipulate and analyze that data back in the classroom.

iPads have now been added for use as interpretive resources on the Boott second floor, Mill Girls and Immigrants Exhibit, and at the Visitor Center. Additional iPads will also be available for use on ranger-guided tours. The iPads contain a wealth of resources from historic images, to journal articles, to videos explaining the technical aspects of textile manufacture and waterpower.

10. Professional Development

Delivering an interpretive program to the public is like playing a jazz song: it may appear to be the work of a quick study, but it is the result of hours of unseen preparation, research, and practice. Staff in both Education and Interpretation build a strong foundation for their interpretations through formal trainings, informal sessions, and a chain of mentorships. They also continue to build their repertoire by finding and assimilating new research, attending conferences, and taking part in workshops. Lowell NHP currently has a wealth of print and digital resources in the realms of subject area training and technique/methods; the people who work here, who bring their knowledge and expertise, are also tremendous assets. In planning for their own development, staff are encouraged to turn to one another and to look outside of the park and agency to enhance their craft. Encouraging lifelong learning and workplace development (as grassroots and top-down initiatives) is critical to the success of both divisions.

This section on Professional Development is both descriptive and aspirational. It provides an overview on the current systems for training new, returning, and long-serving permanent employees on both subject matter and methods/practice. In addition to internal instruction, this section includes information on options for development from external sources, such as meetings and conferences of professional organizations (local, regional, national, and international). A final component provides the basics on how staff learn about safety and professional behavior. Though this report strives to be illustrative of the range and scope of options currently available, it is not fully comprehensive, nor is it the last word on development. Throughout each subsection, there are suggestions on areas for improvement and a look to the future.

Subject Training

Each educator and interpreter must have an in-depth knowledge of the park's interpretive themes, core concepts, and resources. How are park employees empowered to access, explore, and disseminate the material that is most relevant to their programs?

Formal Training Sessions

Seasonal employees in Interpretation attend a division-based training (lasting up to two weeks) at the start of each season. During this period, they are exposed to important park resources, from the trolleys and looms to the Pawtucket Gatehouse. They are also introduced to our main print materials (unigrid, offering, rack cards, etc.) and other means of disseminating information (the park website, social media, and so on). Each employee is then provided with a binder that includes answers to frequently asked questions, a bibliography, and a selection of readings based on their imminent interpretive needs. This binder also contains a significant amount of operational information and guides on standard operating procedures, or SOPs. Employees are also given a copy of *Lowell: The Story of an Industrial City*, written by historian Thomas Dublin, which serves as an important first overview of the park's major themes (and is an important text to share with visitors). This first round of information is critical for laying the foundation of knowledge for each interpreter.

During this first training and throughout the season, staff members also provide new or less experienced employees with an introduction to contemporary topics and to Lowell today, including how to research those topics and gain greater knowledge of them. This aspect of the training includes, but is not limited to, a visit to the park library in the Boott, a trip into the archives, and an overview on how to access subject files on the K:/shared drive. At both the Visitor Center and the Boott, there are additional, easy-to-access materials that can deepen an interpreter's understanding of a given subject (see: the interpretation libraries and filing cabinets with extra subject files).

Museum teachers are provided with a comparable training at the start of their

employment, though their interpretive needs do differ based on the resources they frequently access. Each new museum teacher receives a Handbook with operational information about Lowell National Historical Park, and UMass Lowell (including its mission and history), the TIHC partnership, policies and procedures, steps in learning new programs, and a reading list. New museum teachers attend a series of sessions covering topics such as administrative matters, presenting curriculum-based programs, group management, working with teachers, thematic teaching, customer service, and safety procedures. Museum teachers also attend refreshers and build content knowledge and teaching skills as part of other professional development days, sometimes in collaboration with the Interpretation division.

Overall, obtaining a greater depth of knowledge is critical for all new employees learning the core stories relevant to current programming, interpretive themes and strategic objectives. After an introduction to print and digital sources, employees are encouraged to become familiar with what is available in the library (and Eastern National store) and to peruse additional resources, time permitting. It would be useful to remind staff that reading and research are valid ways to use project time. Often, what one researches is directly related to an upcoming program. Reading an existing outline written by another staff member should be a first step in a longer process of getting a rich understanding of—and critically reflecting on—the larger story.

Those looking for additional information for specific programs are encouraged to seek out Lowell's object and archive collections, and to speak with the Cultural Resources division regarding:

- LOWE museum collections [guide](#).
- LOWE archive collections [guide](#).
- Park videos can be found [online, both on our site and Youtube](#).
- An additional resource is the Center for Lowell History [General collections, and Oral histories](#)

Historical newspapers are another excellent resource. See: [The Greater Lowell Newspaper Archive](#) and [Newspaper Archive](#) - ask a supervisor for login information!

Maintaining subject matter research files that are relevant and accessible to all staff is an ongoing activity, as is making these files easy to find. Since the NPS network services are not accessible to non-NPS staff - including partners at UML and volunteers in the park - sharing a new or important article in print is one option for spreading information, as is a short email blast to interested staff.

Our current training structure includes talks on select topics and common lines of inquiry, subject to periodic evaluation and improvement. There may also be two or more seasonal training pathways depending upon the needs of returning staff. This enables appropriate knowledge sharing for those who have mastered the core elements of the park stories, and accommodates less experienced staff who may otherwise be overwhelmed by "advanced" training with experienced interpreters.

In planning future sessions and early weeks each season, we aspire to be deliberate about how peers interact with one another during training. Learning from more experienced peers is important, as is listening to less experienced peers articulate their confidence to perform new tasks and those they may be able to achieve with guidance (Vygotsky 1986, Bakhtin 1981).

Peer-to-Peer Observation & Learning

Across the division, shadowing other employees in a systematic, planned way is part of both onboarding and continuing education. Most employees learn a program by first observing another teacher, guide or ranger several times. Observation should take place for other reasons than strictly learning a specific program, however. Some continue the process of observation across divisions, both as a means of learning and providing feedback to others. This is not always feasible or easy,

but building this bridge is good for collegiality and each professional's development. An interpreter who staffs the second floor of the Boott Cotton Mill Museum, for instance, may learn a great deal from a museum teacher who conducts programs using those exhibits, and vice versa.

More formally, the option to complete a detail lasting weeks or months in Education or Interpretation is sometimes available to permanent employees. All are encouraged to observe and learn from one another's programs whenever possible, and within reason. Sharing outlines, notes, and other materials is a great way to get started. Self-study is also important and valued.

Lectures and Workshops

Attending the talks of visiting scholars who have come to the park is an important way that employees sharpen their understanding of a particular subject. This may take the form of sitting in on or facilitating a Summer Teacher's Institute workshop, Moses Greeley Parker Lecture Series talk, or other topical presentations. During these programs, interpreters often attend to gain knowledge and to contribute to the flow of information and sharing of expertise.

Learning from people who do not work at the park is also a professional developmental opportunity, with supervisor approval and as schedules allow. Staff often attend community lectures and programs on relevant material such as Lowell Walks. As with workshops, interpreters should see these as opportunities to build on what they know and a means of showing that we are part of a larger, critically engaged community of thinkers in the city.

Upon returning from a conference, staff are typically expected to give a presentation on new information and developments in a field. These presentations should be organized in consultation with your supervisor to ensure that your news of programs or activities elsewhere reaches all those in the park who may benefit from it.

B. Training in Interpretive & Educational Methods and Practices

Employees learn from digital sources, print media, more experienced peers, and park audiences regarding how to do interpretive work. This section provides basic guidance on how employees learn the core interpretive methods they are expected to master. It specifically describes methods for gaining access to new developments in the fields of education, interpretation, and museum studies.

National Park Service and Department of Interior Training

The current seasonal training schedule includes sessions on basic interpretive methods. Additionally, staff facilitate training on sub-topics such as intergenerational learning. In thinking about what it means to be an interpreter or educator, new and returning employees are asked to come up with program ideas and to demonstrate basic skills for their peers.

As a baseline, all interpreters should be familiar with the standards and philosophies explained in the NPS document [21st century interpretation](#). Within the NPS, there are additional opportunities for training in interpretation and that are external to the park. These include but are not limited to:

- Resources on DOI Talent, formerly DOI Learn. This is where some basic procedural training is available (FISSA) as well as advanced resources.
- Attending NPS Fundamentals training, which provides a core understanding of the agency's mission and work.
- Attending training workshops on Audience Centered Engagement.
- Using the Common Learning Portal (several staff members are very active as peer participants and reviewers).

- Taking part in or facilitating trainings at parks or courses funded by the National Association for Interpretation (NAI).

Coaching

New staff are paired with more-experienced peer, full-time rangers at the start of each season. These coaching pairs are assigned by supervisory staff. Each coach works with at least one other employee to guide them to resources and tools for interpretive practice. The coach is not entirely responsible for their trainee's formal training, but is the main point of contact for the employee when developing a new program.

The coach also offers feedback after an employee has begun work as an interpreter. All seasonal staff are asked to develop and practice programs for peer and mentor review. This might mean an observation will take place at the Visitor Center or Boott Cotton Mills desk, on a canal boat, or in a trolley car. Every employee is subject to observation and a follow-up in the form of actionable, constructive, and timely feedback. Coaches are trained to give constructive feedback. These and supervisory observation and feedback are critical methods for evaluating and improving I&E for visitors to Lowell NHP.

It is just as important to have a broader culture of coaching and support outside LNHP. Not all training is formal or internal to the park; helpful coaches are encountered during the course of a season or year. Others are found at off-site training sessions, such as meeting a higher-level staff person at a different park who may serve as a mentor. Interpretive technique is learned through practice with each other.

NPS education staff working in the Tsongas Industrial History Center provide one on one and small group training to new and established museum teachers as they learn to teach new program offerings. Rangers provide a sound introduction to the TIHC, where staff can find accurate content information, Standard Operating Procedures (SOP), and best teaching practices and pedagogical principles that stand behind every offering from the TIHC. Rangers observe programs and provide appropriate feedback. As museum teachers become comfortable, training turns into mentoring as they develop their craft. Coaching and mentoring also takes place informally, as museum teachers seek out opportunities for improvement and understanding. Education rangers assist in planning, developing and presenting the five museum teacher professional development days each year, where topics ranging from information to pedagogy are discussed in depth.

C. External Meetings and Conferences

Connecting with professionals outside of Lowell NHP is vital. Given the breadth of stories that are tied to Lowell NHP, there are many options for finding a path to deeper learning and development. The park is currently a member of several national organizations such as the American Alliance of Museums, or AAM, as well as regional groups. A park-paid membership entitles all employees to access additional resources for improving one's craft.

The list of memberships should be public and easily accessible, especially for seasonal staff looking for career guidance. Furthermore, employees should be encouraged not just to join these groups but to attend professional conferences when possible. This topic should also be the subject of a special morning meeting or development session. Hearing about what a fellow staff person has learned at a conference is a first step. We also need to share information about what we belong to, why, and what the clear benefits are for emerging and established professionals.

D. Safety

Standard Operating Procedures & Emergency Quick Guides

Maintaining a healthy and safe working environment is both an ethical and a legal responsibility. Interpretation and education work at LOWE is not inherently hazard-

ous, and most hazards that you may encounter can usually be mitigated by appropriate practice. However, in any situation that you think constitutes an unsafe working condition, you should report the condition immediately to your supervisor. This is both your right - to be protected - and your responsibility - to protect others!

Some activities present greater risk than others. For example, boat tours on the waterways include the hazards of sudden storms, of falling overboard, of being injured by pinch points in the lock systems, and of heat exhaustion. To mitigate these specific risks, we require all staff to wear personal floatation devices, we direct visitors to keep their bodies well inside the boat gunwale, and we recommend that visitors carry ample drinking water on their tour.

Other hazards are less obvious. For example, the toner used in laser printers and copies is hazardous if inhaled or ingested. Safe practice includes washing your hands after you change a toner cartridge, and that you properly clean up spills and notify a supervisor if you encounter toner powder on a work surface. All materials in the park should have Material Safety sheets stored in a central location.

In addition to specific safety discussion in staff meetings and during seasonal orientation, Quick Guides on how to respond to more than a dozen hazardous or dangerous situations are available at all public desks. Together with SOPs, these documents provide critical guidance on decision-making and step-by-step procedures for how to manage difficult situations. This guide is also available for all new and returning employees.

Safety Committee

Parkwide, employees are expected to engage with the Safety Committee, which sends out regular updates on safety issues and compliance. Members from all divisions have the opportunity to be part of the committee. This requires attending monthly meetings. All other employees are urged to read their committee reports and updates.

Operational Leadership

National Park Service Operational Leadership serves as “an invitation for all employees to assist you to increase your awareness of risk and safety in day-to-day situations.” As defined by the training academy, “Operational Leadership empowers employees to be assertive about their safety and the safety of their team, and encourages them to participate in the decision making and risk management process.”

The fundamentals of operational leadership training are offered during seasonal onboarding. All employees should be familiar with [these basics](#). Higher level training is also available to enhance one’s skills in risk assessment and creating a culture of safety.

E. Ethics

What does it mean to be an ethical professional? While subject matter expertise, methodologies, and procedural information are important, there is also a standard of behavior that must be maintained by all to ensure an equitable and collegial workplace. The fundamentals of professionalism (punctuality, appearance, courtesy, etc.) are taught during onboarding and hopefully, modeled during the workday. Beyond this basic standard, we strive to be a workplace that practices inclusion, promotes accessibility, and considers ethical behavior to be an important value. It is everyone’s task to make sure that Lowell NHP is a respectful, tolerant, and inclusive environment.

One of the challenges faced by educators and interpreters is responding to contentious and disrespectful behaviors by members of the public. Knowing how to assess and respond to harassment is a topic that received significant attention in 2018. It should be addressed in every seasonal training period. Formal ‘Bystander training’ is conducted by supervisors to improve how we respond to those incidents of harassment.

In 2018, the Anti-Harassment Working Group articulated a Code for Standards of Behavior: that describes our organizational ethic:

This code of conduct sets out the terms for making Lowell National Historical Park a safe, supportive, and just work environment.

We will do our best to assume best intentions when another person speaks, but we will also take responsibility when we have spoken in error or in a way that causes offense. For example, colleagues use and respect one another's preferred pronouns (they/she/he).

Bystanders will have a responsibility to do more than be a witness. Keeping in mind the importance of safety, we will be expected to act when a peer is being adversely affected by the words or actions of a visitor.

We will all seek to be open and understanding to the fact that harassment is experienced differently by each person and across a spectrum. We will not be dismissive of a person's experience with a visitor or be permissive of inappropriate behavior among peers.

Employees and volunteers will not be the subject of retribution should they elect to report an incident or act in good faith to defend a colleague.

Ultimately, we will all work together to understand the power of our own words and actions, and those of the people who come into our doors or pass by us on the streets. The goal is to create a safe and dynamic park where respect FOR ALL is paramount.

The Foundation for Ethical Behavior, Executive Order 12674, is accessed at <https://www.doi.gov/ethics/basic-obligations-of-public-service>

All National Park Service paid and unpaid staff are required to act in accordance with Director's Order 16-E, which states, in part:

*"The National Park Service (NPS) is committed to providing a workplace free of discrimination and harassment based on race, color, religion, sex (including pregnancy and gender identity), sexual orientation, national origin, age, disability, family medical history (including genetic information), status as a parent, marital status, political affiliation, and one that is free from illegal retaliation. **The NPS will not tolerate harassing conduct (of a sexual or non-sexual nature) against another NPS employee, intern, volunteer, contractor or other non-federal employee, or other member of the public.** The NPS also will not tolerate reprisal or retaliation if employees report harassment or provide information related to such complaints."*

11. Resources & Assets

The most important resource and asset of Lowell National Historical Park are its paid and volunteer staff who interpret, educate and facilitate public history and STEM engagement with the Park. Your work here is essential to the stewardship of the cultural and natural resources of the park and to the interpretation and enjoyment of the park by the hundreds of thousands who visit each year.

Volunteers and partners

Since its establishment Lowell National Historical Park has embraced partnerships as an integral tool for accomplishing park and community goals. Partnerships with entities such as the City of Lowell, the state, and community organizations have allowed the leverage of funds for historic preservation and supported the economic growth of the city. These partners have been critical to meeting the mission of the park, assisting with interpretation, education, and resource stewardship. Through strong, mutually beneficial relationships with its partners, the park has not only succeeded but thrives as a model for community cooperation in the National Park Service.

The Tsongas Industrial History Center (TIHC) is an education partnership between the [University of Massachusetts Lowell College of Education](#) and the National Park Service. The mission of the partnership is to inspire connections with and understandings about America's industrial past, present, and future through experiential learning using Lowell's unique resources. Since 1991, approximately one million students and educators visiting the TIHC have engaged in simulations and activities such as hand weaving, assembly-line production, and immigration-themed role plays. In STEM-focused programs, students use the engineering design process, manipulate simple machines, create canal systems and test water wheels, measure water quality, or trace the flow of groundwater pollution.

Landscape

The Park and Preservation District encompasses 500 acres that form the center of the city of Lowell. Lowell National Historical Park includes 9.6 miles of major riverbanks and all 5.6 miles of historic canals in Lowell, all of which comprise the waterpower system that harnessed waters of the Merrimack River to power the city's mills. In fact, the Merrimack River and its natural attributes dictated the location of the city itself. The water power and canal system includes the Pawtucket, Merrimack, Hamilton, Western, Eastern, Lowell, and Northern Canals and canal banks, as well as several associated locks, gatehouses and dams, and Pawtucket Falls. This system, which still operates as a source of hydroelectric power, provides an opportunity to interpret both the historic significance of water in industry, as well as the engineering of a waterpower system. Public access has been expanded over the years to support these interpretive opportunities, including creation of a pedestrian canalway and riverwalk and the development of related exhibits and programs such as the River Transformed Exhibit at the Suffolk Mill.

Historic structures and buildings

The Boott Cotton Mills complex is an architecturally and historically significant mill site in the city, and the only one with buildings owned and managed by the National Park Service. The millyard was constructed and then adapted over a 100-year period by the Boott Cotton Mills company, one of the 10 major textile corporations in Lowell. Of the city's original millyards, the Boott Cotton Mills complex is the most intact example of Lowell's historic mill complexes. Changes in technology and production capability influenced the development and appearance of the millyard

over time. Its clock tower, completed about 1865, survives today as one of the most distinctive architectural monuments in Lowell and has become a symbol of the park. Today, the restored mill complex houses the park's Boott Cotton Mills Museum, the Tsongas Industrial History Center, and several NPS Northeast Region offices.

Boott Cotton Mills Museum located in the mill complex started in 1836, includes a 1910s weave room with operating looms. There are also interactive exhibits and oral history videos about the Industrial Revolution and Lowell's working people. The Boott Mills also has programming spaces (Events Center and Counting House), a museum store operated by Eastern National, and occasionally hosts temporary exhibits in the Reflections Room.

Mogan Cultural Center houses the Mill Girls and Immigrants Exhibit, Center for Lowell History, and the Angkor Dance Troupe. The Mill Girls & Immigrants Exhibit tells the human story of the Industrial Revolution by featuring the experiences of Lowell's working people. Explore the kitchen, dining room, and bedrooms of a reconstructed corporation boardinghouse furnished in the style of the 1850s. In the Immigrants exhibit, enter the social and cultural worlds of Lowell's diverse ethnic groups, ranging from the first Irish laborers in the 1820s to recent Southeast Asian emigrants and refugees from many places around the world.

Tsongas Industrial History Center is a hands-on center where students learn about the American Industrial Revolution through activities and tours of the sites where history—and science—happened. Students “do history” by weaving, working on an assembly line, role-playing immigrants, voting in a town meeting, or becoming inventors. Students can also “do science” as they use the engineering design process, manipulate simple machines, create canal systems and test water wheels, measure water quality, trace the flow of groundwater pollution, or discover river cleanup techniques.

Suffolk Mills survive today as a reminder of Lowell's once-great cotton textile industry. The River Transformed Exhibit tells the story of how water provided power for the mills. With its working turbine, it also highlights the changes in waterpower technology and the important work of Lowell's nationally renowned engineers, whose turbine designs are still used today.

Francis Gate and Guard Locks, the main entryway to the canal system, demonstrates how 19th-century canal technology applies to water level control, transportation, and flood prevention. The great 21-ton drop gate designed by Lowell engineer James B. Francis saved the city from flooding in 1852 and again in 1936. This site, which includes a fully operable lock chamber, is a highlight of the ranger-led canal boat tours.

Pawtucket Gatehouse, built between 1846 and 1848, is the largest gatehouse in the canal system. Its ten turbine-and-belt-driven sluice gates controlled the flow of water into the Northern Canal, and still perform that function for a modern hydroelectric plant. The turbine in the gatehouse is the first Francis turbine installed (in 1847), and the progenitor of Francis turbines in use throughout the world today. By tour only.

Lower Locks was part of the 1796 Pawtucket Transportation Canal, which allowed boats to skirt Pawtucket Falls. At that time, boats descended the entire 32 feet from the Merrimack to the Concord River in four lock complexes. When the Pawtucket Canal was rebuilt in 1823 as part of the power canal system, the drop at Lower Locks remained at 17 feet. The complex includes a dam, gatehouse, and two lock chambers, and is also the destination for many of the canal boat tours.

Swamp Locks, a dam, gatehouse, and two locks lowered the water in the Pawtucket Canal by 13 feet. Just above the locks the Merrimack Canal branched off to the

Merrimack Manufacturing Company, the only mills to use the full 32-foot drop of the falls.

Moody Street Feeder Gatehouse is a well-preserved example of the kinds of control structures that were built throughout the canal system to channel and regulate the flow of water to the mills. The gates allow water to flow from the Western Canal, through a 1/3 mile underground tunnel, and out into the Merrimack Canal.

Visitor Center is often the first stop for visitors when they arrive at the Park. Visitors are oriented and provided with all the information they might need for the day. It is also the starting point for many tours including the Boat Tours and the Mill and Trolley tours. The Visitor Center has introductory exhibits, a 15-minute introductory film (*The Continuing Revolution*), a kids corner with family-friendly activities, and the Eastern National museum store.

Watercraft and streetcars

LNHP operates 24-passenger canal boats on the Pawtucket Canal and in the Merrimack River, as platforms for tours and other public programs that explore the historic canal system and the river environment. The park also operates replica trolleys on tracks in the downtown to transport visitors to exhibit locations and serve as an additional platform for guided tours.

Wayside interpretive graphics

The park maintains about 60 waysides throughout downtown and beyond highlighting the natural and cultural landscape including waterways, mills, gatehouses, cultural institutions, and neighborhoods. See appendix for lists and location maps.

Material culture collections

Lowell National Historical Park's museum collections are located at Boott Mill. They are available by appointment only at 978-970-5241 (Emily Pronovost).

LOWE has both object and archive collections. The object collection is focused on Lowell's industrial history with some items related to community groups acquired for exhibit. Many of the latter objects are currently on exhibit at the Mogan Cultural Center.

The object collection includes approximately 70,000 archaeology objects; 25,000 historic objects; and 55 art objects. Further information on the objects in the LOWE museum collections can be found at:

<https://museum.nps.gov/ParkPagedet.aspx?rID=LOWE%20%20%20%20%20%20%20%201%26db%3Dobjects%26dir%3DPARKS>.

Archives

The park holds significant personal papers, organizational archives, and NPS resource management records directly associated with the park's resources. These archives document the lives of early Lowell figures such as mill workers and managers; Lowell's industrial history; and Lowell's role in pivotal historical events such as the American Civil War.

The Proprietors of Lock & Canals (PLC) Collection consists of drawings, files, notes, documentation for experiments, deeds, and photographs. This collection is a good source for graphics, but there is also tremendous potential to use the collection for science education, programs on the industrial city, the history of technology, water power, and more. Institutions holding other portions of the PLC collection are the Center for Lowell History (below) and Harvard's Baker Library.

The park holds one of the largest collections of letters written by mill operatives in

the 19th century. These letters provide information on cultural life in Lowell in the 19th century.

The park has a small, but important collection of early business records related mostly to the Merrimack Manufacturing Company and Boott Cotton Mills. These records include receipts, pay ledgers, contracts.

The archive collection contains approximately 485,000 items. Further information on the LOWE archive collections can be found at:

<https://www.nps.gov/lowe/learn/historyculture/finding-aids.htm>

Library

Staff are welcome to consult and/or check out books from the open stacks in the library on the 4th floor. Please consult with Emily at X5241 for access to rare books. The park owns about 3,000 books and the collection can be searched at www.library.nps.gov.

The books on the first shelving unit focus on Lowell history and many are for reference in the library only. The rest of the books address related topics such as labor history, American social history, women's history, architectural history, and the history of technology. Directions for checking out books are on the library table.

Images and two-dimensional artwork

LOWE has images in the archive and library collections. In addition there are more recent images stored on the park server. Some of the historic images have been digitized, but may not be up to current standards. However, they are a starting point and images that exist as hard copies can be digitized again, if needed. The artwork has not been digitized. Park staff tries to document current activities and events the park hosts or is otherwise involved in.

Audiovisual materials

The park produces audiovisual material for use in social media, on the park web page, and in exhibits. The material is not catalogued. Park staff have taken many photos at community events such as flag raisings, festivals, and parades. Many park videos can be found at <https://www.nps.gov/lowe/learn/photosmultimedia/multimedia.htm>. Additional extra "B-roll" footage exists as well.

Additional repositories

The Center for Lowell History was established as a Lowell-specific archive in 1971. Since that time it has grown to ensure the safekeeping, preservation, and availability of materials in unique local historical subject areas from the Greater Lowell area and beyond. Resource materials include city directories, genealogical, oral histories, photographs, and maps. Collections include materials held by the Lowell Historical Society, the Boston and Maine Railroad, and the Middlesex Canal Association as well as a Portuguese community archive. Website:

General collections <https://libguides.uml.edu/c.php?g=492497&p=3799180>

Oral histories <https://libguides.uml.edu/c.php?g=492497&p=3369424>

Middlesex North Registry of Deeds is largely available on-line. The land records database is the main database containing all document images and indexes from 1629 to the present. Also available are recorded subdivision plans, and Registered Land documents. The Record Books contain the older Recorded Land documents (book 1 to book 2789), plus higher numbered books that are missing from the land records database. The Pre-1855 Documents registry was created in 1855. Before then, all documents for the towns in this district were recorded in Cambridge. In

1855, those documents were copied into a separate set of books for each town in the district. Website <http://www.lowelldeeds.com/>

Pollard Memorial Library is a lively community hub. The local history collection focuses on information related to the chronicle of the City Lowell, local maps, genealogy, and various research topics. Patrons can access city directories and documents, information related to Lowell history, and various newspapers on microfilm and a digital offering of the Lowell Sun from 1879 – present. Website: lowelllibrary.org/research/

The Southeast Asian Digital Archive (SEADA) is a community-based archive of cultural heritage materials from the Lowell, MA, region. SEADA includes materials primarily from Cambodian, Laotian, Vietnamese, and Burmese American communities from the mid- to late-20th centuries to the present. Physical collections may be accessed at the Center for Lowell History, 40 French Street, Lowell, MA, <https://libguides.uml.edu/archives>. Parts of select collections are available for viewing online, <https://umlseada.omeka.net>. Learn more about the SEADA, www.uml.edu/seada.

The Lowell Folklife Project was conducted in 1987-1988 as a cooperative project of the American Folklife Center and the Lowell Historic Preservation Commission, with support from the Massachusetts Council on the Arts and Humanities, to document contemporary ethnic neighborhoods, occupations, and community life related to the history of industrialization in Lowell, Massachusetts. This collection highlights many aspects of community life, from religious services and festivals to local markets and schools. Website: <https://www.loc.gov/collections/lowell-folklife-project/about-this-collection/>

The Greater Lowell Newspaper Archive, a collection organized by UMass Lowell, features digitized versions of Lowell newspapers from 1837-1893. The two newspapers that are featured heavily are the Lowell Courier and the Lowell advertiser. Website: <https://archive.org/details/textuml>. UMass Lowell also has many other digitized collections available through archive.org, including the Little Canada demolition collection, <https://archive.org/details/umllittlecanada> and the Camara Collection highlighting Portuguese life in Lowell, <https://archive.org/details/umlcamara>

The park accesses the digitized Lowell Sun through a subscription to <https://newspaperarchive.com/>. This collection spans from 1879 to 2010. Originally a weekly newspaper, the Sun began printing daily papers around 1893.

Public Art

The park manages nine public sculptures located throughout the downtown area. This website includes information about and locations for public sculpture belonging to the park and others: <http://www.likelowell.com/lowell-public-art-walk>.

Object: Homage to Women
Artist: Mico Kaufman, 1984
Location: Market Mills Park, Lowell, MA
Material: bronze on granite base

Object: The Worker
Artist: Ivan & Elliot Schwartz, 1985
Location: Mack Plaza, corner of Shattuck & Market Streets
Material: Bronze, granite

Object: Agapatime
Artist: Dimitri Hadzi, 1990
Location: Pawtucket Canal at Middlesex College.
Material: bronze on granite base

Object: Stele for the Merrimack
Artist: Peter Gourfain, 1997
Location: Tremont Yard at Western Canal.
Material: bronze on granite base

Object: Jack Kerouac Commemorative
Artist: Ben Woitena, 1988
Location: Eastern Canal Park, Bridge and French Streets
Materials: bronze and stainless steel

Object: Human Construction
Artist: Carlos Dorrien, 1989
Location: Pawtucket Canal, Central Street Bridge
Material: Granite

Object: Industry, Not Servitude
Artist: Ellen Rothenberg, 1996
Location: Lucy Larcom Park at the Merrimack Canal.
Material: Granite and steel

Object: The Lowell Sculptures: One, Two and Three
Artist: Robert Cumming, 1990
Location: Boarding House Park, Corner of French and John Streets
Material: Granite brick and steel

Object: Pawtucket Prism
Artist: Michio Ihara, 1987
Location: Concord Canal and Concord River (at UML Inn & Conference Center)
Material: Stainless steel, gold-plated cubes

Memberships

LNHP is an insitutional member of several organizations. Please contact Emily Pronovost at X5241 for details.

American Alliance of Museums
American Association for State and Local History (AASLH)
Ancestry.com
Early American Industries Association
National Association for Interpretation*
George Wright Society International Coalition of Sites of Conscience*
National Council for Public History*
New England Museum Association
Newspaper Archive
Smithsonian Affiliate
Society for the History of Technology
Society of Industrial Archeology

You are encouraged to participate in other professional organizations, including:

American Historical Association
American Anthropological Association
National Council for History Education
National Science Teachers Association
New England Regional Conference for the Social Studies
Society for the History of Technology
Society for Historical Archaeology
Society for Post-medieval Archaeology

* denotes NPS membership and access to paywalled resources.

References

- M. M. Bakhtin. 1986. *Speech genres and other late essays*. Austin TX: Univ of Texas Press.
- Lynn Dierking. n.d. "Family learning: Laughing and learning together." Accessed at www.engagefamilies.org
- L. D. Dierking, R. Kihne, A. G. Rand & M. Solvay. 2006. Laughing & learning: Family learning research becomes practice at the USS Constitution Museum. *History News* 61(3).
- L. Vygotsky. 1986. *Thought and language*. Cambridge MA: MIT Press.
- Lola Young. 2002. "Rethinking heritage: cultural policy and inclusion." in R. Sandell (ed.), *Museums, society, inequality*. London: Routledge.
- Director's Order 16A. 1999. "Reasonable Accommodation for Applicants and Employees with Disabilities."
- Director's Order 16-E. 2018. "National Park Service Anti-Harassment Policy."
- Director's Order 42. 2000. "Accessibility for Visitors with Disabilities in National Park Service Programs and Services."
- NPS. 2015. *All In! Accessibility in the National Park Service: 2015 – 2020*. Accessed at https://www.nps.gov/aboutus/upload/All_In_Accessibility_in_the_NPS_2015-2020_FINAL.pdf
- Harpers Ferry Center. 2017. "Programmatic Accessibility Guidelines for National Park Service Interpretive Media." Accessed at <https://www.nps.gov/features/hfc/guidelines/>
- ADA National Network. 2015. "A Planning Guide for Making Temporary Events Accessible to People with Disabilities." Accessed at <https://adata.org/publication/temporary-events-guide>
- California State Parks. 2005. Junior Ranger Adventure Guide. Accessed at <https://www.parks.ca.gov/pages/735/files/jradventureguide-english.pdf>