



**The Battle Road Scenic Byway:
Access to Recreation for the 250th
Anniversary of the American
Revolution**

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Abstract

The Battle Road Scenic Byway follows the path of British soldiers on April 19, 1775, during the opening battles of the American Revolution. Just miles outside of Boston, the 17-mile roadway connects the towns of Arlington, Lexington, Lincoln, Concord, and Minute Man National Historical Park. In 2012 the Battle Road was designated a scenic byway by the Commonwealth of Massachusetts, and in 2021 it was designated an All-American Road. Now, the Battle Road Scenic Byway committee and its member entities are preparing for 2025, when the nation will celebrate the 250th anniversary of the American Revolutionary War events that took place on our Byway. The project proposal implements key recommendations of the Byway's Corridor Management Plan to enhance visitor experience by assessing and improving signage and other tourism infrastructure, providing safe access for an anticipated increase in visitation, and improving resource stewardship for the many assets on the Byway that contribute to its intrinsic qualities.

Applicant Information

The Massachusetts Department of Transportation (MassDOT) is the lead applicant in partnership with the Battle Road Scenic Byway Committee (Committee). MassDOT oversees roads, public transit, aeronautics, and transportation licensing and registration across the state as well as the state scenic byway program. The Battle Road Scenic Byway Corridor Management Plan was originally adopted in May of 2011 and was updated in the fall of 2019 to apply for the federal All-American Road designation. The Byway's most notable intrinsic qualities are historical and cultural. It is also home to significant natural, recreational, scenic, and archaeological intrinsic qualities that are well documented in the Corridor Management Plan.

Project Description

The Battle Road Scenic Byway runs 17 miles from urban Arlington to rural Concord, Massachusetts. While each of the four communities host key elements of the Byway, certain stretches of it are not clearly identified and therefore are difficult for Byway visitors to navigate holistically. Not all parts of the Byway are cyclist and pedestrian friendly, nor is it entirely accessible to Byway visitors.

With funding from this grant program, the Battle Road Scenic Byway can be prepared with uniform, modern signage indicating sites along the byway for the 200,000 additional visitors anticipated for the 250th anniversary celebration of the American Revolutionary War. Each member entity will use these funds to shore up resources for access to recreation and tourism infrastructure that will host guests from around the world. Specifically, the project contains five main elements to improve the Byway and the visitor experience: signage assessment and implementation along the entire Byway, improvements to tourism infrastructure in Arlington, the construction of new walking and biking trails in Lincoln, safe bike path crossing in Lexington, and improvements along the Byway in Lexington, Lincoln, Concord and Minute Man National Historical Park. Our historic sites, visitor centers, walking and biking paths, and roadways all need to be prepared to handle the additional visitation, and this grant will make that possible.

1. Implementation of Developed Sign Program: The Battle Road Scenic Byway Corridor Management Plan highlighted the need for branding and showcasing the route. The Byway Committee approved the design of a suite of signs with clear branding and logos. The sign program, however, was never implemented due to lack of funding. As a result, the Byway's route is not clear, and it is sometimes difficult for visitors to navigate from one historic site to another. A review of existing signs will be conducted to improve the visitor experience by reducing sign clutter and make room for the newly designed Byway route finding signs.
2. Tourism Infrastructure Improvements in Arlington: The Town of Arlington is home to 21 sites on the Byway, including the Jason Russell House, where the bloodiest battle on April 19, 1775 took place. Tourism infrastructure in the town, however, is lacking. The municipal parking lots in Arlington do not currently have tour bus parking spaces, which prevents tour buses from stopping. With funding from this grant, we can undergo a municipal lot redesign that can accommodate tour buses, which will enable Arlington to host the additional visitation in 2025 and sustain higher levels of tourist traffic. In addition, our Visitor Center does not have any climate control, and therefore it is only open on a seasonal basis. We seek additional funds to install a highly efficient air-source heat pump that will provide energy efficient heating and cooling with lower greenhouse gas emissions.
3. Pedestrian and Bicycle Paths to safely access and cross the section of The Battle Road Byway located within Minute Man National Historical Park and the Town of Lincoln:
The section of the Battle Road Byway that is located within Minute Man National Historical Park (The Park) and the Town of Lincoln is also Route 2A, a State Road which has a posted speed limit of 40 mph. Vehicles routinely exceed this posted speed. Route 2A bisects The Park and is also at times part of or runs parallel to the historic Battle Road. This section of the Byway/Route 2A is heavily used by cyclists and pedestrians trying to access the Park and the Battle Road for recreational, historical, and cultural purposes. Safety concerns will be exacerbated by the major influx of tourists expected for the 250th anniversary of the American Revolution in 2025. MassDOT is currently working on a resurfacing project that will include traffic calming measures along the Byway and crosswalks at these two locations scheduled to be completed prior to 2025. The proposed paths, located on land owned by the Town of Lincoln, will link to these crosswalks, providing a seamless and safe access for pedestrians and bicyclists to Minute Man National Historical Park.
All parking lots and many visitor amenities are located on the north side of the Byway/Route 2A, together with many historic sites. At present, there is no safe access from the south side of the Byway/Route 2A for Park visitors. Similarly, residents and bicyclists on the south side of the Byway/Route 2A who would like to cross over to the north side do not have path connections in areas that are safe for crossing. This aspect of our proposed project includes the design, engineering, and construction of two multi-use paths to provide a safe way for cyclists and pedestrians to access and cross the Byway to take advantage of the Park and the Battle Road for recreational, historical, and cultural purposes. Both the Minute Man National Historical Park and the Town of Lincoln support the paths project. The paths will be designed and constructed prior to the 250th Anniversary Celebration in 2025.

A 150' +/- path is proposed to run parallel to the south side of the Byway/Route 2A connecting Mill Street in Lincoln to the Park's parking lot at the Paul Revere Capture site. The path will be 8' wide to be constructed of ADA compliant hard packed gravel. Depending on the final design, an existing post and rail fence in the area may be removed, replaced, and relocated to delineate the path and separate it from vehicle traffic on the Byway/Route 2A. An 850' +/- path on the south side of the Byway/Route 2A connecting Bedford Lane in Lincoln to an area across from Bedford Lane on the north side of the Byway, providing a connection to the Hartwell Tavern area in the park. The path will be 8' wide to be constructed of ADA compliant hard packed gravel.

4. Safe Pedestrian and Bicycle Crossings at the Minuteman Bikeway: In Lexington, the Minuteman Bikeway crosses the Battle Road Scenic Byway at Hancock Street. The Minuteman Bikeway runs directly behind the Lexington Visitor Center and parallels much of the bikeway carries and crosses the Byway on Hancock Street is consistently rated as a dangerous intersection. The Minuteman Bikeway is popular with commuters and Byway visitors and carries 5000 people daily but is considered a high crash location by the Lexington Police. The Bikeway currently crosses the Byway at an angle making sightlines for both vehicles and bicyclists poor. The Lexington Engineering Division has been working on plans to make the crossing safer by adding an S-curve to the bikeway creating a safer perpendicular intersection. These plans need to be brought to 100% and built.
5. Resource Stewardship on Byway: The Resource Stewardship portion of this proposal will directly benefit the experience of all Byway travelers as well as the general public. The historic and cultural intrinsic qualities which support the Byway's designation will be improved along a continuous eight-mile stretch within Lexington, Lincoln, and all of Minute Man National Historical Park. Rehabilitating roadsides and adjacent historic landscapes, opening historic vistas, replacing stretches of failing traditional split-rail fences, and improving the stone walls along the corridor will provide a more scenic and historic context for the Byway and the national park and help visitors to better understand their stories. The work will complement and be carefully coordinated with the national park's related project to rehabilitate the park's historic resources, enhance visitor experience and restore elements of the battlefield landscape by 2025. Together with implementation of the Byway's sign program, the prominence of the Byway will be greatly improved. This program will advance the following Battle Road Scenic Byway Corridor Management Plan Goals, Recommendations, and related Action Steps:

Visitor Experience: Improve visibility of and access to historic sites on the Byway with new, uniform signage and improvement of scenic and historic resources across all four Byway communities, including the removal of obsolete signage in each town. Removing the clutter will help visitors focus on historical and cultural experiences. Providing safe pedestrian access and bicycle crossings will help visitors better access the historic sites. Tourism infrastructure, including the installation of bus parking spaces and a heating and cooling system in Arlington's Visitor Center will accommodate more visitors safely.

Continuity and Beautification: Removing old signage and replacing it with new, uniform signs will improve visual continuity of the Byway, enhance its scenic qualities, and create an uninterrupted visitor experience.

Stewardship: To ensure that existing Byway resources remain in good condition, the installation of split-rail fencing will enhance the scenic quality of the Byway in Concord.

Requested Grant Amount and Local Match Sources

Total FHWA Request: \$940,910

MassDOT 20% non-federal match: \$274,423

Additional Non-federal match (Minute Man NHP): \$156,780.00

Total Project Cost: \$1,372,113.00

Project Selection Criteria

1. Challenges or Issues the Proposed Project Seeks to Address

This project will complement comprehensive work underway by Minute Man National Historical Park that will improve park resources that enhance the Byway experience. The project also builds on a current MassDOT resurfacing project that includes pedestrian safety improvements to be completed in time for the 250th Celebration in 2025. The actions included are tangible, impactful and are easily obligated and implemented.

2. How the Proposed Project Will Achieve One or More of the National Scenic Byway Program Goals

- a. **Safety:** The proposed project directly impacts the **safety** of the visitors as the project provides for pedestrian refuges and access at key locations and guides visitors with clear signage.
- b. **Equity and Accessibility:** The proposed project promotes **equity and access** as the project provides important heating and cooling aiding the comfort of all our visitors. In addition, by providing access via pedestrian paths and refuges, paved trails and accessible parking, visitors can get off the road and enjoy the historic sites.
- c. **Economic Strength:** The proposed project supports the **economic strength** of our communities with uniform signs encouraging visitors to stay on the Byway and support the local commercial offerings in each Town as well as support the Minute Man National Historical Park.
- d. **Climate and Sustainability:** The proposed project supports **climate and sustainability** as the accessibility improvements will encourage visitors to get out of their cars and explore the Byway's offering on foot.

3. Proposed Timeline

Scenic and historic landscapes needing rehabilitation are already identified. Upon grant award a scope of work will be developed, and an RFP will be distributed. Work will be conducted by contractors overseen by MassDOT, the Towns or Minute Man National Historical Park.

Design concepts for the paths have already been developed. Upon grant award a public meeting will be held to develop the final design, 100% design plan will be completed, and an RFP will be distributed. Work will be conducted by contractors overseen by the Town of Lincoln Department of Public Works and Minute Man National Park and Massachusetts Department of Transportation. The work will be completed by December 31, 2024.

Wayfinding and branding signs have already been designed and routed. Upon grant award final locations will be vetted with each Town's Select Board, Massachusetts Department of Transportation, and Minute Man National Park, and an RFP for sign manufacturing and installation will be distributed. Work will be conducted by contractors overseen by each

Town. The work will be completed by December 31, 2024.

The installation of an air-source heat pump in Arlington’s Visitor Center can take place immediately upon receipt of funding. Parking lot planning can commence with procurement beginning in the fall of 2022 and planning continuing through spring of 2023. Once a design has been finalized we can put the project out to bid in early 2024 for the work to be completed in the spring of the same year.

For Bikeway safety improvements in Lexington, design concepts have already been developed. Upon grant award a public meeting will be held to develop final design for the crossing, a 100% design plan will be completed, and an RFP will be distributed. Work will be conducted by contractors overseen by the Town of Lexington Engineering Division. The work will be completed by December 31, 2024.

Work on planning, coordination and permitting for stewardship actions (roadside and landscape rehabilitation and split rail replacement will begin immediately upon notification of grant award and will continue through spring 2023 with bid target late fall/early spring 2023 and completion by fall, 2024. Work will be overseen by DOT, the national park and/or the towns.

4. Proposed Project Budget

<u>TASK: DESIGN AND CONSTRUCTION OF ADA-COMPLIANT ACCESS PATHS</u>	
<u>Item</u>	<u>Cost</u>
<u>Survey</u>	<u>\$25,000.00</u>
<u>Design and Engineering</u>	<u>\$13,778.00</u>
<u>Clearing and Grubbing</u>	<u>\$2,963.00</u>
<u>Path Construction</u>	<u>\$11,852.00</u>
<u>Remove/Replace Post & Rail Fence</u>	<u>\$20,000.00</u>
<u>Grading, Fill, Loam, Seeding, Restoration</u>	<u>\$30,000.00</u>
<u>Permitting and Project Management</u>	<u>\$25,000.00</u>
<u>Contingency</u>	<u>\$28,704.00</u>
<u>Total</u>	<u>\$157,297.00</u>
<u>TASK: RESOURCE STEWARDSHIP ADJACENT TO THE BYWAY</u>	
<u>Roadside Clearing</u>	<u>\$202,613.00</u>
<u>Barrett's Mill Road</u>	
<u>Lexington Road – Merriam's Corner</u>	
<u>Old Mass Avenue – Wood Street</u>	
<u>Route 2A:</u>	
<u>Brooks Area</u>	
<u>Ranger Station Area</u>	
<u>Hanscom Drive Area</u>	
<u>Mill Street</u>	
<u>Minute Man Park Visitor Center</u>	

<u>Old Mass Ave/Wood Street</u>	
<u>Landscape Rehabilitation</u>	<u>\$92,500.00</u>
<u>Lexington Road:</u>	
<u>Ox Cart Path</u>	
<u>Captain Beatty</u>	
<u>Route 2A:</u>	
<u>Brooks Road Area</u>	
<u>Shadyside Road Area</u>	
<u>Field south of Revere Capture Site</u>	
<u>Split Rail Fencing</u>	<u>\$224,250.00</u>
<u>Barrett's Mill Road</u>	
<u>Lexington Road – Wayside</u>	
<u>Route 2A:</u>	
<u>Lexington Road/Brooks Area</u>	
<u>South of Paul Revere Capture Site</u>	
<u>Hanscom Drive Area</u>	
<u>Airport Road Area</u>	
<u>Old Mass Ave/Wood Street</u>	
<u>Design Contingency</u>	<u>\$44,850.00</u>
<u>Escalation: 3 years</u>	<u>\$43,464.00</u>
<u>Consulting Fees</u>	<u>\$60,768.00</u>
<u>Total</u>	<u>\$668,445.00</u>
<u>TASK: SIGN FABRICATION AND INSTALLATION</u>	
<u>Review Existing Signs to Reduce Clutter</u>	<u>\$25,000.00</u>
<u>Fabrication: Signs + Posts</u>	<u>\$36,697.00</u>
<u>Installation + Removal + Police Details</u>	<u>\$24,000.00</u>
<u>Field Work</u>	<u>\$20,000.00</u>
<u>Permits</u>	<u>\$2,000.00</u>
<u>Contingency</u>	<u>\$20,674.00</u>
<u>Total</u>	<u>\$128,371.00</u>
<u>TASK: ARLINGTON VISITOR CENTER AND PARKING LOTS</u>	
<u>HVAC System for Visitor Center</u>	<u>\$10,000.00</u>
<u>Parking Lot Improvements</u>	<u>\$200,000.00</u>
<u>Total</u>	<u>\$210,000.00</u>
<u>TASK: IMPROVE BIKEWAY CROSSING IN LEXINGTON</u>	

<u>Design and Public Meeting</u>	<u>\$16,000.00</u>
<u>Construction</u>	<u>\$150,000.00</u>
<u>Equipment (RRFB or HAWK system)</u>	<u>\$42,000.00</u>
<u>Total</u>	<u>\$208,000.00</u>
<u>Total Project Cost, All Tasks</u>	<u>\$1,372,113.00</u>
<u>Non-federal matches that have been offered to reduce grant request:</u>	
<u>MMNHP</u>	<u>\$156,780.00</u>
<u>MassDOT: 20% of Total Project Cost</u>	<u>\$274,423.00</u>
<u>Total Grant Request</u>	<u>\$940,910.00</u>

5. How the Project Will Benefit the Byway Community and/or Traveler and How It Will Help Manage the Byway's Intrinsic Qualities

Together, all four elements of this proposed project will protect the scenic, historical, recreational, cultural, natural, and archaeological integrity of the Byway and its adjacent areas. Appropriate signage paired with new trails will keep people safe on the Byway and prevent them from straying into areas containing historical, cultural, and archaeological resources requiring protection. New tourist infrastructure will provide energy-efficient opportunities for tourists to visit Arlington by bus and enjoy the various historical and cultural resources with an improved visitor experience in a climate-controlled visitor center using clean energy. Providing access to recreational opportunities, the new trails will safely provide access to historical sites on the Byway in Lincoln and at The Park. Resource stewardship improvements will enhance the scenic and historical qualities of the Byway along 8 continuous miles of the Byway. In addition to meeting the critical need of accommodating additional tourism traffic in the next three years, our communities will benefit from the long-term economic impacts of this tourism increase and the improvements to our tourism and recreation infrastructure.

6. How We Will Evaluate Success of Proposed Project in Meeting Stated Purpose and Goals, Including Specific Evaluation Metrics

The Committee will measure the success of the proposed improvements in our towns by tracking visitation to our visitor centers, occupancy of bus parking, municipal lot parking revenues, and meals and hotel tax income. We can also track visitation to The Park as well as other sites on the Byway. We recently have partnered with our regional planning agency, the Metropolitan Area Planning Council (MAPC), to create uniform metrics for tracking tourism impacts across our communities. Implementing the tools and survey methods we have created with MAPC, we are well positioned to measure the impacts of these interventions and to share them back with the FHWA if our proposal is funded.