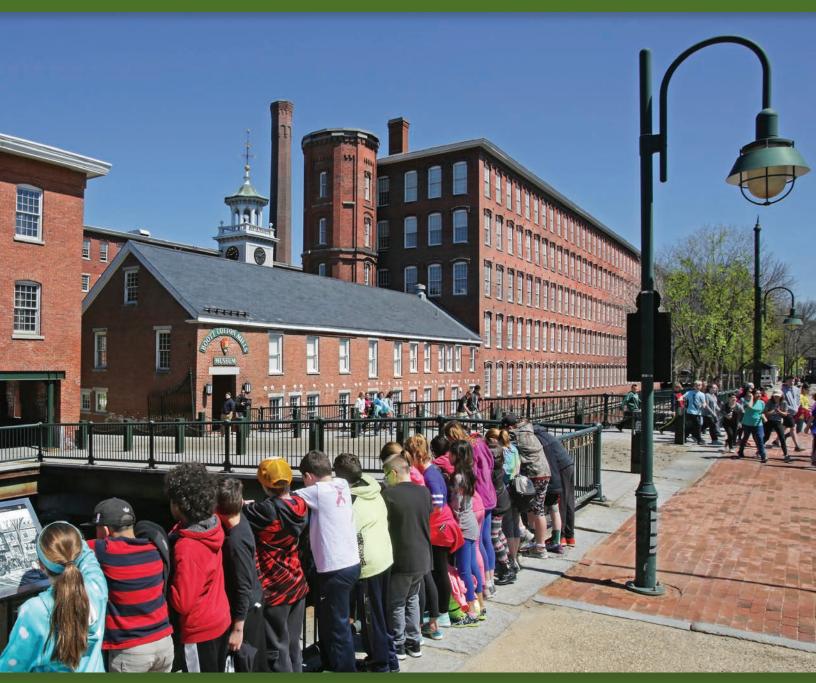
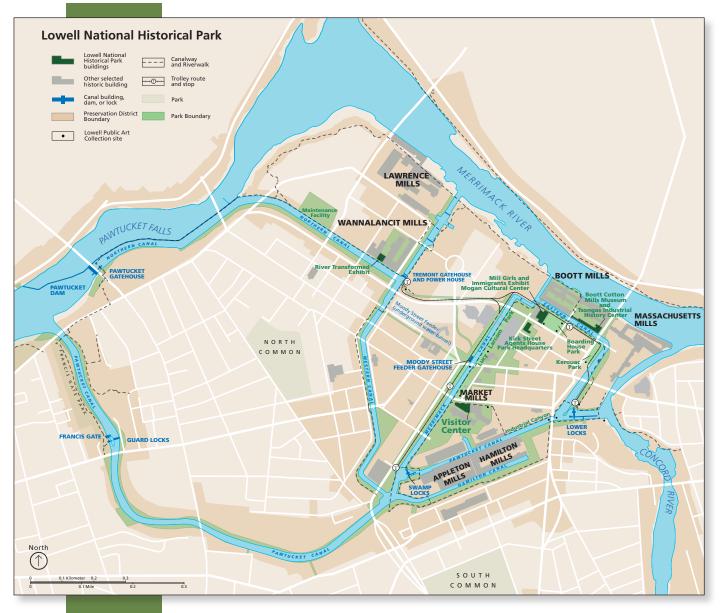


Foundation Document Lowell National Historical Park

Massachusetts September 2017







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Mission of the National Park Service

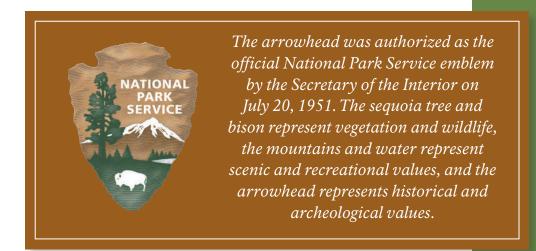
The National Park Service (NPS) preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The National Park Service cooperates with partners to extend the benefits of natural and cultural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

The NPS core values are a framework in which the National Park Service accomplishes its mission. They express the manner in which, both individually and collectively, the National Park Service pursues its mission. The NPS core values are:

- **Shared stewardship:** We share a commitment to resource stewardship with the global preservation community.
- Excellence: We strive continually to learn and improve so that we may achieve the highest ideals of public service.
- Integrity: We deal honestly and fairly with the public and one another.
- Tradition: We are proud of it; we learn from it; we are not bound by it.
- **Respect:** We embrace each other's differences so that we may enrich the well-being of everyone.

The National Park Service is a bureau within the Department of the Interior. While numerous national park system units were created prior to 1916, it was not until August 25, 1916, that President Woodrow Wilson signed the National Park Service Organic Act formally establishing the National Park Service.

The national park system continues to grow and comprises more than 400 park units covering more than 84 million acres in every state, the District of Columbia, American Samoa, Guam, Puerto Rico, and the Virgin Islands. These units include, but are not limited to, national parks, monuments, battlefields, military parks, historical parks, historic sites, lakeshores, seashores, recreation areas, scenic rivers and trails, and the White House. The variety and diversity of park units throughout the nation require a strong commitment to resource stewardship and management to ensure both the protection and enjoyment of these resources for future generations.



Introduction

Every unit of the national park system will have a foundational document to provide basic guidance for planning and management decisions—a foundation for planning and management. The core components of a foundation document include a brief description of the park as well as the park's purpose, significance, fundamental resources and values, and interpretive themes. The foundation document also includes special mandates and administrative commitments, an assessment of planning and data needs that identifies planning issues, planning products to be developed, and the associated studies and data required for park planning. Along with the core components, the assessment provides a focus for park planning activities and establishes a baseline from which planning documents are developed.

A primary benefit of developing a foundation document is the opportunity to integrate and coordinate all kinds and levels of planning from a single, shared understanding of what is most important about the park. The process of developing a foundation document begins with gathering and integrating information about the park. Next, this information is refined and focused to determine what the most important attributes of the park are. The process of preparing a foundation document aids park managers, staff, and the public in identifying and clearly stating in one document the essential information that is necessary for park management to consider when determining future planning efforts, outlining key planning issues, and protecting resources and values that are integral to park purpose and identity.

While not included in this document, a park atlas is also part of a foundation project. The atlas is a series of maps compiled from available geographic information system (GIS) data on natural and cultural resources, visitor use patterns, facilities, and other topics. It serves as a GIS-based support tool for planning and park operations. The atlas is published as a (hard copy) paper product and as geospatial data for use in a web mapping environment. The park atlas for Lowell National Historical Park can be accessed online at: http://insideparkatlas.nps.gov/.



Part 1: Core Components

The core components of a foundation document include a brief description of the park, park purpose, significance statements, fundamental resources and values, and interpretive themes. These components are core because they typically do not change over time. Core components are expected to be used in future planning and management efforts.

Brief Description of the Park

Growth and change have long dominated the American system of values. Industry flourished in 19th-century America as major technological advancements in transportation, power production, and industrial manufacturing facilitated a fundamental shift from rural farm-based communities to a modern urban-industrial society. Lowell, Massachusetts, 30 miles northwest of Boston, was founded in 1822 as a seminal planned industrial city and became one of the most significant textile producing centers in the country. The city of Lowell is not, as is sometimes claimed, the birthplace of the Industrial Revolution in America. Most of the developments associated with this phenomenon in the nation's history had their origins elsewhere. But, it was in Lowell that these developments converged in a way and on a scale that made them revolutionary.

Lowell served as America's model industrial city during the first half of the 19th century, offering the hope that the country would profit socially as well as economically by adopting industrialism as a way of life. The early Lowell system was distinguished by state-of-the-art technology, engineers, and inventors who worked in its waterpower system, monumental mill architecture, enormous production capabilities, rational city planning, a dependence on cotton grown by enslaved peoples, and, most of all, by its much-heralded workforce of Yankee "mill girls." As industry grew in New England, Lowell's factories aged and became less competitive with newer industrial cities. Profits fell, working conditions deteriorated, and wages were cut. The "mill girls" became disillusioned with the system and were replaced by a succession of immigrant groups eager to find work at any price. As crowded tenements took the place

of Lowell's well-regulated system of boardinghouses, Lowell became an industrial city similar to others in New England.

Competition within the textile industry increased continually throughout the 19th century. Eventually, the combination of a cheaper, less unionized workforce; newer, more efficient factories and machinery; cheaper real estate; and lower taxes persuaded the textile industry to move south. Eight of Lowell's original 10 textile firms closed their doors for good during the 1920s, and the remaining two closed in the 1950s. The city fell into a long depression that lasted through the 1960s. Gradually, over the course of 50 years, businesses shut down, real estate prices fell, and unemployment rose. By the 1970s, one could stand almost anywhere in downtown Lowell and see blight and decay that had resulted from decades of deindustrialization.







Established on June 5, 1978, Lowell National Historical Park represented an innovative partner-driven management concept between federal, state, and local governments, the private sector, and the local community. This management concept grew out of the Model Cities program and had no direct precedent in the national park system. Components of this concept include the preservation of important historic resources, the rehabilitation of historic structures for adaptive reuse, and the interpretation of social, ethnic, cultural, and technological themes. Through this approach, the park and its partners work collaboratively as a vehicle for economic progress in the community and encourage creative and cooperative programs to support the preservation and interpretation of Lowell's historic and cultural resources. Almost all 5.3 million square feet of historic mill buildings in downtown Lowell have been successfully rehabilitated as a result of this partnership, and, once again, Lowell has become a model for urban development. The city's revitalization has capitalized on its working-class immigrant culture and the pride of its citizens, as well as extensive cooperation among local, state, and federal agencies and the private sector. Lowell National Historical Park is inextricably linked to the history, culture, and physical form of the city itself.

Today visitors weave in and out of past and present in this living monument to the Industrial Revolution and its legacies. Although the area within the park boundary is 142 acres and the larger Lowell Historic Preservation District encompasses 583 acres, only 19 acres are in federal ownership. The physical resources protected by the park include the original 5.6-mile power canal system, a nationally recognized engineering marvel; major cotton textile mill complexes; diverse museum collections; and intact 19th-century streetscapes of commercial and residential structures. In addition to the industrial artifacts, Lowell retains much of its rich cultural heritage, as reflected in the ethnic diversity and preserved traditions of its citizens.

Visitors can immerse themselves fully in the landscape and culture of the city. All of the senses are engaged, whether by the roar of the looms in the weave room, the cold damp in the granite lock chambers as boats lock through, the plucking of banjo strings reverberating from Boarding House Park, the movement of the trolley as it travels along its tracks, the delicious aroma of foods wafting out from one of the cultural festivals, or the sea of massive red brick mill buildings dominating the city landscape. The diverse resources protected by the park encourage visitors to explore how industry has and continues to influence technology, environment, socioeconomics, and politics in cities and economies across the world. Although the character and physical roots of Lowell lie in the Industrial Revolution, the city and its people are ever evolving. Their dynamic human stories extend far beyond the park's borders to illustrate industrialization and its legacies on a global scale.

Park Purpose

The purpose statement identifies the specific reason(s) for establishment of a particular park. The purpose statement for Lowell National Historical Park was drafted through a careful analysis of its enabling legislation and the legislative history that influenced its development. The park was established when the enabling legislation adopted by Congress was signed into law on June 5, 1978 (see appendix A for enabling legislation and legislative acts). The purpose statement lays the foundation for understanding what is most important about the 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.



Park Significance

Significance statements express why a park's resources and values are important enough to merit designation as a unit of the national park system. These statements are linked to the purpose of Lowell National Historical Park, and are supported by data, research, and consensus. Statements of significance describe the distinctive nature of the park and why an area is important within a global, national, regional, and systemwide context. They focus on the most important resources and values that will assist in park planning and management.

The following significance statements have been identified for Lowell National Historical Park. (Please note that the sequence of the statements does not reflect the level of significance.)

- Lowell's (economic) success was based in innovation, from manufacturing technology and processes, to new business models, to city planning designed to benefit both industry and the worker. Unique industrial concepts were implemented and demonstrated at a massive scale at the Lowell mills, which served as a model for textile production and industrial cities.
- A very large proportion of original buildings, structures, and urban landscapes have survived in Lowell's park and preservation district and now are recognized as important historical artifacts. These include the entire 5.6-mile power canal system with its sophisticated dams, locks, and gatehouses, 7 of the original 10 mill complexes, and significant examples of early housing types, institutions, and transportation facilities.
- The Lowell canal system is nationally recognized as one of the most impressive civil and
 mechanical engineering achievements of the 19th century because of its grand scale and
 technological complexity, and is the site of origin for the famed "Francis" turbine. The
 canal system, used as both a transportation corridor and power source, facilitated the
 growth of the industrial city.
- Lowell National Historical Park preserves and interprets 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.
- The collaboration between Lowell National Historical Park and its partners has resulted
 in the rehabilitation of almost all of the 5.3 million square feet of historic mill space
 and hundreds of additional buildings in the downtown historic district. This effort
 continues to serve as a successful example of leveraging public-private partnerships for
 economic development through historic preservation.
- Lowell National Historical Park embraces partnerships as an integral approach
 to accomplishing park and community goals. Lowell National Historical Park
 serves as a model for leveraging collaborative public-private partnerships and
 community engagement.



Fundamental Resources and Values

Fundamental resources and values (FRVs) are those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to warrant primary consideration during planning and management processes because they are essential to achieving the purpose of the park and maintaining its significance. Fundamental resources and values are closely related to a park's legislative purpose and are more specific than significance statements.

Fundamental resources and values help focus planning and management efforts on what is truly significant about the park. One of the most important responsibilities of NPS managers is to ensure the conservation and public enjoyment of those qualities that are essential (fundamental) to achieving the purpose of the park and maintaining its significance. If fundamental resources and values are allowed to deteriorate, the park purpose and/or significance could be jeopardized.

The following fundamental resources and values have been identified for Lowell National Historical Park:

• Water Power System / Canal System. The Lowell National Historical Park boundary 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 Suffolk Mill Turbine Exhibit.







- Boott Cotton Mills Complex. This complex is architecturally and historically the most 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.
- Immersive Experience. Lowell National Historical Park provides a variety of hands-on interpretive and educational opportunities that allow visitors to immerse themselves in Lowell's industrial past. Key park experiences include exhibits that feature a working turbine and weave room, as well as boat tours of the canal system and rides through the park on historic replica trolleys, which are among the most popular and unique experiences in the park. The Tsongas Industrial History Center, a partnership between Lowell National Historical Park and the University of Massachusetts Lowell Graduate School of Education, is a hands-on center where students can learn about the American Industrial Revolution through interactive activities such as weaving, working on an assembly line, creating canal systems and testing water wheels, and measuring water quality.
- Cultural Heritage and Arts Programming. Immigration and cultural expression were a part of Lowell's story from the beginning—from the Yankee "mill girls" who flocked to the city in search of economic independence to the Irish, French-Canadians, Greeks, Poles, Portuguese, and other ethnic groups that came in search of the American Dream. This cultural heritage, its evolution over time, and its impacts on the cultural character of Lowell today are expressed through programming and exhibitions at the park, including the Mill Girls &Immigrant Exhibit at the Patrick J. Mogan Cultural Center, the Lowell Folk Festival, and the Lowell Summer Music Series. Cultural heritage and arts events are among the most well known and best attended at the park, and feature a range of activities that appeal to local and nonlocal visitors alike.





- Historic Urban Industrial Landscape. Lowell is often recognized as one of America's most significant industrial cities, and, as such, the assemblage of buildings, structures, and public spaces that comprise its historic urban industrial landscape are critical to telling the story of the mills and the Industrial Revolution in America. Lowell was an innovative mill town where the focus was on both industry and the worker, and it includes not only extensive mill space and supporting structures but also boardinghouses, churches, and parks. Although the landscape is central to the story of Lowell, many of the buildings, structures, and greenscapes are owned and managed by other entities. Lowell National Historical Park works with the community and partner organizations as well as private owners and developers to ensure continued preservation of the historic urban industrial landscape, including mill buildings and smokestacks. This collaborative preservation effort is fundamental and will continue to be a central focus for Lowell National Historical Park into the future.
- Partnerships. 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.
- Museum Collections. The museum collections at Lowell National Historical Park contain more than one-half million artifacts and historical documents, spanning from the early 19th century to the present. These objects and documents provide a tangible link to the Industrial Revolution in Lowell and its enduring legacies.

Interpretive Themes

Interpretive themes are often described as the key stories or concepts that visitors should understand after visiting a park—they define the most important ideas or concepts communicated to visitors about a park unit. Themes are derived from, and should reflect, park purpose, significance, resources, and values. The set of interpretive themes is complete when it provides the structure necessary for park staff to develop opportunities for visitors to explore and relate to all park significance statements and fundamental resources and values.

Interpretive themes are an organizational tool that reveal and clarify meaning, concepts, contexts, and values represented by park resources. Sound themes are accurate and reflect current scholarship and science. They encourage exploration of the context in which events or natural processes occurred and the effects of those events and processes. Interpretive themes go beyond a mere description of the event or process to foster multiple opportunities to experience and consider the park and its resources. These themes help explain why a park story is relevant to people who may otherwise be unaware of connections they have to an event, time, or place associated with the park.

The following interpretive themes have been identified for Lowell National Historical Park:

- 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 socioeconomic opportunity and inequity.
- 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.
- Through innovations in textile production, transportation, waterpower, 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.
- 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
 presents challenges today.
- 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.
- 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.





Part 2: Dynamic Components

The dynamic components of a foundation document include special mandates and administrative commitments and an assessment of planning and data needs. These components are dynamic because they will change over time. New special mandates can be established and new administrative commitments made. As conditions and trends of fundamental resources and values change over time, the analysis of planning and data needs will need to be revisited and revised, along with key issues. Therefore, this part of the foundation document will be updated accordingly.

Special Mandates and Administrative Commitments

Many management decisions for a park unit are directed or influenced by special mandates and administrative commitments with other federal agencies, state and local governments, utility companies, partnering organizations, and other entities. Special mandates are requirements specific to a park that must be fulfilled. Mandates can be expressed in enabling legislation, in separate legislation following the establishment of the park, or through a judicial process. They may expand on park purpose or introduce elements unrelated to the purpose of the park. Administrative commitments are, in general, agreements that have been reached through formal, documented processes, often through memorandums of agreement. Examples include easements, rights-of-way, arrangements for emergency service responses, etc. Special mandates and administrative commitments can support, in many cases, a network of partnerships that help fulfill the objectives of the park and facilitate working relationships with other organizations. They are an essential component of managing and planning for Lowell National Historical Park.

No special mandates have been identified for Lowell National Historical Park. For more information about the existing administrative commitments, please see appendix B.

Assessment of Planning and Data Needs

Once the core components of part 1 of the foundation document have been identified, it is important to gather and evaluate existing information about the park's fundamental resources and values, and develop a full assessment of the park's planning and data needs. The assessment of planning and data needs section presents planning issues, the planning projects that will address these issues, and the associated information requirements for planning, such as resource inventories and data collection, including GIS data.

There are three sections in the assessment of planning and data needs:

- 1. analysis of fundamental resources and values
- 2. identification of key issues and associated planning and data needs
- 3. identification of planning and data needs (including spatial mapping activities or GIS maps)

The analysis of fundamental resources and values and identification of key issues leads up to and supports the identification of planning and data collection needs.

Analysis of Fundamental Resources and Values

The fundamental resource or value analysis table includes current conditions, potential threats and opportunities, planning and data needs, and selected laws and NPS policies related to management of the identified resource or value.







Fundamental Resource or Value	Water Power System / Canal System
Related Significance Statements	 Lowell's (economic) success was based in innovation, from manufacturing technology and processes, to new business models, to city planning designed to benefit both industry and the worker. Unique industrial concepts were implemented and demonstrated at a massive scale at the Lowell mills, which served as a model for textile production and industrial cities. A very large proportion of original buildings, structures, and urban landscapes have survived in Lowell's park and preservation district and now are recognized as important historical artifacts. These include the entire 5.6-mile power canal system with its sophisticated dams, locks, and gatehouses, 7 of the original 10 mill complexes, and significant examples of early housing types, institutions, and transportation facilities. The Lowell canal system is nationally recognized as one of the most impressive civil and mechanical engineering achievements of the 19th century because of its grand scale and technological complexity, and is the site of origin for the famed "Francis" turbine. The canal system, used as both a transportation corridor and power source, facilitated the growth of the industrial city.
Current Conditions and Trends	 Conditions The canal system is in fairly good condition overall. The canal system actively generates power and houses high-voltage submarine cables. All canals are within the park boundary. The canal system comprises roughly half of the overall park acreage. Elements of the canal system are owned and operated by a variety of entities that are responsible for the overall condition of the system. The canal walls and floor and waterpower equipment are owned by Enel Green Power, whereas the buildings and gatehouses, with the exception of the Moody Street Feeder Gatehouse, are owned by the Massachusetts Department of Conservation and Recreation. The park has easements associated with properties owned by the state and hydropower company, such as the gatehouses, canal walls, and much of the canal margins. These easements enable the park to create walkways, install railings, support trolley tracks, and perform related maintenance. The public walkways along the canal are in fairly good condition. Water flow through the canal affects the overall condition of the canal infrastructure, including walls that support NPS-owned assets (e.g., walkways, trolley, Boott Mill). There are 52 interpretive waysides. As areas are added to the park, additional waysides will be needed. Visitation to the canalway system is increasing as additional disparate segments are connected. Visitation to the canalway system is increasing as community efforts to bring new events to the canalway increase. Use of the canalway system will increase as downtown development continues. Activation of a new canal lighting system by the City of Lowell has increased attention to the canalway. If proposals by the public to expand the lighting system are implemented, visitation could increase.

Threats There is a negative public response to trash in and around the canal system. The cleanup of debris remains a challenge due to the active power generation function ar subsequent limitations on access authorized by Enel Green Power. Some perceive the canalways to be unsafe, particularly at night, and poor lighting is c identified as a concern. Gatehouses are sometimes broken into and vandalized. Clear lines of jurisdictional law enforcement authority have not been defined for much changes resources (see key issue on "Jurisdictional Challenges"). Lack of maintenance of the canal walls, which are not owned by the National Park Service, can threaten the stability of canal walkways and the trolley system, much of which runs adjacent to the canalway. Vegetation growing along the canal walls can cause structural deterioration over time poses an ongoing maintenance challenge, especially as NPS staff levels decrease. The park is monitoring environmental containment efforts to manage the lasting effect of prior industrial uses along the canal. These effects are most prominent along the U Pavutucket Canal adjacent to the former location of a coalg'as plant. Water flow and levels are controlled by Enel Green Power. Fluctuating water levels dir affect public access, historic structures, the natural environment, and the overall visite experience (e.g., presence of visible debris). Modernization of the historic dam, approved by the Federal Energy Regulatory Commission, has changed a system used for more than 200 years. The effects of the crestgate system on water levels in the canal system, and on the scenic wonder of the falls over the dam, remain to be seen. Opportunities Continue dialogue with Enel Green Power on how it could work with the park and its partners to allow for increased public use and/or interpretation. Work with independent volunteer groups to clean up the canal system. Explore new recreational opportunities through increased use of surface water, such a kayaking and paddle boating and ic

Fundamental Resource or Value	Water Power System / Canal System
Data and/or GIS Needs	 Visitor surveys. Visitor counts. Population survey. GIS data for jurisdictional inventory and cooperative management. Customized high-water study. Mapping of List of Classified Structures data related to the canal system. Wayfinding study. List of roles and responsibilities related to maintenance, leasing agreements, special events, and jurisdiction. Administrative history. Historic resource study.
Planning Needs	 Updated Downtown Lowell Historic District Design Review Standards (in collaboration with Lowell Historic Board). Lighting plan for canalways. Comprehensive interpretive and education plan. Planning for adaptation to climate change. Accessibility self-evaluation and transition plan. Preservation advocacy and funding strategy.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	 Laws, Executive Orders, and Regulations That Apply to the FRV Clean Air Act (42 USC 7401 et seq.) Clean Water Act (33 USC 1251-1387, 33 USC 1151) Historic Sites Act of 1935 (54 USC 320101 et seq.) National Environmental Policy Act of 1969 (42 USC 4321) National Historic Preservation Act of 1966, as amended (54 USC 300101 et seq.) Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (§4.1) "General Management Concepts" NPS Management Policies 2006 (§4.1.4) "Partnerships" NPS Management Policies 2006 (§4.7.2) "Weather and Climate" NPS Management Policies 2006 (chapter 7) "Interpretation and Education" NPS Management Policies 2006 (chapter 8) "Use of the Parks" NPS Management Policies 2006 (chapter 9) "Park Facilities" Director's Policy Memorandum 12-02, "Applying National Park Service Management Policies in the Context of Climate Change" Director's Policy Memorandum 15-01, "Addressing Climate Change and Natural Hazards for Facilities"











Fundamental Resource or Value	Boott Cotton Mills Complex
Related Significance Statements	 Lowell's (economic) success was based in innovation, from manufacturing technology and processes, to new business models, to city planning designed to benefit both industry and the worker. Unique industrial concepts were implemented and demonstrated at a massive scale at the Lowell mills, which served as a model for textile production and industrial cities. A very large proportion of original buildings, structures, and urban landscapes have survived in Lowell's park and preservation district and now are recognized as important historical artifacts. These include the entire 5.6-mile power canal system with its sophisticated dams, locks, and gatehouses, 7 of the original 10 mill complexes, and significant examples of early housing types, institutions, and transportation facilities. The collaboration between Lowell National Historical Park and its partners has resulted in the rehabilitation of almost all of the 5.3 million square feet of historic mill space and hundreds of additional buildings in the downtown historic district. This effort continues
	 to serve as a successful example of leveraging public-private partnerships for economic development through historic preservation. Lowell National Historical Park embraces partnerships as an integral approach to accomplishing park and community goals. Lowell National Historical Park serves as a model for leveraging collaborative public-private partnerships and community engagement.
Current Conditions and Trends	 Conditions The Boott Cotton Mills complex is five stories tall and 810,000 square feet, of which Lowell National Historical Park owns, operates, and maintains 125,000 square feet in Mill No. 6 and the Counting House. The rest of the complex is privately owned residential and office space. It is completely rehabilitated and in excellent condition. Mill No. 6 and the Counting House were fully renovated in the late 1980s and are fully occupied by the Boott Cotton Mills Museum; the Tsongas Industrial History Center; park interpretation, education, and curation functions; and NPS Northeast Region offices. Although the park-owned buildings are structurally in good condition, some underwater foundation columns need repair. Lighting in the Boott complex courtyard is inadequate. Although 1991 exhibits in the Boott Cotton Mills Museum are in good physical condition, most are aging, dated, and outmoded in terms of current museum "best practices." Despite its importance to the park, most of the complex is owned by nonpark entities. Facilities within the NPS Boott Mills buildings, including elevators and restrooms, are aging. Solar-electric and solar hot-water systems have been installed on the roof of Mill No. 6. Replacement of windows and upgrading of lighting are underway at Mill No. 6.
	 Visitation levels remain generally stable. Use of the Boott Cotton Mills complex has been increasing since redevelopment was completed. The national trend of decreasing museum audiences is occurring at the Boott Cotton Mills Museum. The park has received funding to address fire code infrastructure, stabilization, and window replacement for Mill No. 6 and the Counting House.

Fundamental Resource or Value	Boott Cotton Mills Complex
	 Threats There are safety concerns related to inadequate lighting, and lighting in the complex needs to be redesigned. NPS-owned buildings lack strong physical security. Open public access limits ability to implement certain security measures. Safety issues associated with Mill No. 6 include fire code compliance, assembly use of the 4th and 5th floors, and emergency egress. Aging mechanical infrastructure creates issues with the heating and cooling of Mill No. 6, which compromises visitor experience and employee satisfaction and productivity. The distance between the Boott Mills and the visitor center can be a barrier to visitors when there is no trolley available. There is no adjacent free parking at Boott Mills, unlike at the visitor center. Confusion regarding ownership and maintenance responsibilities results in challenges associated with maintaining the common area in the courtyard. Unregulated vehicle parking in the upper courtyards affects the historical scene and the visitor experience. Institutional knowledge associated with the history of preservation at Boott Cotton Mills and the operation of the weave room is being lost (see key issue on "Loss of Specialized Skills and Knowledge"). The Boott Cotton Mill is located in a 100-year floodplain. Increased storm frequency and intensity due to climate change could result in rising groundwater levels, flooding, and erosion. Opportunities Continue to connect local residents and visitors to the Boott Cotton Mills complex by offering traditional and community-based programming. Develop educational opportunities related to Enel Green Power's active power production station across from the Boott Cotton Mills Museum. Improve visitor experiences and perceptions by improving signage and directing visitors to the river. Continue to rotate and update exhibits and expand interpretive offerings. For example, guided tours and/or headphones
	 Research and document ownership and maintenance/enforcement responsibilities in the courtyard and institute monthly partner/tenant meetings to explore common issues and solutions. Enforce parking restrictions within the upper courtyard. Identify critical staff positions and engage in succession planning to bring on new staff
	timed to overlap with departing staff.

Fundamental Resource or Value	Boott Cotton Mills Complex
Data and/or GIS Needs	 Energy consumption study. Wayfinding study. Front-end evaluation for exhibits. Assessment of security and access. Oral history project on development/preservation. Study to determine information technology needs. Visitor surveys. Population survey. List of roles and responsibilities related to maintenance, leasing agreements, special events, and jurisdiction. List of partners. Administrative history. Jurisdictional inventory (update).
Planning Needs	 Comprehensive interpretive and education plan. Exhibit plan for Mill Girls & Immigrant Exhibit and Boott Cotton Mills Museum. Security plan. Wayfinding/sign plan. Comprehensive management and maintenance plan. Information technology network analysis and implementation plan. Energy reduction strategy. Accessibility self-evaluation and transition plan. Comprehensive fire and emergency evacuation plans for buildings. Integrated pest management plan. Planning for adaptation to climate change.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	 Laws, Executive Orders, and Regulations That Apply to the FRV Antiquities Act of 1906 (54 USC 320301-320303, 34 Stat. 225) Archeological and Historic Preservation Act of 1974 (54 USC 312502 et seq.) Historic Sites Act of 1935 (54 USC 320101 et seq.) Museum Properties Management Act of 1955, as amended (54 USC 102501-102504) National Historic Preservation Act of 1966, as amended (54 USC 300101 et seq.) Executive Order 11593, "Protection and Enhancement of the Cultural Environment" "Protection of Historic Properties" (36 CFR 800) Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (chapter 5) "Cultural Resource Management" Director's Order 24: NPS Museum Collections Management Director's Order 28: Cultural Resource Management NPS Museum Handbook, parts I, II, and III The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation Director's Policy Memorandum 14-02, "Climate Change and Stewardship of Cultural Resources" Director's Policy Memorandum 15-01, "Addressing Climate Change and Natural Hazards for Facilities"

Fundamental Resource or Value	Immersive Experience			
Related Significance Statements	 A very large proportion of original buildings, structures, and urban landscapes have survived in Lowell's park and preservation district and now are recognized as important historical artifacts. These include the entire 5.6-mile power canal system with its sophisticated dams, locks, and gatehouses, 7 of the original 10 mill complexes, and significant examples of early housing types, institutions, and transportation facilities. The Lowell canal system is nationally recognized as one of the most impressive civil and 			
	mechanical engineering achievements of the 19th century because of its grand scale and technological complexity, and is the site of origin for the famed "Francis" turbine. The canal system, used as both a transportation corridor and power source, facilitated the growth of the industrial city.			
	 Lowell National Historical Park preserves and interprets 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. 			
	The collaboration between Lowell National Historical Park and its partners has resulted in the rehabilitation of almost all of the 5.3 million square feet of historic mill space and hundreds of additional buildings in the downtown historic district. This effort continues to serve as a successful example of leveraging public-private partnerships for economic development through historic preservation.			
	Conditions			
	A wide variety of well-received, full-sensory experiences are offered at the park, including canal boat tours, Lowell Folk Festival, Tsongas Industrial History Center programs, weave room, and Lowell Summer Music Series.			
	The Tsongas Industrial History Center provides popular programs targeted at providing students with curriculum-based, place-based immersive experiences.			
	Overall, visitors report consistently high levels of satisfaction with immersive experiences at the park.			
Current Conditions and Trends	Existing signage does not provide consistent or adequate direction to visitors navigating to and through the park.			
	Educational offerings at the Tsongas Industrial History Center continue to be responsive to changing curriculum standards.			
	Trends			
	Visitation by different grade levels varies at the Tsongas Industrial History Center because of changing curriculums and educational standards. For example, visitation by fourth grade classes has increased because of the current framework for social studies education, whereas visitation by eighth grade classes has decreased because the topic of industrialization is now addressed in the high school curriculum.			
	Visitation for external partner-led/coordinated programs is increasing.			
	The need for science, technology, engineering, and mathematics educational programs is increasing.			
	The park's immersive experiences meet the needs of 21st-century learners who desire more engaging, free-choice, and self-directed learning environments.			

Fundamental Resource or Value	Immersive Experience
Resource of Value	 Threats Immersive experiences are generally staff intensive, requiring more personnel with specialized skills than other interpretive experiences. Thus, these experiences can be difficult to sustain as employees retire and staff levels decrease. Immersive experiences have high operating costs and require ongoing infrastructure improvements and maintenance. Hiring uniquely skilled employees (e.g., trolley operators and maintenance staff, weavers and loom fixers, museum curators, educators, bilingual interpreters) can be challenging. Immersive experiences require attention to safety and related training, staffing, and equipment, including the operation of heavy equipment and machinery (e.g., boats, trolleys, looms) and the movement and management of large numbers of people during bigger events (e.g., Tsongas Industrial History Center programs, Lowell Summer Music Series, Lowell Folk Festival).
	 There are challenges associated with offering immersive experiences in an urban environment such as traffic, noise, etc. Immersive experiences are considered the primary driver for attracting audiences, but their use is not up to date with trends in delivering immersive and other interpretive experiences to new and diverse audiences. Fluctuations in canal levels, which are managed by the power company, limit the park's ability to use the canals for immersive experiences.
Threats and Opportunities	 Opportunities Continue to update and evolve programming to ensure relevancy. Examples include updating exhibits using 21st-century practices, co-leading programs with community members to explore contemporary topics, and conducting evening programming that uses park resources in creative ways (e.g., open-mic nights based on park themes and tied to community-relevant topics).
	 Continue to explore and evolve business models and partnerships that support operational costs, needs, and staffing required by immersive programming. Continue to develop community engagement and partner-led initiatives that use immersive experiences to attract new audiences and build the next generation of park stewards. Research and institute new techniques to improve current immersive experiences and develop new experiences at Lowell National Historical Park and the Tsongas Industrial History Center. These could include greater emphasis on audience-centered learning,
	 family learning, audio tours and experiences, and bilingual offerings. Leverage assistance of nonprofit groups, partners, and volunteers to help meet staffing needs. Adapt programs and facilities at the Tsongas Industrial History Center to engage nonstudent visitors. Develop succession plan and training opportunities to maintain skilled staffing levels necessary to offer immersive experiences. Pursue phased design and funding strategy to introduce 21st century immersive experiences to park exhibits.
	 Engage with partners to expand awareness of park's immersive experiences and attract new audiences. Continue to develop creative programming in response to shifts in visitation and/or other trends. Consider ways in which the National Park Service might certify canal boat operators for watercraft use as an alternative to the U.S. Coast Guard certification process.

Fundamental Resource or Value	Immersive Experience
Data and/or GIS Needs	 Visitor surveys. Visitor counts. Wayfinding study. Customized high-water study. Population survey. Administrative history. Trolley system condition assessment.
Planning Needs	 Marketing plan and visitation/tourism plan. Comprehensive interpretive and education plan. Wayfinding/sign plan. Succession plan. Collection management plan (update). Accessibility self-evaluation and transition plan.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	 Laws, Executive Orders, and Regulations That Apply to the FRV Americans with Disabilities Act (42 USC 12101 et seq.) Architectural Barriers Act (42 USC 4151 et seq.) Rehabilitation Act of 1973 (29 USC 701 et seq.) "Architectural Barriers Act Accessibility Guidelines" (36 CFR 1191.1) NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (chapter 7) "Interpretation and Education" NPS Management Policies 2006 (chapter 8) "Use of the Parks" NPS Management Policies 2006 (chapter 9) "Park Facilities" Director's Order 6: Interpretation and Education Director's Order 42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services







Fundamental Resource or Value	Cultural Heritage and Arts Programming
Related Significance Statements	Lowell National Historical Park preserves and interprets 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.
	Lowell National Historical Park embraces partnerships as an integral approach to accomplishing park and community goals. Lowell National Historical Park serves as a model for leveraging collaborative public-private partnerships and community engagement.
	Conditions
	Lowell is a diverse city with communities that have roots dating back to Lowell's textile industry and continuing through newer populations that have no traditional association with the park's history.
	Lowell is recognized as a place for artists. More than 500 artists now live and or work in the city and desire new activities and programming.
	The park's premier cultural heritage and arts events are the Lowell Folk Festival and the Lowell Summer Music Series, both of which enjoy great popularity and contribute to Lowell's economic vitality.
	The park has an interpretive agreement with the Angkor Dance Troupe, which has taught traditional Cambodian dance to local residents in the park's Patrick J. Mogan Cultural Center since 2000.
	The park serves many different users ranging from visitors seeking a traditional NPS experience to local community members who use the park as a neighborhood resource.
Current Conditions	For several years, park staff has focused on building local constituency and relevance through community engagement and cultural programming.
and Trends	Due to a diversity of engaged stakeholders in Lowell, park staff must often mediate and build consensus among groups and individuals having different goals.
	The Lowell Summer Music Series and Lowell Folk Fest are popular events that account for a large percentage of the park's special event visitation.
	Trends
	From its inception, the park has used a variety of methods to present Lowell's cultural heritage while simultaneously engaging Lowell's diverse residents. These include employing folklorists, establishing a folklife center, offering a folklife series, co-creating exhibits with community members that focus on local history and heritage, and using facilitated dialogue in programs.
	Lowell's arts community is increasingly involved with activities in the park.
	Demographics are changing in Lowell. Lowell is a gateway city for immigrants and refugees and, more generally, is an affordable place to live.
	The park's community engagement efforts are fostering relationships with local organizations.
	Threats
Threats and Opportunities	Some proposals for art installations or demonstrations could impact the character- defining features of the historic district and park. Effectively managing this conflict can be a challenge because many resources and sites are not owned by the park.
	Existing standards for preservation do not provide clear guidance on certain modern activities (e.g., murals, temporary signage) that could negatively impact character-defining features of the historic district.
	There is a perception, not always true, that the park funds arts programming. This misperception creates the idea that the park has money for X, but not Y.

Fundamental Resource or Value	Cultural Heritage and Arts Programming
Threats and Opportunities	 Threats (continued) The Lowell Summer Music Series and other events have expanded over the years, whereas park staffing (e.g., maintenance, law enforcement) has decreased. The park no longer has staff (formerly Lowell Historic Preservation Commission staff) dedicated to cultural heritage and arts programming who can provide needed expertise and attention. Opportunities Work with historic board to educate community members on value of historic preservation and ways in which the arts and historic preservation can coexist. Work with historic board to update the historic board standards. Continue to engage the community and to tailor events and activities to that audience. These activities can increase community's awareness of the park and help park staff better understand the park's neighbors. Capitalize on the growing artist population to offer arts programming at or in conjunction with the park. Continue to explore opportunities for special events that meet the park's community engagement goals. Seek to attract more diverse groups (i.e., both ethnic groups and artists) through targeted events and activities. Increase outreach efforts further into the Merrimack Valley.
	 Increase outreach efforts further into the Merrimack Valley. Increase strategic partnerships with Lowell High School, which is adjacent to park headquarters (e.g., graphic arts program, internships). Help all staff understand their roles in supporting cultural heritage and arts programming. Skills and cultural competence are needed. Consider how partners can help take the lead on cultural heritage events and increase support. Engage partners in assuming more responsibilities (e.g., fiscal, staffing) in cultural and arts programming. Pursue designation as part of NPS Network to Freedom. Seek to integrate cultural heritage and the wider arts community. Update the Mill Girls & Immigrant Exhibit to better reflect Lowell's cultural heritage (primarily as related to the immigrant part of the exhibit). Complete cultural mapping of organizations.
Data and/or GIS Needs	 Visitor counts. Visitor surveys. Population survey. Folklife study (update). Front-end evaluation for exhibits. Partner list. List of roles and responsibilities related to maintenance, leasing agreements, special events, and jurisdiction. Assessment of security and access. Energy consumption study. Administrative history.

Fundamental Resource or Value	Cultural Heritage and Arts Programming
Planning Needs	 Comprehensive interpretive and education plan. Use plan for Patrick J. Mogan Cultural Center. Exhibit plan for Mill Girls & Immigrant Exhibit and Boott Cotton Mills Museum. Community planning around cultural heritage. Marketing plan and visitation/tourism plan. Accessibility self-evaluation and transition plan. Collection management plan (update). Updated Downtown Lowell Historic District Design Review Standards (in collaboration with Lowell Historic Board). Integrated pest management plan. Comprehensive fire and emergency evacuation plans for buildings. Security plan. Energy reduction strategy. Historic structures report (update).
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	 Laws, Executive Orders, and Regulations That Apply to the FRV Museum Properties Management Act of 1955, as amended (54 USC 102501-102504) National Historic Preservation Act of 1966, as amended (54 USC 300101 et seq.) Executive Order 11593, "Protection and Enhancement of the Cultural Environment" "Curation of Federally-Owned and Administered Archaeological Collections" (36 CFR 79) "Protection of Historic Properties" (36 CFR 800) NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (§1.6) "Cooperative Conservation Beyond Park Boundaries" NPS Management Policies 2006 (§4.1.4) "Partnerships" NPS Management Policies 2006 (§8.10) "Natural and Cultural Studies, Research, and Collection Activities" Director's Order 24: NPS Museum Collections Management Director's Order 28: Cultural Resource Management NPS Museum Handbook, parts I, II, and III







Fundamental Resource or Value	Historic Urban Industrial Landscape
Related Significance Statements	 Lowell's (economic) success was based in innovation, from manufacturing technology and processes, to new business models, to city planning designed to benefit both industry and the worker. Unique industrial concepts were implemented and demonstrated at a massive scale at the Lowell mills, which served as a model for textile production and industrial cities. A very large proportion of original buildings, structures, and urban landscapes have
	survived in Lowell's park and preservation district and now are recognized as important historical artifacts. These include the entire 5.6-mile power canal system with its sophisticated dams, locks, and gatehouses, 7 of the original 10 mill complexes, and significant examples of early housing types, institutions, and transportation facilities.
	The Lowell canal system is nationally recognized as one of the most impressive civil and mechanical engineering achievements of the 19th century because of its grand scale and technological complexity, and is the site of origin for the famed "Francis" turbine. The canal system, used as both a transportation corridor and power source, facilitated the growth of the industrial city.
	The collaboration between Lowell National Historical Park and its partners has resulted in the rehabilitation of almost all of the 5.3 million square feet of historic mill space and hundreds of additional buildings in the downtown historic district. This effort continues to serve as a successful example of leveraging public-private partnerships for economic development through historic preservation.
	Lowell National Historical Park embraces partnerships as an integral approach to accomplishing park and community goals. Lowell National Historical Park serves as a model for leveraging collaborative public-private partnerships and community engagement.
	Conditions
	 More than 400 buildings, and more than 95% of 5.33 million square feet of the historic mill space in the downtown historic district, has been successfully restored or rehabilitated.
	Most buildings are in good condition, but conditions vary. Some buildings were rehabilitated decades ago and require another round of rehabilitation.
	The government owns 19 of the 141 acres within the park boundary. Most structures in the historic urban industrial landscape are not federally owned.
	Buildings, stair towers, smokestacks, and other components of the urban fabric are iconic and well intact as compared with those in other cities of similar size and history.
	The strong cityscape, with well-cared for smokestacks, towers, buildings, and a downtown area, benefits the city.
Current Conditions	The park's three historic trolleys, operating on a 1.5-mile track, are an iconic component of the urban landscape.
and Trends	The Lowell Development & Financial Corporation provides funding for rehabilitation of historic buildings.
	Funding mechanisms such as tax credits have made it more lucrative to rehabilitate buildings.
	• The National Park Service was never intended to regulate design controls for the city of Lowell. The Lowell Historic Board, created through special state legislation, enforces design controls in the downtown preservation district to ensure private development is "not inconsistent with the federal investment" (54 USC 1265). Lowell National Historical Park provides technical assistance for design review when requested, but this role is not formalized in law. The park has a preservation advocacy role and, in some cases where it provided a loan or grant, has placed in-perpetuity development restrictions for historic preservation.
	The historic board must effectively manage and control new development in accordance with the Historic Board Design Review Standards.

Fundamental Resource or Value	Historic Urban Industrial Landscape
Current Conditions and Trends	 Trends Due to improving economic conditions and the viability of market rate infill development, pressure for new development is increasing. Interest in incorporating art in the area (e.g., murals, public art sculptures) is increasing. The number of skilled crafts people at the park, such as carpenters and masons, is declining. Some of the buildings that were rehabilitated decades ago will soon need another round of rehabilitation. Interest in modern industrial design and style (e.g., steampunk culture) is increasing. Interest in using the area for different community events is increasing. Enrollment growth at the university and community college is increasing the presence of younger people in the city. Fewer funds will be available for economic development incentives for historic preservation due to expiration of the Preservation Loan Fund.
	 Threats As church congregations shrink, their ability to maintain historically significant church structures is threatened. As historic buildings in the park and preservation district become vacant, they are not properly maintained and reused (e.g., Lowell Superior Courthouse). There can be a lack of clarity among partner groups regarding ownership and maintenance responsibilities within the park and preservation district. Poorly maintained private buildings and the lack of Historic Review Board enforcement authority threaten the integrity of the industrial landscape within the local historic district. Desire for new construction and subsequent economic development within the historic district could affect the historic board's decisions. Changing economic conditions could affect building occupancy and quality of construction and maintenance. When the economy is bad, there are fewer renovations and/or less maintenance and more issues with shoddier construction. Climate change may increase severe storms, flooding, and erosion, which threaten the landscape.
Threats and Opportunities	 Opportunities Work with partners to improve multimodal access and connect visitors with the Gallagher Transit Terminal, a commuter rail stop to/from Boston. Refine and develop an agreement across all entities, including Enel Green Power, Proprietors of Locks and Canals, the City of Lowell, Massachusetts Department of Conservation and Recreation, and Lowell National Historical Park to maintain the industrial landscape (e.g., Mack Plaza, Victorian Park, and Kerouac Park). Use special events such as Doors Lowell and Lowell Walks to communicate the importance of preservation and urban character to the community. Work with partners to improve directional signage. Explore potential interpretive partners such as St. Patrick's Church, Saint Anne's Episcopal Church, and schools. Educate and engage surrounding communities in historic preservation efforts, particularly those efforts within the park and preservation districts. Work with partners to explore ways to fund historic preservation. Encourage assistance of stakeholders and volunteers in preservation efforts. Maintain leadership, technical expertise, and design controls as city develops. Provide technical guidance to improve lighting to increase perceptions of safety.

Fundamental Resource or Value	Historic Urban Industrial Landscape
Data and/or GIS Needs	 Wayfinding study. Oral history project on development/preservation. Visitor surveys. Visitor counts. GIS data for jurisdictional inventory and cooperative management. Lowell Then and Now (update). Customized high-water study. Complete land acquisition process for parcels. Assessment of security and access. List of roles and responsibilities related to maintenance, leasing agreements, special events, and jurisdiction. List of partners. Population survey. Administrative history. Historic resource study. Archeological overview and assessment (update). Trolley system condition assessment. Hamilton Gatehouse historic structure report, condition assessment, and treatment plan.
Planning Needs	 Comprehensive interpretive and education plan. Security plan. Historic structures report (update). Wayfinding/sign plan. Accessibility self-evaluation and transition plan. Comprehensive management and maintenance plan. Updated Downtown Lowell Historic District Design Review Standards (in collaboration with Lowell Historic Board). Preservation advocacy and funding strategy. Lighting plan for canalways. Marketing plan and visitation/tourism plan. Planning for adaptation to climate change. Succession plan.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	 Laws, Executive Orders, and Regulations That Apply to the FRV Antiquities Act of 1906 (54 USC 320301-320303, 34 Stat. 225) Archeological and Historic Preservation Act of 1974 (54 USC 312502 et seq.) Archaeological Resources Protection Act of 1979 (54 USC 302902) Clean Air Act (42 USC 7401 et seq.) Clean Water Act (33 USC 1251-1387, 33 USC 1151) Historic Sites Act of 1935 (54 USC 320101 et seq.) Museum Properties Management Act of 1955, as amended (54 USC 102501-102504) National Historic Preservation Act of 1966, as amended (54 USC 300101 et seq.) Executive Order 11593, "Protection and Enhancement of the Cultural Environment" "Curation of Federally-Owned and Administered Archaeological Collections" (36 CFR 79) "Protection of Historic Properties" (36 CFR 800) Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources"

Fundamental Resource or Value	Historic Urban Industrial Landscape
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	 NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (§1.6) "Cooperative Conservation Beyond Park Boundaries" NPS Management Policies 2006 (§2.3.1.4) "Science and Scholarship" NPS Management Policies 2006 (§4.1) "General Management Concepts" NPS Management Policies 2006 (§4.1.4) "Partnerships" NPS Management Policies 2006 (§4.2) "Studies and Collections" NPS Management Policies 2006 (§4.7.2) "Weather and Climate" NPS Management Policies 2006 (§5.1) "Research" NPS Management Policies 2006 (§8.10) "Natural and Cultural Studies, Research, and Collection Activities" Director's Order 24: NPS Museum Collections Management Director's Order 28: Cultural Resource Management Director's Order 77-2: Floodplain Management NPS Museum Handbook, parts I, II, and III Director's Policy Memorandum 12-02, "Applying National Park Service Management Policies in the Context of Climate Change" Director's Policy Memorandum 14-02, "Climate Change and Stewardship of Cultural Resources" Director's Policy Memorandum 15-01, "Addressing Climate Change and Natural Hazards for Facilities"



Fundamental Resource or Value	Partnerships
Related Significance Statements	 A very large proportion of original buildings, structures, and urban landscapes have survived in Lowell's park and preservation district and now are recognized as important historical artifacts. These include the entire 5.6-mile power canal system with its sophisticated dams, locks, and gatehouses, 7 of the original 10 mill complexes, and significant examples of early housing types, institutions, and transportation facilities. The collaboration between Lowell National Historical Park and its partners has resulted in the rehabilitation of almost all of the 5.3 million square feet of historic mill space and hundreds of additional buildings in the downtown historic district. This effort continues to serve as a successful example of leveraging public-private partnerships for economic development through historic preservation. Lowell National Historical Park embraces partnerships as an integral approach to accomplishing park and community goals. Lowell National Historical Park serves as a model for leveraging collaborative public-private partnerships and community engagement.
	Conditions Many of the park's activities are made possible through its varied partnerships.
	The park has formal agreements with the City of Lowell, Lowell Festival Foundation, Lowell Plan, Cultural Organization of Lowell, Angkor Dance Troupe, University of Massachusetts Lowell, The Brush Art Gallery and Studios, Middlesex Community College, Lowell Development & Financial Corporation, and Seashore Trolley Museum.
	The park has informal partnerships with community organizations, educational institutions, artist organizations, tourism groups, local businesses, economic development groups, and others.
	The park has been successful in leveraging partner funding for projects that otherwise would have been unfunded (e.g., canalway).
Current Conditions	The park does not have enough funding or staff to consistently meet partner expectations.
and Trends	 Trends There is a growing interest on the part of community groups and members to increase partnerships with the park.
	Partner organizations have changed over time, and there has been a massive growth in informal partners. For example, there once were 5 partners for Lowell Kids Week and now are more than 20.
	Communities are increasingly engaged with the park through park partners.
	As partnerships grow and staff levels decrease, managing partner expectations related to park's ability to provide equipment, funding, technical support, and maintenance continues to be done as it has been in the past.
	The ability to hire students or youth should improve as future policies are developed and implemented.
Threats and Opportunities	Threats
	 Certain key partners can no longer provide the necessary level of support for preservation, maintenance, and staffing.
	Partners may have different goals, and sometimes conflicting missions, than the National Park Service.
	The park cannot provide the level of funding and/or staff support to certain partners that it did in the past.
	Partners are experiencing funding and staffing shortages that leave them unable to maintain resources or offer programming within the park as they once did.
	Some long-term institutional partners have shifted their priorities, thereby reducing their long-term commitments to partnership responsibilities with the park.

Fundamental Resource or Value	Partnerships
Threats and Opportunities	 Opportunities Reach out to youth for volunteers or new hires. Engage new communities to maintain relevancy. Engage a wider visitor base, both culturally and geographically. Use community partnerships to engage artists with open houses and exhibits. Educate partners about the park's capabilities, mission, and role. Work to ensure greater cooperation among facility managers of partner organizations (e.g., university, city, state, private landlords, and developers) to define roles, clarify maintenance responsibilities, and determine if organizations could share labor and/or equipment. Leverage partner support to increase and accomplish shared goals.
Data and/or GIS Needs	 List of roles and responsibilities related to maintenance, leasing agreements, special events, and jurisdiction. GIS data for jurisdictional inventory and cooperative management. Wayfinding study. Lowell Then and Now (update). Oral history project on development/preservation. List of partners. Mapping of List of Classified Structures data related to the canal system. Administrative history.
Planning Needs	 Comprehensive management and maintenance plan. Update Downtown Lowell Historic District Design Review Standards (in collaboration with Lowell Historic Board). Preservation advocacy and funding strategy. Use plan for Patrick J. Mogan Cultural Center. Marketing plan and visitation/tourism plan. Community planning around cultural heritage. Record management plan. Wayfinding/sign plan.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	 Laws, Executive Orders, and Regulations That Apply to the FRV Not applicable NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (§1.6) "Cooperative Conservation Beyond Park Boundaries" NPS Management Policies 2006 (§2.3.1.4) "Science and Scholarship" NPS Management Policies 2006 (§4.1.4) "Partnerships" NPS Management Policies 2006 (§5.1) "Research" NPS Management Policies 2006 (chapter 7) "Interpretation and Education" Director's Order 6: Interpretation and Education Director's Order 79: Integrity of Scientific and Scholarly Activities

Fundamental Resource or Value	Museum Collections
Related Significance Statements	 Lowell's (economic) success was based in innovation, from manufacturing technology and processes, to new business models, to city planning designed to benefit both industry and the worker. Unique industrial concepts were implemented and demonstrated at a massive scale at the Lowell mills, which served as a model for textile production and industrial cities. Lowell National Historical Park preserves and interprets 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.
	The collections are made up of roughly one-half million museum objects, primarily archives, with smaller collections of archaelegy and history objects spanning from the
	 The collections are made up of roughly one-half million museum objects, primarily archives, with smaller collections of archeology and history objects spanning from the early 19th century to the present. The largest archival collection is the records of the Proprietor of Locks and Canals, the
	organization that planned, developed, and operated Lowell's canal system.
	 There is a significant archeological component to the collection, connected to archeological investigations of the 1980s and 1990s of various properties within the park boundary.
	Archival resources include original historical documents and manuscripts.
	Nearly all objects have been cataloged in the collection, with the exception of large- format architectural records from 1995 to the present and resource management records.
	Digitization of the collection occurs on demand.
Current Conditions	 Lowell National Historical Park, together with partners, has completed many oral histories, many of which were collected through an oral history project that coincided with the opening of the Boott Cotton Mill Museum. Oral histories have also been generated through University of Massachusetts Lowell research projects and academic dissertations on a project-by-project basis.
and Trends	 Researchers have been most interested in items relating to the mill girls, locks and canals, and primary source materials from the 19th-century era (e.g., mill girl letters, photographs).
	The collection is always open to the public by appointment.
	The accession process is conservative. The scope of collections statement is focused on historic materials with a direct association to park resources.
	The fire suppression, alarm, and security systems are all in good condition.
	The museum exhibits have existed since the park's establishment, and are more than a generation old. The mills girls museum exhibits are nearly 30 years old, and the Boott Cotton Mill Museum exhibits are nearly 25 years old.
	Trends
	There is a broad increasing trend of families researching ancestry.
	The park is in process of upgrading the security system and the collection will, as a result, have increased levels of protection.
	 Staffing for the collection has been a downward trend, from seven to two full- time employees over the past 10 years. The staff has been supplemented in part by summer interns.

Fundamental Resource or Value	Museum Collections
Threats and Opportunities	 Threats Storage space is adequate, but the environmental conditions for the collections (i.e., heating, ventilation, and air-conditioning [HVAC]) are not ideal. There is a need to upgrade to meet NPS museum collection standards. The large collection of one-of-a-kind, large-format paper objects could be at risk due to inadequate HVAC systems. The collections are now stored in the Boott Cotton Mill, which is in a 100-year flood plain. Maintenance and housekeeping of collections is threatened by lack of staff. Opportunities Accession park resource management records and large-format architectural records into the collection. Bring pieces of the collection into the digital age. Improve HVAC and security systems. Update outdated exhibits that have been in place since the park's establishment, and pursue opportunities for rotating exhibits. Conduct curated talks, outreach, and cultural programming using the collection and primary sources as a method to continue awareness. Continue outreach through social media and other forums. Partner with the University of Massachusetts Lowell through its newly offered course in museum studies. Develop one to two community exhibits a year. Plan for 20th and 21st century by collecting stories, artifacts, musical instruments, and photos from new cultural and ethnic groups.
Data and/or GIS Needs	 Catalog remaining archival collection. Archeological overview and assessment (update). Archeological identification at maintenance facilities. Archeological categorizing. Historic resources study (update).
Planning Needs	 Update and digitize emergency plan. Housekeeping plan. Collection management plan (update). Collections storage plan.

Fundamental Resource or Value	Museum Collections
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	 Laws, Executive Orders, and Regulations That Apply to the FRV National Historic Preservation Act of 1966, as amended (54 USC 300101 et seq.) Antiquities Act of 1906 (54 USC 320301-320303, 34 Stat. 225) Archeological and Historic Preservation Act of 1974 (54 USC 312502 et seq.) Archaeological Resources Protection Act of 1979 Museum Properties Management Act of 1955, as amended (54 USC 102501-102504) Executive Order 11593, "Protection and Enhancement of the Cultural Environment" "Curation of Federally-Owned and Administered Archaeological Collections" (36 CFR 79) "Protection of Historic Properties" (36 CFR 800) NPS Policy-level Guidance (NPS Management Policies 2006 and Director's Orders) NPS Management Policies 2006 (chapter 5) "Cultural Resource Management" Director's Order 24: NPS Museum Collections Management Director's Order 28: Cultural Resource Management Director's Order 77-2: Floodplain Management NPS Museum Handbook, parts I, II, and III







Identification of Key Issues and Associated Planning and Data Needs

This section considers key issues to be addressed in planning and management and therefore takes a broader view over the primary focus of part 1. A key issue focuses on a question that is important for a park. Key issues often raise questions regarding park purpose and significance and fundamental resources and values. For example, a key issue may pertain to the potential for a fundamental resource or value in a park to be detrimentally affected by discretionary management decisions. A key issue may also address crucial questions that are not directly related to purpose and significance, but that still affect them indirectly. Usually, a key issue is one that a future planning effort or data collection needs to address and requires a decision by NPS managers.

The following are key issues for Lowell National Historical Park and the associated planning and data needs to address them:

Jurisdictional Challenges. Lowell National Historical Park has complicated boundaries and multiple jurisdictions. As a result, there can be confusion regarding ownership, boundaries, and law enforcement jurisdiction. It can be difficult to determine ownership of key parcels and identify areas lacking lands processing. Continued collaboration with partners to update agreements specifically regarding law enforcement and maintenance jurisdictions is needed. The park should continue to work with the NPS Northeast Region to advocate that the state legislature update designated national park lands in Massachusetts to concurrent law enforcement jurisdiction.

Associated data needs:

- Updating and digitization of park segment maps
- GIS data for jurisdictional inventory and cooperative management
- Jurisdictional inventory (update)
- Outreach and Relevancy. Lowell National Historical Park has evolved with the city of Lowell, and it is a challenge to effectively communicate that changing story in an inclusive and relevant way. Conveying the historic context of Lowell and the national historical park to community members is particularly challenging because some exhibits are outdated. It is essential to connect with people and their stories more effectively, including updating interpretative media to provide information to nonnative English speakers. Tourism should be promoted more broadly to increase visitation and overcome the negative perception of Lowell that began during the city's post-industrial decline.

Associated planning needs:

- Marketing plan and visitation/tourism plan
- Wayfinding/sign plan
- Comprehensive interpretive and education plan
- Exhibit plan for Mill Girls & Immigrant Exhibit and Boott Cotton Mills Museum

Associated data needs:

- Visitor surveys
- Visitor counts
- Population survey
- Wayfinding study
- Historic resources study (update)

Maintenance/Preservation of Park-Owned Resources and Facilities. The park owns and operates a variety of resources and assets that require significant staffing and funding, including historic mill buildings, boardinghouses, boats, trolleys, and associated infrastructure. Collaboration with park partners to identify ways to leverage funding for maintenance is essential. Reclassification of maintenance positions would allow greater flexibility within the park's diminishing workforce (e.g., maintenance mechanics vs. specialists). Continued creative thinking about appropriate paths for hiring, as well as effective ways to attract and retain maintenance staff, is necessary, including using University of Massachusetts Lowell work-study students and partnering with the local vocational technical high school, social services agencies, and the Student Conservation Association.

Associated planning need:

Comprehensive management and maintenance plan

Associated data needs:

- List of roles and responsibilities related to maintenance, leasing agreements, special events, and jurisdiction
- Trolley system condition assessment
- Loss of Specialized Skills and Knowledge. The nature of the resources of the park requires a large number of staff having specialized skills, such as loom fixers, masons, and woodworkers. Many staff members have worked with the park since its establishment or were part of the Lowell Historic Preservation Commission. They have knowledge of the park and city that is irreplaceable, including the history of preservation and changes in park management over time. As those individuals retire or otherwise move on from the park, specialized skills and knowledge will be lost and must be replaced if possible or somehow captured.

Associated planning needs:

- Succession plan
- Record management plan
- Collection management plan (update)

Associated data needs:

- Administrative history
- Oral history project on development/preservation
- Private Ownership in the Park and Preservation District. Many lands and buildings within the park and preservation district are privately owned but are major components of the historic urban industrial landscape. Their preservation, maintenance, and integrity of design are critically important to the park. Although there are certain mechanisms in place to ensure historic and new buildings in the district meet design and preservation standards, such as city design review processes, maintaining historic integrity is a continual challenge. As the economy has improved and development pressures have increased, challenges increase. The City of Lowell and the commonwealth are exempt from the Lowell Historic Board standards and controls. Additionally, development of structures on nonpark land could encroach on historic resources (e.g., gatehouses and canalways) and diminish the visitor experience. Review of the Lowell Historic Board standards and new, creative approaches to preservation and design control might provide new solutions to these challenges.

Associated planning needs:

- Updated Downtown Lowell Historic District Design Review Standards (in collaboration with Lowell Historic Board)
- Preservation advocacy and funding strategy



• Renewal of Enel Green Power License. The water power license, issued by the Federal Energy Regulatory Commission to Enel Green Power, is near its renewal date. Use of the canal system, a major component of the park experience and interpretation, is subject to terms in that agreement, and the National Park Service should be involved in renewal conversations. Terms should be sought that allow for expanded recreational use of the canalways. Through proactive NPS involvement, the needs of both Enel Green Power and the National Park Service could be met.

Associated data need:

- Customized high-water study
- Climate Change. Some parts of the park, including the Boott Mill No. 6 building and Counting House, are within a designated floodplain that primarily is related to the canal system surrounding the central part of the city of Lowell. As a result, a majority of park buildings, structures, and other resources are at risk to the effects of climate change, with the threat of increased storm incidents and more regular flooding. Resources most at risk include those associated with the water power system / canal system, which is identified as a fundamental resource. Planning is needed to determine potential impacts and provide mitigation strategies.

Associated planning need:

- Planning for adaptation to climate change

Associated data need:

Customized high-water study

Planning and Data Needs

To maintain connection to the core elements of the foundation and the importance of these core foundation elements, the planning and data needs listed here are directly related to protecting fundamental resources and values, park significance, and park purpose, as well as addressing key issues. To successfully undertake a planning effort, information from sources such as inventories, studies, research activities, and analyses may be required to provide adequate knowledge of park resources and visitor information. Such information sources have been identified as data needs. Geospatial mapping tasks and products are included in data needs.

Items considered of the utmost importance were identified as high priority, and other items identified, but not rising to the level of high priority, were listed as either medium- or low-priority needs. These priorities inform park management efforts to secure funding and support for planning projects.

Planning Needs – Where A Decision-Making Process Is Needed			
Related to an FRV or Key Issue?	Planning Needs	Priority (H, M, L)	Notes
FRV, Key Issue	Comprehensive interpretive and education plan	Н	This plan would update the park's interpretive themes and provide guidance for outreach and education, with the intent of informing the public and communities about opportunities within the park. It would also guide development of curriculum for interpretation and education at the Tsongas Industrial History Center. Last, it would guide exhibition planning, including the design of space, methods, and costs.
FRV	Security plan	Н	This plan would provide guidance for improving parkwide security. It would be informed by the assessment of security and access.
FRV	Historic structures reports	Н	The park needs both new and updated historic structures reports to guide treatment and use of all structures listed in the List of Classified Structures database. Many of the existing reports were developed more than 30 years ago and are in need of update, and others have not yet been undertaken.
FRV, Key Issue	Succession plan	Н	A succession plan would address strategic collection of institutional knowledge and skills. A number of employees are the singular source of knowledge, and a plan is needed to capture this knowledge. The plan would also address retention of skills needed to operate the weave room, boat rides, and trolley.
FRV, Key Issue	Wayfinding/sign plan	Н	This plan would address both updating existing signage and designing and siting of new waysides to effectively guide visitors between park destinations, improving both wayfinding and visitor experience. It should be developed in collaboration with partners, including the city and others, as appropriate.
FRV	Accessibility self- evaluation and transition plan	Н	This plan would evaluate and assess both physical and programmatic barriers to accessibility. The outcome of the plan would be an accessible and spatially referenced document that would guide park staff and decision makers in assessing, prioritizing, and implementing solutions for universal accessibility at the park.
FRV	Update and digitize emergency plan	Н	This plan update would allow for increased protection of museum collections in the event of an emergency.
FRV	Collections storage plan	Н	The collections storage plan is a component of the collections management plan, and determines appropriate and secure locations for museum collections to be stored.
FRV, Key Issue	Comprehensive management and maintenance plan	M	Many resources, assets, and infrastructure that comprise the urban landscape and provide access to park sites are managed by or in conjunction with other entities. This plan would address collaboration between the park and its partners for effective management and maintenance.

	Planning Needs – Where A Decision-Making Process Is Needed			
Related to an FRV or Key Issue?	Planning Needs	Priority (H, M, L)	Notes	
FRV, Key Issue	Updated Downtown Lowell Historic District Design Review Standards (in collaboration with Lowell Historic Board)	M	The Downtown Lowell Historic District Design Review Standards have not been updated since January 2012. As a member of the Lowell Historic Board, the park should work with the historic board to review and update design standards according to changing needs and trends that could affect historic preservation in the district. Issues might include long-term art installations (e.g., murals), temporary signage, and lighting.	
FRV, Key Issue	Preservation advocacy and funding strategy	М	This strategy would provide guidance for preservation advocacy and funding to ensure coordinated preservation in the historic district, for both park- and nonpark-owned structures.	
FRV	Lighting plan for canalways	М	This plan would provide recommendations for lighting of the canalways and options for converting current lights to LEDs.	
FRV, Key Issue	Exhibit plan for Mill Girls & Immigrant Exhibit and Boott Cotton Mills Museum	М	This plan would provide guidance for updating the Mill Girls & Immigrant Exhibit and exhibits in the Boott Cotton Mills Museum. Many exhibits are outdated and/or have underused exhibit space.	
FRV	Use plan for Patrick J. Mogan Cultural Center	М	The use plan for the Patrick J. Mogan Cultural Center would help define a purpose for the center and develop a strategy for collaboration with relevant partners. It would also provide guidance for effective use of the space, including space planning for large events such as the Lowell Summer Music Series. Much of the equipment for that event is housed in the center, and other storage options may exist.	
FRV, Key Issue	Marketing plan and visitation/tourism plan	М	The marketing plan should address a comprehensive strategy for community outreach and marketing, probably in conjunction with community partners. It would also assess strategies for increasing outreach and promoting more diverse visitation/tourism. The park's strong focus on the local community should be expanded to include regional and national outreach.	
FRV, Key Issue	Planning for adaptation to climate change	М	Because the park is within a floodplain, extreme weather events can substantially affect the park and its resources. These effects will probably become more pronounced over time. Climate change adaptation planning is needed to help integrate climate change considerations into all levels of park planning processes, as well as actions that could mitigate potential impacts on park resources.	
FRV, Key Issue	Record management plan	М	A record management plan would provide a strategy for all park employees to locate and make available records while protecting and preserving them for future use. It should incorporate standard file codes and disposition instructions in the NPS schedule.	

	Planning Needs	Decision-Making Process Is Needed	
Related to an FRV or Key Issue?	Planning Needs	Priority (H, M, L)	Notes
FRV, Key Issue	Collection management plan (update)	М	Although many recommendations from the current collection management plan have been implemented, an updated plan would address new items in the collection and new park records. In particular, the plan should address access and storage problems related to large-format architectural drawings that need to be accessible and digitization of the collection.
FRV	Energy reduction strategy	L	An energy reduction strategy would provide specific steps to reduce energy consumption in a cost-effective way. It would be based on an energy audit conducted two years ago, as well as on the more comprehensive energy consumption study included as a data need in this document.
FRV	Community planning around cultural heritage	L	With its rich history of immigration and cultural exchange, cultural heritage is an important topic of discussion in the Lowell area. Because of its role in the community, the park is well positioned to initiate more formal conversations on the topic. A planning process, using facilitated discussions, would help the park and community collaborate on a comprehensive approach to promoting cultural heritage in the city.
FRV	Information technology network analysis and implementation plan	L	An information technology engineer should assess the park's current system, determine future needs, and recommend best ways to structure the park's information technology backbone for future growth and use.
FRV	Comprehensive fire and emergency evacuation plans for buildings	L	A comprehensive fire and emergency evacuation plan is needed for Boott Mill and other park buildings. The Boott Mill No. 6 building plans should be updated to address the movement of different groups that occupy the building, and plans should be developed for other buildings such as Patrick J. Mogan Cultural Center.
FRV	Integrated pest management plan	L	The park's existing pest management plan is out of date. A new plan should integrate knowledge of pest biology, the environment, and available technology to prevent unacceptable levels of pest damage.
FRV	Housekeeping plan	L	A housekeeping plan would provide guidance on overall housekeeping and the cyclical cleaning of historic structures, exhibits, and displays throughout the park. Keeping historic structures and their displays clean helps prevent deterioration, allows for monitoring for pests, and improves the overall visitor experience.







D	Data Needs – Where Information Is Needed Before Decisions Can Be Made				
Related to an FRV or Key Issue? Data and GIS Needs		Priority (H, M, L)	Notes, Including Which Planning Need This Data Need Relates To		
FRV, Key Issue	Visitor surveys	Н	Visitor surveys are needed to provide a better understanding of visitor demographics, socioeconomics, and other qualitative information. This information would help improve relevancy of interpretation and programming. Information is also needed regarding visitor transportation modes to and within park facilities.		
FRV	Complete land acquisition process for parcels	Н	The land acquisition process needs to be completed for certain parcels within the park boundary. This is ultimately a responsibility of the NPS Northeast Region Lands Office but is prioritized on this list to highlight its importance to the park.		
FRV	Assessment of security and access	Н	An assessment of security and access would help determine any gaps in security in the park. This assessment is particularly important because of challenges associated with operating in an urban location. It would help inform the security plan.		
FRV	Front-end evaluation for exhibits	Н	A front-end exhibit evaluation would help the park understand how the community would like to be represented in exhibits, as well as what visitors hope to learn or experience during their visits to the park. It would be used to guide the development and design of exhibits, particularly for the Mill Girls & Immigrant Exhibit. In addition, it would synthesize current museum trends to determine methods that might be used at the park.		
FRV, Key Issue	List of roles and responsibilities related to maintenance, leasing agreements, special events, and jurisdiction	Н	The park has a list of roles and responsibilities for the canalways but not for other areas of the park. This list would help park staff understand management and ownership of resources, including maintenance, lease terms, guidance for special events, and jurisdictional issues. It could be incorporated into the park atlas.		
Key Issue	Updating and digitization of park segment maps	Н	Updating and digitization of the park segment maps is needed. Although ultimately a responsibility of the NPS Northeast Region Lands Office, the data need is prioritized on this list to highlight its importance to the park.		
FRV, Key Issue	GIS data for jurisdictional inventory and cooperative management	Н	A range of GIS data is needed including mapping park-owned property, preservation district boundaries, and NPS easement areas. These data would help address challenges related to easements and delineate areas of the park without concurrent law enforcement jurisdiction. It should also include mapping of the preservation and historic districts.		
FRV, Key Issue	Wayfinding study	Н	This study would help determine how people move from place to place in the park, including both pedestrian and vehicular circulation patterns.		
FRV, Key Issue	Jurisdictional inventory (update)	Н	An update is needed to the jurisdictional inventory, a required document that outlines applicable state and local statutes, general agreements, lands, and related local or regional issues that impact law enforcement authority. The current jurisdictional inventory lacks new lands.		

D	Data Needs – Where Information Is Needed Before Decisions Can Be Made				
Related to an FRV or Key Issue?	Data and GIS Needs	Priority (H, M, L)	Notes, Including Which Planning Need This Data Need Relates To		
FRV, Key Issue	Trolley system condition assessment	Н	This assessment would identify, prioritize, and financially plan for operational maintenance needs for the trolley system through review of existing documentation such as drawings, field reports, and provide a condition assessment of the entire trolley system including the track, overhead line, poles, vehicles, the power substation, station platforms, the garage, and signage. The condition assessment would include structure summary sheets, profile drawings, problem photo sheets, supplemental drawings, prioritized recommended work, Class B and C cost estimates, and a fully developed schematic design alternative.		
FRV, Key Issue	Historic resources study (update)	Н	This project would update the 1980s historic resources study with a significant amount of new scholarship. It would link the significant events, people, and historical issues to the properties owned by the National Park Service, as well as those properties that are in Lowell's historic district. It would also identify additional historically and culturally significant properties that are outside the historic district. These significant features would then be connected to the park's interpretive programs and tours, educational programs, and museum exhibits. The project would provide critical research and data necessary to update portions of the Boott Cotton Mill Museum and update current (and create new) interpretive and educational programs.		
FRV	Lowell Then and Now (update)	М	The book, Lowell Then and Now: Restoring the Legacy of a Mill City, was published in 1995 and should be updated to include new photographs, both before and after renovations, and document preservation in the city. Information from the previous book and on more recent developments should be included.		
FRV, Key Issue	Visitor counts	М	This effort would help determine an effective method to accurately count visitors throughout the park. It would help guide park management and inform future planning efforts.		
FRV, Key Issue	Oral history project on development / preservation	М	An oral history project would capture the story of redevelopment and preservation in Lowell.		
FRV, Key Issue	Customized high- water study	М	This study would provide information on the effects of highwater on operation of the canal and the potential effects of flooding on park resources. Because the canal is still used to generate hydropower, power company operations affect park operations.		
FRV	Energy consumption study	М	An energy audit conducted two years ago outlined areas in which energy consumption might be reduced, with a focus on lighting. A more comprehensive energy consumption study is needed that would include modeling of buildings for energy consumption and loss. In particular, it should evaluate solar panels on the roof that are no longer functioning. It would be used to inform the energy reduction strategy.		
FRV	Catalog remaining archival collection	М	This effort would include cataloging of large format architectural records from 1995 to present, as well as resource management records.		

D	Data Needs – Where Information Is Needed Before Decisions Can Be Made				
Related to an FRV or Key Issue?	an FRV or		Notes, Including Which Planning Need This Data Need Relates To		
FRV, Key Issue	Population survey	М	A population survey would provide the park with an understanding of nonvisitors through a random sampling of surrounding populations, helping the park better understand who in the local community is not visiting the park and why. The survey would be random and could be conducted in multiple languages.		
FRV, Key Issue	Administrative history	М	An administrative history would outline management decisions, preservation efforts, and similar topics since establishment of the park.		
FRV	Mapping of List of Classified Structures data related to the canal system	L	Mapping of List of Classified Structures data related to the canal system would help delineate ownership of historically significant canal components, including walls, walkways, gatehouses, and associated machinery. It should also include an assessment of water rights.		
FRV	List of partners	L	Partners are an important component of management at the park. This list should include the partner name, mechanism for partnership (e.g., cooperative agreement), and purpose of partnership. It should be used to track changes in partnerships (e.g., new partnerships, expired agreements).		
FRV	Folklife study (update)	L	The Library of Congress completed a folklife study in the 1980s, but it should be updated to reflect the cultures and traditions of new immigrant groups in Lowell. This effort would likely include compiling information from the state folklorist.		
FRV	Study to determine information technology needs	L	This study would help determine information technology needs, such as Wi-Fi, wiring, and other infrastructure.		
FRV	Archeological overview and assessment (update)	L	An overview and assessment would incorporate new archeological data into the existing overview and assessment document.		
FRV	Archeological identification at maintenance facilities	L	This effort would include a survey of the maintenance facility grounds for archeological resources.		



Part 3: Contributors

Lowell National Historical Park

Celeste Bernardo, Superintendent

Sue Andrews, Assistant

Superintendent-Operations

Peter Aucella, Assistant

Superintendent-Development

Christine Bruins, Community Planner

David Byers, Interpretation Park Ranger

Michael Choquette, Law Enforcement

Rachel Edlund, Architect

Pat Egan, Mechanics Supervisor

Paul Fontaine, Facility Manager

Kristin Gallas, Project Manager-

Tsongas Industrial History Center

Amy Glowacki, Youth and VIP Program Coordinator

Jack Herlihy, Museum Specialist

Sheila Kirschbaum, Director–Tsongas Industrial History Center

John Marciano, Special

Events Coordinator

Marc Mousseau, Building Supervisor

Chuck Parrott, Architect

Laurel Racine, Chief of

Cultural Resources

Tess Shatzer, Supervisory Park

Ranger-Interpretation

Diana Shiba, Administrative Officer

Linda Sopheap Sou, Chief of

Interpretation and Education

Charlie Tonetti, Architect

Becky Warren, Supervisory

Park Ranger–Tsongas Industrial History Center

NPS Northeast Region

Michael A. Caldwell, Regional Director

Brian Strack, Associate Regional

Director, Construction and Facility Management

Allen Cooper, Chief, Park Planning and

Special Studies

Jim O'Connell, Planner, Regional Liaison Joanne Blacoe, Interpretive Planner William A. Griswold, Archeologist

James Speck, Landscape Architect, Olmsted Center for

Landscape Preservation

Other NPS Staff

John Gerbich, Project Manager and Community Planner, Denver Service Center–Planning

Pam Holtman, Quality Assurance Coordinator, WASO Park Planning and Special Studies

John Paul Jones, Visual Information Specialist, Denver Service Center–Planning

Sarah McSweeney, Contract Librarian, Denver Service Center–Planning Nancy Shock, Foundation Coordinator, Denver Service Center–Planning

Judith Stoeser, Contract Editor, Denver Service Center–Planning

Rose Verbos, Visitor Use Management Specialist, Denver Service

Center-Planning

Melanie Wood, Project Manager, Natural Resources Stewardship and Science

Zak Wood, GIS Specialist, Denver Service Center–Planning

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Appendixes

Appendix A: Enabling Legislation and Legislative Acts for Lowell National Historical Park

Legislative Summary

AREA: LOWELL NATIONAL HISTORICAL PARK, MASSACHUSETTS

AUTHORIZATION

Act of June 5, 1978 (P.L. 95-290, 92 Stat. 290)

*ACQUISITION AUTHORITY

Act of June 5, 1978, authorized the Secretary to acquire, by donation, purchase with donated or appropriated funds, condemnation, or otherwise, the following properties:

- (A) The Linus Childs House
- (B) The H and H Paper Company (aka Boott Mill Boarding House)
- (C) Old City Hall
- (D) Merrimack Gatehouse
- (E) The Wannalancit Textile Company
- (F) The structure containing the Jade Pagoda and Soloman's Yard Goods.

Any property or interest therein owned by the Commonwealth of Massachusetts or any political subdivision thereof may be acquired only by donation. In addition, the Secretary is authorized to acquire easements in the park for carrying out the purposes of the act. Condemnation, to be used only as a last resort, requires consultation with the Lowell Historic Preservation Commission and the City Council of Lowell. House Report No. 95-1023 directed that only a partial interest in The Wannalancit Textile Company be acquired so that the present mill owners may retain majority ownership and continue to operate.

Act of May 8, 2008 (P.L. 110-229, 122 Stat. 769), revised the boundary to include the following five parcels of land and authorized the acquisition of such land by donation, purchase with donated or appropriated funds, condemnation, or otherwise:

- (i) 91 Pevey Street,
- (ii) The portion of 607 Middlesex Place,
- (iii) Eagle Court,
- (iv) The portion of 50 Payne Street, and
- (v) 726 Broadway.

Any property or interest therein owned by the Commonwealth of Massachusetts or any political subdivision thereof may be acquired only by donation. Condemnation, to be used only as a last resort, requires consultation with the Lowell Historic Preservation Commission and the City Council of Lowell.

Act of October 5, 2012 (P.L. 112-182, 126 Stat. 1420), authorized the Secretary to exchange any land or interest in land within the boundaries of the park for any land or interest in land owned by the Commonwealth of Massachusetts, the city of Lowell, or the University of Massachusetts Building Authority. The act also provides direction regarding equalization payment for such an exchange.

ESTABLISHED

June 5, 1978

BOUNDARY REVISIONS

Act of June 5, 1978, authorizes the Secretary to make minor revisions after consultation with the Commission and the city manager. Such revisions require both the publication of a revised boundary description in the Federal Register and the timely notification of Congress.

Act of May 8, 2008, revised the boundary of the park to include five parcels of land identified on the map entitled 'Boundary Adjustment, Lowell National Historical Park', numbered 475/81,424B and dated September 2004.

ACREAGE LIMITATIONS

None

STATUTORY CEILING FOR LAND ACQUISITION

Act of June 5, 1978, authorized the appropriation of up to \$18,500,000 for acquisition and development, of which \$3,034,000 has been designated for land acquisition.

Act of October 16, 1987 (P.L. 100-134, 101 Stat. 810), increased the ceiling from \$18,500,000 to \$19,800,000. No additional funds were designated for land acquisition.

REMARKS

Act of June 5, 1978, Sec. 304, authorized the Lowell Historic Preservation Commission to acquire certain properties by donation, by purchase with donated or appropriated funds, or by condemnation (only with the approval of the Secretary). Funds for such acquisitions must be requested from the Secretary.

Act of September 8, 1980 (P.L. 96-344, 94 Stat. 1136), authorized the Commission to use any revenues or other assets acquired by the Commission through donation, the lease or sale of property, or fees for services. Such revenues may be used for any authorized function of the Commission, without fiscal year limitation.

AREA NUMBERS

MIS -1780

*Denotes section revised

Revised November 2, 2012

Establishment: Public Law 95-290, 92 Stat. 290; 54 USC 1265 (June 5, 1978)

92 STAT. 290

PUBLIC LAW 95-290—JUNE 5, 1978

Public Law 95-290 95th Congress

An Act

June 5, 1978 [H.R. 11662]

To provide for the establishment of the Lowell National Historical Park in the Commonwealth of Massachusetts, and for other purposes.

Lowell National Historical Park, Mass.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

FINDINGS AND PURPOSE

16 USC 410cc.

Section 1. (a) The Congress finds that—

(1) certain sites and structures in Lowell, Massachusetts, historically and culturally the most significant planned industrial city in the United States, symbolize in physical form the Industrial Revolution;

(2) the cultural heritage of many of the ethnic groups that immigrated to the United States during the late nineteenth and early twentieth centuries is still preserved in Lowell's neighbor-

(3) a very large proportion of the buildings, other structures, and districts in Lowell date to the period of the Industrial Revolution and are nationally significant historical resources, including the five-and-six-tenths-mile power canal system, seven original mill complexes, and significant examples of early housing, commercial structures, transportation facilities, and buildings associated with labor and social institutions; and

(4) despite the expenditure of substantial amounts of money by the city of Lowell and the Commonwealth of Massachusetts for historical and cultural preservation and interpretation in Lowell, the early buildings and other structures in Lowell may be lost without the assistance of the Federal Government.

(b) It is the purpose of this Act to preserve and interpret the nationally significant historical and cultural sites, structures, and districts in Lowell, Massachusetts, for the benefit and inspiration of present and future generations by implementing to the extent practicable the recommendations in the report of the Lowell Historic Canal District Commission.

DEFINITIONS

16 USC 410cc-1.

Sec. 2. For purposes of this Act—

(1) the term "park" means the Lowell National Historical Park, established by section 101(a) (1) of this Act;
(2) the term "preservation district" means the Lowell Historic Preservation District, established by section 101(a) (1) of this Act;

(3) the term "Commission" means the Lowell Historic Preservation Commission established by section 301(a) of this Act;

(4) the term "Secretary" means the Secretary of the Interior; and

(5) the term "report of the Lowell Historic Canal District Commission" means the report submitted to the Congress by the Lowell Historic Canal District Commission pursuant to an Act entitled "An Act to provide for a plan for the preservation, inter-

PUBLIC LAW 95-290-JUNE 5, 1978

92 STAT. 291

pretation development and use of the historic, cultural, and architectural resources of the Lowell Historic Canal District in Lowell, Massachusetts, and for other purposes", approved January 4, 1975 (88 Stat. 2330).

16 USC 461 note.

TITLE I—ESTABLISHMENT OF PARK AND PRESERVATION DISTRICT

ESTABLISHMENTS; BOUNDARIES

Sec. 101. (a) (1) To carry out the purpose of this Act, there is 16 USC established as a unit of the National Park System in the city of Lowell, 410cc-11. Massachusetts, the Lowell National Historical Park. There is further established in an area adjacent to the park the Lowell Historic Preservation District, which will be administered by the Secretary and by the Commission in accordance with this Act. The boundaries of the park and preservation district shall be the boundaries depicted on the map entitled "Lowell National Historical Park, Massachusetts", dated March 1978, and numbered "Lowe-80,008A". Such map shall be on file and available for inspection in the office of the National Park Service, Department of the Interior, and in the office of the city clerk, city of Lowell.

(2) The Secretary shall publish in the Federal Register, as soon as Publication in practicable after the date of the enactment of this Act, a detailed description and map of the boundaries established under paragraph

(1) of this subsection.(b) The Secretary may make minor revisions of the park and preservation district boundaries established under subsection (a) (1) of this section, after consulting with the Commission and the city manager of Lowell, by publication of a revised drawing or other boundary description in the Federal Register; but no waters, lands, or other property outside of the park or preservation district boundaries established under such subsection may be added to the park or preservation district without the consent of the city manager of Lowell and the city council of Lowell. A boundary revision made under this subsection shall be effective only after timely notice in writing is given to the Congress.

Notice to Congress.

410cc-12.

COPPERATION OF FEDERAL AGENCIES

Sec. 102. (a) Any Federal entity conducting or supporting activities 16 USC directly affecting the park or preservation district shall-

(1) consult with, cooperate with, and to the maximum extent practicable, coordinate its activities with the Secretary and with the Commission; and

(2) conduct or support such activities in a manner which (A) to the maximum extent practicable is consistent with the standards and criteria established pursuant to section 302(e) of this Act, and (B) will not have an adverse effect on the resources of the park or preservation district.

(b) No Federal entity may issue any license or permit to any person to conduct an activity within the park or preservation district unless such entity determines that the proposed activity will be conducted in a manner consistent with the standards and criteria established pursuant to section 302(e) of this Act and will not have an adverse effect on the resources of the park or preservation district.

Federal Register.

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AUTHORIZATION OF APPROPRIATIONS

16 USC 410cc-13. Sec. 103. (a) There are authorized to be appropriated such sums as

may be necessary to carry out this Act, except that—
(1) the total of the amounts authorized to be appropriated for the purpose of acquisition and development under the park management plan established pursuant to section 201(b) of this Act and emergency assistance under section 205(a) (1) of this

Act shall not exceed \$18,500,000; and
(2) the total of the amounts authorized to be appropriated for the purpose of carrying out section 302(b) (2) of this Act, for the payment of grants and loans under section 303 of this Act, for the acquisition of property under section 304 of this Act, and for carrying out any transportation program and any educational and cultural program described in section 302(c) of this Act shall not exceed \$21.500.000.

(b) No funds shall be authorized pursuant to this section prior to October 1, 1978.

(c) Funds appropriated under subsection (a) of this section shall

remain available until expended.

(d) (1) Within 60 days after the date of the enactment of this Act, and on each subsequent October 1 and March 1, the Secretary shall submit to the Congress a statement certifying the aggregate amount of money expended by the Commonwealth of Massachusetts, the city of Lowell, and by any nonprofit entity for activities in the city of Lowell consistent with the purpose of this Act during the period beginning on January 1, 1974, and ending on the date such statement is submitted.

(2) The aggregate amount of funds made available by the Secretary to the Commission from funds appropriated under subsection (a) (2) of this section may not exceed the amount certified by the Secretary in the most recent statement submitted to the Congress under paragraph (1) of this subsection.

SPENDING LIMITATIONS

16 USC 410cc-14.

Report to Congress.

> Sec. 104. Notwithstanding any other provision of this Act, no authority to enter into agreements or to make payments under this Act shall be effective except to the extent, or in such amounts, as may be provided in advance in appropriation Acts.

TITLE II—ROLE OF THE SECRETARY

PARK MANAGEMENT PLAN

Report to Congress. 16 USC 410cc-21.

SEC. 201. (a) The Secretary shall submit a statement to the Congress, within two years after the date on which funds are made available to carry out this Act, which-

(1) reports on the progress that the Secretary has made in acquiring the properties identified under section 202 of this Act, and describes the way the Secretary intends to use these

(2) identifies the properties within the park and preservation district respecting which the Secretary has entered into or intends to enter into agreements relating to interpretive exhibits or programs under section 203(a) of this Act;

(3) (A) reports on the progress of the Secretary in leasing a portion of the Lowell Manufacturing Company, located on Market Street, for the purpose of establishing a visitors' center in close proximity to parking and other transportation facilities, and (B) identifies any other property within the park which the Secretary has leased or intends to lease for purposes of the park;

(4) reports any other activities which the Secretary has taken or intends to take to carry out the purpose of this Act; and

(5) contains a tentative budget for the park and preservation district for the subsequent five fiscal years.

(b) (1) Not later than three years after the date on which funds are made available to carry out this Act, the Secretary shall establish and submit to the Congress a park management plan containing the information described in subsection (a) of this section. Such plan shall, upon request, be available to the public.

(2) After consulting with the Commission, the city manager of Lowell, and the Commonwealth of Massachusetts, the Secretary may make revisions in the park management plan established pursuant to paragraph (1) of this subsection by publication of such revisions in the Federal Register. A revision made under this paragraph shall be effective 90 days after written notice of the revision is submitted to the Congress.

Plan, submittal to Congress.

Availability to public.

Publication in Federal Register.

Notice to Congress.

ACQUISITION OF PROPERTY

Sec. 202. (a) (1) The Secretary is authorized to acquire the properties designated in paragraph (2) of this subsection, or any interest therein, by donation, purchase with donated or appropriated funds, condemnation, or otherwise. Any property or interest therein owned by the Commonwealth of Massachusetts or any political subdivision thereof may be acquired only by donation. The Secretary may initiate condemnation proceedings under this paragraph only after making every reasonable effort to acquire property through negotiations and purchase, and consulting with the Commission (if established) and the city council of Lowell.

(2) The properties referred to in paragraph (1) of this subsection are the following:

(A) The Linus Childs House, 63 Kirk Street.

(B) The H and H Paper Company (commonly referred to as Boott Mill Boarding House), 42 French Street.

(C) Old City Hall, 226 Merrimack Street.

(D) Merrimack Gatehouse, 269 Merrimack Street.

(E) The Wannalancit Textile Company, 562 Suffolk Street.
(F) The structures containing the Jade Pagoda and Solomon's Yard Goods, 210 and 200 Merrimack Street.

(b) Until the date on which the Commission conducts its first meeting, the Secretary may acquire any property within the park or preservation district not designated in subsection (a)(2) of this section, or any interest therein, if such property—

(1) is identified in the report of the Lowell Historical Canal District Commission as a property which should be preserved, restored, managed, developed, or maintained in a manner con-

sistent with the purpose of this Act;

(2) is listed in the National Register of Historic Places, as maintained by the Secretary pursuant to section 101(a) of the Act entitled "An Act to establish a program for the preservation of additional historic properties throughout the Nation, and for other purposes", approved October 15, 1966 (16 U.S.C. 470a), and section 2(b) of the Act entitled "An Act to provide for the preservation of historic American sites, buildings, objects, and

16 USC 410cc-22.

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antiquities of national significance, and for other purposes",

approved August 21, 1935 (16 U.S.C. 462); or

(3) is determined by the Secretary to be of national significance; and would be subject to demolition or major alteration in a manner inconsistent with the purposes of this Act unless acquired by the Secretary. Such property may be acquired only as provided in subsection (a) (1) of this section.

(c) The Secretary may acquire easements within the park for the purpose of carrying out this Act. Such easements may be acquired only

as provided in subsection (a) (1) of this section.

AGREEMENTS AND TECHNICAL ASSISTANCE

16 USC 410cc-23. Sec. 203. (a) The Secretary may enter into agreements with any owner of property with national historic or cultural significance within the park to provide for interpretive exhibits or programs. Such agreements shall provide, whenever appropriate, that—

(1) the public may have access to such property at specified, reasonable times for purposes of viewing such property or the exhibits or attending the programs established by the Secretary

under this subsection; and

(2) the Secretary may make such minor improvements to such property as the Secretary deems necessary to enhance the public use and enjoyment of such property, exhibits, and programs.

(b) (1) The Secretary shall provide, upon request, technical

assistance to-

Regulations.

(A) the city of Lowell to assist the city in establishing regulations or laws consistent with the standards and criteria established pursuant to section 302(e) of this Act; and

(B) the Commission to assist the Commission in establishing the index and the standards and criteria required by section 302

of this Act.

(2) The Secretary may provide to any owner of property within the park or preservation district, the Commission, the Commonwealth of Massachusetts, the city of Lowell, and any other Federal entity or any institution such technical assistance as the Secretary considers appropriate to carry out the purpose of this Act.

WITHHOLDING OF FUNDS

16 USC 410cc-24. Sec. 204. The Secretary may refuse to obligate or expend any money appropriated for the purposes described in section 103(a)(1) of this Act or section 103(a)(2) of this Act if the Secretary determines that—

(a) the city of Lowell has failed to establish regulations or laws consistent with the standards and criteria established pursuant to section 302(e) of this Act within one year after the date such standards and criteria have been established, except that the Secretary may extend such one-year period for not more than six months if the Secretary determines that the city has made a good faith effort to establish such regulations or laws;

(b) the city of Lowell has failed to notify the Commission of (1) applications for building permits or zoning variances respecting any property which is included in the index established pursuant to section 302(d) of this Act, or (2) any proposals of the city of Lowell to change the regulations or laws described in

paragraph (c) (1) of this subsection;

(c) (1) during the period before the city of Lowell has established regulations or laws consistent with the standards and criteria established pursuant to section 302(e) of this Act, the city of Lowell has granted any building permit or zoning variance or has taken any other action respecting any property within the park or preservation district, which either the Secretary or the Commission consider to be inconsistent with such standards and

(2) after the city of Lowell has established the regulations or laws described in subparagraph (1) of this paragraph, the city of Lowell has granted any building permit or zoning variance or has taken any other action respecting any property within the park or preservation district, which either the Secretary or the Commission consider to be inconsistent with such regulations or

(d) the Commission has not made good faith efforts to (1) provide for the preservation, restoration, management, development, or maintenance of property within the park and preservation district or (2) carry out the park preservation plan approved under section 302 of this Act.

GENERAL ADMINISTRATIVE FUNCTIONS

SEC. 205. (a) (1) The Secretary, acting through the National Park 16 USC Service, shall take appropriate actions to implement to the extent practicable the park management plan established pursuant to section 201(b) of this Act. In carrying out such plan, the Secretary shall administer the park in accordance with laws, rules, and regulations applicable to the national park system. Before the date on which the Commission conducts its first meeting, the Secretary may take any other action the Secretary deems necessary to provide owners of property with national historic or cultural significance within the park or preservation district with emergency assistance for the purpose of preserving and protecting their property in a manner consistent with the purpose of this Act.

(2) Subject to sections 204 and 302(b) of this Act, the Secretary shall make available to the Commission any funds appropriated under section 103(a)(2) of this Act for the purpose of carrying out title III

(b) Notwithstanding any other provisions of law, the Secretary may accept donations of funds, property, or services from individuals, foundations, corporations, and other private entities, and from public entities, for the purpose of implementing the park management plan.

(c) The Secretary may sponsor or coordinate within the park and preservation district such educational or cultural programs as the Secretary considers appropriate to encourage appreciation of the resources of the park and preservation district.

(d) The Secretary may acquire such leases respecting property within the park as may be necessary to carry out the purpose of this Act.

TITLE III—ROLE OF THE COMMISSION

ESTABLISHMENT OF LOWELL HISTORIC PRESERVATION COMMISSION

Sec. 301. (a) There is established within the Department of the 16 USC Interior a commission to be known as the Lowell Historic Preservation Commission which shall administer the preservation district and provide certain services within the park in accordance with this title. The

410cc-25.

Rules and regulations.

Funds, availability.

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Commission shall consist of fifteen members appointed by the Secretary as follows:

(1) Three members who are members of the city council of Lowell, appointed from recommendations made by the mayor of Lowell

(2) Three members appointed from recommendations made by the city manager of Lowell of persons who are representative of organized labor, the business community, local neighborhoods, and cultural institutions, and who are not elected officials.

(3) One member appointed from recommendations made by the

president of the University of Lowell.

(4) Three members appointed from recommendations made by

the Governor of the Commonwealth of Massachusetts.

(5) One member appointed from recommendations made by the Secretary of Commerce and who shall be an employee of the Department of Commerce.

(6) One member appointed from recommendations made by the Secretary of Transportation and who shall be an employee of

the Department of Transportation.

7) One member appointed from recommendations made by the Secretary of Housing and Urban Development and who shall be an employee of the Department of Housing and Urban Development.
(8) Two members who are qualified to serve on the Commission

because of their familiarity with programs of the Department of the Interior involving national parks and historic preservation and who shall be an employee of the Department of the Interior.

- (b) If any member of the Commission who was appointed to the Commission under paragraph (1) or (4) of subsection (a) of this section as a member of the city council of Lowell or any other government leaves that office, or if any member of the Commission who was appointed from persons who are not elected officials of any government becomes an elected official of a government, such person may continue as a member of the Commission for not longer than the thirty-day period beginning on the date such person leaves that office or becomes such an elected official, as the case may be.
- (c) (1) Except as provided in paragraph (2) of this subsection, members shall be appointed for terms of two years. A member may be reappointed only three times unless such member was originally appointed to fill a vacancy pursuant to subsection (e) (1) of this section, in which case such member may be reappointed four times.

(2) Of the members first appointed pursuant to subsection (a) of this section, the following shall be appointed for terms of three years:

(A) The members appointed pursuant to paragraphs (2), (3), and (8) of such subsection.

(B) One of the members appointed pursuant to paragraph (4) of such subsection, as designated by the Secretary at the time of appointment upon recommendation of the Governor.

(d) The chairman of the Commission shall be elected by the members of the Commission. The term of the chairman shall be two years. (e) (1) Any vacancy in the Commission shall be filled in the same

manner in which the original appointment was made.

(2) Any member appointed to fill a vacancy shall serve for the remainder of the term for which his predecessor was appointed. Any member may serve after the expiration of his term for a period not longer than thirty days.

(f) Eight members of the Commission shall constitute a quorum, but a lesser number may hold hearings.

(g) The Commission shall meet at least once each month, at the

call of the chairman or a majority of its members.

(h)(1) Except as provided in paragraph (2) of this subsection, members of the Commission shall each be entitled to receive \$100 for each day (including travel time) during which they are engaged in the performance of the duties of the Commission.

(2) Members of the Commission who are full-time officers or employees of the United States, the city of Lowell, or the Commonwealth of Massachusetts shall receive no additional pay on account of

their service on the Commission.

(3) While away from their homes or regular places of business in the performance of services for the Commission, members of the Commission shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in the Government service are allowed expenses under section 5703 of title 5 of the United States Code.

(i) The Commission established pursuant to this Act, shall cease Termination. to exist ten years from the date of enactment of this Act.

PARK PRESERVATION PLAN AND INDEX

Sec. 302. (a) (1) Within one year after the date on which the Com- 16 USC mission conducts its first meeting, the Commission shall submit to 410cc-32. the Secretary a draft park preservation plan meeting the requirements of subsection (c) of this section. The Secretary shall review the draft park preservation plan and, within ninety days after the date on which such plan is submitted to the Secretary, suggest appropriate changes in such plan to the Commission.

(2) Within eighteen months after the date on which the Commission conducts its first meeting, the Commission shall submit to the Secretary a park preservation plan which meets the requirements of subsection (c) of this section. The Secretary shall, within ninety days after the date on which such plan is submitted to the Secretary, approve or disapprove such plan. The Secretary may not approve such plan unless the Secretary determines that such plan would adequately carry out the purpose of this Act.

(3) If the Secretary disapproves a park preservation plan, the Secretary shall advise the Commission of the reasons for such disapproval together with the recommendations of the Secretary for revision of such plan. Within such period as the Secretary may designate, the Commission shall submit a revised park preservation plan to the Secretary. The Secretary shall approve or disapprove any revised park preservation plan in the same manner as required in paragraph (2) of this subsection for the approval or disapproval of the original park preservation plan.

(4) If the Secretary approves a park preservation plan, the Secretary shall publish notice of such approval in the Federal Register and shall forward copies of the approved plan to the Congress.

(5) Any park preservation plan or draft plan submitted to the Availability to Secretary under this subsection shall, upon request, be available to public.

the public.

(6) No changes other than minor revisions may be made in the approved park preservation plan without the approval of the Secretary. The Secretary shall approve or disapprove any proposed change in the approved park preservation plan, except minor revisions in the

Publication in Federal Register.

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same manner as required in paragraph (2) of this subsection for the approval or disapproval of the original park preservation plan.

(b) (1) Except as provided in paragraph (2) of this subsection, the Secretary shall not make any funds available to the Commission to carry out section 303 or 304 of this Act until a park preservation plan has been approved under subsection (a) of this section.

Funds, availability.

- (2) Before a park preservation plan is approved under subsection (a) of this section, the Secretary may make available to the Commission such funds as the Commission may request to carry out any activity specified in paragraph (3) of this section. However, no funds shall be made available under this paragraph unless a proposal describing such activity is reviewed and approved by the Secretary.
 - (3) The Commission may request funds from the Secretary to—
 (A) carry out activities to preserve, restore, manage, develop, or maintain any property identified in subsection (c)(1) of this section;
 - (B) take any action the Commission considers necessary to provide owners of property with national historical or cultural significance within the park or preservation district with emergency assistance for the purpose of preserving and protecting their property in a manner consistent with the purpose of this Act; or

Act; or

(C) acquire in accordance with section 304 of this Act, any property within the park which—

(i) is identified in the report of the Lowell Historic Canal District Commission as a property which should be preserved, restored, managed, developed, or maintained in a

manner consistent with the purpose of this Act;

(ii) is listed in the National Register of Historic Places, as maintained by the Secretary pursuant to section 101(a) of the Act entitled "An Act to establish a program for the preservation of additional historic properties throughout the Nation, and for other purposes", approved October 15, 1966 (16 U.S.C. 470a), and section 2(b) of the Act entitled "An Act to provide for the preservation of historic American sites, buildings, objects, and antiquities of national significance, and for other purposes", approved August 21, 1935 (16 U.S.C. 462); or

(iii) is determined by the Secretary to be of national significance;

and would be subject to demolition or major alteration in a manner inconsistent with the purpose of this Act unless acquired by the Commission.

(c) Any plan submitted to the Secretary under subsection (a) of this section shall—

- (1) describe the manner in which the Commission, to the extent practicable in accordance with the recommendations in the report of the Lowell Historic Canal District Commission, proposes to provide for the preservation, restoration, management, development, or maintenance of—
 - (A) the Welles Block, 169 Merrimack Street;
 - (B) the Jordan Marsh Company Building, 153 Merrimack Street and 15 Kirk Street;

(C) the Yorick Club, 91 Dutton Street;

- (D) the Lowell Gas Light Company, 22 Shattuck Street; (E) St. Anne's Church and Rectory, 237 Merrimack Street;
 - (F) Lowell Institution for Savings, 18 Shattuck Street;

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(G) the Ahepa Building, 31 Kirk Street; (H) Boott Mill, Foot of John Street;

(I) Lowell Manufacturing Company on Market Street;

(J) the structure commonly referred to as the Early Residence, 45, 47, and 49 Kirk Street;

(2) identify the properties included in the index established

pursuant to subsection (d) of this section;

(3) identify the properties which the Commission intends to acquire under section 304 of this Act and specify how such properties shall be used;

(4) include the standards and criteria established pursuant to subsection (e) of this section;

(5) provide a detailed description of the manner in which the Commission intends to implement the grant and loan programs under section 303 of this Act, including information relating to the estimated amount of such grants and the manner in which such grants shall be awarded by the Commission;

(6) provide for a transportation program by which the Commission shall provide, directly or by agreement with any person or any public or private entity, transportation services and facilities for park and preservation district visitors, including barge equipment, docking facilities, and local rail facilities;
(7) provide for educational and cultural programs to encour-

age appreciation of the resources of the park and preservation

district; and

(8) include a tentative budget for the subsequent five fiscal

(d) The Commission shall establish, within one year after the date Index. on which the Commission conducts its first meeting, an index which includes

(1) any property in the park or preservation district (except for any property identified in section 201(a) (2) of this Act) which should be preserved, restored, managed, developed, maintained, or acquired by the Commission because of its national historic or cultural significance; and

(2) any property which should be preserved, restored, managed, developed, or maintained in a manner compatible with the purpose of this Act because of its proximity to (A) any property referred to in paragraph (1) of this subsection, or (B) any property designated in section 201(a) (2) of this Act.

The index may be modified only by a majority vote of the members

of the Commission, taken when a quorum is present.

(e) (1) The Commission shall establish standards and criteria Standards and applicable to the construction, preservation, restoration, alteration, and use of all properties within the preservation district with the advice of the Commonwealth of Massachusetts and of the Secretary, and the

consent of the city manager of Lowell.

(2) The Commission shall establish the standards and criteria described in paragraph (1) of this subsection for any property within the park with the advice of the Commonwealth of Massachusetts and the city manager of Lowell and subject to the review and approval of the Secretary.

(3) The Commission shall establish standards and criteria under paragraphs (1) and (2) of this subsection within one year after the date on which the Commission conducts its first meeting. Such stand-

criteria.

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ards and criteria may be revised in the same manner in which they were originally established.

Publication in Federal Register. (4) The Secretary shall publish the standards and criteria established under paragraphs (1) and (2) of this subsection, and any revisions thereof, in the Federal Register.

LOANS, GRANTS, AND TECHNICAL ASSISTANCE

16 USC 410cc-33. Sec. 303. (a) The Commission may make loans to the Lowell Development and Financial Corporation (established under chapter 844 of the Massachusetts General Laws and hereinafter referred to as the "corporation") to enable the corporation to provide low interest loans for the preservation, restoration, or development of any property described in section 302(d) (1) of this Act. The Commission may make any such loan to the corporation only after entering into a loan agreement with the corporation which includes the following terms:

(1) The loan to the corporation shall have a maturity of thirty-five years. At the end of such period, the corporation shall repay to the Secretary of the Treasury (in a lump sum) for deposit in the general fund of the Treasury the full amount of the loan and any additional amounts accruing to the corporation pursuant to this subsection excepting those amounts expended by the corporation for reasonable administrative expenses.

(2) The money received from the Commission, and any interest earned on such money, may be obligated by the corporation only for low interest loans made under paragraphs (6) and (7) of this subsection, except that the corporation may use such money to the extent the Commission considers reasonable to satisfy the costs of the corporation in administering the loan or procuring loan guarantees or insurance.

(3) Within five years after receiving the loan from the Commission, the corporation shall make loans under paragraphs (6) and (7) of this subsection which, in the aggregate, obligate the full amount of money received from the Commission (minus any amount required to satisfy the costs described in paragraph (2) of this subsection).

(4) As loans made under paragraphs (6) and (7) of this subsection are repaid, the corporation shall make additional loans under such paragraphs with the money made available for obligation by such repayments.

tion by such repayments.

(5) The corporation shall make available to the Commission and to the Secretary, upon request, all accounts, financial records, and other information related to loans made under paragraphs (6) and (7) of this subsection.

(6) Before the corporation approves any application for a low interest loan for which money has been made available to the corporation by the Commission, the corporation shall require the prospective borrower to furnish the corporation with a statement from the Commission stating that the Commission has reviewed the application and has determined that any loan received by the prospective borrower will be spent in a manner consistent with—

(A) the standards and criteria established pursuant to section 302(e) of this Act, and

(B) the goals of the park preservation plan approved under section 302(a) of this Act.

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(7) The corporation may approve any application for a low interest loan which meets the terms and conditions prescribed by the corporation with the approval of the Commission and for which money has been made available to the corporation by the Commission if—

(A) the prospective borrower furnishes the corporation with the statement described in paragraph (6) of this

subsection;

(B) the corporation determines that such borrower has sufficient financial resources to repay the loan; and

(C) such borrower satisfies any other applicable credit

criteria established by the corporation.

In order to determine whether the corporation has complied with this subsection, the Commission, or such other appropriate person or entity as the Commission may designate, shall conduct an audit at least once every two years of all accounts, financial records, and other information related to loans made under paragraphs (6) and (7) of this subsection. If the Commission determines, after conducting a hearing on Hearing. the record, that the corporation has substantially failed to comply with this subsection, the outstanding balance of any loan made to the corporation under this subsection shall become payable in full upon the demand of the Commission.

(b) (1) The Commission may make grants to owners of property described in section 302(d)(1) of this Act for the preservation, restoration, management, development, or maintenance of such property in a manner consistent with the standards and criteria established pursuant

to section 302(e) of this Act.

(2) The Commission, with the approval of the Secretary, may make grants to any person or any public or private entity to provide for (i) educational and cultural programs which encourage appreciation of the resources of the park and preservation district, or (ii) any planning, transportation, maintenance, or other services the Commission

considers necessary to carry out the purposes of this Act.

(3) Grants under this subsection shall be made under agreements which specify the amount of the grant, the installments (if any) by which the grant shall be paid to the grant recipient, the purpose for which the grant may be used, and any other condition the Commission considers appropriate. The Commission shall be entitled, under the terms of any grant agreement, to recover from the recipient any funds used in a manner inconsistent with such grant agreement.

(c) The Commission with the advice of the Secretary may provide

technical assistance to-

(1) owners of property within the park or preservation district to assist such owners in (A) making repairs to or improvements in any property included in the index established pursuant to section 302(d) of this Act, or (B) applying for loans under subsection (a) of this section; and

(2) any other person or public or private entity to assist such person or entity in taking actions consistent with the purpose of

(d) The Commission shall make available to the Secretary, upon request, all accounts, financial records, and other information of the Commission relating to grants and loans made under this section.

(e) The Secretary shall make an annual report to the Congress describing the loans, grants, and technical assistance provided under this section and under section 203 of this Act. Such report shall specify the amount, recipient, and purpose of any loan, grant or technical

Report to Congress.

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assistance so provided and contain such additional information as the Secretary considers appropriate.

ACQUISITION AND DISPOSITION OF PROPERTY

16 USC 410cc-34. Sec. 304. (a) (1) The Commission may acquire any property designated in paragraph (3) of this subsection, any property described in section 302(d) (1) of this Act, or any interest therein, by donation, by purchase with donated or appropriated funds, or by condemnation in

accordance with paragraph (2) of this subsection.

(2) Only properties within the park or property designated in paragraph (3) of this subsection may be acquired by the Commission by condemnation. The Commission may initiate condemnation proceedings only after making every reasonable effort to acquire any such property through negotiations and purchase and consulting with the city council of Lowell. No lands or interests therein may be acquired by the Commission by condemnation without the approval of the Secretary.

(3) The Commission may acquire in accordance with paragraph (1) of this subsection the following properties, or any interest therein:

(A) World Furniture Building, 125 Central Street; and
(B) The Martin Building, 102-122 Central Street.

(b) The Commission, with the approval of the Secretary, may sell or lease any property which it acquires under subsection (a) of this section subject to such deed restrictions or other conditions as the

Commission deems appropriate to carry out the purpose of this Act. (c) Pursuant to a written agreement between the Commission and the Commonwealth of Massachusetts, the Commission, with the approval of the Secretary, may sell, donate, lease, or in any other manner the Commission and the Secretary deem appropriate make available to the Commonwealth any property which the Commission has acquired under subsection (a) of this section in order to provide for the administration or maintenance of such property by the Commonwealth in a manner consistent with the purpose of this Act.

POWERS OF COMMISSION

Hearings. 16 USC 410cc-35. Sec. 305. (a) The Commission may for the purpose of carrying out this Act hold such hearings, sit and act at such times and places, take such testimony, and receive such evidence, as the Commission may deem advisable. The Commission may administer oaths or affirmations to witnesses appearing before it.

(b) When so authorized by the Commission, any member or agent of the Commission may take any action which the Commission is

authorized to take by this section.

(c) Subject to section 552a of title 5, United States Code, the Commission may secure directly from any department or agency of the United States information necessary to enable it to carry out this Act. Upon request of the chairman of the Commission, the head of such department or agency shall furnish such information to the Commission.

(d) Notwithstanding any other provision of law, the Commission may seek and accept donations of funds, property, or services from individuals, foundations, corporations, and other private entities, and from public entities, for the purpose of carrying out its duties.

(e) The Commission may use its funds to obtain money from any source under any program or law requiring the recipient of such money to make a contribution in order to receive such money.

(f) The Commission may use the United States mails in the same manner and upon the same conditions as other departments and

agencies of the United States.

(g) The Commission may obtain by purchase, rental, donation, or otherwise, such property, facilities, and services as may be needed to carry out its duties. Any acquisition of property by the Commission shall be in accordance with section 304 of this Act: Provided, however, That the Commission may not acquire lands or interests therein pursuant to this subsection by condemnation. Upon the termination of the Commission, all property, personal and real, and unexpended funds shall be transferred to the Department of the Interior.

STAFF OF COMMISSION

Sec. 306. (a) The Commission shall have a Director who shall be 16 USC appointed by the Commission and who shall be paid at a rate not to exceed the rate of pay payable for grade GS-15 of the General Schedule.

(b) The Commission may appoint and fix the pay of such addi-

tional personnel as the Commission deems desirable.

(c) The Director and staff of the Commission may be appointed without regard to the provisions of title 5, United States Code, governing appointments in the competitive service, and may be paid without regard to the provisions of chapter 51, and subchapter III of chapter 53 of such title relating to classification and General Schedule pay rates, except that no individual so appointed may receive pay in excess of the annual rate of basic pay payable for grade GS-15 of the General

(d) Subject to such rules as may be adopted by the Commission, the Commission may procure temporary and intermittent services to the same extent as is authorized by section 3109(b) of title 5, United States Code, but at rates determined by the Commission to be reasonable.

(e) (1) Upon request of the Commission, the head of any Federal agency represented by members on the Commission may detail, on a reimbursable basis, any of the personnel of such agency to the Commission to assist it in carrying out its duties under this Act.

(2) The Administrator of the General Services Administration shall provide to the Commission on a reimbursable basis such administrative support services as the Commission may request.

Approved June 5, 1978.

 $\pm 10cc - 36$.

3 CFR, 1977 Comp., p. 142. 5 USC 5332 note.

5 USC 5101 et seq. 5 USC 5331.

LEGISLATIVE HISTORY:

HOUSE REPORT No. 95-1023 (Comm. on Interior and Insular Affairs). SENATE REPORT No. 95-813 (Comm. on Energy and Natural Resources). CONGRESSIONAL RECORD, Vol. 124 (1978):

Apr. 3, considered and failed of passage in House.

Apr. 11, considered and passed House.

May 18, considered and passed Senate, amended.

May 23, House concurred in Senate amendments.
WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS, Vol. 14, No. 23:

June 5, Presidential statement.

Appendix B: Inventory of Administrative Commitments

Title / Agency / Organization	Purpose / Description	Expiration Date	Responsible Party						
	Memorandums of Agreement								
General Services Administration	Electric power supply for 14 park utility accounts.	March 2017	Administrative Officer						
City of Lowell Massachusetts Historical Commission, Trinity Hamilton Canal Limited Partnership, Lowell Historic Board	Historic preservation requirements for Hamilton Canal District—April 2, 2009.	None	Assistant Superintendent for Development						
Massachusetts Division of Capital Asset Management, Massachusetts Historical Commission, Lowell Historic Board	Historic preservation requirements for Lowell Judicial Center, Jackson St., Lowell, MA MHC #45314—May 14, 2009.	None	Assistant Superintendent for Development						
	Memorandums of Und	erstanding							
City of Lowell Police Department	Mutual law enforcement and protection assistance.	March 28, 2018	Chief Ranger						
City of Lowell	Interpretive and recreational activities—Mack Playground.	December 12, 2022	Superintendent						
Middlesex Community College	Building of kiln that would serve as a community resource.	December 14, 2016	Chief Cultural Resources and Park Facility Manager						
Massachusetts Department of Environmental Management	Use of visitor center parking lot by department staff and visitors.	None	Superintendent						
	Interpark Agree	ment							
Boston National Historical Park	Emergency dispatch services.	In process	Chief Ranger						
	Cooperative Agree	ements							
City of Lowell	Canalway and Riverwalk projects; multimodal transportation improvements.	September 1, 2017, and September 1, 2018	Park Planner						
The Lowell Plan, Inc.	Economic development, historic preservation, environmental improvement, cultural tourism, interpretation, education.	October 1, 2017	Chief of Cultural Resources						
Lowell Festival Foundation	Ethnic and cultural events; Lowell Folk Festival and Summer Music Series.	April 20, 2020	Chief of Cultural Resources						
The New England Electric Railway Historical Society	Economic development, historic preservation, energy conservation, and cultural tourism.	September 30, 2017	Park Planner						

Title / Agency / Organization	Purpose / Description	Expiration Date	Responsible Party					
Cooperative Agreements (continued)								
Cultural Organization of Lowell, Inc.	Cultural tourism at Lowell Canal/River Walkway.	December 31, 2017	Park Planner					
University of Massachusetts Lowell Graduate School of Education	Curriculum-based education programs for students and educators in partnership with NPS staff.	September 30, 2017	Chief of Interpretation and Education					
Student Conservation Association	Centennial intern, summer interns, youth engagement and development.	September 30, 2016, and December 10, 2019	Park Volunteer and Youth Program Coordinator and NPS Youth Program Manager					
Community Teamwork Inc.	Youth programming-maintenance, trades skills, theater and community action teams.	September 30, 2019	Park Volunteer and Youth Program Coordinator					
Greater Merrimack Valley Convention	Economic development and cultural tourism in Lowell.	September 30, 2018	Park Media and Com- munications staff and Superintendent's office					
Eastern National	Cultural and educational activities, programs and events including programs with A Brush With History, Inc.	2020	Chief of Interpretation and Education					
	General Agreem	ents						
University of Massachusetts	Provide and maintain information technology fiber optic expansion in two areas.	August 6, 2020	Superintendent					
Boott Mill Developer LLC	Design, install and maintain decorative banners at Boott Mills.	September 10, 2018	Superintendent					
Town of Chelmsford	Maintain and operate Traveler Information System.	June 21, 2018	Superintendent					
Angkor Dance Troupe, Inc.	Provide public with interpretation and education services.	February 18, 2020	Chief of Interpretation and Education					
	Leases (park pays	rent)						
Market Mills Associates	42,210 square feet of Mill Building at 246 Market Street, Lowell, MA; used for NPS Visitor Center, NPS Protection Office, Lowell Telecommunications Corp, Community Teamwork Inc., and Brush with History Studios & Gallery. National Park Service pays rent, for trash removal, and NPS portion of gas usage.	Option to terminate September 30, 2018; expires May 26, 2022; option to continue rent at nominal amount per year after May 26, 2022 (see lease for purchase option after May 26, 2022)	Administrative Officer					
University of Massachusetts	7,211 square foot common area at Wannalancit Mill, 600 Suffolk Street, Lowell, MA, to access turbine exhibit. National Park Service pays rent and for electricity.	September 30, 2019	Administrative Officer					

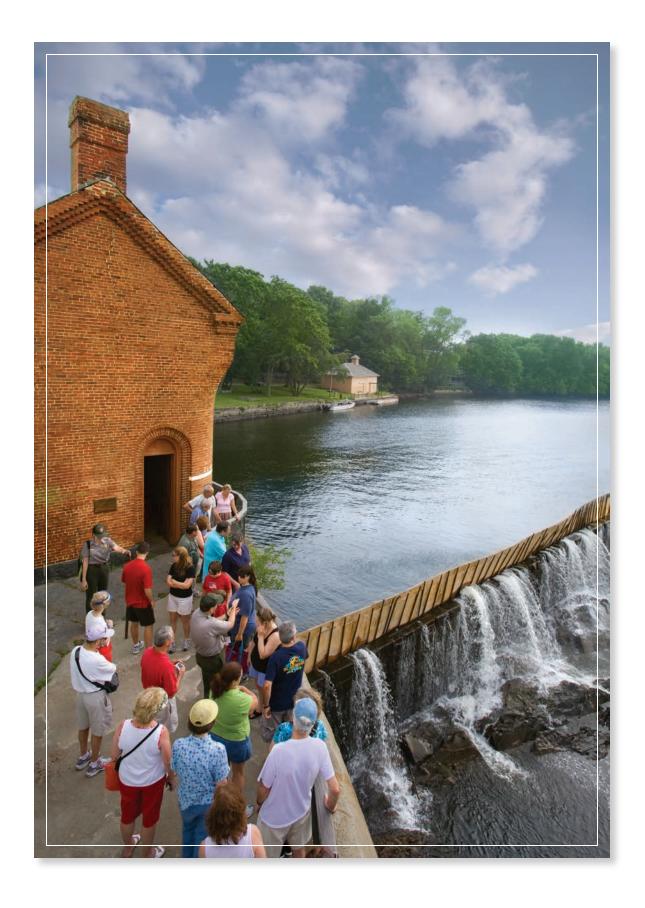
Title / Agency / Organization	Purpose / Description	Expiration Date	Responsible Party
	Leases (park pays	rent)	
AP Boott Mills LLC	6,520 square foot Boott Cotton Storehouse, 40 French Street, Lowell, MA. (Note: 480 square feet are paid by NPS Northeast Region.)	September 30, 2019	Administrative Officer
East Mills Limited Partnership	2,025 square foot basement space. Boott Mill Tract 104-10. Equipment for Boott Mill cooling tower operation. Upon expiration of lease National Park Service to remove 13 tanks and reroute pipes, panel, pumps, etc.	May 31, 2020	Superintendent
	Leases (park receiv	es rent)	
Community Teamwork Inc.	7,900 square feet, 246 Market Street, Lowell, MA; for day care center.	June 5, 2026	Administrative Officer
Lowell Telecommunications Corporation	8,985 square feet, 246 Market Street. Rent amortized for capital improvements made by lessee.	November 30, 2019	Administrative Officer
Enterprise Bank and Trust Company	Old City Hall building and land tract. September 8, 2015, report "pending review" feasibility of constructing new building on parking lot. Biennial inspection due on or before May 1, 2017 (see Exhibit H: 23 windows, 7 transoms; 11 doors).	December 14, 2045	Administrative Officer
	Special Park U	ses	
Special use permits	In fiscal year 2015, (21) special use permits were issued to include the following uses: theater (4); conference room (8); special events (7); political rally (1); canal tour (1). In fiscal year 2015, 5 commercial film or photography special-use permits were issued.		Park Ranger (Special Events) and Media and Communications Officer



Appendix C: Past and Ongoing Park Planning and Data Collection Efforts

Document Name	Year
National Register of Historic Places—City Hall Historic District.	1975
National Register of Historic Places—Lowell Locks and Canals Historic District.	1976
Report of the Lowell Historic Canal District Commission to the Ninety Fifth Congress of the United States.	1977
National Register of Historic Places—Lowell National Historical Park.	1978
Wyma, C., and P. Cloyd. Historic Structure Report—Suffolk Mills.	1979
Roberts, S.K. <i>Historic Structure Report—The Moody Street Feeder (Merrimack Gatehouse).</i>	1979
Robbins, J. Historic Structure Report—Boott Cotton Mills and Massachusetts Cotton Mills Agents House—Architectural Data.	1979
Cultural Resources Inventory.	1980
Gross, M., et al. <i>Economic Impact Analysis</i> .	1980
Draft Resource Management Plan.	1980
Interpretive Prospectus.	1980
Energy Conservation Study—A Cost-Effective Plan for Energy Independence.	1980
Mahlstedt, T.F. Historic Structure Report—Northern Canal Guard Gatehouse Complex, Francis Gate Complex, Swamp Locks, Lower Locks—Archeological Data Section.	1980
Preservation Plan.	1980
Details of the Preservation Plan.	1980
Final Environmental Impact Statement.	1981
General Management Plan.	1981
Fiero, K.W. Archeological Testing—Dutton Street Parking Lot.	1981
Unrau, H.D. Historic Structure Report—Old City Hall Historic Data Section.	1982
Booth, A., and H.D. Unrau. <i>Historic Structure Report—Pawtucket Canal and Northern Canal Lock Structures Historic Data Section</i> .	1982
Economic Feasibility Study—Trolley and Barge Transportation System.	1983
Mahlstedt, T.F. Historic Structure Report—Archeological Data Section.	1983
Interpretive Prospectus.	1984
Land Protection Plan with Addendums.	1984
Feasibility and Operations Analysis Lowell Electrified Trolley System—Extended Trackage, Year Round Service.	1985
Visitor Use Patterns and Interpretive Effectiveness in Two Urban Historical Parks: Boston and Lowell.	1986

Document Name	Year
Bellows Woods, N. The Lowell Park Trolley, Development and Implementation: A Thesis.	1986
Interdisciplinary Investigations of the Boott Mills—vol. 1: Life at the Boarding Houses Cultural Resources Management Study.	1987
Interdisciplinary Investigations of the Boott Mills—vol. 2: The Kirk Street Agents' House Cultural Resources Management Study.	1987
Interdisciplinary Investigations of the Boott Mills—vol. 3: The Boarding House System as a Way of Life Cultural Resource Management Study, with Appendices.	1987
Preservation Plan Amendment.	1990
National Register of Historic Places Registration Form—Lowell National Historical Park and Preservation District.	1993
Strategic and Annual Performance/Work Plans.	1997
Phillips, M.K. Historic Structure Report—Kirk Street Agents' House.	1997
Long-Range Interpretive Plan.	1997
Wall, C. Visitor Study: Summer 1997.	1998
Engineering Study for Roads.	1998
Alternative Transportation Systems Study.	2001
Volpe, J.A. Alternative Transportation System—Historic Trolley Planning Study.	2002
Griswold, W.A. et al. Supplementary Excavations at the Kirk Street Agents' House.	2003
General Management Plan Addendum.	2003
The Road Inventory of Lowell National Historical Park—LOWE—1780, Cycle 3 Report.	2005
Long-Range Interpretive Plan [Second Draft].	2005
Collection Management Plan.	2007
30 Years of Preservation and Innovation for Future Generations—1978-2008.	2008
General Management Plan/Environmental Assessment with FONSI.	2010
Forrant, R., and C. Strobel. <i>Ethnicity in Lowell—Ethnographic Overview and Assessment.</i>	2011
Scope of Collections Statement.	2011
Park Asset Management Plan.	2013
Road Inventory and Condition Assessment of Lowell National Historical Park— Cycle 5 Report.	2013
Lowell National Historical Park List of Classified Structures.	2016



Northeast Region Foundation Document Recommendation Lowell National Historical Park

September 2017

This Foundation Document has been prepared as a collaborative effort between park and regional staff and is recommended for approval by the Northeast Regional Director.

RECOMMENDED

Celeste Bernardo, Superintendent, Lowell National Historical Park

leste Bunarole

Date

APPROVED

Gay Vietzke, Regional Director, Northeast Region

Date





As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historic places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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