



# The Battle Road Scenic Byway: Road to Revolutions

Arlington • Lexington • Lincoln • Concord



**Corridor Management Plan**  
May 2011





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May 2011



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**massDOT**  
Massachusetts Department of Transportation

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# The Battle Road Scenic Byway: Road to Revolutions

## Arlington • Lexington • Lincoln • Concord

### EXECUTIVE SUMMARY

**Vision for the Battle Road Scenic Byway Corridor Management Plan:** The interplay between tradition and innovation is at the heart of corridor management planning for the Battle Road Scenic Byway. Four towns – Arlington, Lexington, Lincoln, and Concord – along with Minute Man National Historical Park, the Massachusetts Department of Transportation and the Metropolitan Area Planning Council are collaborating to highlight the historic, cultural, recreational, scenic, and natural resources along this route. Through input from community members and town officials, the *Battle Road Scenic Byway Corridor Management Plan* proposes strategies to manage transportation, land use, and tourism along the Byway. The plan provides a guide for preserving and promoting Byway resources while recognizing that development pressures and opportunities exist in close proximity to these esteemed resources.

**One Road, Many Revolutions!** The Battle Road Scenic Byway is the Road to Revolutions. Following the approximate path of British regulars on April 19, 1775 during the battles that marked the start of the American Revolution, this storied route is also home to literary, environmental, and technological revolutions that have shaped the American experience. Located in the Massachusetts towns of Arlington, Lexington, Lincoln, and Concord, this Byway includes Minute Man National Historical Park and other sites associated with the American Revolution. It also features sites associated with early conservationists, prominent abolitionists and former slaves, some of the 19<sup>th</sup> century's most celebrated authors, and innovators of cutting edge technologies from the 1600s through today.

The Battle Road Scenic Byway was designated as a Massachusetts State Scenic Byway in 2006 with the intention of recognizing, protecting, and enhancing its unique resources. In 2007, the Metropolitan Area Planning Council (MAPC), on behalf of the four towns and Minute Man National Historical Park (MMNHP), was awarded a grant to develop a Corridor Management Plan from the Federal Highway Administration's National Scenic Byway Program and a match from the Massachusetts Highway Department (which is now the Massachusetts Department of Transportation Highway Division).

The Battle Road Scenic Byway Working Group was designated to oversee the development of the *Battle Road Scenic Byway Corridor Management Plan* in April 2009. The Core Working Group consisted of two representatives from each town appointed by their Board of Selectmen, one representative from Minute Man National Historical Park (MMNHP), and one representative from MAPC. In addition to the Core Working



**The Road to Revolutions:** the storied Battle Road Scenic Byway has sparked revolutionary thought and action essential to the American narrative.

#### Chapter 345 of the Acts of 2006

##### AN ACT DESIGNATING IN THE TOWNS OF ARLINGTON, LEXINGTON, LINCOLN AND CONCORD A SCENIC BYWAY TO BE KNOWN AS THE BATTLE ROAD: THE ROAD TO REVOLUTIONS.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same as follows:

Notwithstanding section 15C of chapter 40B of the General Laws, a portion of Massachusetts avenue in the town of Arlington, Massachusetts avenue, Old Massachusetts avenue and portion of state highway Route 2A, Wood street and Hancock street in the town of Lexington, North Gate road in the town of Lincoln, and Lexington road and portion of Monument street and Liberty street in the town of Concord shall be designated and known as the Battle Road: the Road to Revolutions Scenic Byway.

The Battle Road: the Road to Revolutions scenic byway shall begin on Massachusetts avenue at the intersection of Tufts street in the town of Arlington and shall proceed generally northeast along Massachusetts avenue, with a spur to the Hancock Clarke house on Hancock street, and continue on Massachusetts avenue to Market road, and also branches to Wood street, Old Massachusetts avenue and Massachusetts avenue, through the town of Lexington, where both branches shall merge with North Gate road in the town of Lincoln and continue northeast to Lexington street and Monument square in the town of Concord, where it turns northeast to Monument street then southeasterly to Liberty street, terminating at the Battle monument and Master Field of the Minute Man National Historical Park.

The purpose of the Battle Road: the Road to Revolutions scenic byway designation shall be to recognize, protect and enhance the unique historic, scenic, cultural and recreational resources along the byway, including preservation of the character of the corridor, expansion of economic opportunities, development of balanced tourism and a context in which to evaluate proposed roadway changes. The towns of Arlington, Concord, Lexington and Lincoln shall work in cooperation with the National Park Service to preserve the resources and improve the experience of the byway for both residents and visitors.

Approved November 8, 2006.

The Battle Road Scenic Byway was designated by the Massachusetts Legislature and approved by the Governor on November 8, 2006 under Chapter 345 of the Acts of 2006.

Group, one Board of Selectmen liaison was appointed by each Town. The work of developing the plan was carried out by MAPC. The project's administrative partner was the Massachusetts Department of Transportation Office of Transportation Planning.

Public input was gathered in a variety of ways throughout this project. The Battle Road Scenic Byway Working Group held periodic public forums, subcommittee meetings on transportation, land use, and tourism, and maintained an email distribution list and project website, [www.battleroadscenicbyway.org](http://www.battleroadscenicbyway.org). In addition to the use of email and the project website, meetings were publicized with flyers posted in key community locations, on social networking websites, and in local newspapers, blogs, town websites, and other locations. Throughout the process, MAPC invited the public to provide input at meetings, by email, or by mail. Comments were catalogued by MAPC staff and the final plan is the result of ideas posed by community members and other project stakeholders. The strategies used to engage the public that were the most popular included the use of virtual tours at every public meeting, the use of electronic keypads for audience polling, conversations with Working Group members at feedback stations or during question and answer periods during public meetings, the project website, and articles in local newspapers.

The Corridor Management Plan includes an introductory chapter, a chapter describing the Byway's intrinsic qualities, a chapter on transportation, a chapter on land use, a chapter on tourism and Byway promotion, and a chapter on project implementation. The document also features an inventory of sites and resources that contribute to the intrinsic qualities of the Byway and a series of maps: a project area overview map, a map for each of the four towns highlighting Byway resources, a zoning and historic districts map, a generalized land use map, a map showing areas of traffic concern, and a map showing the Byway's bicycle and pedestrian network. In addition to a list of dozens of recommendations and action steps that would help advance the plan's goals, the implementation chapter outlines the structure of a Battle Road Scenic Byway Task Force, an interim management entity that will work with project partners to establish a permanent management structure.



Numerous public forums were held in 2009-2011 to collect input on the Corridor Management Plan. This photo is from the public kickoff meeting held on June 16, 2009.



During development of the Corridor Management Plan, MAPC maintained a webpage on its website using the domain [www.battleroadscenicbyway.org](http://www.battleroadscenicbyway.org).



The Battle Road Scenic Byway as designated by the Commonwealth of Massachusetts is shown in red, with proposed extensions shown with red dashed lines. The purple dashed lines are the northern and southern loops of the Byway. These loops are not part of the designated Byway, but capture important resources that contribute to the Battle Road Scenic Byway Story. The lavender-colored line shown in Arlington and Lexington is the Minuteman Bikeway, the green is Minute Man National Historical Park, and the yellow stars show the location of Byway resources.

**Battle Road Scenic Byway Benefits and Goals:** Implementing the *Battle Road Scenic Byway Corridor Management Plan* will yield the 4 P's of Byway Benefits, as defined by the National Scenic Byways Program: Partnerships, Preservation, Promotion, and Pride. To ensure that the communities along the Battle Road Scenic Byway corridor receive these benefits, the Battle Road Scenic Byway Working Group developed the following goals to achieve each benefit.

### **Benefit: Partnerships**

**Organization:** Identify organizational structure(s) and assign responsibilities for achieving these goals.

**Coordination:** Use the Battle Road Scenic Byway to promote regional cooperation and partnerships.

### **Benefit: Preservation**

**Stewardship:** Use the Byway designation to promote stewardship of the corridor's historic, natural, scenic, cultural, recreational and archaeological resources and intrinsic qualities. Seek funding and develop new programs to support the Byway's resources and visitor attractions.

**Education and Awareness:** Increase awareness of the Byway's rich history and promote it as an educational resource.

### **Benefit: Promotion**

**Identity:** Create a distinct identity for the Battle Road Scenic Byway as a destination.

**Outreach and Communication:** Promote and communicate Byway initiatives to local stakeholders, and market the Byway to regional, state, national, and international audiences.

### **Benefit: Pride**

**Continuity and Beautification:** Improve visual continuity of the Battle Road Scenic Byway, enhance its scenic qualities, and create an uninterrupted visitor experience.

**Accessibility:** Make the Byway accessible to a diversity of potential visitors, including people of all ages, abilities, incomes, and ethnicities. Ensure that the entire Byway can be accessed by pedestrians, bicyclists, people with disabilities, mass transit riders, and motorists.

**Visitor Experience:** Ensure that the Byway is an exciting place to visit that has adequate traveler facilities and is easy and safe to navigate.



Each chapter in the *Battle Road Scenic Byway Corridor Management Plan* describes existing conditions and concludes with recommendations. The summaries below for Chapters 1-5 are primarily focused on existing conditions, and the summary for Chapter 6 includes highlights of the major recommendations identified during this community planning process.

**Chapter 1: Introduction** includes a description of the Battle Road Scenic Byway, the vision and goals for the Corridor Management Plan, information on the National Scenic Byways Program, a brief history of previous and current efforts to preserve the corridor, and an overview of the planning process for the Byway.

In April and May 2006, the Towns of Arlington, Lexington, Lincoln, and Concord all voted to support designation of the Battle Road Scenic Byway. The Battle Road Scenic Byway: Road to Revolutions was officially designated as a State Scenic Byway by the Massachusetts Governor on November 8, 2006 in Chapter 345 of the Acts of 2006.

The Battle Road Scenic Byway is about 14 miles long and begins at the intersection of Tufts Street and Massachusetts Avenue in Arlington, proceeds northwest along Massachusetts Avenue into Lexington with a spur to the Hancock/Clarke House on Hancock Street in Lexington. It continues on Massachusetts Avenue to Marrett Road near the I-95/Route 128 interchange, where it branches to Wood Street, Old Massachusetts Avenue, and Massachusetts Avenue through Lexington. The Wood Street/Old Massachusetts Avenue and Massachusetts Avenue/Marrett Road branches merge and proceed to North Great Road in Lincoln. The Byway continues westward along North Great Road in Lincoln to Lexington Street and Monument Square in Concord, and then turns northward to Monument Street in Concord. It then turns southwest onto Liberty Street in Concord, and ends at the Buttrick Mansion and Muster Field in Minute Man National Historical Park.

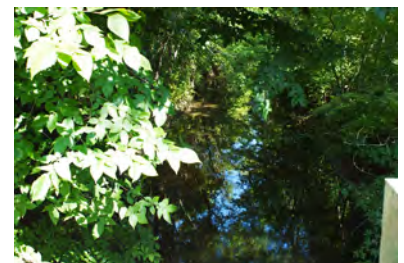
Through the corridor management planning process, community members and Working Group members have suggested adding approximately 3 miles to the Byway, extending it eastward about 0.8 miles to the Arlington/Cambridge line, including an additional 0.7 mile section of the original 1775 Battle Road in Arlington along Appleton Street and Paul Revere Road, and extending it about 1.5 miles westward in Concord to Barrett's Farm on Barrett's Mill Road. Legislation proposing these extensions to the Byway has been filed in the Massachusetts House of Representatives for the 2011-2012 legislative session.

In addition to these proposed extensions, the Working Group proposed a southern loop and northern loop in Concord and Lincoln to capture additional resources not located directly on the Byway such as Walden Pond, Gropius House, DeCordova Sculpture Park and Museum, Thoreau Farm, and Hangar 24. These loops are not currently proposed for extensions to the Byway, but may be included in promotional and interpretive materials for the Byway.

Bikeways and trails that closely follow the Byway, such as the Minuteman Commuter Bikeway and Battle Road Trail, help make the Byway more accessible to pedestrians and bicyclists. The Working Group and community members believe that continuous off road pedestrian and bicycle access should be aggressively pursued as part of implementing this Corridor Management Plan, and bikeways and trails should be treated as an integral part of the Byway whether or not they are officially designated as part of the Byway.

Efforts to preserve the Battle Road corridor began shortly after the American Revolutionary War ended. At the same time, the four towns that host the Battle Road Scenic Byway grew and modernized. The Battle Road corridor was a major travel route and parts of it became a state highway. An airport was established just north of the corridor in 1941, which was leased to the federal government for use by the

**Proposed Byway Extensions:**  
A bill has been filed with the Massachusetts Legislature to add 3 miles to the Battle Road Scenic Byway.



This plan proposes to extend the Byway to the Arlington town line at Alewife Brook Parkway.



Another proposed addition is a section of the original 1775 Battle Road in Arlington, which would include the home of Menotomy Minute Men Captain Benjamin Locke.



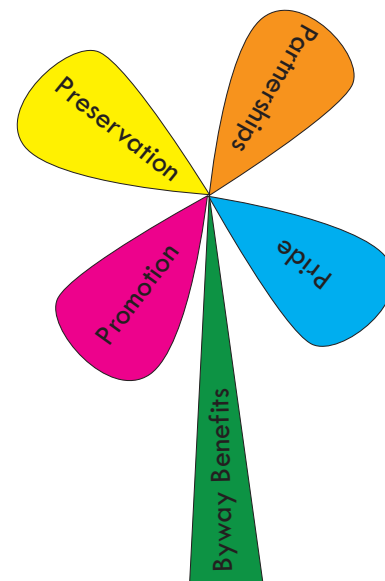
British troops had planned to seize cannon and other armaments from the Colonel James Barrett House in Concord on April 19, 1775. This plan proposes to extend the Byway to Barrett's Farm.

Air Force during World War II. This airport and Air Force Base became centers for technological innovation and major development and expansion occurred of their facilities occurred in the 1950s and 1980s. Development of military and aviation facilities in close proximity to the 1775 Battle Road, along with Post-World War II suburban development, could have resulted in a total loss of the colonial Battle Road landscape. Recognizing the need to identify and preserve significant colonial and revolutionary properties, the Boston National Historic Sites Commission recommended establishing a National Park along Battle Road. On September 21, 1959, Minute Man National Historical Park was established in the towns of Lexington, Lincoln, and Concord. Designation of the Battle Road Scenic Byway: Road to Revolutions as a State Scenic Byway, followed by the completion and implementation of this corridor management plan, are the latest preservation efforts in the 236 years since the battles of April 19, 1775.

The National Scenic Byways Program is managed by the U.S. Department of Transportation Federal Highway Administration and was established by federal transportation legislation in 1991 with a vision “to create a distinctive collection of American roads, their stories and treasured places.” The mission of the program is “to provide resources to the byway community in creating a unique travel experience and enhance local quality of life through efforts to preserve, protect, interpret, and promote the intrinsic qualities of designated byways.” It defines intrinsic qualities as the “scenic, historical, recreational, cultural, archaeological, or natural features that are considered unique, irreplaceable, or distinctly characteristic of an area.” The National Scenic Byways Discretionary Grants Program provides funding for projects to support and enhance National Scenic Byways, All-American Roads and State Scenic Byways. Since 1992, the National Scenic Byways Program has funded over 2,800 projects for state and nationally designated byways across the country.

The Battle Road Scenic Byway offers strong potential for federal designation as one of America’s Byways, and completion of this Corridor Management Plan is a step towards pursuing this national recognition. Located along the historic route where the first battles of the American Revolutionary War were fought, this Byway is already a destination unto itself. Every year, over a million people from around the world visit Minute Man National Historical Park, authors’ homes, and other sites located along this route. Every day, numerous residents, commuters, and visitors enjoy the Byway’s recreational offerings such as the Minuteman Bikeway and the Battle Road Trail. Every April scores gather at key battle sites to be educated and entertained by reenactments of events that changed the course of this country’s history. The Battle Road Scenic Byway has sites with scenic, natural, historic, cultural, and recreational intrinsic qualities.

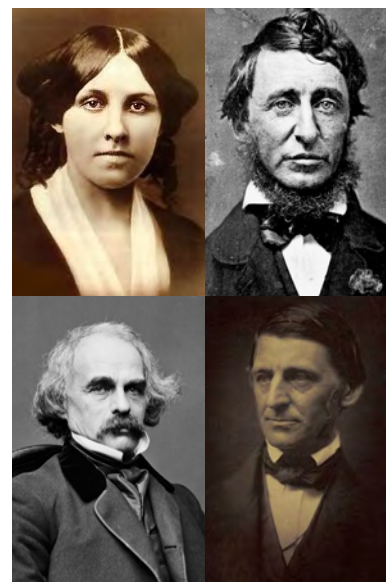
**Chapter 2: Intrinsic Qualities Management** includes detail on what makes the Battle Road Scenic Byway significant and worthy of preservation and promotion. The chapter includes a brief history of the corridor and tells the Battle Road Scenic Byway Story. This story involves many “revolutionary” themes, illustrating why the Battle Road Scenic Byway is the Road to Revolutions – this story goes beyond the events of April 19, 1775. In the nineteenth century, American literature and philosophies such as transcendentalism, civil disobedience, abolitionism, and conservation of the natural environment were hallmarks of Byway residents such as Henry David Thoreau, Louisa May Alcott, Ralph Waldo Emerson, and Nathaniel Hawthorne. The Byway also hosts a strong agricultural tradition. Many civic buildings along the Byway, which passes through three town centers, were endowed by local philanthropists in the nineteenth and twentieth century. Internationally renowned artists and architects lived and worked on or near the Byway, such as Daniel Chester French, who is best known for sculpting the seated Lincoln statue at the Lincoln Memorial in Washington, D.C., and Walter



The 4 P's of Byway Benefits



Every year, reenactments of the events of April 19, 1775 draw thousands of visitors to Arlington, Lexington, Lincoln, and Concord.



Louisa May Alcott, Henry David Thoreau, Nathaniel Hawthorne, and Ralph Waldo Emerson all lived and wrote along the Battle Road Scenic Byway.

Gropius, pioneer of modern architecture and father of the Bauhaus School. The Byway can also boast almost five centuries of technological innovation – from early mills and tanneries in the 1600s and 1700s, to ice harvesting on Spy Pond in Arlington in the 1800s, to innovations in radar technology, air defense and traffic control systems, inertial navigation, and aviation electronics in the twentieth century, to the high-tech innovations happening along the corridor happening today in the twenty-first century.

Historic resources along the Byway include a dozen sites related to the battles of April 19, 1775 including the Jason Russell House and Foot of the Rocks in Arlington, Lexington Battle Green, Bloody Angle in Lincoln, and Meriam's Corner and North Bridge in Concord. Additionally, over 40 witness houses, homes that date back to at least April 19, 1775, still exist along the Byway. The homes of Louisa May Alcott, Ralph Waldo Emerson, Nathaniel Hawthorne are located directly on the Byway and the birth home of Henry David Thoreau as well as a replica of his house near Walden Pond are nearby. Several burial grounds, sites associated with technological and industrial history, and civic buildings are also historic resources located along the Byway.

Cultural resources include interpretive efforts such as Minute Man National Historical Park's programs as well as the Walden Woods Project, which interprets the Byway's literary, conservation, and agricultural tradition, and the Drinking Gourd Project, which interprets its African-American and Abolitionist heritage. The Byway is host to several museums and visitor centers, which also provide additional cultural context for the Byway's incredible history and local traditions. There are dozens of commemorative markers, monuments and statues along the Byway. Historic military reenactments are a major cultural tradition along the Battle Road Scenic Byway and draw thousands of visitors every year.

Recreational resources along the Byway include an extensive bicycle and pedestrian network that includes the Minuteman Commuter Bikeway, which runs parallel to the Byway from Arlington Center to Lexington Center and the Battle Road Trail in Minute Man National Historical Park. Additionally, the Byway offers opportunities for canoeing and kayaking, as well as bird-watching and other recreational activities.

The Byway is also host to several natural and scenic amenities, such as the Great Meadows National Wildlife Refuge, the Olmsted Brothers-designed Winfield-Robbins Memorial Garden, and the North Bridge landscape.

**Chapter 3: Transportation** describes access to the Byway by major roads that connect with the Byway, as well as public transportation, bicycling, and pedestrian access to the Byway. It also describes characteristics of the roadway including jurisdiction and classification, pavement conditions, drainage, flood zones, streetscape, signage, and parking. Current and planned transportation improvement projects are listed. Traffic and safety conditions are described, including data on traffic volumes, the impact of Hanscom Field and Hanscom Air Force Base, and crash statistics. Areas of traffic concern – intersections along the Byway that are considered to be poorly designed and in need of improvement – are identified at 15 locations. Local roadway management policies, including Lexington's Traffic Calming Policy, Lincoln's Scenic Roads Bylaw, *Lincoln's Roadside Report* by the Lincoln Garden Club, and Concord's Context Sensitive Roads Policy are summarized. State and federal roadside improvement resources that the Battle Road Scenic Byway management entity can use to develop roadway development and design guidelines are listed and described.



The Byway is best experienced on foot. Improving the visitor experience for bicyclists and pedestrians is among the top recommendations for this plan.

**Chapter 4: Land Use** reviews current land uses and the regulations controlling land use and development along the Battle Road Scenic Byway. The review identifies gaps in current regulations and recommends strategies to ensure that the land use regulations protect and preserve the Byway's intrinsic qualities. The chapter begins with data and analysis of current land uses, protected open space, and population density in each Byway town. Environmental characteristics such as topography, wetlands, river floodplains, and geologic features are described. Anticipated future land use changes in each town are summarized. Current land management techniques including zoning, height, site plan review, historic districts, demolition delay, design guidelines, and other regulations are analyzed for each Byway town. Description of and compliance with outdoor advertising regulations is documented, which is required for inclusion in the Corridor Management Plan by the National Scenic Byways Program.

**Chapter 5: Tourism and Byway Promotion** includes a listing of the Byway visitor sites and resources in each town. It also describes tourism organizations in each town and in the region, including Town Tourism Committees, Historical

Societies, Chambers of Commerce, Town Celebrations Committees, tour offerings by public and private entities, and public-private collaborative organizations such as the Concord Historical Collaborative and the Friends of Minute Man National Park. The chapter also describes recent tourism-related studies of the Byway area. Promotions, special events, and interpretive activities are also described.

**Chapter 6: Implementation** outlines the next steps for the Battle Road Scenic Byway after this Corridor Management Plan is approved by the towns of Arlington, Lexington, Lincoln, and Concord, Minute Man National Historical Park, the Metropolitan Area Planning Council, Massachusetts Department of Transportation, and the Federal Highway Administration. A temporary Battle Road Scenic Byway Task Force will assume responsibility for moving this plan from approval to implementation, and will do so by proposing a permanent management structure and developing a Memorandum of Understanding for each entity to adopt. This chapter concludes with a comprehensive list of the recommendations and action steps identified to advance each of the nine Corridor Management Plan goals, culling together the recommendations and action steps identified in each of the previous chapters in this document.



Community members review implementation strategies at the final public meeting, an open house held at the Minute Man Visitor Center on March 31, 2011.

Out of dozens of recommendations and action steps identified in the Corridor Management Plan, described in Chapters 1-5 and listed in Chapter 6, the following eleven recommendations emerged as the highest priorities for implementation of the Battle Road Scenic Byway project goals. This top-eleven list can inform the work plan that will be developed by the Battle Road Scenic Byway Task Force.

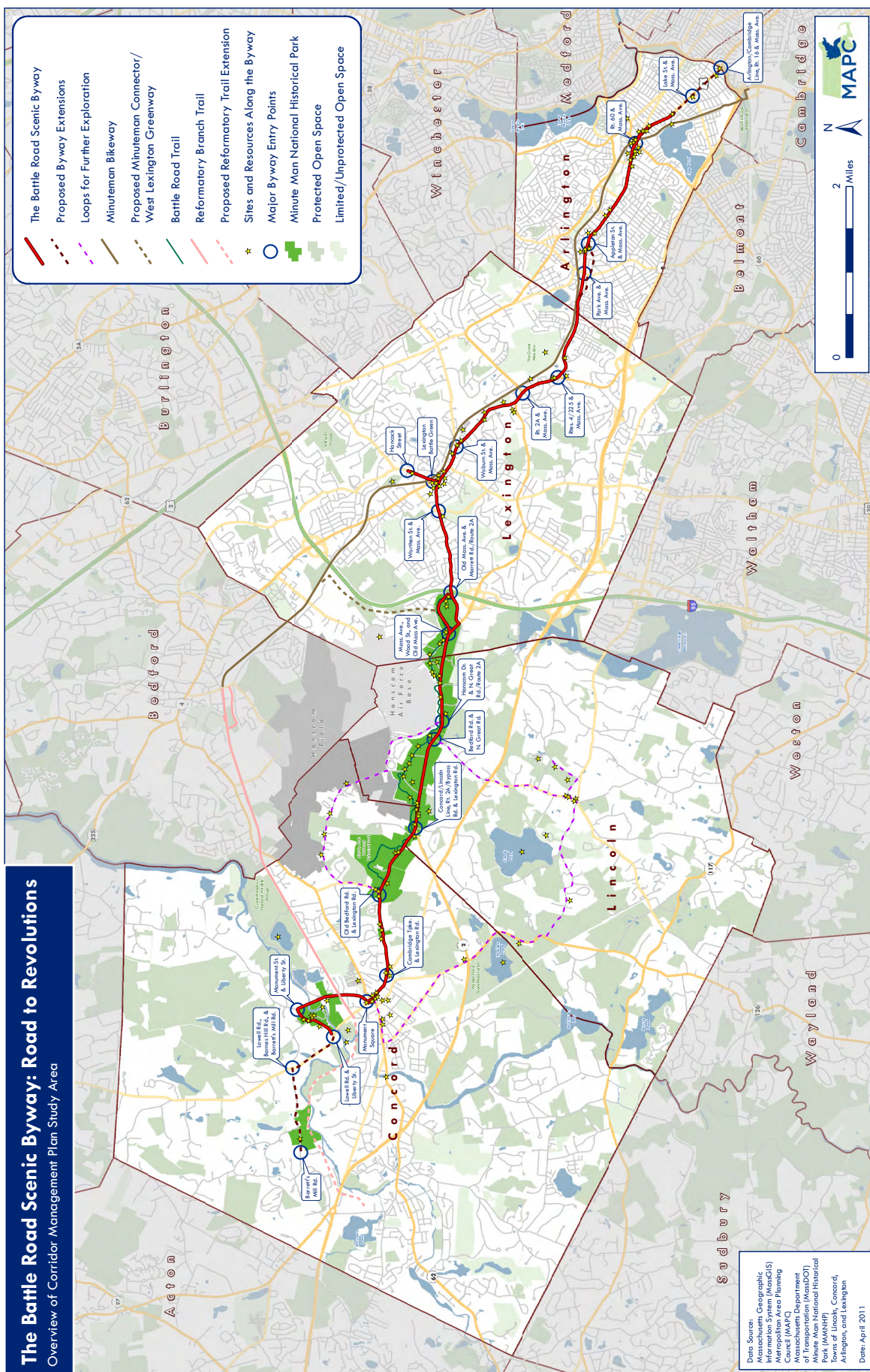
### Top Eleven Recommendations

1. Establish a Battle Road Scenic Byway management entity.
2. Seek designation of additional sections to become part of the Battle Road Scenic Byway.
3. Seek federal designation of the Byway as a National Scenic Byway or All-American Road.
4. Develop a Battle Road Scenic Byway logo and branding scheme that will be used in Byway print and online materials as well as along the corridor itself.
5. Create a Battle Road Scenic Byway website and use the Internet and social media to promote the Byway.
6. Ensure local regulations and development decisions that affect the Battle Road Scenic Byway corridor and its environs protect and enhance the intrinsic qualities of the Byway.
7. Develop landscaping guidelines to buffer or screen land uses that do not contribute to the intrinsic qualities of the Byway.
8. Ensure existing Byway resources are in good repair.
9. Follow context-sensitive roadway design guidelines to preserve the intrinsic qualities of the Byway, provide access to bicyclists and pedestrians, and improve safety and mobility along the roadway.
10. Work with the tourism and hospitality industry to promote the Byway.
11. Develop facilities that will enhance the Byway visitor experience.

The *Battle Road Scenic Byway Corridor Management Plan* sets the stage and establishes the trajectory for future preservation, interpretation, and promotion efforts along this historic corridor. Implementation of this plan will help to ensure that this incredible resource can be enjoyed for generations to come.



# MAP: OVERVIEW OF CORRIDOR MANAGEMENT PLAN STUDY AREA







# The Battle Road Scenic Byway: Road to Revolutions

## Arlington • Lexington • Lincoln • Concord

### 1. INTRODUCTION

**One Road, Many Revolutions!** The Battle Road Scenic Byway is the Road to Revolutions. Following the approximate path of British regulars on April 19, 1775 during the battles that marked the start of the American Revolution, this storied route is also home to literary, environmental, and technological revolutions that have shaped the American experience. Located in the Massachusetts towns of Arlington, Lexington, Lincoln, and Concord, this Byway includes Minute Man National Historical Park and other sites associated with the American Revolution. It also features sites associated with early conservationists, prominent abolitionists and former slaves, some of the 19<sup>th</sup> century's most celebrated authors, and innovators of cutting edge technologies from the 1600s through today.

The Battle Road Scenic Byway was officially designated as a Massachusetts State Scenic Byway in 2006 with the intention of recognizing, protecting, and enhancing its unique resources. The Metropolitan Area Planning Council (MAPC), along with the Towns of Arlington, Lexington, Lincoln, and Concord and Minute Man National Historical Park, engaged in a two-year process (April 2009-May 2011) to develop this Corridor Management Plan with input from project area residents, businesses, and other stakeholders and guidance from the project's administrative partners at the Massachusetts Department of Transportation Office of Transportation Planning. The project was funded by a grant from the Federal Highway Administration's National Scenic Byways Program and a match from the Massachusetts Department of Transportation Highway Division.

This chapter includes a description of the Byway, the vision, benefits, and goals for this corridor management plan, previous and current efforts to preserve the Battle Road Scenic Byway corridor, and an overview of the planning process for this Byway.

#### 1.1. About the Battle Road Scenic Byway

In April and May 2006, the Town Meetings of Arlington, Lexington and Lincoln and the Concord Board of Selectmen voted to support the designation of the Battle Road Scenic Byway by the Commonwealth of Massachusetts. The Battle Road Scenic Byway: Road to Revolutions was officially designated as a State Scenic Byway by the Massachusetts Legislature on November 8, 2006. As stated in Chapter 345 of the Acts of 2006 (*An Act Designating in the Towns of Arlington, Lexington, Lincoln and Concord A Scenic Byway to be known as The Battle Road: the Road to Revolutions*)<sup>1</sup>:

The purpose of the Battle Road: the Road to Revolutions scenic byway designation shall be to recognize, protect and enhance the unique historic, scenic, cultural and recreational resources along the byway, including preservation of the character of the corridor, expansion of economic opportunities, development of balanced tourism and a context in which to evaluate proposed roadway changes. The towns of Arlington, Concord, Lexington and Lincoln shall work in cooperation with the National Park Service to preserve the resources and improve the experience of the byway for both residents and visitors.

<sup>1</sup> (Commonwealth of Massachusetts, 2006)

The National Scenic Byways Program, which is described in more detail later in this chapter, defines a **scenic byway** as:

A public road having special scenic, historic, recreational, cultural, archaeological, and/or natural qualities that have been recognized as such through legislation or some other official declaration. The term “road” and “highway” are synonymous. They are not meant to define higher or lower functional classifications or wider or narrower cross-sections. Moreover, the terms State Scenic Byway, National Scenic Byway, or All-American Road refer not only to the road or highway itself but also to the corridor through which it passes.<sup>2</sup>

The interplay between tradition and innovation is at the heart of corridor management planning for the Battle Road Scenic Byway. The Towns of Arlington, Lexington, Lincoln, and Concord, along with Minute Man National Historical Park, the Massachusetts Department of Transportation, and the Metropolitan Area Planning Council are collaborating to highlight and protect the historic, cultural, recreational, scenic, and natural resources along this route.

The *Battle Road Scenic Byway Corridor Management Plan* provides a guide for preserving and promoting the Battle Road Scenic Byway while recognizing that development pressures and opportunities exist in close proximity to the Byway’s esteemed resources. Through input from community members, this corridor management plan proposes strategies to manage transportation, land use, and tourism along the Byway.



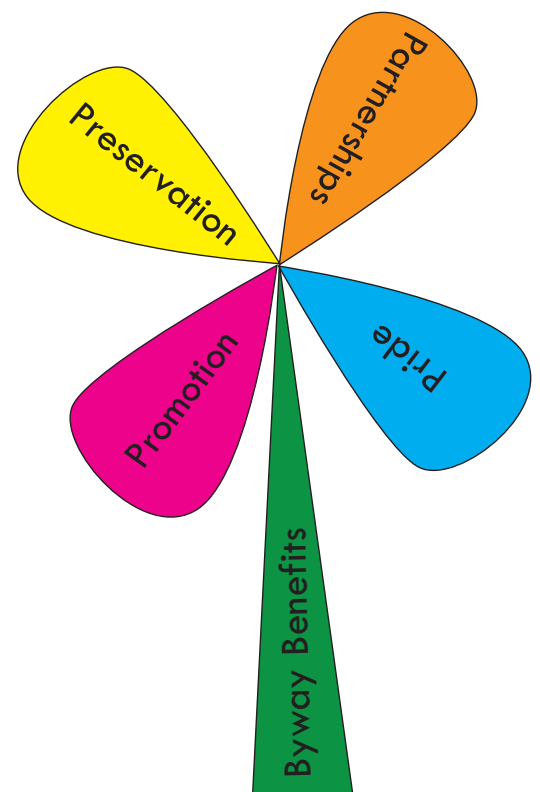
The Battle Road Scenic Byway was designated by the Massachusetts Legislature and approved by the Governor on November 8, 2006 under Chapter 345 of the Acts of 2006.

## Corridor Management Plan Benefits and Goals

Establishing a scenic byway and completing a corridor management plan offers benefits that the National Scenic Byways Program has defined as the four P’s: partnerships, preservation, promotion, and pride.<sup>3</sup>

The Battle Road Scenic Byway Working Group and community members from the four Byway towns identified nine goals that implementing this corridor management plan should achieve. Achieving these nine goals will confer the benefits defined by the National Scenic Byways Program.

- Benefit: Partnerships**
  - Goal: Organization**
  - Goal: Coordination**
- Benefit: Preservation**
  - Goal: Stewardship**
  - Goal: Education and Awareness**
- Benefit: Promotion**
  - Goal: Identity**
  - Goal: Outreach and Communication**
- Benefit: Pride**
  - Goal: Continuity and Beautification**
  - Goal: Accessibility**
  - Goal: Visitor Experience**



<sup>2</sup> (U.S. Department of Transportation Federal Highway Administration, 1995)

<sup>3</sup> (National Scenic Byways Program, 2005)

Each chapter in this plan documents the existing conditions along the Byway and suggests strategies to help maintain or improve these conditions while advancing the project's goals. Chapter 6: Implementation includes the comprehensive list of recommendations and action steps that advance these goals.

## Benefit: Partnerships

Establishment of the Battle Road Scenic Byway has already offered the benefit of partnerships. Seeking designation of the Byway required partnership between the four towns and their citizens, Minute Man National Historical Park, MassDOT, MAPC, and as the State Legislature and Governor's Office. Throughout the development of this plan, existing partnerships were strengthened and new partnerships were established. As recommendations and projects identified in this plan are implemented, partnerships will continue to be developed, including partnerships with institutions and businesses. Furthermore, the National Scenic Byways Program provides opportunities for scenic byways to partner with other scenic byways, technical assistance providers, and communications experts.

### Goal: Organization

Identify organizational structure(s) and assign responsibilities for achieving these goals.

### Goal: Coordination

Use the Battle Road Scenic Byway to promote regional cooperation and partnerships.

## Benefit: Preservation

Preservation of this historic corridor was a crucial impetus for establishing the Battle Road Scenic Byway. The National Scenic Byways Program identifies preservation as an important benefit of scenic byways because "it sustains the resource for generations to come." According to the National Scenic Byways Program, "byways create legacies and offer opportunities to preserve special places. It is those qualities and places that residents love and that draw visitors."<sup>4</sup>

### Goal: Stewardship

Use the Byway designation to promote stewardship of the corridor's historic, natural, scenic, cultural, recreational and archaeological resources and intrinsic qualities. Seek funding and develop new programs to support the Byway's resources and visitor attractions.

### Goal: Education and Awareness

Increase awareness of the Byway's rich history and promote it as an educational resource.

## Benefit: Promotion

Designation of a State Scenic Byway allows it to be promoted at the State level and to a limited extent by the National Scenic Byways Program. Completion of



<sup>4</sup> (National Scenic Byways Program, 2005)



During development of the Corridor Management Plan, MAPC maintained a webpage on its website using the domain [www.battleroadscenicbyway.org](http://www.battleroadscenicbyway.org).

a corridor management plan is required in order to be considered for National Scenic Byway and All-American Road designation. America's Byways® recognizes and promotes National Scenic Byways and All-American Byways, and the National Scenic Byways Program promotes these federally designated Byways on the America's Byways® map, on its traveler website, [www.byways.org](http://www.byways.org)<sup>5</sup>, and through a variety of other projects. Becoming part of this national collection allows nationally significant corridors to use the America's Byways® brand and logo, which "increases visitor recognition of the program and encourages travelers to include byways in their trip plans."<sup>6</sup>

The Battle Road Scenic Byway has potential to become a National Scenic Byway or All-American Road, which would allow it to take advantage of promotion by America's Byways®. In the mean time, however, the Battle Road Scenic Byway's resources and visitor attractions will benefit from the new level of coordination that the Byway offers. This coordination will allow the individual resources to be promoted as part of the Byway, and will also allow the Byway to be promoted as an entity unto itself.

### Goal: Identity

Create a distinct identity for the Battle Road Scenic Byway as a destination.

### Goal: Outreach and Communication

Promote and communicate Byway initiatives to local stakeholders, and market the Byway to regional, state, national, and international audiences.

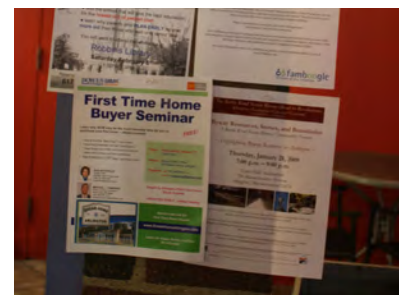
## Benefit: Pride

As stated by the National Scenic Byways Program, scenic byway designation "can instill a greater sense of awareness and pride among citizens."<sup>7</sup> Planning for the Battle Road Scenic Byway involved support from many volunteers, and implementation of this plan necessitates ongoing participation by the communities along the Byway. Members of these communities already exhibit a great deal of pride in their local resources, as evidenced by their volunteerism. The four-town Battle Road Scenic Byway extends an opportunity to take even greater pride in local and regional resources.



## Continuity and Beautification

Improve visual continuity of the Battle Road Scenic Byway, enhance its scenic qualities, and create an uninterrupted visitor experience.



## Accessibility

Make the Byway accessible to a diversity of potential visitors, including people of all ages, abilities, incomes, and ethnicities. Ensure that the entire Byway can be accessed by pedestrians, bicyclists, people with disabilities, mass transit riders, and motorists.

## Visitor Experience

Ensure that the Byway is an exciting place to visit that has adequate traveler facilities and is easy and safe to navigate.



<sup>5</sup> (U.S. Department of Transportation Federal Highway Administration, 2011)

<sup>6</sup> (National Scenic Byways Program, 2005)

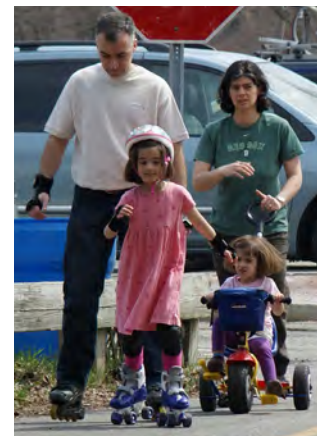
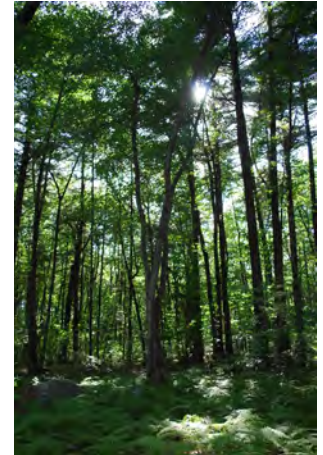
<sup>7</sup> (National Scenic Byways Program, 2005)

## Designated Byway, proposed extensions, and loops

The Battle Road Scenic Byway is about 14 miles long. Through the corridor management planning process, community members and Working Group members have suggested adding approximately 3 miles to the Byway, extending it eastward about 0.8 miles to the Arlington/Cambridge line, including an additional 0.7 mile section of the original 1775 Battle Road in Arlington along Appleton Street and Paul Revere Road, and extending it about 1.5 miles westward in Concord to Barrett's Farm on Barrett's Mill Road. The current Byway and proposed extensions are described below.

In terms of width, scenic byways are generally defined as the “viewshed” of the Byway, in other words, what can be seen from the roadway. The viewshed of the Battle Road Scenic Byway varies greatly: some parts are densely developed, some parts are thick with foliage, and some parts are open fields or vistas. The shape and depth of property lines along the byway also varies considerably, so simply defining the Byway as all properties that abut the roadway may not capture enough of the viewshed in some areas.

At this stage, the Working Group has determined that the width of the Battle Road Scenic Byway be roughly defined as a 0.25 mile buffer on either side of the Byway, which is approximately a five-minute walk. As specific projects are undertaken, the width of the Byway may be defined with more specificity. Future projects may also be analyzed for their impact on the Byway’s “soundscape,” as in, what can be heard from the Byway in addition to what can be seen from the Byway.



The Battle Road Scenic Byway as designated by the Commonwealth of Massachusetts is shown in red, with proposed extensions shown with red dashed lines. The purple dashed lines are the northern and southern loops of the Byway. These loops are not part of the designated Byway, but capture important resources that contribute to the Battle Road Scenic Byway Story. The lavender-colored line shown in Arlington and Lexington is the Minuteman Bikeway, the green is Minute Man National Historical Park, and the yellow stars show the location of Byway resources.

## State Scenic Byway as designated on November 8, 2006

The Battle Road Scenic Byway as designated by the Massachusetts Senate and House of Representatives and approved by the Governor on November 8, 2006 roughly follows the path of British troops on April 19, 1775, along “Battle Road,” following this path beginning at the Black Horse Tavern site in Arlington:

- Starts at Massachusetts Avenue at the intersection of Tufts Street in Arlington
- Proceeds northwest along Massachusetts Avenue into Lexington, with a spur to the Hancock/Clarke House on Hancock Street in Lexington

- Continues on Massachusetts Avenue to Marrett Road in Lexington
- Branches to Wood Street, Old Massachusetts Avenue, and Massachusetts Avenue through Lexington
- The Wood Street/Old Massachusetts Avenue and Massachusetts Avenue branches merge and then proceed to North Great Road in Lincoln
- The Byway continues westward along North Great Road in Lincoln to Lexington Street and Monument Square in Concord
- Turns northward to Monument Street in Concord
- Then turns southwest toward Liberty Street in Concord
- Ends at the Buttrick Mansion and Muster Field of Minute Man National Historical Park

## Proposed extensions

Through the process of creating the corridor management plan, Working Group members and community stakeholders expressed a desire to pursue the extension of the Byway through additional legislation. This would bring the Byway starting point eastward to the Arlington town line at Alewife Brook Parkway, and would extend the Byway westward to Barrett Farm in Concord. In January 2011, Working Group members worked with Massachusetts State Representative Jay Kaufman to propose the following extensions in House Bill H01779, *An Act to further define a scenic byway in the Towns of Arlington, Lincoln, and Concord*.<sup>8</sup> The legislation that was filed would add the following sections to the Byway:

- In Arlington, the Byway would begin at the Cambridge city line along Massachusetts Avenue and continue to its previous starting point at Tufts Street
- In Arlington, the portion of Appleton Street from Massachusetts Avenue to Paul Revere Road, continuing along Paul Revere Road until it meets with Massachusetts Avenue
- In Concord, from Liberty Street and Lowell Road to Barrett's Mill Road, then along Barrett's Mill Road to Barrett's Farm.

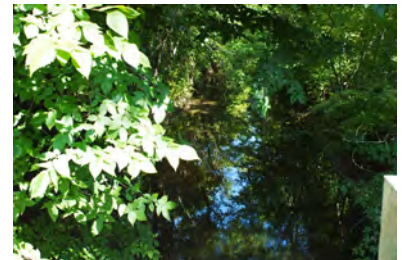
Extending the Byway to the Arlington town line will allow for more resources in East Arlington to be included as part of the Byway, as well as provide more opportunities to promote Arlington as the official starting point for the Byway.

The proposed extension of the Byway to include Appleton Street and Paul Revere Road in Arlington is suggested because on April 19, 1775, military engagements between the colonists and British troops actually occurred along this portion of the road rather than Massachusetts Avenue. Thus, this addition is proposed to incorporate additional sections of the 1775 Battle Road.

The extensions in Concord are intended to include Barrett's Farm in the Battle Road Scenic Byway. Barrett's Farm was where the colonists stored munitions in the days prior to April 19, 1775. British troops had received intelligence about this and were on their way to confiscate these weapons on April 19<sup>th</sup>. However, the colonists had been warned of their arrival and removed the weapons stored there prior to the troops' arrival. Minute Man National Historical Park was extended to include Barrett's Farm

### Proposed Byway Extensions:

A bill has been filed with the Massachusetts Legislature to add 3 miles to the Battle Road Scenic Byway.



This plan proposes to extend the Byway to the Arlington town line at Alewife Brook Parkway.



Another proposed addition is a section of the original 1775 Battle Road in Arlington, which would include the home of Menotomy Minute Men Captain Benjamin Locke.



British troops had planned to seize cannon and other armaments from the Colonel James Barrett House in Concord on April 19, 1775. This plan proposes to extend the Byway to Barrett's Farm.

<sup>8</sup> (Kaufman, 2011)

as part of the Omnibus Public Lands Management Act of 2009 signed into law by President Obama on March 30, 2009.<sup>9</sup> While Barrett's Farm was still a private residence when the original scenic byway legislation was submitted, it has since been sold to a nonprofit organization that is restoring the historic structure and creating traveler facilities at this location with the ultimate goal of selling the property to the National Park Service, and thus, it makes sense to include this section as part of the Battle Road Scenic Byway. Next steps regarding these proposed extensions are discussed in the Implementation chapter at the end of this plan.

## Loops for further exploration

While the resources located directly along the historic road tell rich and compelling stories by themselves, a few key resources are also located off the Byway. The Working Group proposed a southern loop and a northern loop that would capture these additional resources, and these loops were presented to the public during the December 2009 and January 2010 community forums in each Byway town.

The southern loop is intended to pick up historic, cultural, and transportation resources in Concord and Lincoln. Resources along the southern loop include shops, restaurants, and arts venues in Concord Center, as well as a number of sites associated with Concord's African-American and Abolitionist History as identified by the Drinking Gourd project. Concord Depot, which services the Fitchburg line on the MBTA Commuter Rail, is on the Thoreau Street leg of this loop. Walden Pond in Concord and Sandy Pond/Flint's Pond in Lincoln, both associated with the life and work of Henry David Thoreau, are along this loop. The Gropius House, a National Historic Landmark, and the deCordova Sculpture Park and Museum in Lincoln are two resources of interest for connoisseurs of art and architecture. Sites on and near the Bedford Road leg of the loop further develop the story of the battles on April 19, 1775, including the activities of the Lincoln Minute Men and of Mary Hartwell.

The **southern loop** begins at Monument Square in Concord and follows this path:

- From Monument Square moving westward along Main Street
- At the intersection of Main Street and Thoreau Street, turning left to travel in a southeasterly direction
- At the intersection of Thoreau Street and Walden Street, turning right to travel south
- Continuing along Walden Street, which becomes Concord Road once crossing the town line into Lincoln
- Turning left to move eastward on Baker Bridge Road in Lincoln
- Turning right at Sandy Pond Road to travel in a southeasterly direction
- Turning left at Bedford Road to travel in a northeasterly direction
- Turning right onto Old Lexington Road and then left onto Lexington Road, which is a spur in the loop
- U-turning on Lexington Road, to return to Old Lexington Road and then making a right on Bedford Road to travel northward
- Continuing along Bedford Road past the Cambridge Turnpike (Route 2) until returning to the Battle Road Scenic Byway on North Great Road/Route 2A in Lincoln.
- To continue to the northern loop, turn right onto North Great Road/Route 2A to travel east on the Byway, then make a left at Hanscom Drive, where the northern loop begins.



Concord Center.



Thoreau Cabin Replica in Walden Pond State Reservation.



The Gropius House in Lincoln.

<sup>9</sup> (National Trust for Historic Preservation, 2009)

The northern loop in Lincoln and Concord passes by Hanscom Air Force Base and Hanscom Field, including Draper Labs/Hangar 24, which can provide visitors to the Byway a flavor of the technological innovations that have occurred along the Byway including advances in electronics and aviation technologies. It also includes the Thoreau Farm, which is Henry David Thoreau's birth home, and scenic vistas along Concord's oldest road, Virginia Road.

The northern loop begins at the intersection of North Great Road/Route 2A and Hanscom Drive in Lincoln and then follows this path:

- Travel northward along Hanscom Drive, making a left to move westward on Old Bedford Road.
- Continue along Old Bedford Road until Virginia Road, and then turn right to move northward on Virginia Road.
- Continuing along Virginia, cross the town line from Lincoln into Concord.
- Virginia Road ends at Old Bedford Road. Turn left to go southward on Old Bedford Road.
- Return to the Byway at the intersection of Old Bedford Road and Lexington Road in Concord, near Meriam's Corner.

## Bikeways and trails

Throughout the planning process for developing this corridor management plan, participants in the project have inquired about whether bikeways and trails such as Minuteman Bikeway and Battle Road Trail could be officially designated as part of the Battle Road Scenic Byway. These bikeways and trails help make the Byway more accessible to pedestrians and bicyclists, and seeing the Byway on foot is perhaps the best way to experience what it has to offer. Although the National Scenic Byways Program recognizes scenic byways as roadways along which automobiles can travel, bikeways and trails that contribute to the intrinsic qualities of the byway could potentially receive funding and recognition through the National Scenic Byways Program. The Working Group believes that continuous off roadway pedestrian and bicycle access approximately paralleling the Byway should be aggressively pursued in future actions.



Thoreau Farm, Thoreau's birth home.



Cutting edge technologies have been developed at Hangar 24.



MIT Lincoln Laboratory and other high-tech research and development facilities continue the Byway's technological revolution.



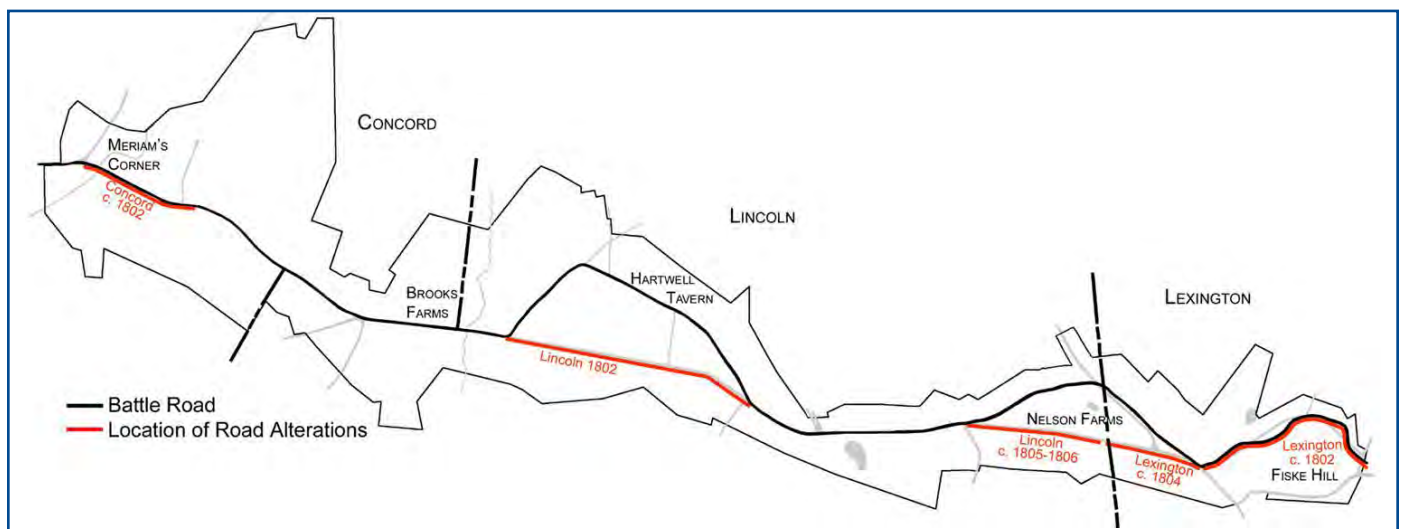
## 1.2. Planning for the Battle Road Scenic Byway

This section begins with a review of efforts to preserve the April 19, 1775 Battle Road since the 1800s. This overview of preservation along the Battle Road Scenic Byway corridor is followed by discussion of the National Scenic Byways Program and the significance of scenic byway designation, including what it takes to make a byway organization successful. The chapter concludes with an overview of the corridor management planning process for the Battle Road Scenic Byway, to illustrate how this document was developed, the role played by project partners, public officials, and citizens of the four byway towns, and next steps for implementing this plan.

### Previous and current efforts to preserve the corridor

While the road itself has shifted its path several times since 1775, its significance within the four communities of the Byway has never wavered. Efforts to preserve portions of the road, as well as the monuments and landscape surrounding the road, began in the early 1800s and continue through today.

#### Battle Road Improvements 1802-1806



*From the Cultural Landscape Report for Battle Road Unit, Minute Man National Historical Park (Dietrich-Smith, 2005).*

In 1835 and again in 1875, local citizens donated two small sections of the then disused original roadway on opposite sides of the Concord River, abutting the site of the long dismantled North Bridge, to the Town of Concord. The Town erected monuments on both sections of the road and a commemorative North Bridge over the river, reconnecting both portions of the original roadway. In 1875, work was complete in time for a large celebration in honor of the one-hundredth anniversary of the April 19, 1775 battle at North Bridge.

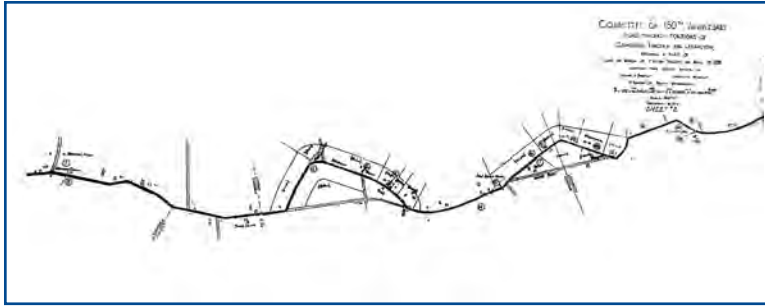
In 1925, on the 150<sup>th</sup> anniversary of the “shot heard ‘round the world,” a significant effort was undertaken by a committee appointed by the Massachusetts governor to designate the Battle Road as a Memorial Highway from North Bridge in Concord to the center of Lexington. Included in the plan submitted to the committee by landscape architect Arthur Shurtleff was a recommendation to preserve nearly two miles of the Battle Road, including two large bends in the early roadway located in Lincoln and Lexington that had



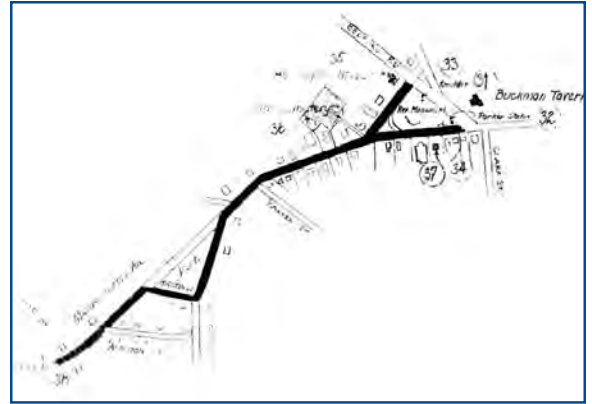
Meriam's Corner, late 1800s (Historic New England Archives).



Battle Road in the 1930s (Concord Free Public Library).



From 1925 Report of Arthur A. Shurtleff, Landscape Architect to Commission on the One Hundred Fiftieth Anniversary of the American Revolution (Minute Man National Historical Park Archives).



been bypassed between 1802 and 1806. Despite support from state and local associations, a Memorial Highway was never established.

During World War II and in the years afterward, the Battle Road landscape experienced a great deal of change. Within very close proximity of the 1775 Battle Road, the Commonwealth of Massachusetts acquired 500 acres of farmland in the towns of Bedford, Lexington, Lincoln, and Concord to establish a Boston Auxiliary Airport in 1941. In 1942, the Commonwealth of Massachusetts leased the airport to the War Department for use by the Army Air Forces, and the airport became a site for training fighter squadrons that went on to combat in North Africa and Europe during World War II. The airport was renamed Laurence G. Hanscom Field in 1943. Hanscom Field served as a “site for testing new radar sets” in World War II and “it was this secondary wartime activity at Hanscom that gave rise to the base’s postwar role.”<sup>10</sup> In 1952, the Commonwealth of Massachusetts ceded land on one side of Hanscom Field to the federal government. This land became Hanscom Air Force Base. Hanscom Field became a joint military and civilian facility in the 1950s. The first buildings for MIT Lincoln Laboratory were built in 1952 on Hanscom Air Force Base, Air Force electronic and geophysics laboratories were developed at the Base in 1954, and Hanscom Field’s runways were expanded and new hangars and facilities were built in 1953. In 1959, the same year Minute Man National Historical Park was established immediately south and west of Hanscom Field and Hanscom Air Force Base, the newly formed Massachusetts Port Authority (Massport) assumed control of the land at Hanscom Field. Massport assumed operations and maintenance of Hanscom Field by 1974, by which time military flying operations became infrequent. Significant development at Hanscom Air Force Base occurred in the 1980s, when new engineering facilities, service facilities for base personnel, housing, and temporary lodging facilities were built. Today, Hanscom Field is a full-service aviation airport and Hanscom Air Force Base is the Air Force’s center for the development and acquisition of electronic systems. Hanscom Air Force Base has played a significant role in the development of high-technology industries along Route 128.<sup>11</sup>

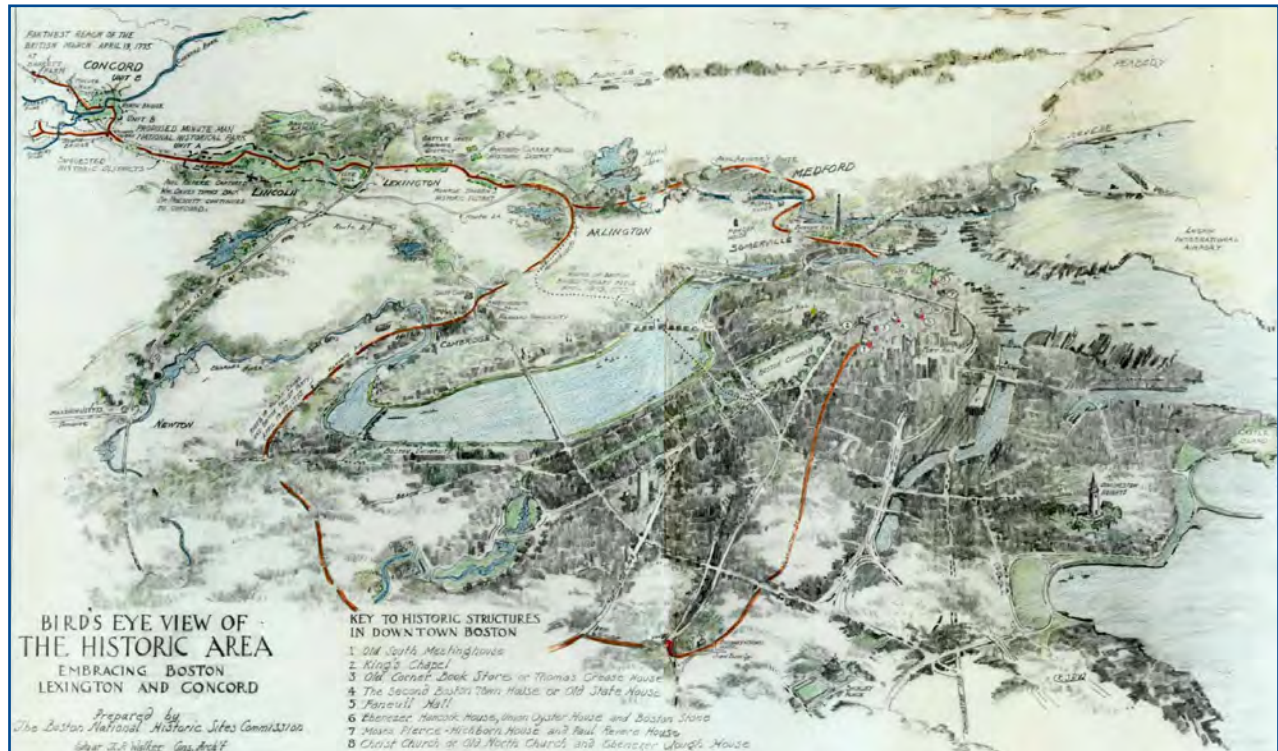


Views of the corridor from the 1950s (Minute Man National Historical Park Library).

Development of military and aviation facilities in close proximity to the 1775 Battle Road, along with Post-World War II suburban development, could have resulted in a total loss of the colonial Battle Road landscape. Recognizing the need to identify and preserve significant colonial and revolutionary properties in the Boston area, the federal government created the Boston National Historic Sites Commission (BNHSC) in 1955. As part of its comprehensive study, the BNHSC identified the entire Battle Road from Concord to Boston as significant. However, the commission stated Route 128, just east of Fiske Hill, was the “dividing line between the retrievable and irretrievable past.” The Commission recommended establishing a National Park in Concord, Lincoln, and Lexington that roughly matches the current park boundaries. Four years later, on September 21, 1959, Minute Man National Historical Park was established by Public Law 86-321.

<sup>10</sup> (U.S. Air Force, 2010)

<sup>11</sup> (U.S. Air Force, 2010), (Massport, 2011).



From the *Final Report of the Boston National Historic Sites Commission to the Congress of the United States*, June 16, 1960 (National Archives and Records Administration, Waltham).

Minute Man National Historical Park (MMNHP) was “assembled from hundreds of individual agricultural, residential, and commercial tracts.”<sup>12</sup> According to a Cultural Landscape report prepared for MMNHP in 2005, “since land acquisition [by MMNHP] began, over two hundred modern structures within the Battle Road Unit have been removed and thirteen buildings dating prior to 1810 were preserved, as well as many important colonial landscape features including several agricultural fields that have been under cultivation since the seventeenth century.”<sup>13</sup> Minute Man National Historical Park includes three sections: the Battle Road Unit, North Bridge Unit, and the Barrett Farm Unit. The Barrett Farm Unit is a recent addition; it became part of MMNHP in 2009. MMNHP has commissioned several studies that include the sections of the Battle Road within the Park. The MMNHP General Plan and other MMNHP studies are consistent with the intent of this corridor management plan.

In 1960, the Town of Concord established by Special Act of the Legislature one of the first Historic District Acts in Massachusetts. The Act placed permanent protections on the historic structures and landscape along the Byway through three new historic districts - the American Mile Historic District, which runs along the Battle Road from Minute Man National Historical Park to Concord Center; the Monument Square/North Bridge Historic District, which includes both Monument and Liberty Streets within the Byway, and the Barrett Farm Historic District which includes both Lowell Road and Barrett's Mill Road to just past Barrett's Farm.

In the 1960s through the 2000s, several sites along the corridor in all four towns have been added to the National Register of Historic Places. While listing in the National Register of Historic Places does not offer any protection to the sites, it does recognize them as sites worthy of preservation. Six sites are designated National Historic Landmarks, which means they have been recognized as sites that hold meaning for all Americans and are essential to the heritage of the United States. These sites are: Lexington Battle Green, Buckman Tavern, and the Hancock-Clarke House in Lexington and The Wayside, Wright's Tavern, and the Old Manse in Concord.

In the mid-1990s, the towns of Lexington, Lincoln, Concord, and Bedford commissioned a Master Plan for the area surrounding the Laurence G. Hanscom Field. One of its recommendations was a call for a feasibility study for the possible designation of the Battle Road as a scenic byway. That study was the impetus for the present scenic byway designation.

In 1999, the Town of Concord adopted a policy which states: “in the reconstruction of roads, the Town of Concord seeks

<sup>12</sup> (Dietrich-Smith, 2005)

<sup>13</sup> (Dietrich-Smith, 2005)

Images: Lexington Center community planning photos, National Trust for Historic Preservation News Release announcing 11 Most Endangered Places, screenshot of the Freedom's Way National Heritage Area website, Barrett's Farm in September 2009.

to maintain those aspects of the existing environment which enhance the historic, scenic, and agricultural properties of the roadway consistent with public safety and in addition to consider alternative transportation accommodation(s) on the Town's Roads consistent with this policy and public safety." This policy is not specific to the Byway, but does apply to the portion of the Byway within Concord.<sup>14</sup>

In 1994, the Freedom's Way Heritage Association was created to identify resources and preserve the rich heritage of thirty-seven municipalities in Massachusetts (including all four Battle Road Scenic Byway towns) and eight in New Hampshire with the goal of becoming a National Heritage Area. Subsequently, the Freedom's Way Heritage Association completed the *Freedom's Way Heritage Area Feasibility Study* in 1997 and initiated town-by-town Heritage Landscape Inventories in partnership with the Massachusetts Department of Conservation and Recreation (DCR) in 2006. The Heritage Landscape Inventories for Arlington, Concord, Lexington, and Lincoln were consulted to identify significant Byway resources for this corridor management plan. In 2009, the Freedom's Way National Heritage Area was established.

Due to the impact of "noise, visual intrusions, and ground traffic" generated by Hanscom Field, along Massport's proposal at the time to expand aviation activities, the "Minute Man National Historical Park and Environs" were listed by the National Trust for Historic Preservation as one of America's "11 Most Endangered Historic Places" in 2003.<sup>15</sup> Scenic America named the area around the Byway as one of America's "ten most threatened scenic landscapes" in the same year.<sup>16</sup>

In April 2006, challenges and opportunities for preserving Battle Road were presented at the national *Preserving the Historic Road Conference* held in Boston. A team of participants who have also been involved with developing the Battle Road Scenic Byway Corridor Management Plan submitted a paper entitled *Finding a Twenty-first Century Authenticity along an Eighteenth Century Historical Legacy – the Battle Road*, along with offering a panel presentation at the conference and a field session that was conducted using a Liberty Ride trolley.<sup>17</sup> Conferences provide a special opportunity to garner awareness of preservation issues as well as to network and learn about best practices in historic preservation. The *Battle Road Scenic Byway Corridor Management Plan* was the subject of a mobile workshop at the American Planning Association's National Planning Conference in Boston in April 2011.

Designation of the Battle Road Scenic Byway: Road to Revolutions as a State Scenic Byway in 2006, completion of this corridor management plan in 2011, and implementation of this corridor management plan are the latest preservation efforts in the 236 years since the battles of April 19, 1775.

## About the National Scenic Byways Program

The **National Scenic Byways Program** is managed by the U.S. Department of Transportation Federal Highway Administration and was established by federal transportation legislation in 1991 under the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), reauthorized in 1998 under the Transportation Efficiency Act for the 21<sup>st</sup> Century (TEA-21) and reauthorized and amended in 2005 under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).



<sup>14</sup> (Lucas, 2007), (Kritzer, 2009-2011), (National Park Service), (Freedom's Way Heritage Association, 2010), (Massport, 2011), (U.S. Air Force, 2011).

<sup>15</sup> (National Trust for Historic Preservation, 2003)

<sup>16</sup> (Winter, 2003)

<sup>17</sup> (Canale, Lucas, McKenna, Nelson, & Smith, 2006)

The vision of the National Scenic Byways Program is “to create a distinctive collection of American roads, their stories and treasured places.” The mission of the program is “to provide resources to the byway community in creating a unique travel experience and enhanced local quality of life through efforts to preserve, protect, interpret, and promote the intrinsic qualities of designated byways.”<sup>18</sup>

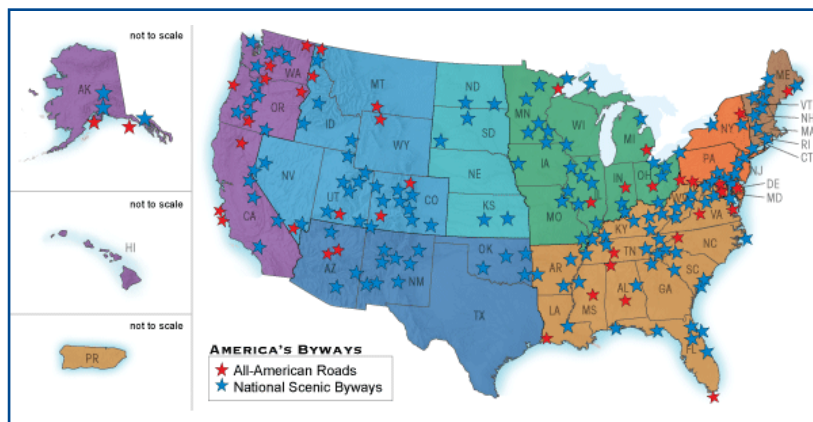
**Intrinsic qualities**, the “scenic, historic, recreational, cultural, archaeological, or natural features that are considered representative, unique, irreplaceable, or distinctly characteristic of an area,” are key to scenic byway designation and essential for sustaining a successful scenic byway program. The primary intrinsic quality along the Battle Road Scenic Byway is historic, although the Byway also has many cultural, recreational, scenic, and natural resources. State law requires that archaeological resources remain confidential to protect their fragile nature, so no archaeological resources are included in this assessment of the corridor’s intrinsic qualities.<sup>19</sup> The Byway’s intrinsic resources draw thousands of visitors to the corridor annually. Definitions for each of the intrinsic qualities, an assessment of the Byway’s intrinsic qualities, and examples of intrinsic resources that contribute to the unique character of the Battle Road Scenic Byway are detailed in Chapter 2: Intrinsic Qualities Management.

The **National Scenic Byways Discretionary Grants Program** provides funding for projects to support and enhance National Scenic Byways, All-American Roads and State Scenic Byways. Since 1992, the National Scenic Byways Program has funded over 2,800 projects for state and nationally designated byways in 50 states, Puerto Rico, and the District of Columbia.

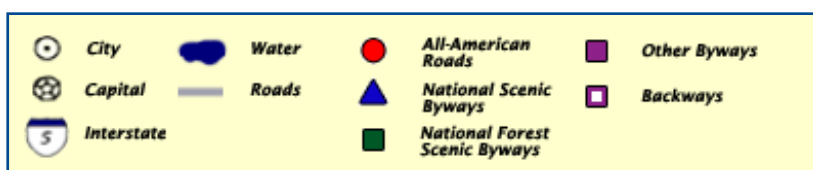
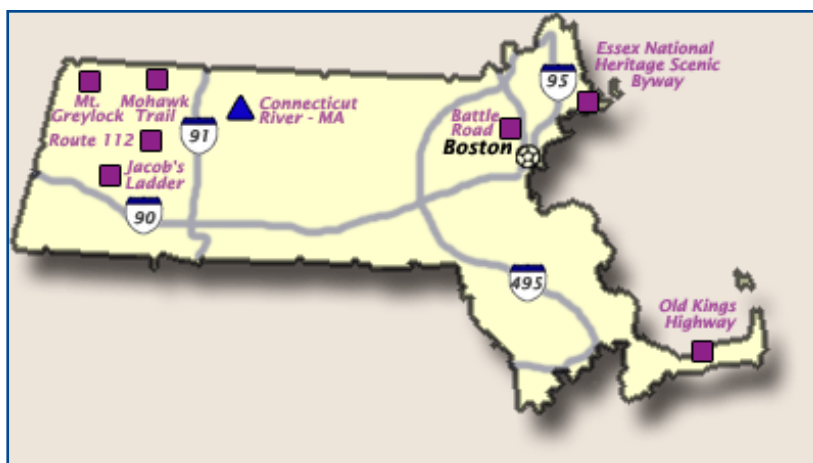
The Battle Road Scenic Byway has been a State Scenic Byway since 2006. The National Scenic Byways Program defines **State Scenic Byway** as:

A road or highway under State, Federal or local ownership that has been designated by the State through legislation or some other official declaration for its scenic, historic, recreational, cultural, archaeological, or natural qualities. An Official Declaration is an action taken by a Governor or that of an individual, board, committee, or political subdivision acting with a granted authority on behalf of the State.

Under the National Scenic Byways Program, certain roads are recognized by the U.S. Secretary of Transportation and promoted by the Federal Highway Administration as **America’s Byways**, which include **National Scenic Byways** and **All-American Roads**. In most cases, any highway or road submitted for national designation as one of America’s Byways must already be designated a State Scenic Byway. Another requirement for National Scenic Byway or All-American Road



As of October 16, 2009, there were 151 America’s Byways® in 46 states, of which 120 were National Scenic Byways and 31 were All-American Roads (<http://bywaysonline.org/nominations/>). The image above is from National Scenic Byways Online, the America’s Byways® interactive website (<http://byways.org/explore/>).



As of October 2009, there were 7 State Scenic Byways in Massachusetts, including the Battle Road Scenic Byway, and one National Scenic Byway – the multi-state Connecticut River Byway. (National Scenic Byways Online, <http://www.byways.org/explore/states/MA/maps.html>.)

<sup>18</sup> (U.S. Department of Transportation Federal Highway Administration, 2011)

<sup>19</sup> (Commonwealth of Massachusetts)

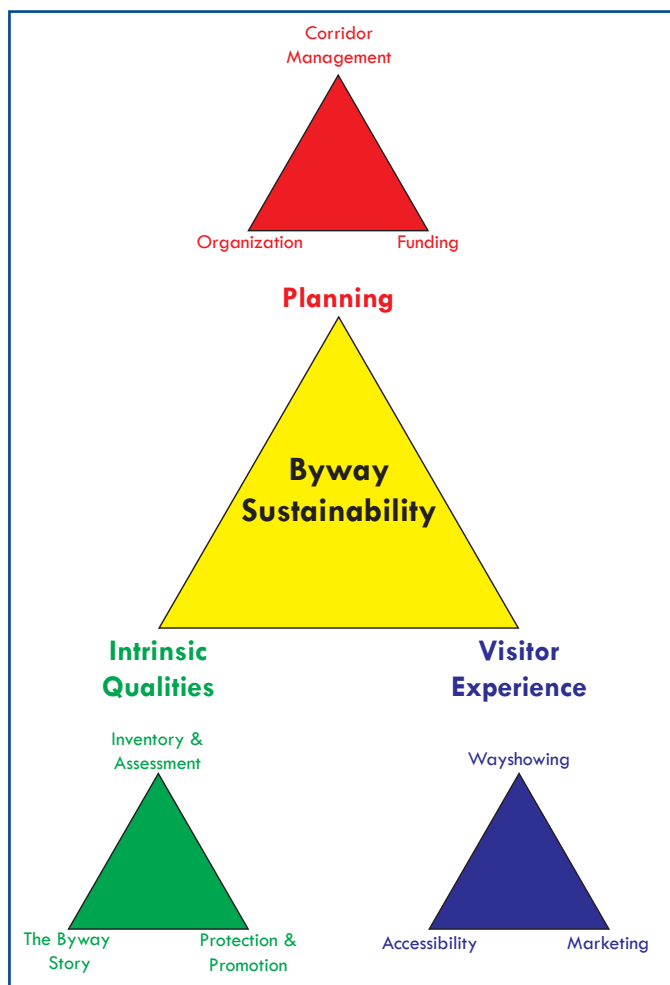
consideration is the completion of a scenic byways corridor management plan according to the criteria defined by the National Scenic Byways Program.<sup>20</sup>

National Scenic Byways designation requires the byway to “significantly meet at least one of the six scenic byways intrinsic qualities.” All-American Road designation requires the byway to “meet the criteria for at least two of the intrinsic qualities.” An All-American Road “must also be considered a destination unto itself.”<sup>21</sup>

The Battle Road Scenic Byway has potential to become one of America’s Byways. Located along the historic route where the first battles of the American Revolutionary War were fought, this byway is already a destination unto itself. Every year, tens of thousands of people from around the world visit Minute Man National Historical Park, authors’ homes, and other sites located along this route. Every day, numerous residents, commuters, and visitors enjoy the Byway’s recreational offerings such as the Minuteman Bikeway and the Battle Road Trail. Every April scores gather at key battle sites to be educated and entertained by reenactments of events that changed the course of this country’s history. The Battle Road Scenic Byway has sites with scenic, natural, historic, cultural, and recreational intrinsic qualities. In particular, the Byway is well-represented by resources with historic, recreational and cultural intrinsic qualities. Byway resources, intrinsic qualities management, visitor statistics, and tourism conditions are discussed in further detail throughout this plan.

## Scenic byway sustainability

America’s Byway Resource Center (ABRC), an information and assistance provider for scenic byways organizations, has developed tools to help byway organizations be successful and sustainable. According to ABRC, byway sustainability involves three components: planning, intrinsic qualities, and visitor experience. All three are equally important aspects for the stability of a scenic byway organization. Planning includes the development of a corridor management plan, creating a byway organization, and building a strong financial foundation. The intrinsic qualities component includes inventory and assessment of the byway’s resources, developing the byway’s story, and protection and promotion of the byway’s character. The visitor experience component includes wayshowing, accessibility, and marketing.<sup>22</sup> The aspects of byway sustainability were summarized in the graphic developed by MAPC. Following this corridor management plan while keeping in mind the components of byway sustainability will help ensure the long-term success of the Battle Road Scenic Byway.



## The corridor management planning process

Once a byway is designated as a State Scenic Byway, it can receive funding for through the National Scenic Byways Program Discretionary Grants Program to complete a corridor management plan. Once a corridor management plan is completed, the State Scenic Byway may apply for additional grants to implement projects identified in the plan.

<sup>20</sup> (U.S. Department of Transportation Federal Highway Administration, 1995)

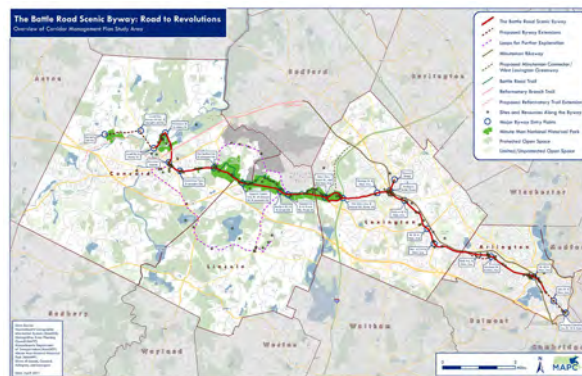
<sup>21</sup> (U.S. Department of Transportation Federal Highway Administration, 1995)

<sup>22</sup> (America’s Byways Resource Center, 2011)

The National Scenic Byways Program defines a **corridor management plan** as “a written document that specifies the actions, procedures, controls, operational practices, and administrative strategies to maintain the scenic, historic, recreational, cultural, archaeological, and natural qualities of the scenic byway.”<sup>23</sup>

Federal requirements for corridor management plans include:

1. A map of the byway that includes its boundaries, land uses, and intrinsic qualities
2. An assessment of the intrinsic qualities and their context
3. A strategy for maintaining and enhancing the intrinsic qualities of the byway
4. A schedule and a listing of the entities responsible for implementation, along with a description of enforcement and review mechanisms
5. A strategy for enhancing existing development and accommodating new development while preserving the intrinsic qualities of the corridor
6. A plan for ongoing public participation throughout implementation of the plan
7. A review of the road’s safety and accident record
8. A plan to accommodate commerce and convenient user facilities while maintaining safe and efficient level of service along the roadway
9. A plan for minimizing intrusions to the visitor experience
10. A demonstration of compliance with laws intended to control outdoor advertising
11. A signage plan
12. A description of marketing strategies
13. A discussion of roadway design standards
14. A description of plans to interpret significant byway resources



This corridor management plan includes a series of nine maps:

1. Overview of the Corridor Management Plan Study Area
2. Arlington Resources
3. Lexington Resources
4. Lincoln Resources
5. Concord Resources
6. Bicycle and Pedestrian Network
7. Areas of Traffic Concern
8. Generalized Land Use, Environmental Characteristics, and Flood Zones
9. Zoning and Historic Districts

Corridor management plans for All-American Roads must also include:

1. A narrative on how the All-American Road would be promoted, interpreted, and marketed, especially to travelers from other countries
2. A plan for accommodating tourism
3. A plan to address multilingual information needs

In 2007, the Metropolitan Area Planning Council (MAPC) applied for a National Scenic Byways Program grant to complete a corridor management plan. According to the grant application, MAPC would carry out the work of completing the corridor management plan in partnership with and with oversight from a Working Group, which included representatives from the towns of Arlington, Concord, Lexington and Lincoln as well as from Minute Man National Historical Park. Included in the application were letters expressing support for the project and a commitment to full participation from the Arlington Board of Selectmen, the Lexington Board of Selectmen, the Lincoln Board of Selectmen, the Concord Board of Selectmen, and the Superintendent of Minute Man National Historical Park.

A \$172,525 grant was awarded in 2008, funded 80% by the Federal Highway Administration’s National Scenic Byways Program and 20% by the Massachusetts Highway Department (MassHighway, which is now known as the Massachusetts Department of Transportation Highway Division or MassDOT Highway). Work to complete this corridor management plan began in April 2009.

This section outlines the scope of work for the Battle Road Scenic Byway corridor management plan approved by the state scenic byways grants administrator, the Massachusetts Department of Transportation’s Planning Division. The scope of work included four phases: 1) Initial organization, including establishment of the Battle Road Scenic Byway Working Group and

<sup>23</sup> (U.S. Department of Transportation Federal Highway Administration, 1995)

development of a stakeholders list for project communications, 2) Data gathering, 3) Developing recommendations and the implementation plan, and 4) Developing the Corridor Management Plan. In addition to these four phases, a project website was developed in order to communicate progress on the project and to post documents related to the project. Public meetings were held during each phase of the project. The scope of work included the elements required by the Federal Highway Administration's National Scenic Byways Program as well as additional requirements, as defined in the grant application for this corridor management plan.

## The Battle Road Scenic Byway Working Group

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The first task required for this project was the formal designation of a Working Group to oversee the development of the corridor management plan. As defined in the project's grant application and approved scope of work, the Core Working Group consists of two representatives from each town appointed by their Board of Selectmen, one representative from Minute Man National Historical Park, and one representative from MAPC. In addition to the Core Working Group, one Board of Selectmen liaison was appointed by each Town.

Responsibilities of Working Group members included: representing the interests of their community or organization in Working Group meetings, attending Working Group and public meetings, keeping their community or organization up to date on progress as appropriate, and contributing to the completion of the corridor management plan. The Working Group met on an as-needed basis and corresponded regularly in every phase of the project. Notes from Working Group meetings were made available on the project website, [www.battleroadscenicbyway.org](http://www.battleroadscenicbyway.org). The Battle Road Scenic Byway Working Group members are listed below.



In November 2009, the Battle Road Scenic Byway Working Group toured the Byway to assess the Byway's intrinsic qualities. A few members of the Working Group are pictured here, in front of the Old Schwamb Mill in Arlington.

### Town of Arlington

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- *Primary Town Contact January 2011-May 2011:* Carol Kowalski, Arlington Director of Planning and Community Development
- Howard Winkler, Arlington Historical Society
- *Board of Selectmen Liaison:* Clarissa Rowe, Arlington Board of Selectmen  
Former Working Group Member
- *Primary Town Contact April 2009-January 2011:* David Berry, Arlington Assistant Director of Planning

### Town of Lexington

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- *Primary Town Contact:* Maryann McCall-Taylor, Lexington Planning Director
- Richard Canale, Lexington Planning Board
- *Board of Selectmen Liaison November 2010-March 2011:* George Burnell, Lexington Board of Selectmen  
Former Working Group Member
- *Board of Selectmen Liaison April 2009-November 2010:* Jeanne Krieger, Lexington Board of Selectmen

### Town of Lincoln

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- *Primary Town Contact September 2010-May 2011:* Chris Reilly, Lincoln Director of Planning and Land Use
- Colin Smith, Lincoln Historical Commission
- *Board of Selectmen Liaison:* Sara Mattes, Lincoln Board of Selectmen  
Former Working Group Members
- *Primary Town Contact January 2010-September 2010:* Catherine Perry, Lincoln Planning Administrator
- *Primary Town Contact April 2009-January 2010:* Mark Whitehead, Lincoln Town Planner

## Town of Concord

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- *Primary Town Contact:* Lara Kritzer, Concord Senior Planner
- Mike Maglio, Concord Public Works Engineer
- *Board of Selectmen Liaison November 2010-May 2011:* Elise Woodward, Concord Board of Selectmen  
Former Working Group Member
- *Board of Selectmen Liaison April 2009-November 2010:* Stanly Black, Concord Board of Selectmen

## Minute Man National Historical Park

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- *Official representative:* Nancy Nelson, Minute Man National Historical Park Superintendent
- Lou Sideris, Minute Man National Historical Park Chief of Planning and Communications

## Metropolitan Area Planning Council

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- *March 2010-May 2011:* Manisha Gadia Bewtra, AICP, MAPC Regional Planner
- *April 2009-March 2010:* Christine Wallace, P.E., MAPC Senior Regional Planner
- *Project scope and grant application developed by:* Barbara Lucas, former MAPC Transportation Division Manager

## Public input

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Public input was gathered in a variety of ways throughout this project. The Battle Road Scenic Byway Working Group held periodic public forums, subcommittee meetings on transportation, land use, and tourism, and maintained an email distribution list and project website. In addition to the use of email and the project website, meetings were publicized with flyers posted in key community locations, on social networking websites, and in local newspapers, blogs, town websites, and other locations. Throughout the process, MAPC invited the public to provide input at meetings, by email, or by mail. Comments were catalogued by MAPC staff and this plan is the result of ideas posed by community members and other project stakeholders.

## Project website

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Early in the project, a webpage was established for the Battle Road Scenic Byway on MAPC's website. In June 2009, the domain names [battleroadscenicbyway.org](http://battleroadscenicbyway.org), [battleroadscenicbyway.com](http://battleroadscenicbyway.com), and [battleroadscenicbyway.us](http://battleroadscenicbyway.us) were purchased for five years each. This website [www.battleroadscenicbyway.org](http://www.battleroadscenicbyway.org) was referenced in project communications starting in July 2009, and throughout the life of the project this domain name redirected to the project webpage on the MAPC website.

## June 16, 2009 Public Kickoff Meeting

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The Battle Road Scenic Byway **Public Kickoff Meeting** was held on June 16, 2009, 7:00-9:00pm at Cary Memorial Hall in Lexington. Over fifty participants attended this kickoff meeting, which featured:

- Welcome and introductions from Lexington Board of Selectmen Chair Jeanne Krieger and State Representative Jay Kaufman
- Keynote address by Dan Fenn, Kennedy School of Government Adjunct Lecturer and Lexington resident
- A history of the Battle Road Scenic Byway given by Lexington Planning Board member Richard Canale
- An overview of the National Scenic Byways Program and corridor management plans by MAPC Senior Regional Planner Christine Wallace, P.E.
- A Google Earth Virtual Tour with a panel of speakers from the Working Group
- Open discussion
- Opportunities to provide written feedback; several participants filled out feedback forms at the meeting.



### Transportation, Land Use, and Tourism Subcommittees

On August 11, 2009, the Working Group kicked off the three project subcommittees during breakout sessions at a Working Group meeting: the **Transportation Subcommittee** (which was initially called the Roadway Subcommittee), the **Land Use Subcommittee**, and the **Tourism Subcommittee**. Subsequently, each of these subcommittees met on an occasional basis at times other than regular Working Group meetings. The Transportation Subcommittee and Land Use Subcommittee typically met during business hours and the Tourism Subcommittee typically met on weekday evenings. In addition to representatives from the Working Group, participants in the subcommittees included representatives from state agencies such as the Massachusetts Department of Transportation Highway Division, residents of Byway towns, and employees of visitor sites along the Byway.



### December 2009-January 2010 community forums in each town

In December 2009 and January 2010, the Working Group hosted community forums in each Byway town: on December 14, 2009 in Concord, on December 16, 2009 in Lincoln, on January 14, 2010 in Lexington, and on January 28, 2010 in Arlington. These community forums included discussion of the many resources, stories, and themes of the Battle Road Scenic Byway. Participants provided input on the Byway boundaries, including proposed extensions and loops.



### October 2010 Topic-specific forums

Topic-specific forums to discuss plan recommendations and potential action steps were held in October 2010; a forum on tourism was held in Arlington on October 14, 2010, a forum on land use was held in Lincoln on October 19, 2010, and a forum on transportation was held on October 21, 2010 in Concord.



### November 9, 2010 Public Forum

On November 9, 2010 the Working Group hosted a public forum to present the corridor management plan vision, goals, and potential action steps at Cary Memorial Hall in Lexington. Members of the four Byway communities were invited to join members of the Working Group for a Meet and Greet in the lobby of Cary Memorial Hall prior to presentations in the auditorium. During this Meet and Greet, participants had the opportunity to review project maps as well as draft action steps and proposed strategies for the Byway, organized by topic: transportation, land use, tourism, and intrinsic qualities. As the Meet and Greet was winding down, participants were asked to enter Cary Memorial Hall Auditorium to watch a virtual tour of the Byway. The evening's presentation included an interactive presentation in which audience members were polled for their opinions on the Byway's intrinsic qualities, the corridor management plan goals, and strategies for each of the corridor management plan goals. They were also asked about how they'd identify themselves, what town they were representing, and previous attendance at Byway meetings. Over fifty participants





attended the meeting, and more than a quarter of the participants who responded to the polling questions were attending a meeting about the Battle Road Scenic Byway for the first time.

### March 31, 2011 Final Public Forum

On March 31, 2011, the final public forum for the Battle Road Scenic Byway Corridor Management Plan was held at the Minute Man Visitor Center in Minute Man National Historical Park.

### Press and media coverage

Corridor management planning for the Battle Road Scenic Byway attracted considerable coverage in local and regional newspapers, as well as local blogs and on local cable television stations. The following list is a summary of publicity that the project received.

- The June 16, 2009 Public Kickoff meeting was recorded by the Lexington local cable station and re-broadcast in Lexington and other Byway towns. Additionally, the meeting received coverage in the *Lexington Minuteman* and republished in other local newspapers.
- The *Boston Globe* featured an article about planning for the Byway on June 28, 2009.
- A Transportation Subcommittee meeting held in Concord on May 14, 2010 received coverage in the *Concord Journal* and was republished in the *Lincoln Journal* and the *Lexington Minuteman*.
- Press coverage of the December 2009-January 2010 community forums included articles in the *Concord Journal* and the *Lincoln Journal*.
- On April 18, 2010 an article in the *MetroWest Daily News* referred to the Battle Road Scenic Byway as an example of a regional preservation effort that the MetroWest could follow.
- The October 14, 2010 forum on tourism was publicized in the *Arlington Advocate*.
- The November 9, 2010 Public Forum was publicized in the *Boston Globe*, CBS Boston, *Arlington Patch*, *Concord Patch*, *Lexington Patch*, and *YourArlington.com*. The meeting received coverage in *Lexington Patch*.
- On March 27, 2011 an article about the March 31, 2011 open house and planning for the Byway was featured in the *Boston Globe*.
- An April 7, 2011 in the *Lexington Minuteman*, *Concord Journal*, *Lincoln Journal*, *Arlington Advocate*, and other local newspapers summarized the corridor management plan and publicized the opportunity for public input.
- An article in May 2011 in the *Lexington Minuteman*, *Concord Journal*, *Lincoln Journal*, *Arlington Advocate*, and other local newspapers publicized presentations of the corridor management plan to each town's Board of Selectmen and summarized next steps in planning for the Byway.





## Data gathering

Data gathering for the Battle Road Scenic Byway started with conducting an inventory of the corridor to document resources contributing to the intrinsic qualities of the Byway, and to identify any conditions that detract from these intrinsic qualities. Data on existing conditions for Byway resources, transportation conditions, land use context, tourism, and compliance with outdoor advertising regulations were gathered by field research, in Working Group meetings, at subcommittee meetings, at meetings with key stakeholders, and through review of existing reports on these conditions. Sources used are cited throughout this report and listed in the bibliography for this document.

## Management recommendations

Recommendations for managing the intrinsic qualities, future development, transportation along the Byway, roadway conditions, and tourism were developed throughout the planning process. Potential implementation steps for these recommendations presented at the October 2010 topic-specific forums, in the public forum on November 9, 2010, and after revision, presented again at the final public forum on March 31, 2011. These recommendations and implementation steps were revised and refined until the document was finalized for submission to the Massachusetts Department of Transportation and the Federal Highway Administration.



## Implementing this plan

This document identifies the next steps for implementing the Battle Road Scenic Byway Corridor Management Plan, including the formation of a management team and an outline of the implementation priorities. These are detailed in the final chapter of the plan.



### Public engagement:

Participants responded enthusiastically to the use of both low-tech and high-tech public engagement strategies during the planning process. Every public forum offered opportunities to interact with the Working Group and to review project documents and maps. Virtual tours created using Google Earth were a popular feature at public forums and were made available for download on the project website. At the November 9, 2010 public forum, electronic keypads were used for audience polling.





## The Battle Road Scenic Byway: Road to Revolutions

### Arlington • Lexington • Lincoln • Concord

## 2. INTRINSIC QUALITIES MANAGEMENT

A major component of corridor management planning for scenic byways is identifying the byway's *intrinsic qualities* and resources along the byway that contribute to those qualities. The Battle Road Scenic Byway has dozens of intrinsic resources that contribute to its historic, cultural, natural, recreational, and scenic qualities. Many of the key resources that illustrate why the Battle Road Scenic Byway is the Road to Revolutions are described in this chapter, such as historic homes, battlegrounds, burial grounds, mills, laboratories, farm fields, monuments, conservation areas, and scenic vistas. Additionally, events that bring the Battle Road Scenic Byway's incredible history to life such as annual reenactments of the events of April 19, 1775 are described as well. Strategies for protecting and enhancing these resources are included throughout this Corridor Management Plan, since protecting the intrinsic qualities of the Battle Road Scenic Byway is essential for its long-term sustainability. This chapter discusses some of these strategies, as well as strategies for interpreting these resources to further develop the Battle Road Scenic Byway Story.

### 2.1. The Road to Revolutions

Much of the Battle Road Scenic Byway follows routes first developed by Native Americans. These routes later became roadways during the Colonial period, and continue to be central thoroughfares for the four Battle Road Scenic Byway communities and the surrounding region. The route was also home to several significant Pre-Colonial settlements, and local museums house many of the artifacts discovered in the area.

In the 17<sup>th</sup> and 18<sup>th</sup> century, the economy along the Battle Road Scenic Byway communities was based on agriculture and industries such as mills and tanneries. Concord, located at the confluence of the Assabet, Sudbury, and Concord Rivers, was the first inland settlement in America and quickly grew to be a thriving center of Colonial life in Massachusetts.

Concord was settled by Europeans and incorporated in 1635. Lexington was settled in 1642 as part of Cambridge, then incorporated as a parish called Cambridge Farms in 1691, and incorporated as the Town of Lexington in 1713. Lincoln was settled as part of Concord in 1654 and incorporated as a separate town in 1754. Arlington was first settled a village of Cambridge called Menotomy in 1635, incorporated as part of West Cambridge in 1807, and incorporated as the Town of Arlington in 1837. All four towns have practiced a Town Meeting form of government since their incorporation. Like many Massachusetts and New England towns, settlers of the Battle Road Scenic Byway believed in self-reliance and interdependence, as indicated by the active involvement of town citizens in shaping local government from the 17<sup>th</sup> century through today.

The Battle Road Scenic Byway corridor is best known for its role in the American Revolution. The events of April 19, 1775, commonly known as the Battles of Lexington and Concord, are considered the point of no return – the point when years of building tension finally erupted into war. An early dawn battle on April 19, 1775 at Lexington Common, now known as Lexington Battle Green, during which eight colonial militia men were killed and ten were wounded, was followed by the “shot heard ‘round the world” at North Bridge when colonists attacked the king’s troops, killing three British soldiers and wounding several others. The British troops started their retreat to Boston, and the running battle that followed through

Concord, Lincoln, Lexington, and Arlington is the source of what we now call the Battle Road.

In the nineteenth century, the Battle Road Scenic Byway was a hub for American literature, transcendentalism, abolitionism, and environmental conservation. Major authors of the nineteenth century including Ralph Waldo Emerson, Henry David Thoreau, Louisa May Alcott, Margaret Fuller, and Nathaniel Hawthorne all lived and wrote along this storied route and drew inspiration from the natural and cultural resources that it provided.

In the twentieth century, innovations in radar technology, air defense, air traffic control systems, inertial navigation, and aviation electronics were developed just steps away from the Battle Road Scenic Byway at the Massachusetts Institute of Technology (MIT) Lincoln and Draper Laboratories adjacent to Hanscom Air Force Base and other Department of Defense-funded research laboratories.

Today, the four communities that host the Battle Road Scenic Byway are still hubs for high-tech innovation associated with the technology businesses along Route 128, known as “America’s Technology Highway.” Route 128 runs perpendicular to the Battle Road Scenic Byway near the Lexington and Lincoln town lines, at the approximate center of the Byway.

Some of today’s pre-eminent thinkers live in the Battle Road Scenic Byway towns. Some current or recent residents include E.O. Wilson, Noam Chomsky, Sir Tim Berners-Lee, Peter Diamond, and Doris Kearns Goodwin. Pulitzer Prize-winner E. O. Wilson is a renowned biologist, researcher in sociobiology and biodiversity, theorist, naturalist and author. Noam Chomsky is an outspoken American linguist, philosopher, cognitive scientist, and political activist. Sir Tim Berners-Lee is the engineer and computer scientist credited with inventing the World Wide Web. Peter Diamond won the Nobel Prize in Economics in 2010. Pulitzer-prize winner Doris Kearns Goodwin is a biographer, historian, and political commentator. These and numerous other Byway residents, famous or not, continue the Battle Road Scenic Byway’s tradition of visionary thinking and revolutionary action.<sup>1</sup>

Throughout its superlative history, the Battle Road Scenic Byway has been a place of lively debate and intellectual discourse, home to pioneers of many humanitarian movements and technological innovations. The following themes have “revolutionary” undercurrents and are the hallmarks of the Road to Revolutions. This is the Battle Road Scenic Byway Story.

## American Independence

The Battle Road Scenic Byway follows the approximate route of British troops during the battles on April 19, 1775 which kicked off the American Revolutionary War. Battle sites, witness houses, commemorative monuments, and tourist facilities capture the events of this momentous day and bring them to life in visitors’ imaginations.

## Authors and Philosophers

In many ways, American literature came into being along the Byway with numerous classic American authors living and writing along the Byway in the 19<sup>th</sup> century. These authors and their contemporaries influenced the intellectual discourse and social reform movements of their time, and their strong convictions and sense of civic



British troops marching toward Concord and militia muster at North Bridge. Images courtesy of National Park Service.



Louisa May Alcott, Henry David Thoreau, Nathaniel Hawthorne, and Ralph Waldo Emerson all lived and wrote along the Byway.

<sup>1</sup> (Hollister & Sideris, 2008), (Winkler, 2009-2011), (Kritzer, 2009-2011), (Canale, 2009-2011).

responsibility still inspire us today. Among these philosophies are: transcendentalism, civil disobedience, abolitionism, and conservation of the natural environment.

## Technological Innovation

For centuries, new technologies and innovative solutions have been developed in the environs of The Battle Road Scenic Byway. Thanks to the natural resources provided by water bodies and the local climate, The Battle Road Scenic Byway was home to several mills and ice houses before and during the Industrial Revolution. The ice harvested here was shipped around the world, as were the products manufactured in the mills along the Byway. More recently, early innovations in radar technology, air defense and traffic control systems, inertial navigation, and aviation electronics occurred just steps away from the Battle Road Scenic Byway at the Massachusetts Institute of Technology (MIT) Lincoln and Draper Laboratories adjacent to Hanscom Air Force Base and other Department of Defense-funded research laboratories.



## Agriculture

Much of the economy along the Battle Road Scenic Byway was based on agriculture during the Colonial Period, and a strong agricultural tradition continues along the Byway through today. Farming was still predominant along much of the Byway until well into the twentieth century and there are ongoing efforts in the communities to preserve and restore agricultural resources where possible.



## Abolition of Slavery

Many Underground Railroad “stations”, or safe houses, are located along The Battle Road Scenic Byway. Several abolitionists and former slaves lived here, and were instrumental in the emancipation of slaves and ultimate abolishment of slavery in the United States. The Drinking Gourd Project developed a walking tour of African-American and Abolitionist heritage sites in Concord and is actively involved in preserving the Caesar Robbins House as a historical center.



## Philanthropy

Many of the libraries, town halls, schools, museums, and other civic buildings and cultural institutions along The Battle Road Scenic Byway were endowed by local altruists in the late nineteenth and early twentieth century through today.



## Art and Architecture

Internationally-known artists and architects, including architect Walter Gropius who founded the Bauhaus School in Germany and sculptor Daniel Chester French who sculpted *Abraham Lincoln* for the Lincoln Memorial in Washington, D.C., lived and worked in close proximity to the Byway. The Byway includes excellent works of public sculpture, many depicting the historical figures who once lived nearby. There are also several museums and arts resources along (or nearby) the Byway. Several sites along the Byway are listed on the National Register of Historic Places for their architectural significance.



## 2.2. What are intrinsic qualities?

As mentioned in the previous chapter, the National Scenic Byways Program defines **intrinsic qualities** as the historic, cultural, natural, recreational, scenic, and archaeological features that are “considered representative, unique, irreplaceable, or distinctly characteristic of an area.” These six qualities are defined below. Nearly every resource along the Battle Road Scenic Byway has historic qualities associated with it. Other intrinsic qualities, particularly cultural and recreational, feature prominently as well. The bulk of this chapter following this section includes examples of resources contributing to each intrinsic quality, with the exception of archaeological quality due to a Massachusetts law, described later in this chapter, which requires that archaeological sites remain confidential to protect their fragile nature.

### Historic quality

Definition from the FHWA National Scenic Byways Program Interim Policy:

**Historic quality** encompasses legacies of the past that are distinctly associated with physical elements of the landscape, whether natural or manmade, that are of such historic significance that they educate the viewer and stir an appreciation for the past. The historic elements reflect the actions of people and may include buildings, settlement patterns, and other examples of human activity. Historic features can be inventoried, mapped, and interpreted. They possess integrity of location, design, setting, material, workmanship, feeling, and association.



### Cultural quality

Definition from the FHWA National Scenic Byways Program Interim Policy:

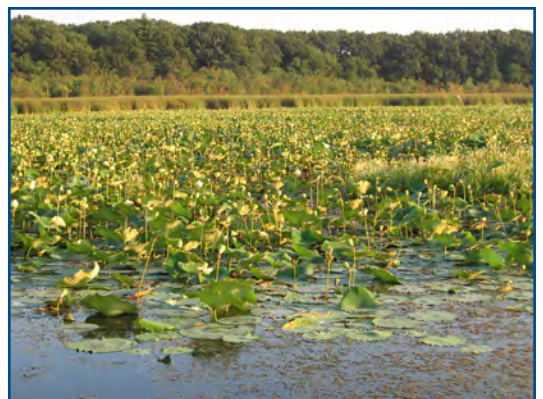
**Cultural quality** is evidence and expressions of the customs or traditions of a distinct group of people. Cultural features including, but not limited to, crafts, music, dance, rituals, festivals, speech, food, special events, vernacular architecture, etc., are currently practiced. The cultural qualities of the corridor could highlight one or more significant communities and/or ethnic traditions.



### Natural quality

Definition from the FHWA National Scenic Byways Program Interim Policy:

**Natural quality** applies to those features in the visual environment that are in a relatively undisturbed state. These features predate the arrival of human populations and may include geological formations, fossils, landform, water bodies, vegetation, and wildlife. There may be evidence of human activity, but the natural features reveal minimal disturbances.



## Recreational quality

Definition from the FHWA National Scenic Byways Program Interim Policy:

**Recreational quality** involves outdoor recreational activities directly [associated] with and dependent upon the natural and cultural elements of the corridor's landscape. The recreational activities provide opportunities for active and passive recreational experiences. They include, but are not limited to, downhill skiing, rafting, boating, fishing, and hiking. Driving the road itself may qualify as a pleasurable recreational experience. The recreational activities may be seasonal, but the quality and importance of the recreational activities as seasonal operations must be well recognized.



## Scenic quality

Definition from the FHWA National Scenic Byways Program Interim Policy:

**Scenic quality** is the heightened visual experience derived from the view of natural and manmade elements of the visual environment of the scenic byway corridor. The characteristics of the landscape are strikingly distinct and offer a pleasing and most memorable visual experience. All elements of the landscape—landform, water, vegetation—contribute to the quality of the corridor's visual environment. Everything present is in harmony and shares in the intrinsic qualities.



## Archaeological quality

Definition from the FHWA National Scenic Byways Program Interim Policy:

**Archaeological quality** involves those characteristics of the scenic byways corridor that are physical evidence of historic or prehistoric human life or activity that are visible and capable of being inventoried and interpreted. The scenic byway corridor's archaeological interest, as identified through ruins, artifacts, structural remains, and other physical evidence have scientific significance that educate the viewer and stir an appreciation for the past.



Massachusetts law requires that archaeological sites remain confidential. As such, resources along the Battle Road Scenic Byway that fit a strict interpretation of the archaeological intrinsic quality definition by FHWA are not included in this report. However, numerous sites that indicate "physical evidence of historic human life or activity," such as the house foundation shown here, are located along the Byway.

## 2.3. Battle Road Scenic Byway resource inventory

This section identifies several critical resources that tell the Battle Road Scenic Byway Story, listed by their primary intrinsic quality. Selected resources are shown in maps for each town at the end of this chapter. The complete Battle Road Scenic Byway Resource Inventory is included in Appendix A.

### Historic resources

#### April 19, 1775 battlegrounds

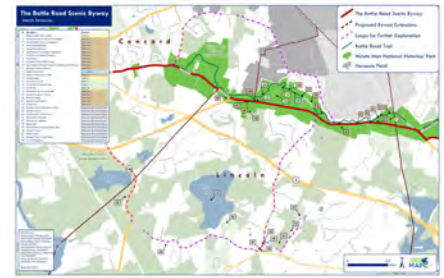
The Battle Road Scenic Byway brings the American Revolution to life. The following narrative is a summary of the actions that led up to the events of April 18-19, 1775 and a more detailed account of what happened on April 18-19, 1775.

In the years following the French and Indian War, which ended in 1763, tensions grew between American colonists and the British government. The British government attempted to pay for the war by passing the Stamp Act in 1765, which met with violent protest by the colonists and was repealed the next year. After that, a tug of war ensued in which the British government would impose taxes and tariffs, colonists would protest, and British troops would be sent to the Boston area to keep order. In 1774, the British government deposed the local government and installed General Thomas Gage as the Governor of Massachusetts. In response to these aggressive actions, the colonists began to arm themselves. British troops seized armaments from present-day Somerville in September 1774 and Salem in February 1775.

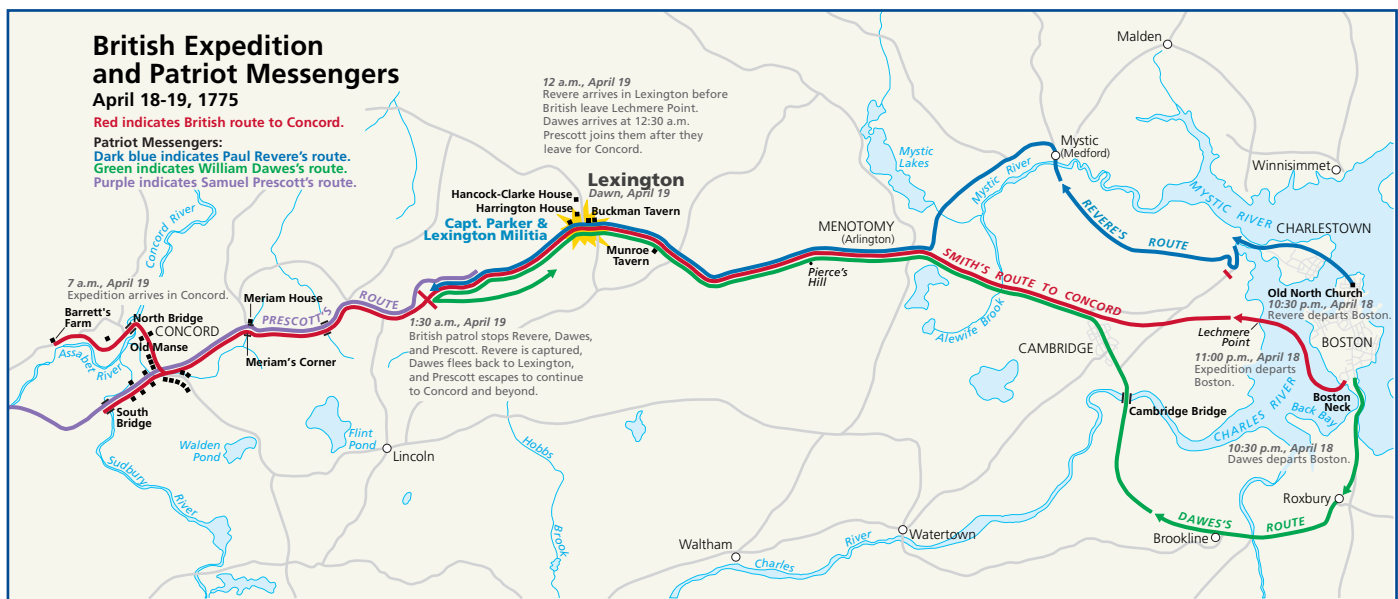
On April 18, 1775, General Gage ordered Lieutenant Colonel Francis Smith of His Majesty's 10th Regiment and Major John Pitcairn of the Marines along with 700 British soldiers to seize the munitions stored in Concord. They began their expedition to Concord around 11:00pm on April 18, 1775.

Before the troops left Boston, at around 10:30pm, alarm riders William Dawes and Paul Revere were sent by separate routes to warn colonists in Lexington, Concord, and the other towns along the way that the British were coming. The alarm riders were able to travel much faster than the large expedition of troops, although a small group of British officers were sent ahead of the expedition in close pursuit of the alarm riders.

Revere arrived at the Hancock-Clarke House near Lexington Common around midnight. By this point, the British troops were still at Lechmere Point in East Cambridge, about 11 miles away. Captain John Parker, commander of the Lexington Militia, assembled the militia on Lexington Common.



Intrinsic resources maps for each town are included at the end of this chapter.



National Park Service map included in the Minute Man National Historical Park brochure

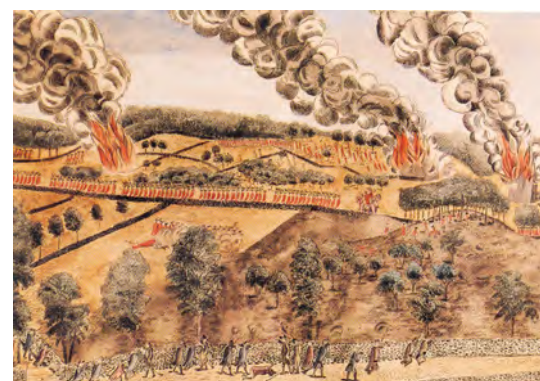
Revere was joined by Dawes around 12:30 a.m., and they left for Concord together, joined by Samuel Prescott en route. British officers, sent after the alarm riders, eventually caught up with them, capturing Revere at 1:30 a.m. near what is today the Lexington/Lincoln border. The officers escorted Revere back to Lexington, while Dawes and Prescott were able to escape. Dawes fled back to Lexington while Prescott continued the journey to Concord, continuing to alarm colonists that the British troops were on their way.

The British troops finally arrived at Lexington Common around 5:00 a.m. on April 19, 1775, encountering the 77 Lexington militia men. Here, the first blood of the American Revolutionary War was shed. Captain John Parker saw that the Lexington Militia was seriously outnumbered and ordered his troops to disperse. A shot was fired – whether a Lexington Militia member, or a British soldier, no one knows – resulting in the British troops firing a volley into the militia, killing eight and wounding ten.

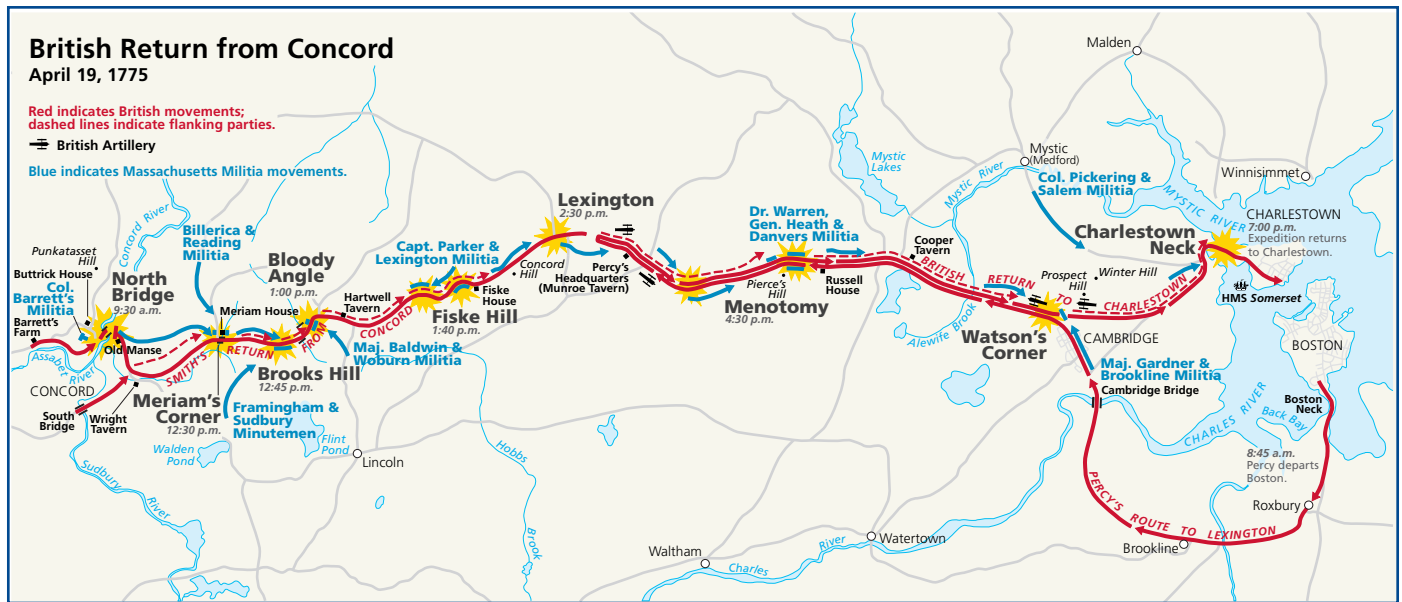
The British troops continued on toward Concord and arrived around 7:00 a.m. While the troops marched from Lexington to Concord, colonial militia men from Concord and Lincoln responded to the alarms of Prescott and others, and begin mustering, hiding military supplies, and keeping watch of the arriving troops. The British troops split up into smaller groups to search for munitions and to secure North Bridge and South Bridge in Concord. They burned whatever military equipment or other contraband they found in the streets. Some of the troops advanced toward Colonel James Barrett's Farm, about one and one-half miles from North Bridge, where informers had told the government that armaments including cannon were stored.

At around 9:30 a.m., men from Colonel James Barrett's Militia, which consisted of units from Concord, Lincoln, Acton, and Bedford, stood on Muster Field, the hill above North Bridge, and saw smoke in the direction of Concord's town center. They thought the British were burning the town. Major John Buttrick, the commanding officer of these men, was reported to have shouted, "Fire, fellow soldiers; for God's sake fire." The full volley killed three British and wounded several others. This was, in Emerson's words, "the shot heard 'round the world." The people then attacked the king's troops.

At this point, the British troops were outnumbered and the colonial militia men had been much more organized than they had expected. The troops started their retreat to Boston. First, the troops spent about two hours in Concord Center and set up temporary headquarters at Wright Tavern to regroup and refresh. Meanwhile, the numbers of colonial militia grew as the local militias were joined by militias from neighboring towns, including the Billerica and Reading Militia. The colonial militia men, now numbering about 1,000, converged with British troops at Meriam's Corner around 12:30 p.m., and a fierce fight ensued. The Framingham and Sudbury Militia joined the fight at Brooks Hill around 12:45 p.m., at Major Baldwin, and the Woburn Militia joined at Bloody Angle around 1:00 p.m. The fighting continued onward to Fiske Hill, where British troops arrived around 1:40pm. Around 2:30pm, the British troops arrived at Lexington Common for their second encounter with the Lexington Militia. Here the British troops received 1,000 reinforcements, commanded by Brigadier General Earl Percy. They rested in Lexington briefly at Munroe Tavern.



Engraver Amos Doolittle visited April 19, 1775 battle sites and interviewed witnesses to create a series of renderings. Shown here are replicas of these engravings, engraved in Boston and handcolored in 1903: the fight at Lexington Green, the arrival of British troops in Concord, the fight at North Bridge, and the retreat back toward Boston with Percy's reinforcements. Images courtesy of the Concord Museum.



National Park Service map included in the Minute Man National Historical Park brochure

The bloodiest fighting occurred in Menotomy – present-day Arlington – where the troops arrived around 4:30 p.m. By this time, more than 5,000 men on both sides were involved in the fight. The fighting in Menotomy claimed about half of the lives lost in the battles of April 19, 1775. The British troops finally arrived at Bunker Hill in Charlestown, across the Charles River in Boston, around 6:30 p.m., and the fighting ended for that day – but the Siege of Boston by colonial militias had begun. The day's casualties included 73 dead, 174 wounded, and 26 missing on the British side; and 49 dead, 40 wounded, and 5 missing on the colonial side.<sup>2</sup>

The battlegrounds, significant witness houses, and commemorative markers listed below are listed in the chronological order of events, starting with Lexington Battle Green where the first military engagement occurred on April 19, 1775, moving west to Concord, and returning east through Concord, Lincoln, Lexington, and Arlington. Other significant sites important to the April 19, 1775 narrative, including the many houses along the Battle Road Scenic Byway whose inhabitants may have been witness to the fighting on that day, burial grounds, and commemorative markers including the Paul Revere Capture Site are described later in this chapter.

### Butterfield Whittemore House, Arlington

William Dawes would have passed this home as he alarmed the countryside that British troops were on their way on the night of April 18, 1775. Located at 52 Massachusetts Avenue in Arlington, the **Butterfield Whittemore House** was built in the late 1600s or early 1700s by Johnathan Butterfield and was purchased in 1749 by Samuel Whittemore III, the son of the Samuel Whittemore who fought British troops in Arlington on April 19, 1775. The Whittemore family was awoken by British troops marching by their home in the early morning hours of April 19.<sup>3</sup> The Butterfield Whittemore House is listed in the National Register of Historic Places and is currently a multifamily residence. It was renovated by Lumus Historical Restorations in 2006.<sup>4</sup>



Butterfield Whittemore House

### Black Horse Tavern Site, Arlington

Also along the route of William Dawes, the site of the **Black Horse Tavern** at the intersection of Tufts Street and Massachusetts Avenue in Arlington marks the beginning of the Battle Road Scenic Byway as designated by the Massachusetts legislature in November 2006. According to *The Battle of April 19, 1775* by Frank Warren Coburn, the Committee of Safety

<sup>2</sup> (Hollister & Sideris, 2008), (PBS and WGBH, 2004), (Winkler, 2009-2011), (National Park Service, 2010)

<sup>3</sup> (Coburn, 1922, p. 52)

<sup>4</sup> (National Park Service), (Lumus Construction Inc., 2008)

and the Committee of Supplies met at the Black Horse Tavern on April 18, 1775. Three members of these committees stayed at the tavern overnight, and were awoken by British troops marching by around three o'clock in the morning on April 19. They soon realized that the troops suspected that they were there and quietly escaped at the rear of the tavern. The troops haphazardly searched the tavern, and upon discovering nothing of import, continued on their march.<sup>5</sup> Today, all that is left of the Black Horse Tavern is a commemorative marker in front of the gas station. A sign advertising the gas station as a location to get state inspections done often blocks the commemorative marker.



The Black Horse Tavern Site

### The Wayside Inn, Arlington

William Dawes would have also passed this home, located at 393 Massachusetts Avenue in Arlington. The **Wayside Inn** was built in the mid-1700s and is listed in the National Register of Historic Places.<sup>6</sup> The building is currently occupied by offices. According to the Freedom's Way National Heritage Area, the house was owned by the Whittemore and Shattuck families.<sup>7</sup>



The Wayside Inn

### Captain Benjamin Locke House, Arlington

Built in 1720 and listed in the National Register of Historic Places in 1978,<sup>8</sup> the home of Captain Benjamin Locke, captain of the Menotomy minutemen, was one of the places where Paul Revere stopped during his "midnight ride" on April 18, 1775.<sup>9</sup> The **Captain Benjamin Locke House** is located at 21 Appleton Street, in close proximity to the current Battle Road Scenic Byway and on the proposed Byway extension.



Captain Benjamin Locke House

### Hancock-Clarke House

Also built in the late 1600s or early 1700s, the **Hancock-Clarke House** was the residence of Reverend Jonas Clarke in 1775. On the night of April 18, 1775 John Hancock and Samuel Adams stayed here after meetings of the Provincial Congress in Concord. Around midnight, Paul Revere and William Dawes both stopped at this house, separately, to alert John Hancock and Samuel Adams that the British troops were on their way. The Hancock-Clarke House was named after its inhabitants; before Reverend Jonas Clarke lived there, it was occupied by Reverend John Hancock, the grandfather of the more famous John Hancock. The Hancock-Clarke House, a National Historic Landmark, is managed by the Lexington Historical Society and open daily June-October and on weekends in April and May.<sup>10</sup>



Hancock-Clarke House

### Buckman Tavern

Located at 1 Bedford Street in Lexington adjacent to the Battle Green, **Buckman Tavern** was built in the late 1600s or early 1700s by Benjamin Muzzey and is named after John Buckman, the tavern's proprietor in 1775. Buckman Tavern was a major community meeting space; it served as a restaurant and bar for townspeople and those



Buckman Tavern

<sup>5</sup> (Coburn, 1922, pp. 52-54)

<sup>6</sup> (National Park Service)

<sup>7</sup> (Freedom's Way Heritage Association, 2010)

<sup>8</sup> (National Park Service)

<sup>9</sup> (Winkler, Menotomy Minuteman Historical Trail: A Walking Tour of Arlington's Past)

<sup>10</sup> (Lexington Historical Society, 2011)

who did business in Lexington, and many town committee meetings occurred there. Like many other sites along the Battle Road Scenic Byway, Buckman Tavern is best known for its role in the events of April 1775. During that time, the tavern was the headquarters for the Lexington militia. In the early hours of April 19, 1775, over seventy minutemen waited for the arrival of the British troops at Buckman Tavern. Buckman Tavern, a National Historic Landmark, is open daily April-October and by appointment in the off-season through the Lexington Historical Society.<sup>11</sup>

## Lexington Battle Green

This National Historic Landmark, **Lexington Battle Green**, also called Lexington Common and Lexington Green, is the hallowed ground where the fighting began in the early morning hours of April 19, 1775. After receiving the warning from alarm riders Paul Revere and William Dawes earlier in the night, Captain John Parker used the bell atop the Belfry to assemble the Lexington militia on the Green. As the British troops were still several miles from Lexington when Revere and Dawes sounded their warnings, Captain Parker ordered the troops to disassemble but to stay alert for the call of the Lexington drummer to reassemble.



Lexington Battle Green

Many of the Lexington militia men stayed at Buckman Tavern that night, only steps away from Green.<sup>12</sup> When the British troops were about a half-mile away, the drum call sounded, and seventy-seven Lexington militia men assembled on the Green. To this day, it remains unclear which side opened fire first, but eight colonists died, ten colonists were wounded, and two British soldiers were wounded in this skirmish.<sup>13</sup> Lexington Battle Green is a public space. During much of the year except during the winter, free tours are offered and questions answered by the Battle Green Guides, employees of the Town of Lexington who wear period costume. The Lexington Historical Society offers private tours, available upon request.<sup>14</sup> Recently, the Lexington Tourism Committee worked with a consultant to develop the *Lexington Battle Green Area Master Plan*, which includes recommendations for the preservation and use of the Lexington Battle Green and its surroundings.<sup>15</sup>

## Paul Revere Capture Site

Paul Revere did not complete his midnight ride; he, along with fellow riders William Dawes and Dr. Samuel Prescott, were apprehended by British troops at this site along Route 2A in Lincoln. Dawes and Prescott escaped, but the troops questioned Revere and forced his return to Lexington, where they took his horse and released him.<sup>16</sup> The **Paul Revere Capture Site** includes a parking area for visitors and features informational panels to educate visitors about the midnight riders and Paul Revere's capture.



Paul Revere Capture Site

## North Bridge and Muster Field, Concord

After the skirmish at Lexington Green, British troops marched toward Concord, where stockpiles of munitions were concealed in locations throughout the town. A chief target was Colonel James Barrett's house, based upon intelligence that a large quantity of munitions, including cannon, was stored there. During this march, some members of the Concord and Lincoln militias were posted on hills to watch and gather information on the number of troops. Other militia men hid stored munitions or gathered at Wright's Tavern in preparation for the British troops' arrival. As they approached, British troops made arrangements to secure South Bridge and North Bridge. Just shy of one-



Reenactment at North Bridge

<sup>11</sup> (National Park Service), (Lexington Historical Society, 2011)

<sup>12</sup> (Hollister & Sideris, 2008)

<sup>13</sup> (Town of Lexington Tourism Committee, 2010)

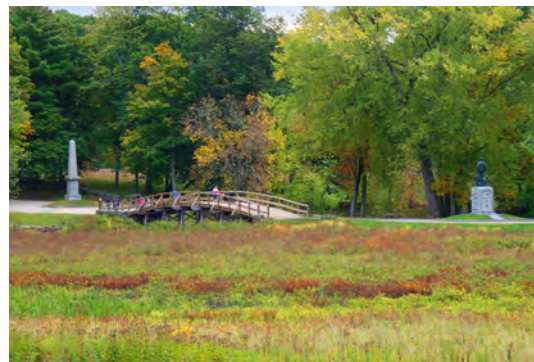
<sup>14</sup> (Lexington Historical Society, 2011)

<sup>15</sup> (Town of Lexington Tourism Committee, 2011)

<sup>16</sup> (Hollister & Sideris, 2008)

hundred British troops guarded **North Bridge** while about 130 crossed the bridge toward Colonel James Barrett House.

Meanwhile, about 400 militia men from Concord, Lincoln, Bedford, and Acton had gathered at **Muster Field** between North Bridge and the Barrett House. At around 9:30am, the militia saw smoke coming from Concord Center from their vantage point at Muster Field. Thinking British troops had begun to set fire to the town, the militia marched toward North Bridge, led by Colonel Barrett who instructed them not to fire unless fired upon. As the militia approached, the weary British troops saw they were outnumbered and some began to fire upon the militia without waiting for orders to do so. Seeing this, Major John Buttrick ordered the militia to fire – the first time colonists were ordered to fire on British troops. At North Bridge, twelve British soldiers were shot and three died. The remaining troops scattered and retreated back toward Concord Center. The militia followed them and the fighting that ensued lasted for several hours as the British troops headed east to Boston. The British troops that were sent to the Barrett House returned empty-handed, as colonists had been warned of their approach and hid all the munitions that were stored there in other places.<sup>17</sup>



View of North Bridge

### Colonel James Barrett House

**Colonel James Barrett House**, commonly known as **Barrett's Farm**, is located at 448 Barrett's Mill Road in Concord and was listed in the National Register of Historic Places in 1973.<sup>18</sup> This house, built in the early 1700s, was a site where colonists stored large quantities of military supplies in 1775. The British government learned about the munitions stored there, and seizing these weapons was the purpose of their march from Boston to Concord in the early morning hours of April 19, 1775. The colonists were warned that the British were coming, and moved the military supplies out of Barrett's Farm in advance of the British troops' arrival.



Colonel James Barrett House on Patriot's Day, 2011

Barrett's Farm is not currently on the Battle Road Scenic Byway; it would become the western terminus of the Byway if the Byway is extended as proposed. Minute Man National Historical Park boundary was extended in March 2009 to include Barrett's Farm, which is under restoration by an organization called Save Our Heritage.<sup>19</sup>

### Wright Tavern, Concord

Committees of the Provincial Congress met in Concord Center at **Wright Tavern** before the fighting began on April 19, 1775. After the fight at North Bridge in the late morning of April 19, 1775, the tavern was used by British officers for food and drink.<sup>20</sup>

To the left of this building at 20 Lexington Road, where the **First Parish Church** is now located, is the site of the town Meeting House in 1775 where the Provincial Congress, including John Hancock and Samuel Adams, met. The First Parish Church was "commonly used for public discourse on slavery in the 1800s."<sup>21</sup> Harriet Tubman and Frederick Douglass gave speeches there and any Middlesex County Antislavery Society meetings were held there.<sup>22</sup> The building presently at this location was built in 1901 and is a copy of its 1841 forerunner.<sup>23</sup>



Wright Tavern

<sup>17</sup> (Hollister & Sideris, 2008), (National Park Service, 2010)

<sup>18</sup> (National Park Service)

<sup>19</sup> (Save Our Heritage)

<sup>20</sup> (Hollister & Sideris, 2008)

<sup>21</sup> (The Drinking Gourd Project, 2009)

<sup>22</sup> (The Drinking Gourd Project, 2009)

<sup>23</sup> (Concord Historical Commission, 2001)

## Meriam's Corner, Concord

The Meriam family lived at this corner between 1663 and 1870. The **Meriam House**, a grey house at Meriam's Corner, was built in 1705 and in 1775 was occupied by Nathan and Abigail Meriam and their eleven children. Josiah Meriam also lived nearby in a house that no longer exists. Josiah Meriam was a sergeant in a minute man company and his son Josiah, Jr. was a private in the company.

After the fight at North Bridge, **Meriam's Corner** was the next major engagement along Battle Road. This At this location, thousands of militia from neighboring towns converged to bully the British back to Boston, thus beginning the Siege of Boston.<sup>24</sup>



Meriam House at  
Meriam's Corner

## Brooks Hill, Lincoln

Several features that give a flavor of colonial life and significant for events on April 19, 1775 are located at **Brooks Village**, such as houses, barns, and stone walls. Members of the Brooks family lived in this area between 1652 and 1862. The **Samuel Brooks House** was built in 1733 and is named after the farmer Samuel Brooks, who lived in the house with his mother Elizabeth on April 19, 1775 and was later a member of the Continental Army. Today, the Samuel Brooks House is available for public use for events such as corporate retreats and small weddings.<sup>25</sup> The **Joshua Brooks Tanyard Site** is where Samuel's cousin Joshua operated a tannery next to Elm Brook. **Noah Brooks Tavern**, built in 1798, was the private residence of Noah Brooks and his family as well as a successful tavern that benefited from its location along the Bay Road. Also in Brooks Village are the **Joshua Brooks, Jr. House**, built in 1780, and the **Job Brooks House**, built in 1740.<sup>26</sup>

Fighting on April 19, 1775 occurred at **Brooks Hill**, where the British troops encountered the Framingham and Sudbury militias. Two who fought that day at Brooks Hill were Peter Salem, an African-American minuteman and former slave who fought in the Framingham militia, and Major John Pitcairn, who was the second in command for the British troops. Salem was later credited with killing Pitcairn on June 17 at the Battle of Bunker Hill.<sup>27</sup>



Samuel Brooks House and  
Job Brooks House

## Bloody Angle, Lincoln

Located along a bend in the road on the restored Battle Road Trail, this was one of the few wooded areas along Battle Road on April 19, 1775. This became the site of one of the bloodiest skirmishes of the day. Upon their return from Concord, several minute men hid here and waited for the British troops. Eight British soldiers were killed and several more wounded at what is now known as **Bloody Angle**. An interpretive panel created by Minute Man National Historical Park is located at the site.<sup>28</sup>



2007 reenactment at Bloody Angle

## Ephraim Hartwell Tavern, Lincoln

**Ephraim Hartwell Tavern** is a witness house located along the Battle Road Trail in Minute Man National Historical Park. Built in 1733, the Hartwell Tavern was the home of Ephraim and Elizabeth Hartwell. They operated a tavern at their home from 1756-1783. They had three sons who all fought with the Lincoln Minute Men on April 19, 1775. Hartwell Tavern is part of Minute Man National Historical Park and is open to the public on a seasonal basis.<sup>29</sup>



Hartwell Tavern

<sup>24</sup> (Hollister & Sideris, 2008)

<sup>25</sup> (Hollister & Sideris, 2008), (National Park Service, 2011)

<sup>26</sup> (Hollister & Sideris, 2008)

<sup>27</sup> (Hollister & Sideris, 2008)

<sup>28</sup> (Hollister & Sideris, 2008)

<sup>29</sup> (Hollister & Sideris, 2008)

## Captain William Smith House, Lincoln

The **Captain William Smith House** is another witness house located along the Battle Road Trail in Minute Man National Historical Park. A Colonial house built in the late 1600s where the captain of the Lincoln Minute Men, his wife and four children, and a slave lived in 1775. Captain William Smith was the brother of Abigail Smith Adams, the wife of the United States' second president John Adams.<sup>30</sup>



Captain William Smith House

## The Bluff, Lexington

The **Bluff Monument** is a granite marker located at the base of a small rocky hill, known as the Bluff, to the north of Old Massachusetts Avenue near its intersection with Route 2A.<sup>31</sup> As stated on the granite marker: "This Bluff / was used as a rallying point / by the British / April 19, 1775 / After a sharp fight / they retreated to Fiske Hill / from which they were driven / in great confusion."

## Fiske Hill, Lexington

Named after the Fiske family who resided in the area from 1647 to 1847, **Fiske Hill** is located on the eastern boundary of Minute Man National Historical Park just west of I-95 in Lexington. The **Ebenezer House Foundation and Cellar Hole** is located here. On April 19, 1775, British troops passed through this area on their way to Concord and again on their return to Boston. During the return trip, Acton minute man James Hayward and a British soldier killed each other near the site of the well on the Fiske property. In 1885, a stone tablet known as the **Hayward Well Monument**, was installed by the Lexington Historical Society to memorialize the event.<sup>32</sup>



Hayward Well Monument

## Munroe Tavern, Lexington

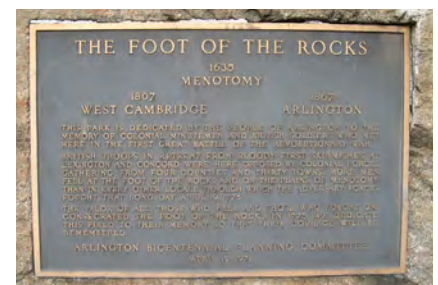
Built in the late 1600s or early 1700s, the **Munroe Tavern** at 1332 Massachusetts Avenue in Lexington is named for William Munroe, who was the Tavern's proprietor from 1770 to 1827. Munroe served as an orderly sergeant in the Lexington militia in 1775. On April 19, 1775, Munroe Tavern was taken over by Brigadier General Earl Percy and one-thousand British soldiers. For one-and-a-half hours, Munroe Tavern was the headquarters for British troops. A bullet hole from April 19, 1775 is still visible in the ceiling of the taproom. Munroe Tavern served as a field hospital and was also where the troops ate and drank on that day. Years later, in 1789, President George Washington dined at Munroe Tavern when he came to visit the Lexington battlefield. Tours of Munroe Tavern are offered by the Lexington Historical Society.<sup>33</sup>



Munroe Tavern

## Foot of the Rocks, Arlington

A skirmish with a flanking unit of the British troops occurred here during their retreat from Concord back toward Boston. The **Foot of the Rocks** is located the intersection of Lowell Street and Massachusetts Avenue. General Joseph Warren was almost killed during this fight.<sup>34</sup> According to the Freedom's Way Heritage Association, "at least two thousand British troops and a similar number of Minute Men converged and began a fire-fight which lasted until the British finally reached the sea at Charlestown."<sup>35</sup> There are commemorative markers in the landscaped median at this intersection.



Plaque at Foot of the Rocks

<sup>30</sup> (Hollister & Sideris, 2008)

<sup>31</sup> (Lexington Historical Commission, 2010)

<sup>32</sup> (Hollister & Sideris, 2008)

<sup>33</sup> (Lexington Historical Society, 2011)

<sup>34</sup> (Winkler, 2009-2011)

<sup>35</sup> (Freedom's Way Heritage Association, 2010)

## Jason Russell House, Arlington

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The **Jason Russell House** was built in 1740 and was the site of some of the bloodiest fighting on April 19, 1775. The British troops arrived at this location in the late afternoon of April 19 and surprised the colonial militia members who were stationed there in defensive positions. Jason Russell, plus eleven other colonists and two British soldiers, were all killed during that encounter.<sup>36</sup> It was reported in *The Lexington – Concord Battle Road Interim Report* of the Boston National Historic Sites Commission to the Congress of the United States, 1958, that at the Jason Russell House, “there followed the most famous fight at close quarters during the eventful day and the bloodiest encounter associated with any house in the Revolution.”<sup>37</sup>



Jason Russell House

A reenactment of the battle at Jason Russell House occurs annually. The home is listed in the National Register of Historic Places. In the 1960s, three late 19<sup>th</sup> and early 20<sup>th</sup> century buildings adjacent to the home were removed in order to restore the battlefield. The **Arlington Historical Society** manages the Jason Russell House and the adjoining **George A. Smith Museum**.<sup>38</sup>

## Old Men of Menotomy Wagon Capture Site, Arlington

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Chronologically, this event occurred around the same time as the battle at Fiske Hill in Lexington between Lieutenant Colonel Francis Smith’s troops and the local militias. While troops were retreating from Concord back to Boston, 1,000 reinforcements led by Brigadier General Earl Percy left Boston around 8:45am and arrived at this site located near the present-day intersection of Massachusetts Avenue and Mystic Street in Arlington around 1:30pm on April 19, 1775. Here, some of the reinforcement expedition’s munitions wagons were captured by a group of colonists called the “**Old Men of Menotomy**”<sup>39</sup> as these reinforcement troops were heading toward Lexington around 1:30pm on April 19, 1775.

## Whittemore Marker, Arlington

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Samuel Whittemore, a decorated war officer from the French and Indian War, was an eighty years-old farmer who armed himself with a musket, two pistols, and a sword and waited behind a wall at Mystic Street when he heard that the British troops were on their way into Menotomy from Concord. When they arrived, he killed one British soldier with his musket, and killed two others using both his pistols. He used his sword to slash at additional British soldiers that had surrounding him. He was shot in the face, which tore his cheek away, received thirteen bayonet wounds, and was clubbed in the head and on his body with muskets. Somehow, he managed to survive these attacks and not only tried to load his musket again for another shot, he also lived for another eighteen years after this incident until the age of 98. The **Whittemore Marker** commemorating Samuel Whitmore was erected in the late 1800s and has been relocated several times near the location of this incident. Today, it is located in **Whittemore Park** near the intersection of Massachusetts Avenue with Route 60/Pleasant Street/Mystic Street. This intersection is also where the paths of William Dawes and Paul Revere converge.<sup>40</sup>



Whittemore Marker

## Cooper’s Tavern Site, Arlington

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Jabez Wyman and Jason Winship were murdered at **Cooper’s Tavern Site** by the retreating British troops on April 19, 1775.<sup>41</sup> There is a commemorative marker at this site, located at the intersection of Massachusetts Avenue and Medford Street.

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<sup>36</sup> (Rogers, 2008)

<sup>37</sup> (Winkler, 2009-2011)

<sup>38</sup> (Winkler, 2009-2011)

<sup>39</sup> (Winkler, 2009-2011)

<sup>40</sup> (Winkler, Menotomy Minuteman Historical Trail: A Walking Tour of Arlington’s Past)

<sup>41</sup> (Winkler, 2009-2011)

## 1775 witness houses and buildings

The Battle Road Scenic Byway includes several homes and other buildings that existed in 1775. These are called “witness houses” because the buildings themselves, along with their inhabitants, witnessed, and in many cases, actively took part in, the events on April 18 and 19, 1775. Witness houses are listed in geographical order by town from east to west below. Some of the witness houses that had a direct role in the events of April 18 and 19, 1775 are described in the previous section’s narrative, and other witness houses that become more significant during later periods of the Battle Road Scenic Byway’s history are described elsewhere in this chapter.

### Arlington witness houses

There are four witness houses in Arlington that fall along the Battle Road Scenic Byway:<sup>42</sup>

- Butterfield Whittemore House, 54 Massachusetts Avenue (on proposed Byway extension)
- The Wayside Inn, 393 Massachusetts Avenue
- Jason Russell House, 7 Jason Street
- Captain Benjamin Locke House, 21 Appleton Street (on proposed Byway extension)

### Lexington witness houses

Lexington witness houses along the Battle Road Scenic Byway include:<sup>43</sup>

- Munroe Tavern, 1332 Massachusetts Avenue
- Buckman Tavern, 1 Bedford Street
- Harrington House, 1 Harrington Road
- Hancock-Clarke House, 35 Hancock Street
- Jacob Whittemore House, 21 Marrett Street, Minute Man National Historical Park

### Lincoln witness houses

There are two witness houses in Lincoln on the Battle Road Scenic Byway, both in Minute Man National Historical Park along the Battle Road Trail, or what was formerly Virginia Road. They are accessible from Route 2A/North Great Road.<sup>44</sup>

- Captain William Smith House, Battle Road Trail, Minute Man National Historical Park
- Ephraim Hartwell Tavern, Battle Road Trail, Minute Man National Historical Park



Paul Revere at the Hancock-Clarke House

### Concord witness houses

Concord has thirty-three witness houses on or in very close proximity to the Battle Road Scenic Byway. Nine of these are within Minute Man National Historical Park boundary or are managed by Minute Man National Historical Park.<sup>45</sup>

- Job Brooks House, 1265 Lexington Road (North Great Road), Minute Man National Historical Park
- Samuel Brooks House, 1175 Lexington Road, Minute Man National Historical Park
- Farwell Jones House, 955 Lexington Road, Minute Man National Historical Park
- Meriam House, 34 Old Bedford Road, Minute Man National Historical Park
- Daniel Taylor House, 663 Lexington Road



In the 1840s, Ephraim Wales Bull created the Concord Grape and lived along the Byway next door to the Alcott family in a circa 1716 home.

<sup>42</sup> (Winkler, 2009-2011)

<sup>43</sup> (Sideris, 2009-2011), (McCall-Taylor, 2009-2011)

<sup>44</sup> (Sideris, 2009-2011)

<sup>45</sup> (Sideris, 2009-2011), (Kritzer, 2009-2011), (Concord Historical Commission, 2001)

- Ephraim Bull/Grapevine Cottage, 491 Lexington Road
- The Wayside House and Barn (Samuel Whitney House), 455 Lexington Road, Minute Man National Historical Park
- Orchard House, 399 Lexington Road
- A. and J. Moore House, 343-355 Lexington Road
- Bake Shop (Green Arbor Tea Room), 255 Lexington Road
- Benjamin Barron House, 245-249 Lexington Road
- Wheeler/Huttman/Schuremann House, 201 Lexington Road
- Widow Heywood House, 184-190 Walden Street (anticipated to be visible from Byway after invasive species removal project along Mill Brook is completed)
- Brown/Beaton House; Fay/Heywood House, 105 Lexington Road
- Reuben Brown House, 77 Lexington Road
- Reuben Brown Saddler's Shop (Fiske House?<sup>46</sup>), 69-71 Lexington Road
- Jonathan Prescott House, 48 Lexington Road
- Thomas Dane House, 47 Lexington Road
- John Ball House, 37 Lexington Road
- Beaton(?)<sup>47</sup>/Davis Store, 29 Lexington Road
- Pellet/Barrett House; E Brown/E Tolman, 5-7, 13-15 Lexington Road
- Wright Tavern, 8 Lexington Road
- The Colonial Inn, 48 Monument Square
- Elisha Jones House, 242 Monument Street, Minute Man National Historical Park
- Old Manse, 269 Monument Street, Minute Man National Historical Park
- Major John Buttrick House, 231 Liberty Street, Minute Man National Historical Park
- Brown/Dakin House, 81 Estabrook Road (near Major John Buttrick House)
- Hunt/Hosmer House and Barn, 320 Lowell Road (on proposed extension)
- Jonathan Hildreth House, 8 Barrett's Mill Road (on proposed extension)
- Abishai Brown House/Tavern, 71 Barrett's Mill Road (on proposed extension)
- Temple/Stone/Munroe House, 222 Barrett's Mill Road (on proposed extension)
- Colonel James Barrett Farm, 448 Barrett's Mill Road (on proposed extension)

## Authors' Homes

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Nineteenth-century authors including Amos Bronson Alcott and his daughter Louisa May Alcott, Ralph Waldo Emerson, Nathaniel Hawthorne, Henry David Thoreau, and Margaret Sidney all lived and wrote on or in close proximity to the Battle Road Scenic Byway. The strong literary tradition they inspired along the Byway, particularly in Concord, continues through today. Several renowned authors still live near the Byway today and Concord is host to organizations such as the Concord Poetry Center and events such as the annual Concord Festival of Authors.

### The Wayside House and Barn (Samuel Whitney House)

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The Wayside is a symbol for many of the revolutionary stories that the Battle Road Scenic Byway is known for. Constructed around 1717, it is one of several April 19, 1775 witness houses along the Byway in Concord. In 1775, the house was occupied by Concord Minute Man Samuel Whitney and commander of the British military General Thomas Gage identified the house as a location where munitions were stored. The Wayside is also notable for Samuel Whitney's slave named Casey, who tried running away during the commotion of the events of 1775. Casey fought in the war and returned to Concord self-emancipated, a free man.

From 1845 to 1848, this house was occupied by the Alcott family who called the home "Hillside." Louisa May Alcott and her sisters, upon whom the novel *Little Women* is based, spent much of their childhood here. The Alcott sisters used the barn to stage plays, which Louisa May Alcott wrote about in *Little Women*. Today the barn serves as a Visitor Center for the Wayside. A plaque at the Wayside indicates that it was a part of the Underground Railroad and influenced Louisa May



The Wayside

<sup>46</sup> The question mark is included in Concord's historical properties survey, and is therefore included here as well.

<sup>47</sup> The question mark is included in Concord's historical properties survey, and is therefore included here as well.

Alcott's thoughts against slavery and in favor of abolition. The Alcott family sheltered a fugitive slave here in 1847.

From 1852 to 1870, the Wayside was owned and occupied by author Nathaniel Hawthorne who gave it its present-day name. Hawthorne wrote his last works at the Wayside.

Harriett Lothrop, who wrote *The Five Little Peppers* stories under the pen name Margaret Sidney, lived here from 1883 to 1924 and helped to preserve the home. The Wayside has been altered several times since its construction in the early 1700s, with additions made by the Alcotts, Hawthorne, and Lothrop's in the 1800s, but has been preserved since 1924. The Wayside is operated by Minute Man National Historical Park and is open to visitors.<sup>48</sup>

## Orchard House

Famous as the setting for *Little Women* and also the place where Louisa May Alcott wrote this novel, the **Orchard House** was the home of the Alcott family from 1858 to 1877. The Orchard House, located at 399 Lexington Road in Concord, is operated by the Louisa May Alcott Memorial Association and is open to visitors.<sup>49</sup>

The Alcotts were abolitionists. When they lived at the Wayside, they hid a man named John who had escaped from slavery, and they may have hid runaway slaves in the Orchard House as well. According to the Drinking Gourd Project, they held antislavery meetings at the Orchard House and "the Alcott girls organized a play to raise money for the Concord Antislavery Society." They hosted the prominent abolitionist John Brown here, and Brown's two daughters lived with the Alcotts at the Orchard House after he was hanged for his raid on Harper's Ferry.<sup>50</sup>



The Orchard House

## Ralph Waldo Emerson House

This was the home of Ralph Waldo Emerson from 1835 until 1882. Known for leading the American Transcendentalism movement as well as for his essays, lectures, and poetry, Emerson "led a renaissance in American ideas in the 19<sup>th</sup> Century."<sup>51</sup> Emerson spoke publicly against slavery and supported abolitionist John Brown.<sup>52</sup> The **Ralph Waldo Emerson House** is open to visitors.<sup>53</sup>



Ralph Waldo Emerson House

## Old Manse

The **Old Manse**, located at 269 Monument Street in Concord, was the home of several prominent philosophers, authors, and abolitionists in the 18<sup>th</sup> and 19<sup>th</sup> centuries. Concord's minister at the time of the battle here in 1775, Reverend William Emerson, lived here. The home, one of Concord's April 19, 1775 witness houses, was built in 1770 and is where Ralph Waldo Emerson, Reverend William Emerson's grandson, wrote his essay "Nature." Author Nathaniel Hawthorne also lived here for three years and did some of his writing here.

In 1769, Reverend Emerson married Caesar Robbins and Cate Bliss, both former slaves. The garden at the Old Manse was planted by Caesar Robbin's grandson John Garrison and Henry David Thoreau, who offered the garden as a wedding gift to Nathaniel and Sophia Hawthorne in 1842. Abolitionist John Brown spoke here in 1857, and one of his protégés, Frank Sanborn, lived here in 1863. The Old Manse is open to the public and operated by the Trustees of Reservations.<sup>54</sup>



The Old Manse

<sup>48</sup> (Hollister & Sideris, 2008), (National Park Service), (National Park Service, 1998), (The Drinking Gourd Project, 2009).

<sup>49</sup> (Hollister & Sideris, 2008)

<sup>50</sup> (The Drinking Gourd Project, 2009)

<sup>51</sup> (Ralph Waldo Emerson House)

<sup>52</sup> (The Drinking Gourd Project, 2009)

<sup>53</sup> (Hollister & Sideris, 2008)

<sup>54</sup> (The Drinking Gourd Project, 2009), (The Trustees of Reservations, 2008)

## Thoreau Farm

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Located on the northern loop off the designated Byway at 341 Virginia Road in Concord, the circa 1730 **Wheeler-Minot Farmhouse** listed in the National Register of Historic Places is the birth house of Henry David Thoreau, also known as **Thoreau Farm**. Because it was built before April 19, 1775, this house like numerous others in Concord is a “witness house,” although for the purposes of this document witness houses on Byway loops, which are not part of the designated Byway, are not fully documented.



Thoreau Farm in August 2010, from the Thoreau Farm Trust website

Before the Town of Concord was chartered in 1635, the land surrounding Thoreau Farm was cultivated by Native Americans. Early settlers acquired the land and by the time of Thoreau’s birth in 1817, the property had become one of Concord’s largest farms. Thoreau only lived there until he was eight months old but many family stories about the farm provided inspiration for his writings. In the mid- to late-1800s the property was a tenant-farm cultivated by African-Americans and European immigrants. The house was moved from its original location to its present location in 1878. Farming continued on the property well into the 20<sup>th</sup> century. In 1995 the most recent property owner passed away and the property was put on the market for sale. A public-private task force raised funds to acquire and preserve the property.

Today, Thoreau Farm is managed by the **Thoreau Farm Trust**, a nonprofit organization working to restore Thoreau’s birth home and to preserve the “legacy of this extraordinary American author and philosopher and our country’s first environmentalist.”<sup>55</sup> Thoreau Farm Trust rehabilitated Thoreau Farm using green building techniques. They also plan to build a small barn on the property to be used for educational programming. Thoreau Farm Trust plans to use the Thoreau Farm property, including the Thoreau birth house, the future ancillary barn, and the land surrounding the house and barn to provide education and interpretive materials on Henry David Thoreau and the history of agriculture in Concord. The property will include facilities such as meeting spaces for educators, students, and community members. Thoreau’s birth home is now open to visitors with seasonal hours or by appointment. Thoreau Farm Trust maintains the website <http://www.thoreaufarm.org/>.

The **Thoreau Society**, established in 1941, is “the oldest and largest organization devoted to an American author,”<sup>56</sup> and currently has its offices at Thoreau Farm and leases the space from Thoreau Farm Trust.

## Burial grounds

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### Mount Pleasant Cemetery, Arlington

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Members of the Robbins family, the great benefactors of the Town of Arlington, are buried here.<sup>57</sup> **Mount Pleasant Cemetery**, located at 70 Medford Street about 0.3 miles from Massachusetts Avenue, was established by the Town in the 1840s, after space in Old Burying Ground had run out.<sup>58</sup> Others buried here include witnesses to the events of 1775.

### Old Burying Ground, Arlington

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Located near the intersection of Massachusetts Avenue and Pleasant Street in Arlington, **Old Burying Ground** is where Jason Russell and nine other Patriots killed on April 19, 1775 are buried, along with over fifty other soldiers of the American Revolutionary War.<sup>59</sup>

### Robbins Cemetery, Lexington

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**Robbins Cemetery** is a small burial ground located on the Byway in East Lexington. It was established in 1792.<sup>60</sup>

<sup>55</sup> (Thoreau Farm Trust)

<sup>56</sup> (The Thoreau Society, 2011)

<sup>57</sup> (Winkler, 2009-2011)

<sup>58</sup> (Menotomy Minutes, 2000)

<sup>59</sup> (Winkler, 2009-2011)

<sup>60</sup> (Massachusetts Department of Conservation and Recreation, 2006)



The three images shown here are from Old Burying Ground in Arlington.



### Munroe Cemetery, Lexington

Located east of Lexington Center between Massachusetts Avenue and the Minuteman Bikeway, **Munroe Cemetery** was established in 1831 and includes 19<sup>th</sup> and 20<sup>th</sup> century headstones and monuments. It also features an iron picket fence and is landscaped with trees.<sup>61</sup>

### Old Burying Ground, Lexington

Located near Lexington Battle Green, the **Old Burying Ground** was established in 1690 and features slate headstones, as well as a few monuments and tombs.<sup>62</sup>

### Lincoln Cemetery

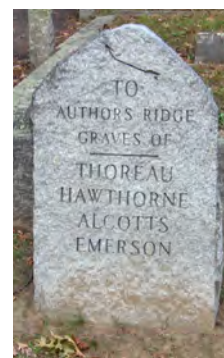
Located in Lincoln on the southern loop of the (non-designated) Byway, **Lincoln Cemetery** is also called **Old Town Cemetery** and **First Town Cemetery**. It was established in 1756.<sup>63</sup>



Old Hill Burying Ground, Concord

### Old Hill Burying Ground, Concord

**Old Hill Burying Ground**, located at Monument Square, was Concord's first burial ground after the town was established in 1635. The earliest existing stone is for Joseph Merriam, who died on April 20, 1677. Major John Buttrick, who famously ordered colonial militia at North Bridge to fire upon British soldiers on April 19, 1775, is buried here, as is his son and forty other veterans of the American Revolutionary War. Today Old Hill Burying Ground has nearly 500 graves. It also includes the grave of John Jack, the first former slave to purchase land in Concord.<sup>64</sup>



### Sleepy Hollow Cemetery, Concord

Concord authors Emerson, Thoreau, Hawthorne, and the Alcott family are buried at **Sleepy Hollow Cemetery** in an area called **Authors' Ridge** on Route 62 just north of the Battle Road Scenic Byway.<sup>65</sup> Additionally, Peter Hutchison, a descendant of former slaves, and abolitionist Prudence Ward are buried here.<sup>66</sup>

Emerson's grave, Thoreau's grave, and sign pointing to Author's Ridge at Sleepy Hollow Cemetery in Concord

<sup>61</sup> (Massachusetts Department of Conservation and Recreation, 2006)

<sup>62</sup> (Massachusetts Department of Conservation and Recreation, 2006)

<sup>63</sup> (Massachusetts Department of Conservation and Recreation, 2006)

<sup>64</sup> (Concord Cemetery Committee/Concord Public Works, 2001), (The Drinking Gourd Project, 2009)

<sup>65</sup> (Hollister & Sideris, 2008)

<sup>66</sup> (The Drinking Gourd Project, 2009)

## Sites associated with technological and industrial history

### Spy Pond, Arlington

In the 19<sup>th</sup> century, ice from **Spy Pond** in the winter was harvested and shipped as far as India. Major infrastructure to support this ice harvesting business was developed in Arlington, which led to the ultimate development of a railroad near Spy Pond.

### Old Schwamb Mill, Arlington

A mill has been continuously operating at this site, located at 17 Mill Lane on Mill Brook in Arlington, since approximately 1650. The current building was built in 1861. Today, oval-shaped wooden frames are manufactured here and the site operates as a museum, where woodworking demonstrations are given to visitors. **Old Schwamb Mill** also includes community spaces and a gallery featuring work by local artists.

### Schwamb Manufacturing Company, Arlington

Located at 1166 Massachusetts Avenue in Arlington, a wooden piano case manufacturing business was operated here starting in 1853. **Schwamb Manufacturing Company** became the largest business in Arlington by 1898.

### Laurence G. Hanscom Field and Hanscom Air Force Base

**Hanscom** – which today includes the **Laurence G. Hanscom Field** and **Hanscom Air Force Base** – was established in 1941 during World War II when the U.S. government appropriated funding to build 250 new airports to support national defense just before the United States entered the war. Hanscom has been a hub for the technological innovation that has occurred in the vicinity of the Battle Road Scenic Byway from the 1940s through today. It is located on the northern loop of the (non-designated) Byway, abutting Minute Man National Historical Park.

In 1942 the Commonwealth of Massachusetts leased the airport to the War Department to use as a training site for fighter squadrons during World War II. The airport was named Laurence G. Hanscom Field in 1943. By 1945, Hanscom “emerged as the Air Force’s center for the development and acquisition of electronic systems,” and since then, has “played a significant role in the creation of a national high-technology area around Route 128.” Hanscom expanded in the 1950s as a result of collaboration between the Air Force and MIT to develop an air defense system for the United States, which led to the creation of **MIT Lincoln Laboratory**.

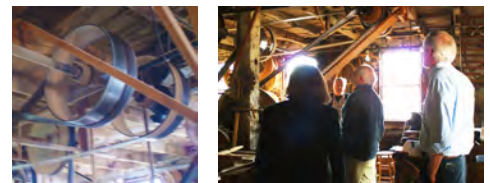
Hanscom Field and Hanscom Air Force Base became two separate entities in 1973, by which time flying operations by the Air Force had significantly diminished. Before then, the entire property was a single entity.

Hanscom Air Force Base expanded again in the 1980s, including construction of electronic systems management facilities as well as service facilities and housing for base personnel. Today, Hanscom Air Force Base is the headquarters for the U.S. Air Force Electronic Systems Center and is host to the 66<sup>th</sup> Air Base Wing, MITRE Corporation, sections of the Air Force Research Laboratory, and MIT Lincoln Laboratory.<sup>67</sup> The total workforce at Hanscom Air Force Base is 7,763 including 1,229 active-duty military personnel, 2,051 government civilians, 2,828 contractors, and 1,485 employees of private businesses located on the base. The annual budget for Hanscom Air Force Base is \$3.3 billion.

Today, Hanscom Field is a full-service general aviation airport closely tied with the high-technology businesses along the Route 128 corridor. A preliminary estimate of aircraft activity at Hanscom Field in 2010, based on Federal Aviation Administration (FAA) tower counts, fleet mix data, and estimates was 163,737 flights between 7:00am and 11:00pm, of which 1,795 flights were military aircraft activity and the rest were civilian aircraft activity. Between 11:00pm and 7:00pm,



Ice harvesting on Spy Pond in 1854



Old Schwamb Mill exterior and interior. Interior photos from Byway Working Group van tour in November 2009.

<sup>67</sup> (U.S. Air Force, 2010)

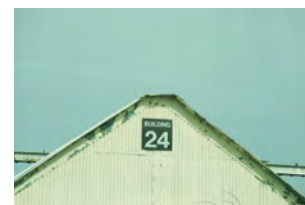
when the FAA tower is closed, there were 1,830 flights recorded.<sup>68</sup> Massport manages a noise abatement program and works with the towns of Bedford, Lexington, Lincoln, and Concord, as well as Minute Man National Historical Park, to minimize aircraft noise over residential areas and Minute Man National Historical Park.<sup>69</sup>

## MIT Lincoln Laboratory

The **Massachusetts Institute of Technology (MIT) Lincoln Laboratory** was established in 1951 to build the nation's first air defense system, which was called the Semi-Automatic Ground Environment (SAGE) air defense system. Today, Lincoln Laboratory continues to develop systems critical to national security as a Department of Defense-funded research and development laboratory. Located just north of the designated Byway on the northern loop in Hanscom Air Force Base, this major facility employs about 2,500 people including 1,500 staff people.<sup>70</sup>

## Hangar 24

Located on the northern loop of the (non-designated) Byway at Hanscom Field, **Hangar 24** was built in 1948 and was called the MIT Instrumentation Laboratory and later the Charles Stark Draper Laboratory. Inertial navigation technologies for aircraft, ships, submarines, and space vehicles were developed by Charles Stark Draper were tested and refined at Hangar 24. Air traffic control systems developed at MIT Lincoln Laboratory were also tested here.<sup>71</sup> Hangar 24 is listed in the Massachusetts Inventory of Historic Assets and "is eligible for inclusion in the National Register of Historic Places for achievements in aerospace engineering and technology that took place there."<sup>72</sup> Massport, the owner and operator of Hanscom Field, in the past has made plans to redevelop the area around the hangar which would include demolition of the hangar itself.



Hanscom Air Force Base and Hanscom Field about the Minute Man National Historical Park. Air defense and air traffic control systems were developed at MIT Lincoln Laboratory and Hangar 24, both located in this area.

## Civic buildings



Central Fire Station

### Central Fire Station, Arlington

The **Central Fire Station** was the first octagonal fire station in the United States. The octagonal shape of the building allowed fire trucks to emerge simultaneously in six directions.<sup>73</sup>

### Whittemore-Robbins House, Arlington

Located at 670R Massachusetts Avenue in Arlington, the **Whittemore-Robbins House** is a Federal-style mansion built in 1800 and restored by the Arlington Historical Commission as a house museum. A prominent Menotomy businessman and Town official, William Whittemore, lived in this house in the 1800s. The Robbins family were the second owners of the house, which they purchased in 1847. This family became known for their philanthropic role in the community. This civic-minded family commissioned and donated several facilities to the Town of Arlington, including the Robbins Library, the Winfield-Robbins Memorial Garden, the Robbins Memorial Town Hall, and the granite watering trough at Foot of the Rocks. In 1931, the family donated the Whittemore-Robbins House itself to the Town of Arlington.<sup>74</sup>



Whittemore-Robbins House

<sup>68</sup> (Patzner, 2011)

<sup>69</sup> (Massport)

<sup>70</sup> MIT Lincoln Laboratory website

<sup>71</sup> (Concord Historical Commission, 2007)

<sup>72</sup> (Aronson, 2011)

<sup>73</sup> (Town of Arlington, MA, 2002)

<sup>74</sup> (Town of Arlington, MA)

### Robbins Memorial Town Hall, Arlington

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**Robbins Memorial Town Hall**, located at 730 Massachusetts Avenue, was donated to the Town of Arlington by the Robbins family in 1913. In front of the building is a flag pole, which features sculpture by Cyrus Dallin. The base of the flagpole includes four sides: “the mother and child represent honor, Squaw Sachem represents liberty, the Puritan divine represents obedience, and the Minuteman represents patriotism.”<sup>75</sup> Robbins Memorial Town Hall has public restrooms.<sup>76</sup>



Robbins Memorial Town Hall and Dallin flag pole

### Robbins Library, Arlington

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**Robbins Library**, located at 700 Massachusetts Avenue in Arlington, was founded in 1807 and is listed on the National Register of Historic Places. In 1892, a new building for the library was built with money donated by Maria C. Robbins. It was designed in the Italian Renaissance style, and was considered to be one of the most noteworthy architectural pieces of its time. Robbins Library has public restrooms.<sup>77</sup>

### US Post Office with WPA Murals, Arlington

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The Art Deco era **U.S. Post Office** located at 10 Court Street in Arlington was built in 1936. Inside is a **WPA Federal Art Project mural**, entitled *Purchase and Use of the Soil*, and painted by William C. Palmer in 1938.<sup>78</sup>



Mural inside the Post Office in Arlington

### Highland Hose House, Arlington

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The **Highland Hose House**, located at 1007 Massachusetts Ave in Arlington is one of three fire stations in Arlington and was built in 1928. The building is listed in the National Registry of Historic Places.<sup>79</sup>

### Cary Memorial Hall, Lexington

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**Cary Memorial Hall**, located at 1605 Massachusetts Ave., is a professional, Colonial-style performance venue in Lexington Center. It opened in 1928.<sup>80</sup>

### Bemis Hall, Lincoln

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**Bemis Hall**, located at 15 Bedford Road in Lincoln, was dedicated to the Town of Lincoln in 1892 by George Bemis, to be used as a town hall space.<sup>81</sup>



Bemis Hall in Lincoln

### Lincoln Library

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**Lincoln Library**, located at 3 Bedford Road in Lincoln was built in 1884 with funds donated by Lincoln resident Grosvenor Tarbell, to be used as a public library for the residents of Lincoln. The library was a founding member of the Minuteman Library Network, which serves Metro West Boston.<sup>82</sup>

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<sup>75</sup> (Winkler)

<sup>76</sup> (Winkler), (Town of Arlington, MA)

<sup>77</sup> (Robbins Library, 2011), (Winkler), (National Park Service)

<sup>78</sup> (Town of Arlington, MA, 2002)

<sup>79</sup> (Arlington Patch, 2011), (National Park Service)

<sup>80</sup> (Town of Lexington, MA)

<sup>81</sup> (Bemis Lectures)

<sup>82</sup> (The Lincoln Public Library)

## Cultural resources

The legendary stories of the American Revolution have many historically accurate aspects to them, but they also have achieved a mythological reverence. For example, although Paul Revere was a real person, the alarm rider depicted in Henry Wadsworth Longfellow's poem *The Midnight Ride of Paul Revere* is actually a composite of several alarm riders. Also, Concord resident Ralph Waldo Emerson coined the phrase, "the shot heard 'round the world" to describe the fight at the North Bridge based on the facts that, for the first time, Colonists were ordered to fire at the King's troops and for the first time they killed British soldiers. However, the phrase causes confusion if one interprets it as referring to the first shots. The first shots and the first American casualties of the war occurred on Lexington Battle Green; North Bridge was the second engagement of the day.

Inscribed on the *Line of the Minute Men Boulder* on Lexington Battle Green is the phrase "Stand your ground. Don't fire unless fired upon but if they mean to have a war, let it begin here,"<sup>83</sup> attributed to Captain John Parker, commander of the Lexington militia. In reality, although Captain Parker may have said "don't fire unless fired upon," it is unlikely he said "Stand your ground" since all contemporary accounts say he ordered his men to disperse, nor is it likely he said "if they mean to have a war, let it begin here."<sup>84</sup> Furthermore, no likeness of Captain Parker is known to exist, but the statue depicts a tall, slender man when in fact Captain Parker may have been shorter and was suffering from tuberculosis at the time of the battle.



These stories have been made legendary in no small part thanks to the authors and artists who lived on or in close proximity to the Battle Road Scenic Byway.

## Literary tradition

Numerous sites throughout the Battle Road Scenic Byway are associated with the rich literary tradition of the area. Information regarding the Wayside, Orchard House, Ralph Waldo Emerson House, Thoreau homes, Sleepy Hollow Cemetery, Old Manse, etc. can be found throughout this chapter on intrinsic qualities.



These interpretive panels in Minute Man National Historical Park overlook North Bridge. The center panel states: "The 18th-century American Revolution was followed by a 19th-century literary revolution in Concord, which advanced our ideas of individual liberty and equality. Concord authors such as Ralph Waldo Emerson, Louisa May Alcott, Henry David Thoreau and Nathaniel Hawthorne helped Americans to realize their own national and cultural identity."

<sup>83</sup> (Hollister & Sideris, 2008)

<sup>84</sup> (Hollister & Sideris, 2008)

## Museums, visitor centers and interpretive facilities

### Cyrus E. Dallin Art Museum at the Jefferson Cutter House

The **Cyrus E. Dallin Art Museum** at 1 Whittemore Park in Arlington center is housed at the **Jefferson Cutter House**, which was built in 1830 and was listed in the National Register of Historic Places in 1992.<sup>85</sup> The museum features Dallin's sculptures. His most renowned works are *Paul Revere*, near Old North Church in Boston's North End neighborhood, and *Appeal to the Great Spirit* in front of the Museum of Fine Arts in Boston.<sup>86</sup> His sculpture *Menotomy Indian Hunter* is down the street in Arlington at the Butterfield-Whittemore Garden next to Arlington Town Hall. The Cyrus E. Dallin Art Museum is open Wednesday through Sunday, 12:00-4:00pm.<sup>87</sup>



Cyrus E. Dallin Art Museum

### George A. Smith Museum and Arlington Historical Society at the Jason Russell House

The **George A. Smith Museum** and **Jason Russell House** feature displays of archives and artifacts of the history of Menotomy, West Cambridge, and Arlington.<sup>88</sup>



Smith Museum and Jason Russell House

### National Heritage Museum

Located at 33 Marrett Road at the intersection of Route 2A and Massachusetts Avenue in Lexington, the **National Heritage Museum** tells the American story, highlighting "the rich diversity of American life across four centuries—how we as a people have worked and played, struggled and achieved."<sup>89</sup> The museum has six galleries and hosts as many as eighteen exhibitions in a year. *Sowing the Seeds of Liberty: Lexington and the American Revolution* is a long-term installation that illustrates what daily life was like for people during the American Revolution. The National Heritage Museum was founded by Scottish Rite Masons of the Northern Jurisdiction of the United States "as a gift to the nation on our country's bicentennial."<sup>90</sup> The museum is open Wednesday-Saturday, 10:00am-4:30pm. More information can be found on the museum website (<http://www.monh.org/>). The Liberty Ride bus tour begins at the National Heritage Museum.



National Heritage Museum

### Lexington Visitors Center

Located at 1875 Massachusetts Avenue adjacent to the Lexington Battle Green and Buckman Tavern, **Lexington Visitors Center** is open daily year-round. Operated by the Lexington Chamber of Commerce, this visitor center includes a diorama of the April 19, 1775 battle as well as informational materials about places to visit in Lexington.<sup>91</sup>



Lexington Visitors Center

### Minute Man Visitor Center

Located on Route 2A/North Great Road near the town line between Lexington and Lincoln, **Minute Man Visitor Center** features a large mural of the April 1775 events on Battle Road, educational exhibits, a gift store, and an award-winning multimedia theater presentation called "The Road to Revolution" which introduces visitors to the events of April 18-19, 1775. The presentation is shown every half hour, 9:00-



The Liberty Ride, a trolley tour along Battle Road, is a project of the Town of Lexington's Tourism Committee.

<sup>85</sup> (National Park Service)

<sup>86</sup> (Winkler, 2009-2011)

<sup>87</sup> (The Cyrus E. Dallin Museum, 2010)

<sup>88</sup> (Winkler, 2009-2011)

<sup>89</sup> (National Heritage Museum, 2011)

<sup>90</sup> (National Heritage Museum, 2011)

<sup>91</sup> (Lexington, MA Chamber of Commerce)

4:30pm, April through October.<sup>92</sup> Off-season hours are on the Minute Man National Historical Park website (<http://www.nps.gov/mima/>). Minute Man Visitor Center is one of two visitor centers for Minute Man National Historical Park; the other visitor center is the North Bridge Visitor Center at Buttrick Mansion in Concord.

### Concord Museum

As stated on the Concord Museum's brochure, "the Concord Museum is the one place where all of Concord's remarkable past is brought to life through an inspiring collection of historical, literary and decorative arts treasures." The **Concord Museum** collection includes one of the lanterns hung at the Old North Church in the North End of Boston on the night of April 18, 1775, as well as artifacts and exhibits associated with the life and work of Ralph Waldo Emerson and Henry David Thoreau.<sup>93</sup> Located at 200 Lexington Road, this museum features "original artifacts associated with Thoreau, Emerson and other antislavery activists," and the "museum galleries examine the concept of liberty and the ability of individuals to affect change."<sup>94</sup>



Minute Man Visitor Center offers an award-winning multimedia presentation called *The Road to Revolution*.

### Concord Art Association

Located at 37 Lexington Road in the **John Ball House**, built in the mid-1700s, the **Concord Art Association** is a non-profit visual arts organization that features art exhibits in its galleries, offers educational programming, and a landscaped garden. The John Ball House was renovated in the summer of 2009. This building was a stop on the **Underground Railroad**, and visitors can see a closet, a secret room, and a tunnel that are thought to have been used to hide runaway slaves.<sup>95</sup> This home was owned by State Representative Jonas Lee in the early 19<sup>th</sup> Century.<sup>96</sup>

### Concord Visitor Center

Located at 58 Main Street, a short distance from the designated Byway, on the southern loop of the (non-designated) Byway, **Concord Visitor Center** is operated by the Concord Chamber of Commerce and is open from April-October. Public restrooms at the facility are available year-round.

### Concord Free Public Library

Located at 129 Main Street, a short distance from the designated Byway, on the southern loop of the (non-designated) Byway, **Concord Free Public Library** houses special collections of interest to historians and visitors.

### Caesar Robbins House Educational Center

The **Caesar Robbins House**, built around 1780 by Caesar Robbins, one of Concord's freed slaves, was originally located near the Old Manse in Concord. According to the Drinking Gourd Project, this house "was the home of several generations of Concord's early African-American families."<sup>97</sup> Caesar Robbins lived here, and later, his stepson Peter Hutchison lived here. Henry David Thoreau wrote about Hutchison,<sup>98</sup> a hog butcher and possibly the "first African resident to vote in Concord in 1881."<sup>99</sup> The home was moved to Bedford Street after Peter Hutchison's death.

This home was listed in the Massachusetts Historical Commission Survey of Buildings in 1991. It was listed in Concord's Demolition Delay Bylaw in 1998. In 2009, the house was listed on Preservation Massachusetts' Most Endangered Historic Resources list. The Demolition Delay for the home expired on September 12, 2009. Prior to the expiration



The Caesar Robbins House, before it was moved to its present location near the Old Manse.

<sup>92</sup> (Hollister & Sideris, 2008)

<sup>93</sup> (Hollister & Sideris, 2008)

<sup>94</sup> (The Drinking Gourd Project, 2009)

<sup>95</sup> (The Concord Art Association)

<sup>96</sup> (The Drinking Gourd Project, 2009)

<sup>97</sup> (The Drinking Gourd Project, 2010)

<sup>98</sup> (The Drinking Gourd Project, 2010)

<sup>99</sup> (The Drinking Gourd Project, 2009)

of the Demolition Delay, the Drinking Gourd Project launched a campaign to “move, preserve and restore the home, and ultimately to have it serve as an interpretive site – as Concord’s African American History Museum.”<sup>100</sup>

At Concord Town Meeting on April 27, 2010, Concord residents unanimously voted for Warrant Articles 35 and 36. Warrant Article 35 awarded the Drinking Gourd Project \$60,000 from the Concord Preservation Committee funds to help save the Caesar Robbins House. Warrant Article 36, authorized the Concord Town Manager to lease some land near the North Bridge parking lot to the Drinking Gourd Project for 25 years for \$1.00 per year.<sup>101</sup>

Subsequently, through the Community Preservation Committee funds and private donations, the Drinking Gourd Project “acquired title to the house and the means to relocate it back closer to its original historic location across the street from the Old Manse.”<sup>102</sup> On May 21, 2011, the house was moved to this location near North Bridge.

While the Caesar Robbins House Educational Center is still a work in progress, the “house’s links to freed slaves and the abolitionist movement will make it a destination for history buffs” and will “help make the town’s storied history whole.”<sup>103</sup>

### North Bridge Visitor Center

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Located in the **Stedman Buttrick House**, which is often called **Buttrick Mansion**, the **North Bridge Visitor Center** at 174 Liberty Street in Concord includes exhibits such as “a period musket and accoutrements, a plank from the original North Bridge, and the ‘Hancock’ cannon, which was one of the weapons hidden at Barrett’s farm.” The visitor center includes a café and gift shop.<sup>104</sup> The Stedman Buttrick House was built in 1911 by a descendant of Major John Buttrick.



North Bridge Visitor Center at Buttrick Mansion

### The Walden Woods Project

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The mission of the **Walden Woods Project**, a nonprofit organization, is to preserve “the land, literature and legacy of the quintessential American author, philosopher, and naturalist, Henry David Thoreau, to foster an ethic of environmental stewardship and social responsibility.” They undertake five core activities: conservation, scholarship, education, program activities, and advocacy/awareness. The Project works to preserve Walden Woods in Concord and Lincoln in an effort to inspire others to “protect the Waldens that exist in their own communities.” The Walden Woods Project owns and manages the **Thoreau Institute**, which provides the most comprehensive body of Thoreau-related material available in one place.

The Walden Woods Project owns and designed **Thoreau’s Path on Brister’s Hill**, which is located on the southern loop of the Byway near Walden Pond at the intersection of Route 2 and Walden Street. The path provides an introduction to Thoreau’s life and writings through the use of granite markers inscribed with quotations by him and others. It is a flat, one mile loop trail and offers visitors a place where Thoreau’s words are brought directly to the land he himself walked, studied, and wrote about.<sup>105</sup>

### The Drinking Gourd Project

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In Concord, the **Drinking Gourd Project** is a local nonprofit organization “focused on raising awareness of Concord’s African and Abolitionist history from the 17<sup>th</sup> through the 19<sup>th</sup> centuries.”<sup>106</sup> Their mission is to “shine a light on this history and make it even more accessible to residents and visitors in a way that will add a new layer to our understanding of our past and a deeper appreciation for the complexity of Concord and its role in creating a diverse America.”<sup>107</sup> The Drinking Gourd Project developed a map and tours of early African and Abolitionist sites in Concord. The tours are supported by the Concord Chamber of Commerce. Additionally, the Drinking Gourd Project seeks to establish the Caesar Robbins House Educational Center to raise awareness of Concord’s African and abolitionist history. Other efforts of the Project include educational programs, fundraising, resource interpretation, and collaboration with other entities in Concord.

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<sup>100</sup> (The Drinking Gourd Project, 2010)

<sup>101</sup> (The Drinking Gourd Project, 2010)

<sup>102</sup> (The Drinking Gourd Project, 2010)

<sup>103</sup> (Schworm, 2009)

<sup>104</sup> (Hollister & Sideris, 2008)

<sup>105</sup> (Bowdoin, 2011)

<sup>106</sup> (The Drinking Gourd Project, 2010)

<sup>107</sup> (The Drinking Gourd Project, 2010)

The 2009 version of *Concord's African American and Abolitionist History Map* by the Drinking Gourd Project includes 36 sites in Concord Town Center, on and near Lexington Road, in the residential area south and west of Monument Square called "Abolitionists Neighborhood" in the map, areas north of Monument Square along and nearby Monument Street, sites in Walden Woods, and on Jennie Dugan Road. Sixteen sites identified by the Drinking Gourd Project are located on the Battle Road Scenic Byway, some of which are described in other sections of this chapter.

Six sites identified in the Drinking Gourd Project map were **Underground Railroad stops**. Three of these Underground Railroad stops are located on the Battle Road Scenic Byway: the **Wayside** at 455 Lexington Road, **Concord Art Association** at 37 Lexington Road, which was owned by State Representative Jonas Lee in the early nineteenth century, and the **Mary Rice House** at 44 Bedford Street. The other three Underground Railroad sites, the **Bigelow/Shadrach Minkins House** at 19 Sudbury Road, the **Col. William Whiting House** at 169 Main Street, and the **Thoreau House** at 255 Main Street are located on the Southern Loop of the Byway, an area not officially designated as part of the Byway, but which includes several resources that contribute to the Battle Road Scenic Byway story.

## Commemorative markers, monuments, and statues

### Civil War Monument

The **Civil War Monument**, located near the octagonal Central Fire Station near the intersection of Massachusetts Avenue and Medford Street, honors the men of West Cambridge, now Arlington, who fought in the Union Army during the Civil War.<sup>108</sup> Nearby is the Cooper's Tavern Site marker, described earlier.



Civil War Monument

### Uncle Sam Memorial Statue

The **Uncle Sam Memorial Statue**, created by sculptor Theodore Cotillo Barbarossa, was installed during the United States Bicentennial in 1976 near Samuel Wilson's birthplace. It is located near the intersection of Massachusetts Avenue and Mystic Street adjacent to the Minuteman Bikeway.<sup>109</sup> Samuel Wilson, 1766-1854 was recognized by the 87<sup>th</sup> United States Congress as the official Uncle Sam on September 15, 1961, as indicated by the following statement: "Resolved by the Senate and the House of Representatives that the Congress salutes Uncle Sam Wilson of Troy, New York, as the progenitor of America's National symbol of Uncle Sam."<sup>110</sup>

Samuel Wilson lived during the events of 1775. According to the Town of Arlington's Uncle Sam Committee Chairman Laurence McKinney, Wilson "occasionally acted as courier for clandestine messages" sent to Dr. Joseph Warren, the Committee of Correspondence member who famously sent William Dawes and Paul Revere on their midnight ride on April 18, 1775.

The **Uncle Sam Committee** was established in 1999 and seeks promote Arlington as the birthplace of the "real" Uncle Sam. Some of the work that the committee is currently undertaking includes creating a logo for brochures and souvenirs and development of **Wilson Plaza** where the Uncle Sam Memorial Statue is located. The committee is working with the Arlington Department of Public Works to add lighting to the Uncle Sam Memorial Statue, which is scheduled for the summer of 2011. Additionally, the committee plans to introduce an Article to the 2012 Arlington Town Meeting Warrant that would designate the area surrounding the statue, including the statue itself, two flagpoles, and the brick patio in front of the statue as Wilson Plaza. The committee is also working to establish an official "Uncle Sam Day" in the Commonwealth of Massachusetts.<sup>111</sup>



Uncle Sam Memorial Statue

<sup>108</sup> (Winkler H. , 2009-2011)

<sup>109</sup> (Wikipedia, 2010)

<sup>110</sup> (Wikipedia, 2011)

<sup>111</sup> (McKinney, 2011)

## Captain John Parker Statue

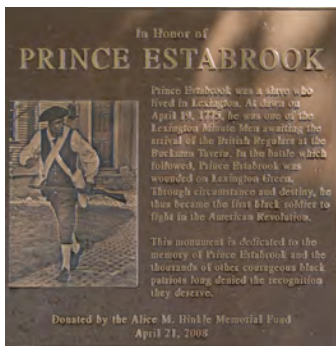
Located on the Lexington Battle Green, this iconic statue is often called the **Lexington Minuteman**. The **Captain John Parker Statue** was unveiled by Captain Parker's great-grandson in 1900 and was sculpted by Henry Hudson Kitson.<sup>112</sup>

## Other monuments on and near Lexington Battle Green

Besides the Captain John Parker Statue, also called the Lexington Minuteman, which is described in the cultural resources section of this chapter, there are a number of other monuments in Lexington Battle Green. The **Revolutionary War Monument**, dedicated on July 4, 1799, is the nation's oldest war memorial. It was originally located in Ye Olde Burying Ground, but moved to its present location in 1835. Across the common from this monument is the **Line of the Minute Men Boulder** which includes a quote ascribed to Captain John Parker. Between this boulder and the Revolutionary War Monument is the line along which the Lexington militia assembled to face British troops on April 19, 1775. The Green also includes the **Old Belfry marker** indicating the location of the Belfry in 1775, the **Preachers' Stand**, a marker indicating the location of the first three meeting houses in Lexington, and a tall **flagpole** with the United States flag. In 2009, the Old Belfry marker was stolen. It was recovered in January 2010 and rededicated during Patriots' Day celebration in April 2010, one-hundred years after it was originally installed by the Daughters of the American Revolution in 1910. A flag has flown at the center of Lexington Battle Green since 1965 when President Lyndon Johnson signed an act ordering it and seven other sites across the country to fly the flag twenty-four hours a day. The original wooden flag pole was struck by lightning and replaced with the current flagpole for the Bicentennial.<sup>113</sup>



Memorial to the Lexington Minute Men of 1775



Across the street near Buckman Tavern is the **Memorial to the Lexington Minute Men of 1775**, a relief sculpture created by Bashka Paeff and dedicated on April 19, 1949 (Peckham, 1992). Adjacent to the Lexington Visitors Center are the **USS Lexington Memorials** installed by the Lexington Lions Club and the crews of CV2 and CV16. These monuments memorialize five Navy ships from 1776 through present day named USS Lexington. The **bell** from the USS Lexington (CV2) is on display in the Visitors Center.<sup>114</sup> The **Prince Estabrook monument** outside Buckman Tavern, dedicated in 2008, memorializes Prince Estabrook, a slave who fought with the Lexington militia and thereby became the first black soldier to fight in the American Revolution. Also nearby is a **stone marker** dedicated to citizens of Lexington who fought in World War II.

## British grave markers



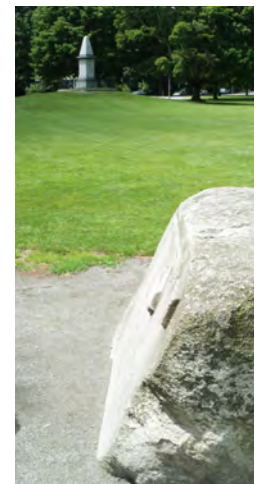
Minute Man National Historical Park has installed six **British grave markers** with the inscription "Near Here is Buried a British Soldier, April 19, 1775" in various locations throughout the park, indicating areas where British soldiers were known to have died. Features such as this reflect the Park's efforts to interpret the events of 1775.<sup>115</sup>



Captain Parker Statue



1799 Revolutionary War Monument



Line along which Lexington militia assembled: from the boulder to the 1799 Revolutionary War Monument

<sup>112</sup> (Hollister & Sideris, 2008)

<sup>113</sup> (Town of Lexington Tourism Committee, 2010)

<sup>114</sup> (The Lions Club, Lexington, MA)

<sup>115</sup> (Sideris, 2009-2011)

## Casey's Plaque

Near the Wayside in Concord, **Casey's Plaque** reads "In 1775, Casey was Samuel Whitney's enslaved person. When the Revolutionary War came, he ran away to war, fighting for the colonies, and returned a free man."<sup>116</sup>

## Old Jail Site

The **Old Jail Site** is located near Monument Square in Concord. Today, a commemorative marker at this site features the inscription "Henry David Thoreau was imprisoned for one night in a jail on this site, July, 1846 for refusing to recognize the right of the state to collect taxes from him in support of slavery – an episode made famous in his essay *Civil Disobedience*."<sup>117</sup>



Marker at Old Jail Site

## North Bridge landscape

The **commemorative landscape around North Bridge** includes "two lines of trees that formalize the approach from Monument Street," as well as monuments and markers memorializing the events that occurred here on April 19, 1775. The **Obelisk** monument was dedicated in 1837. The **Minute Man Statue** was dedicated during the centennial on April 19, 1875. Also at this site is a commemorative **Grave of British Soldiers**. The Minute Man Statue was the first commission of Daniel Chester French, a Concord native who went on to sculpt more famous works, most notably the seated Lincoln statue at the Lincoln Memorial in Washington, D.C.<sup>118</sup>



Monuments around North Bridge

## Agricultural heritage

Agricultural activities are an important part of the historic and present culture of the communities along the Battle Road Scenic Byway. There are numerous farms and farmstands within and near the Battle Road Scenic byway, including:

- Wilson Farm, Lexington, a 127-year-old family-run farm, founded by Irish immigrants, in operation at its present location since 1884.<sup>119</sup>
- Lexington Farmers Market, Woburn Street and Massachusetts Avenue, Lexington.
- Matlock Farm/Flint's Farm<sup>120</sup>, Lincoln the oldest family-owned working farm in Lincoln and the second oldest in Massachusetts.
- Palumbo Farm, Lexington Road, Concord.
- Battle Road Farm, Concord, an exciting new farm incubator project and educational non-profit committed to supporting and advocating sustainable agriculture in the Greater Boston area.<sup>121</sup>



Flint's Field, Lincoln

<sup>116</sup> (The Drinking Gourd Project, 2009)

<sup>117</sup> (The Drinking Gourd Project, 2009)

<sup>118</sup> (Hollister & Sideris, 2008)

<sup>119</sup> (Wilson Farm)

<sup>120</sup> (Matlock Farm)

<sup>121</sup> (Local Harvest)

## Reenactments

Historic military reenactments are a major cultural tradition along the Battle Road Scenic Byway and draw thousands of visitors every year. The following is a list of American living history reenactor units, those who play the part of the colonial militias for reenactments of the events of April 19, 1775:<sup>122</sup>

- Captain David Brown's Company
- The Lexington Training Band
- Stow Minutemen
- Sudbury Companies of Militia & Minute
- Danvers Alarm List Company
- Col. Bailey's Second Massachusetts Regiment
- Goodwin and White's Companies
- 6th Middlesex Regiment of Militia
- 4th Middlesex Militia of Massachusetts
- Tenth Massachusetts Regiment
- 3rd New Hampshire Regiment
- The Charlestown Militia
- The Woburn Militia
- 2nd Massachusetts Regiment
- 5th Connecticut Regiment
- Eames' Rangers



Of course, the redcoats – British troops – are also necessary to properly reenact the events of April 19, 1775. The following are British living history reenactor units:

- His Majesty's Ninth Regiment of Foot
- His Majesty's Tenth Regiment of Foot
- Royal Irish Artillery
- First Regiment Foot Guards
- 20th Regiment of Foot
- 23rd Regiment of Foot
- 63rd Regiment of Foot
- 64th Regiment of Foot
- King's (4th) Own Regiment, Light Infantry Company
- HMS Somerset Marine Detachment
- His Majesty's Fifth Regiment of Foot
- 16th Queen's Light Dragoons
- 1st New Jersey Volunteers



All four Battle Road Scenic Byway towns have ceremonial reenactor units that represent their towns in parades and other ceremonial events. They may wear stylized parade uniforms that differ from 18th century clothing. Many of the members also participate in more historically accurate living history events and programs. These units include:

- The Menotomy Minute Men, from Arlington, who wear ceremonial uniforms
- The Lincoln Minutemen, who wear ceremonial uniforms and conduct living history events
- The Lexington Minutemen, who wear ceremonial uniforms and conduct living history events
- The Concord Minute Men, who wear ceremonial uniforms
- Concord Independent Battery, who wear ceremonial uniforms



<sup>122</sup> (Sideris, 2009-2011)

In addition to units from Arlington, Lexington, Lincoln, and Concord, other ceremonial units in from nearby towns include:

- Westford Colonial Minutemen, who wear ceremonial uniforms and conduct living history events
- The Acton Minutemen, who wear ceremonial uniforms and conduct living history events
- The Bedford Minutemen, who wear ceremonial uniforms
- Middlesex County Volunteers Fifes & Drums, who wear ceremonial uniforms
- National Lancers, based in Framingham, who wear ceremonial uniforms and conduct living history events

Reenactments were the subject of a PBS documentary called *Patriots Day* that aired in 2005 as part of the *American Experience* history series. The *American Experience* film crew followed “65 men of his Majesty’s 10<sup>th</sup> Regiment and 67 American rebels” reenacting the Battle of Lexington and Concord “as they shuffle between their 18<sup>th</sup>- and 21<sup>st</sup>-century lives.” The film highlights the cultural role of reenactments along the Battle Road Scenic Byway. For example, while most troops were “historically white, male, Anglo-Saxon,” the film featured a female reenactor and an Asian-American reenactor. Also, Prince Estabrook, a slave who participated in the Lexington militia and who is honored with a monument near Buckman Tavern, is played by an African-American reenactor. Some of the reenactors interviewed in the film expressed that participating in reenactments helps renew their sense of history, patriotism, and civic duty.<sup>123</sup>



Thousands of visitors come to view reenactments of the events of April 18-19, 1775 on Patriots Day weekend every April. In addition to reenactments, there are open houses at museums and historic homes, parades, pancake breakfasts, and many other community events.

The following are a few examples of reenactments and other events that occur along the Battle Road Scenic Byway during Patriots Day Weekend:

- **Open houses, exhibitions, living history events, concerts, community socials** at Hartwell Tavern, the Captain William Smith House, the Old Manse, Concord Museum, Minute Man Visitor Center, Barrett’s Farm, and several other venues including town facilities and local churches.
- **Parades** with participation from all four Battle Road Scenic Byway towns. Arlington, Lexington, and Concord each host a parade on Patriots Day weekend and the Lincoln Minute Men march from Lincoln Center to Concord and participate in the Concord parade.
- **Commemoration of the North Bridge Fight** featuring British and Colonial reenactors
- **Parker’s Revenge** near Minute Man Visitor Center, featuring reenactors firing ceremonial volleys and playing the role of the Lexington Militia



<sup>123</sup> (PBS and WGBH, 2005)

- **Bloody Angle Battle Demonstration**, featuring 300 Colonial and British reenactors demonstrating a portion of the retreat toward Boston on April 19, 1775 starting near the Bloody Angle battle site and continuing for a half-mile to the Samuel Hartwell House site.
- **Tower Park Battle Demonstration** in Lexington featuring British and Colonial reenactors
- **Alarm and Muster of the Lincoln Minute Men**, a reenactment of Captain William Smith spreading the warning that British troops are on their way and the Lincoln Minute Men receiving orders for their march to Concord
- **Reenactments of Paul Revere's and William Dawes' rides**
- **The Alarm at the Old Belfry** at 5:30am on Patriots Day in Lexington, the bell at the Old Belfry on Belfry Hill is rung to sound the alarm that the British are coming
- **Lexington Battle Reenactment** on Lexington Battle Green at 6:00am on Patriots Day
- **Dawn Salute and North Bridge Remembrance Ceremony** starting at 5:45am at North Bridge
- **Dawn Tribute and March to Concord** in Lincoln starting at 6:45am
- **British Mourn Arms Ceremony** conducted by British reenactors at North Bridge in honor of their war dead
- **Arrival of the Sudbury Militia** around 10:30am on Patriots Day at North Bridge

Information regarding Patriots Day weekend activities can be found on a number of websites including the websites for Minute Man National Historical Park, Concord Chamber of Commerce, Lexington Town Celebrations Committee, and the Town of Arlington website. The Battle Road Committee, a group that includes several reenactor organizations, also lists reenactments and links to reenactment organizations at <http://www.battleroad.org/>.<sup>124</sup> Many reenactor groups such as the Lincoln Minute Men host their own websites and list reenactments they are participating in.

## Annual events

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### Arlington Town Day

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**Arlington Town Day** usually occurs on the second weekend in September and was originally celebrated as Uncle Sam day. The Uncle Sam Memorial Statue was dedicated during this event in its first year, on September 13, 1976. The significance of this date is that September 13, 1766 was Samuel Wilson's birthdate, 1976 was the United States bicentennial.<sup>125</sup> On Town Day, Massachusetts Avenue in Arlington is blocked off from Pleasant Street to Mill Street and booths "offering craft exhibits, bake sales, educational displays, raffles, club membership information, games, food vendors, and/or other such "fair type" activities"<sup>126</sup> are set up along the street. Town Day is organized by the Arlington's **Town Day Committee**.

### Sudbury, Assabet, and Concord RiverFest

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The Sudbury, Assabet, and Concord Wild and Scenic River Stewardship Council hosts an annual **RiverFest** every summer. Several organizations from several cities and towns located along the rivers participate in this weekend event, including a number of arts, conservation, and historical organizations from Concord and Lincoln.

<sup>124</sup> (Battle Road Committee, 2011)

<sup>125</sup> (McKinney, 2011)

<sup>126</sup> (Town of Arlington, MA, 2011)

## Arts and entertainment

The communities of the Battle Road Scenic Byway host a variety of organizations and locations for arts and entertainment.

### Capitol Theatre

Located at 204 Massachusetts Avenue in Arlington, the **Capitol Theatre** was built in 1925 by the Locatelli family. Since 1990, the theatre has been a 6-screen multiplex movie theater.<sup>127</sup> Capitol Theatre was listed in the National Register of Historic Places in 1985.<sup>128</sup>

### Regent Theatre

Located on Medford Street in Arlington, the historic **Regent Theatre**, built in 1916, remains true to its roots as a vibrant vaudeville house. An intimate 500-seat performing arts center with superior acoustics and comfortable seating, “Arlington’s Show Place of Entertainment” features live music concerts, theatre, dance events, family entertainment, comedy, film specials, and more.<sup>129</sup>

### Emerson Umbrella Center for the Arts

In 1982, Emerson Umbrella’s founders obtained tax-exempt status as a private non-profit organization and developed a detailed multi-use proposal for an old municipal school building. **The Emerson Umbrella Center for the Arts** provides studio space for more than 50 artists, classes and workshops for children and adults, exhibition space, community arts initiatives, and performance space in the 435-seat theater.<sup>130</sup>

### Additional arts and entertainment venues

Numerous additional arts and entertainments venues and organizations exist in the Byways communities; a partial list of additional locations or groups includes:

- Philharmonic Society of Arlington
- Arlington Friends of the Drama
- Friends of the Performing Arts in Concord

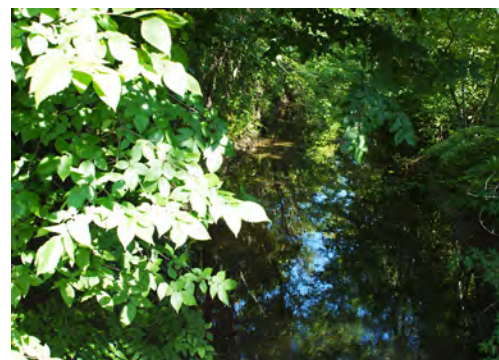


Capitol Theatre and Regent Theatre in Arlington

## Natural resources

### Alewife Brook Reservation

Designated a wetland, **Alewife Brook Reservation** “provides habitat for an array of indigenous and migratory birds including Osprey and the Great Blue Heron.”<sup>131</sup> Alewife Brook Reservation is located at the Arlington town line and includes scenic and recreational amenities as well, which are described in the scenic and recreational resources sections. In 2003, the Massachusetts Department of Conservation and Recreation completed the *Alewife Master Plan* to address “significant restoration of wildlife habitat and ecological hydrological functions; enhanced recreational and educational opportunities; and improved connections to the system of protected natural areas and corridors in metropolitan Boston.”<sup>132</sup>



Alewife Brook Reservation

<sup>127</sup> (FEI Theatres)

<sup>128</sup> (National Park Service)

<sup>129</sup> (Regent Theatre)

<sup>130</sup> (Emerson Umbrella Center for the Arts)

<sup>131</sup> (Department of Conservation and Recreation)

<sup>132</sup> (Department of Conservation and Recreation)

## Spy Pond

**Spy Pond**, notable for historic, cultural, scenic, and recreational qualities as well, is a 103-acre kettle hole pond formed by a retreating glacier 50,000 years ago. Many varieties of birds and fish inhabit the Spy Pond area.<sup>133</sup> In 1956, a mastodon tusk was found in Spy Pond, which is now on display at the George A. Smith Museum, described earlier.<sup>134</sup>

## Bloody Bluff Fault

The Bloody Bluff Fault is a fault zone that extends from Newbury, Massachusetts at its northeast end, curving southwestward to Reading and Wilmington, through Lexington, and continues into Connecticut. The fault zone is named after the Bluff, the small rocky hill used as a rallying point by the British on April 19, 1775 near Fiske Hill. The most recent movements along this fault zone were around 300 million years ago near the end of the Paleozoic era when “a collision of continental blocks took place,” ultimately forming the supercontinent Pangaea. The fault zone “consists of reddish-orange Indian head granite that formed during the Mississippian period.” To the south and east of the fault zone is bedrock from the Avalon terrane which formed during the late Precambrian period. Avalon terrane can also be found in Great Britain and Belgium, due to plate tectonic movements that formed the Atlantic Ocean during the Jurassic period. North and west of the fault zone is Nashoba terrane. A terrane is a series of related rock formations. The Bloody Bluff fault zone is visible near the Bluff Monument. Other evidence of tectonic plate movements are visible nearby in rock formations along Route 128, such as dark-colored basalt that has metamorphosed into light-colored granite.<sup>135</sup>

## Great Meadows National Wildlife Refuge

**Great Meadows National Wildlife Refuge** encompasses over 3,800 acres in area and twelve miles in length along the Concord and Sudbury Rivers, passing through several Massachusetts towns including Concord and Lincoln. Much of the refuge is freshwater wetlands. The refuge is managed by the U.S. Fish and Wildlife Service, which protects this area for migratory birds and other wildlife as well as for native vegetation. Over 220 bird species have been recorded at the refuge, along with a variety of mammals, amphibians, reptiles, and waterfowl. Great Meadows National Wildlife Refuge offers recreational opportunities such as wildlife watching, hiking, snowshoeing, and cross-country skiing.<sup>136</sup>

## Concord, Assabet, and Sudbury Rivers

The Sudbury and Assabet Rivers join to form the Concord River near the North Bridge in Concord. Portions of the **Sudbury, Assabet and Concord Rivers** were designated as Partnership Wild and Scenic Rivers on April 9, 1999. The designated segments include: a 14.9 mile segment of the Sudbury River beginning at the Danforth Street Bridge in the town of Framingham, downstream to the Route 2 Bridge in Concord; the 1.7 mile segment of the Sudbury River from the Route 2 Bridge downstream to its confluence with the Assabet River at **Egg Rock**; the 4.4 mile segment of the Assabet River beginning 1,000 feet downstream from the Damon Mill Dam in the town of Concord, to its confluence with the Sudbury River at Egg Rock in Concord; the 8 mile segment of the Concord from Egg Rock at the confluence of the Sudbury and Assabet Rivers downstream to the Bridge in the town of Billerica.<sup>137</sup>



Signs created by local elementary school children noting the precious natural resources at Spy Pond



Great Meadows National Wildlife Refuge

<sup>133</sup> (Wikipedia, 2010)

<sup>134</sup> (Winkler, 2009-2011)

<sup>135</sup> (Geologic Resources, 2010), (Allen & Goldner, 2009), (The American Heritage® Dictionary of the English Language, Fourth Edition. (2003))

<sup>136</sup> (U.S. Fish and Wildlife Service, 2011)

<sup>137</sup> (National Park Service)

## Walden Pond State Reservation

**Walden Pond State Reservation**, a 462 acre park with protected open space is managed by the Massachusetts Department of Conservation and Recreation (DCR). Walden Pond State Reservation is located in Concord at the intersection of Route 2 and Route 126 on the southern loop of the (non-designated) Byway. It is home to **Walden Pond**, the 103-foot deep kettle hole pond made famous by Henry David Thoreau. Thoreau lived on the land here in 1845 and stayed for two years. While he lived here he kept a journal that he refined for his book *Walden* in 1854. Visitors may enjoy a replica of Thoreau's modest home, as well as interpretive programs, guided walks, a gift shop, bookstore, and the Tsongas gallery. The park receives about 600,000 visitors every year. DCR limits the number of visitors to the park everyday to help protect the historic and natural resources it offers.

The Commonwealth of Massachusetts acquired the property in 1922 and since has restored the vegetation to "the hard and soft wood mix of Thoreau's day,"<sup>138</sup> which includes "berry bushes, sumac, pitch pine, hickory and oak." Additionally, wildlife such as gray squirrels, chipmunks, rabbits, skunks, raccoons, red foxes, kingfishers, blackbirds, chickadees, red-tailed hawks, ducks, geese, pickerel, sunfish, perch, smallmouth bass, and crayfish live in Walden Pond State Reservation and can be observed by visitors.

The park may be used for a variety of recreational activities including swimming, picnicking, hiking, canoeing, rowing, fishing, cross-country skiing, and snowshoeing.



Folly Pond

## Selected additional natural resource locations in and adjacent to the Byway

Numerous additional natural resource sites exist along or nearby the Byway; a partial list includes:

- Cooke's Hollow, Arlington
- Mystic River, Arlington
- Joyce Miller's Meadow/Great Meadows Conservation Area, Lexington
- Drumlin Farm Wildlife Sanctuary, Lincoln
- Folly Pond, Lincoln
- Elm Brook, Concord
- Egg Rock, Concord



Elm Brook

## Recreational resources

The communities along the Battle Road Scenic Byway provide for a variety of passive and active recreational facilities, ranging from active recreational fields to bikeways to areas for hiking and picnicking and wildlife viewing. A number of areas cited in the natural resources section of this report could also be listed in the recreational resources section.

## Recreational amenities along Alewife Brook Reservation and Parkway

Recreational opportunities along Alewife Brook Reservation and Parkway include hiking, bicycling, and bird watching. The Parkway was originally designed for leisurely driving, but heavy traffic along the Parkway reduces the scenic, leisurely qualities of the driving experience.

## Spy Pond and Spy Pond Park

Spy Pond, is a 103-acre glacial kettle hole pond. Spy Pond and the adjacent park are used for leisure activities, including boating.



Minuteman Bikeway passes by Spy Pond

<sup>138</sup> (Massachusetts Department of Conservation and Recreation, 2009)

## Minuteman Bikeway

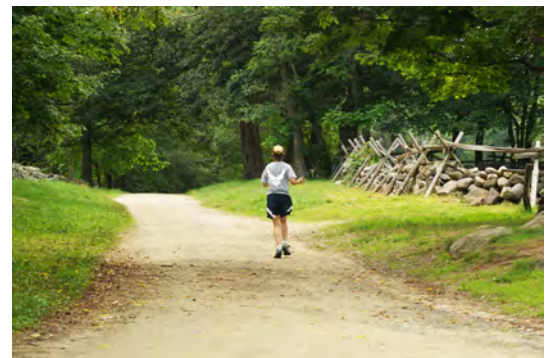
The **Minuteman Commuter Bikeway** was built by the Commonwealth of Massachusetts on the Boston and Maine railroad bed that had been in operation since 1846. Construction began in 1991, and the trail officially opened in 1993 as the country's 500<sup>th</sup> rail-trail. The paved trail is nearly 11 miles long; the MBTA-owned railroad right-of-way is leased, managed and maintained by the communities it passes through: Bedford, Lexington, and Arlington. It is a major regional greenway providing off-road links to many public parks, historic sites, and conservation lands on its route. The Minuteman Commuter Bikeway received national recognition in 2008 when it was inducted into the Rail-Trail Hall of Fame by the Rails-to-Trails Conservancy.



The success and great popularity of the Minuteman Bikeway has led to new or planned connections in West Lexington, Bedford, Somerville, Belmont, and Cambridge, including the Community Path, the Bike to the Sea, and the Mass Central Rail Trail on the eastern end and the Bay Circuit Trail, the Narrow Gauge Rail Trail, and the Reformatory Branch trail in Bedford. The proposed Minuteman Bikeway/Battle Road Connector, now at 25% design, will connect the Minuteman Bikeway with the Minuteman National Historic Park Battle Road Trail. The Reformatory Branch trail will extend the Bikeway toward Concord and its Great Meadows Wildlife Refuge, the Old North Bridge, and other historic revolutionary war sites. The Bikeway is a commuter link to the proposed developments in the Urban Ring program as well as the DCR path developments in the Alewife Reservation and along the Mystic Valley Parkway.<sup>139</sup>

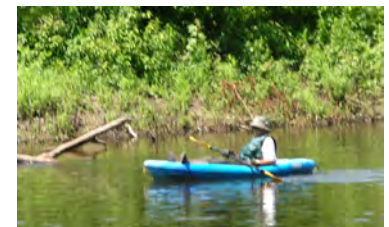
## Battle Road Trail

Much of the Battle Road Scenic Byway and sections now on the **Battle Road Trail** were originally Native American trails, which later became the Bay Road, which connected Boston Harbor all the way to Lake Champlain. The sections of Bay Road upon which the events of April 19, 1775 occurred have become known as Battle Road. In the nineteenth century, some of the road was re-routed to make it straighter, leaving sections such as the present-day Battle Road Trail to be used less frequently for vehicular traffic. Through "the careful study of maps and archaeological research,"<sup>140</sup> Minute Man National Historical Park restored these secondary roads to their colonial appearance, thus creating the Battle Road Trail. Now this trail is part of Minute Man National Historical Park and is not open to motorized vehicles.<sup>141</sup>



## South Bridge Boat House

The **South Bridge Boat House**, located at 496 Main Street in Concord, offers canoe and kayak for rent and for sale as well as breakfast, high tea, lunch, and dinner river cruises. Although not directly located on the Byway, boats rented at South Bridge Boat House can provide access to key Byway resources such as North Bridge, as well as opportunities for wildlife watching and experiencing the environment that inspired Concord authors such as Thoreau and Hawthorne.



## Selected additional recreational facilities in Byway communities

The Byway communities, and the National Park Service, manage significant additional recreational resources including the following sites:

- Hastings Park, Lexington



<sup>139</sup> (Enders & Ohmart, 2011)

<sup>140</sup> (Hollister & Sideris, 2008, p. 23)

<sup>141</sup> (Hollister & Sideris, 2008)

- Vernal Pool Trail, Minute Man National Historical Park, Lincoln
- Great Meadow, in Lexington, but managed by the Town of Arlington
- Expansive Bicycle and Pedestrian Network, as shown on the map in Transportation chapter

## Scenic resources

The scenic resources within and nearby the Battle Road Scenic Byway include scenes of natural beauty, scenes which include human influenced landscapes such as farms, and landscapes showing more human influence but which have beauty of architecture or cultivated landscape.

### Alewife Brook Reservation and Parkway

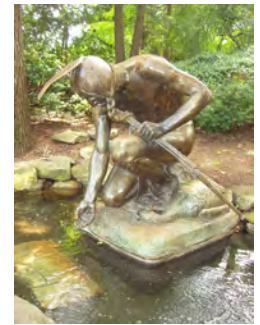
Alewife Brook Parkway was designed by landscape architect Charles Eliot in the early 19<sup>th</sup> century. The reservation and parkway are part of the Metropolitan Park System, “the first regional park system in the country.”<sup>142</sup>

### Winfield-Robbins Memorial Garden

Located between Robbins Library and Arlington Town Hall on Massachusetts Avenue, the Winfield-Robbins Memorial Garden was originally designed by the firm of Frederick Law Olmsted (Olmsted Brothers) and features Cyrus E. Dallin’s *Menotomy Indian Hunter* sculpture.



Winfield-Robbins Memorial Garden



### Selected additional scenic landscapes

The following is a sampling of the additional scenic resources along the Byway:

- Spy Pond and Spy Pond Park, Arlington
- Whittemore Park, Arlington
- Great Meadow, in Lexington but managed by the Town of Arlington
- West Farm Conservation Area, next to Wilson Farm in Lexington
- Youville Place Assisted Living Facility, Lexington
- Depot Square/Emery Park, Lexington
- Parker Meadow, Lexington
- Minute Man National Historical Park
- Folly Pond, Lincoln
- Elm Brook Wetlands Vista, Lincoln and Concord
- North Bridge area, Concord
- Buttrick Garden, adjacent to Buttrick Mansion in Concord
- Calf Pasture, Concord



## Archaeological resources

According to state law M.G.L. c. 9, § 27C, known as the “Antiquities Act,”<sup>143</sup> archaeological sites must remain confidential as a way of protecting their fragile nature. As such, resources along the Battle Road Scenic Byway that may have archaeological intrinsic quality cannot be listed here. Many historic sites, such as house foundations and burial grounds, are listed under historic resources. These do not qualify as “archaeological” in the strictest sense, but they are “physical evidence of historic human life or activity,” as stated in the National Scenic Byways Program definition for archaeological quality.



Ebenezer Fiske House Site

<sup>142</sup> (Department of Conservation and Recreation)

<sup>143</sup> (Commonwealth of Massachusetts)

## 2.4. Resource protection and enhancement strategies

Many recommendations discussed in later chapters of this document are intended to protect the intrinsic qualities and resources of the Battle Road Scenic Byway. In addition to those are the following recommendations to protect and preserve the historic, cultural, natural, recreational, and scenic qualities of the Battle Road Scenic Byway.

The following list outlines recommendations related to recommendations discussed in this chapter.

**Stewardship:** Use the Byway designation to promote stewardship of the corridor's historic, natural, scenic, cultural, recreational and archaeological resources and intrinsic qualities. Seek funding and develop new programs to support the Byway's resources and visitor attractions.

★ **Recommendation:** Ensure local regulations and development decisions that affect the Battle Road Scenic Byway corridor and its environs protect and enhance the intrinsic qualities of the Byway.

★ **Recommendation:** Ensure existing Byway resources are in good repair.

**Recommendation:** Seek funding for historic preservation and support historic preservation programs.

- Support the Community Preservation Act, as it could provide a potential source of funding for Byway projects
- Advocate for adoption of the Community Preservation Act in Arlington for preservation of historic resources
- Communicate Byway projects and promotion efforts with the National Trust for Historic Preservation and research funding and promotion opportunities offered by the Trust

**Recommendation:** Improve scenic vistas along the Byway.

- Implement landscape clearing in select locations (e.g., vista restoration in the Elm Brook area)
- Restore Folly Pond as a historic and scenic feature

**Recommendation:** Seek opportunities to enhance cultural resources along the Byway.

- Apply for Massachusetts Cultural Council Cultural District designation (in specific areas along the Byway)

**Recommendation:** Use the Battle Road Scenic Byway to engender and increase a sense of civic pride.

- Illustrate how the Battle Road Scenic Byway is the next step in a long history of community involvement in Massachusetts municipal governance.

**Coordination:** Use the Battle Road Scenic Byway to promote regional cooperation and partnerships.

**Recommendation:** Use the Battle Road Scenic Byway designation as a means for increasing cross-community collaboration.

- Use the Battle Road Scenic Byway “umbrella” to broker increased collaboration between cultural institutions along the Byway

**Education and Awareness:** Increase awareness of the Byway's rich history and promote it as an educational resource.

**Recommendation:** Develop educational programs and materials.

- Develop curriculum materials for teachers and schoolchildren about the Byway and its resources.
- Create educational programs for K-12 school field trips to the Battle Road Scenic Byway.
- Encourage regional vocational technical high schools to offer courses related to tourism as part of their hospitality curricula.
- Develop educational programs and materials about Byway resources and history for adults and families.

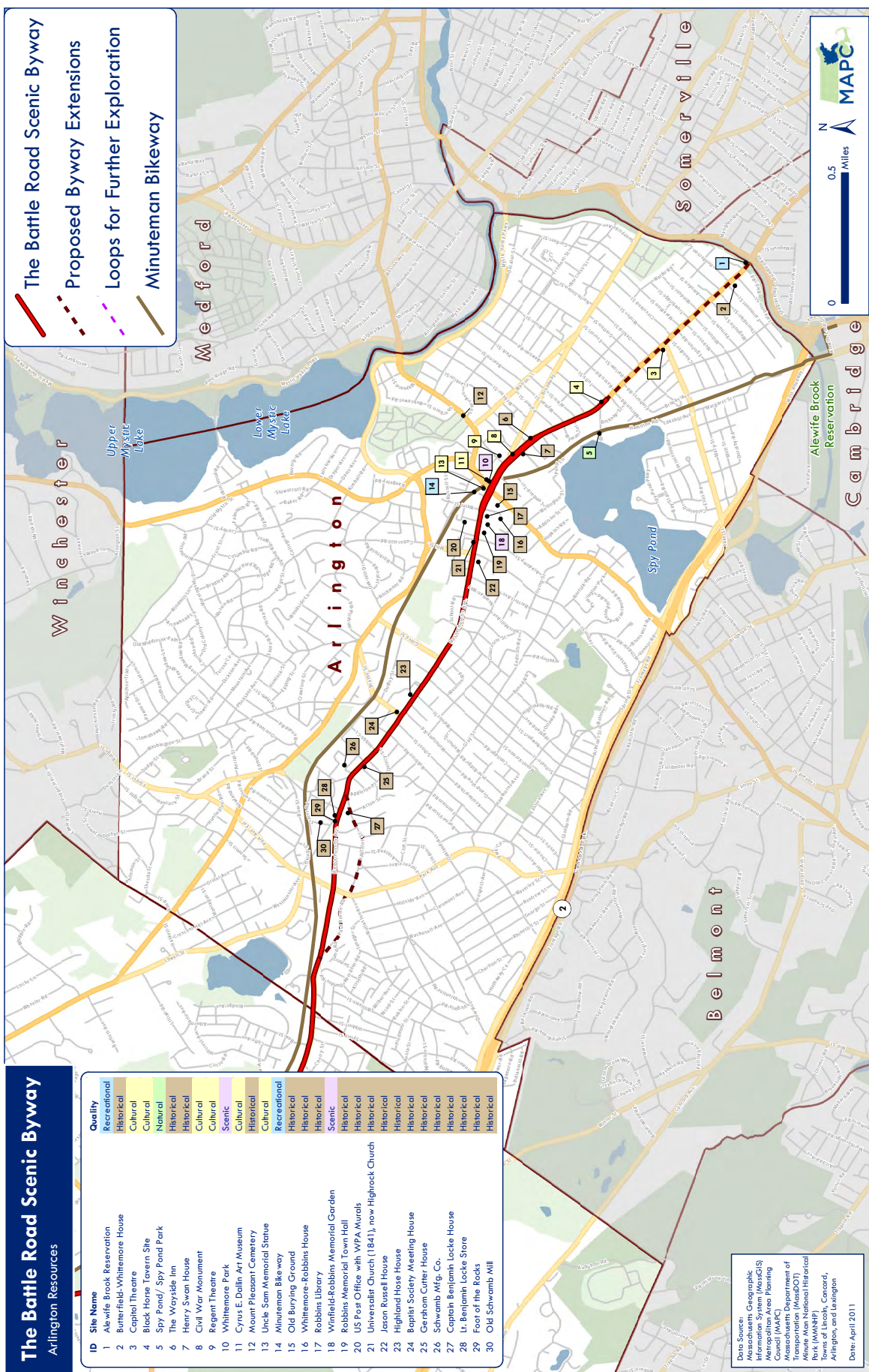
**Recommendation:** Promote the value of historic preservation by using the Battle Road Scenic Byway and its resources as examples.

**Recommendation:** Further develop the Battle Road Scenic Byway Story by supporting resource interpretation.

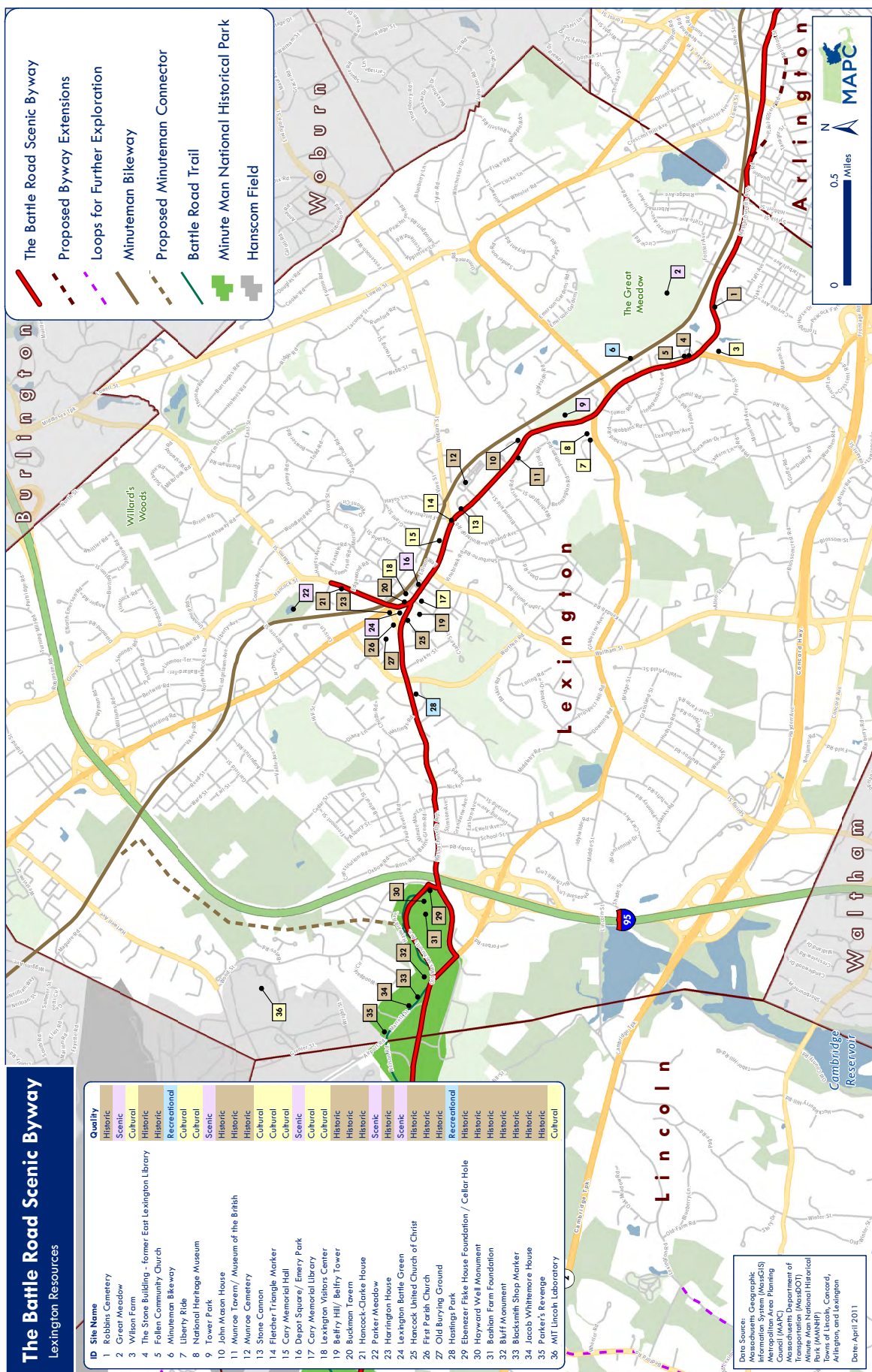
- Work with the Drinking Gourd Project to interpret resources and implement projects related to Concord's abolitionist and African-American history.
- Support research projects that further establish the Byway's abolitionist and African-American history in all four Byway towns.
- Consider developing the story of the iconic Uncle Sam, who was born in Arlington, and using this story and imagery in Byway promotion efforts.
- Support a history/storytelling project that will interpret Byway resources, bringing each era of the Byway to life. (Inspiration: The American Girls Collection series of books include fictional characters from different eras of American history.)
- Partner with post-secondary institutions (community colleges, college, universities, technical institutes) to develop/promote tourism curriculum and to interpret Byway resources.



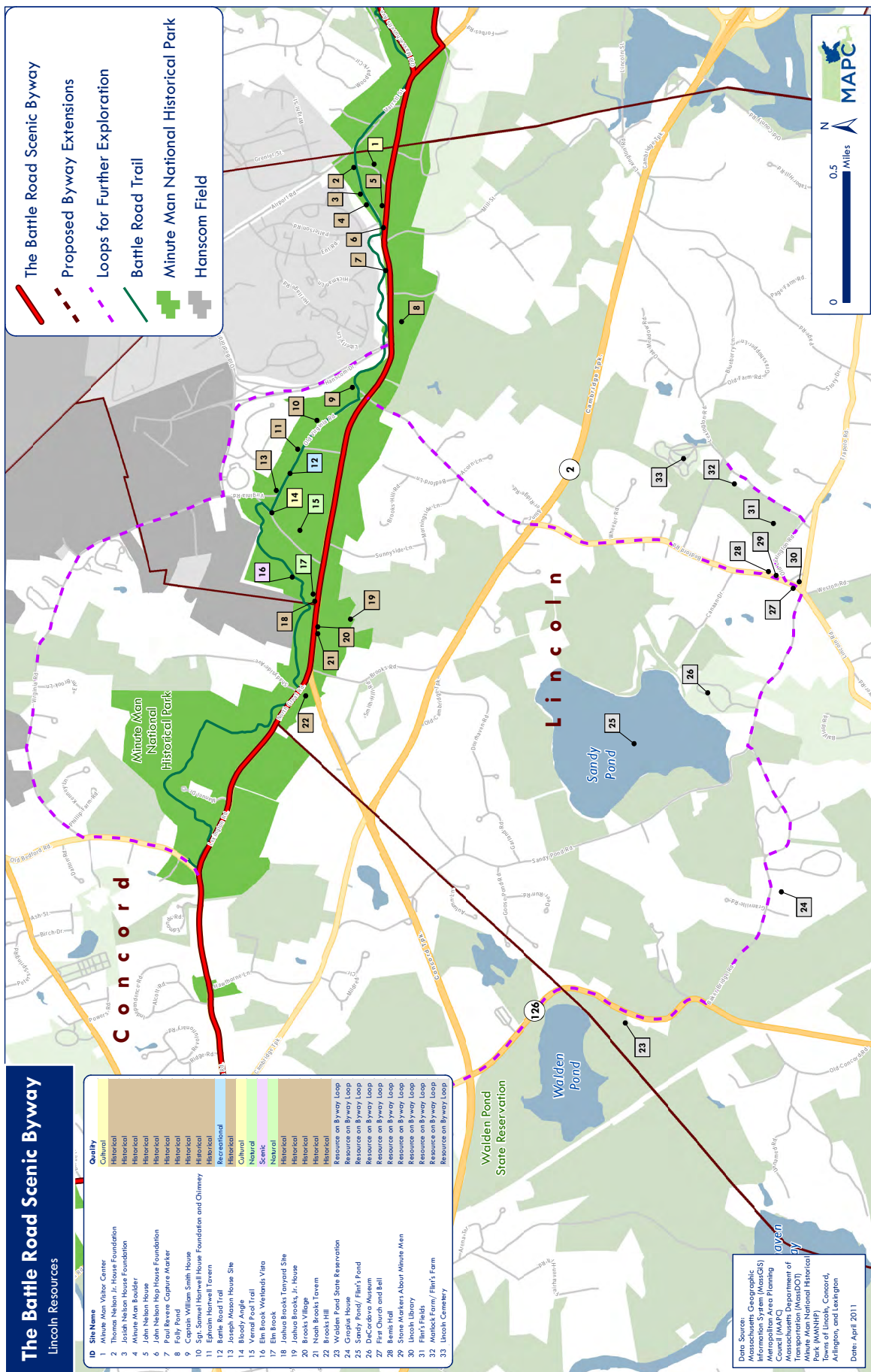
# Map: Arlington Resources



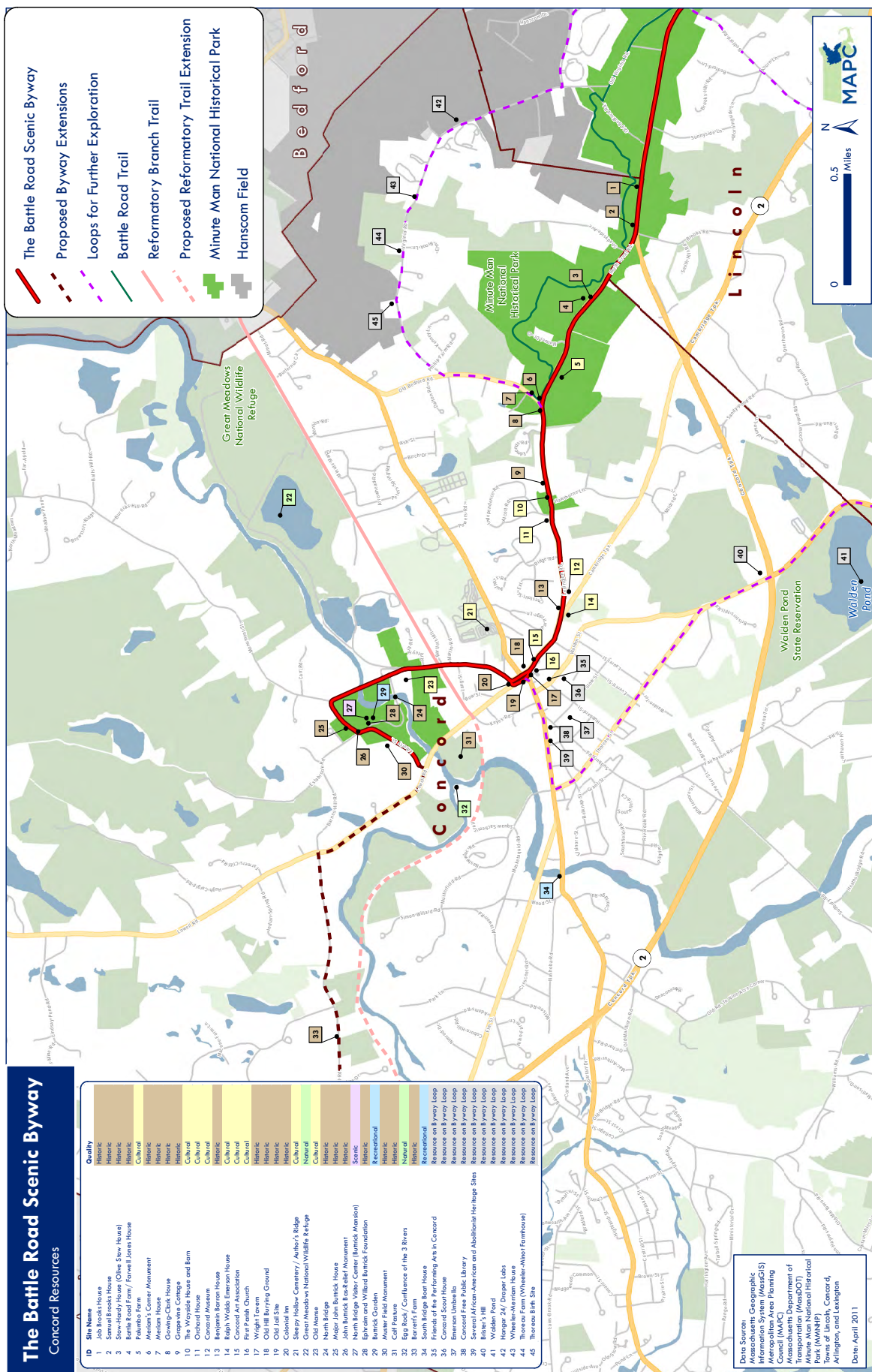
# Map: Lexington Resources



# Map: Lincoln Resources



# Map: Concord Resources



### 3. TRANSPORTATION MANAGEMENT

This chapter examines transportation infrastructure and management along the Battle Road Scenic Byway. It includes sections relating to:

- A description of the major on-road entry points for accessing the Byway,
- How the Byway can be accessed by public transportation, by bicycle, and on foot,
- The characteristics of the roadway, including features such as pavement conditions, drainage conditions, flood zones, streetscape characteristics, and municipal parking lots,
- The jurisdiction and classification for each section of the Byway, listing the entities responsible for roadway management and the types of roads that exist along the Byway,
- The current conditions related to traffic and safety, including an assessment of traffic volumes, the impact of Hanscom Field and Hanscom Air Force Base, crash data, projects included in the Boston MPO's Transportation Improvement Program for FFYs 2011-2014, and areas of traffic concern along the Byway, and
- Local road management policies and state and federal improvement resources.

The analysis of existing transportation infrastructure and management conditions is followed by recommendations for improving transportation conditions along the Byway. The Battle Road Scenic Byway is perhaps best experienced on foot, and therefore many of the recommendations focus on improving mobility for bicyclists and pedestrians. Accomplishing these recommendations will require coordination with local, regional, state, and federal entities, both public and private. The following is a summary of the recommendations included in this chapter.

Maintaining or improving the Byway's roadways and the bicycle and pedestrian network is an essential component of Byway stewardship. It is recommended that the Byway management entity coordinate with the entities responsible for improvements to the rights-of-way along the Byway, both on-road and off-road. Additionally, the Byway management entity should provide comment on development regulations, projects, and planning efforts that affect transportation and mobility along the Byway.

Calming traffic and improving safety along the Byway will enhance the visitor experience. This will make the Byway more accessible to people with disabilities, as well as for bicyclists and pedestrians. All visitors, regardless of whether they travel to the Byway by car or by other modes of transportation, are likely to leave their vehicles to visit Byway attractions – which means all visitors are pedestrians at some point during their visit.

Among the top recommendations is to follow context-sensitive roadway design guidelines that preserve the intrinsic qualities of the Byway while improving safety and mobility along the roadway. The intent of this recommendation is to improve access to the Byway for bicyclists and pedestrians on the roadway, whether that access is on the road itself or immediately adjacent to it such as on sidewalks, and to do so in a way that is sensitive to the historic, cultural, scenic, and natural qualities of the Byway.

In addition to on-road access to the Byway, developing continuous off-road access to the Byway for bicyclists and pedestrians is recommended. This will improve the recreational resources the Byway has to offer and will provide an alternative for visitors who prefer using trails and bikeways.

Improving the visitor experience by providing facilities such as bicycle racks and other amenities for bicyclists and pedestrians will make facilitate traveling along the Byway without a car. Additionally, shuttle services from parking areas and additional accommodations for tour buses could help facilitate reduced dependence on personal automobiles.

#### 3.1. Existing transportation conditions

Existing conditions for transportation infrastructure and management are described here. This includes analysis of how the Byway can be accessed, characteristics of the roadway, local roadway management policies, and state and federal roadside improvement resources.

## Accessing the Byway

This section describes major roads that connect with the Byway and also describes public transportation, bicycling, and walking conditions along the Byway.

### Major on-road entry points for the Byway

The Battle Road Scenic Byway can be accessed at several entry points along its length. The entry points mentioned here are only major roads; of course, one can enter or leave the Byway from dozens of local roads as well. Additionally, the Byway can be accessed from numerous bicycle and pedestrian trails, which are shown in the Bicycle and Pedestrian Network map in this document. Two major trails, the Minuteman Commuter Bikeway and the Battle Road Trail are described in more detail under the heading “Accessing the Byway by bicycle or on foot.”

The entire Byway runs approximately parallel to Route 2, so most of the entry points from the south also connect to Route 2. Route 2A merges with and exits the Byway at many points, which are also described here.

From Cambridge, the city immediately east of Arlington, the Byway can be accessed from Massachusetts Avenue/Route 2A, which continues as Massachusetts Avenue/Route 2A and merges with Route 3 after crossing the municipal boundary into Arlington. It may also be accessed by Route 3/Route 16/Alewife Brook Parkway at its intersection with Massachusetts Avenue at the municipal boundary between Cambridge and Arlington.

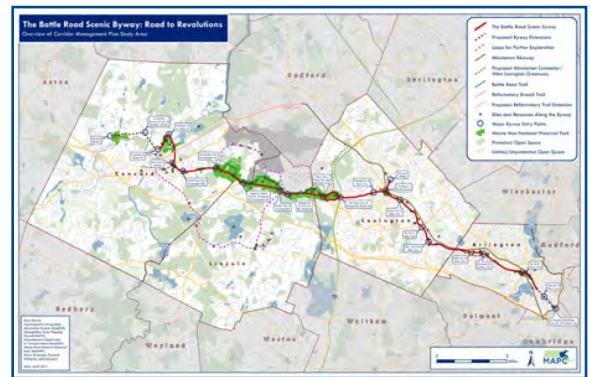
In East Arlington, the Byway can be accessed from the south by Lake Street. Closer to Arlington Center, the Byway can be accessed from Broadway, which terminates at Massachusetts Avenue and creates a triangular area called Broadway Plaza.

In Arlington Center, the Byway may be accessed from Route 60/ Pleasant Street from the south and Route 60/ Mystic Street from the north where Route 60 intersects with Massachusetts Avenue. Route 2A and Route 3 depart from the Byway here, merging with Route 60 northbound along Mystic Street.

In Arlington Heights, the Byway can be accessed from the south at Appleton Street, from the north at Forest Street, and from the north or south at Park Avenue.

In Lexington near Wilson Farm, the Byway can be accessed from Pleasant Street/Routes 4/225 at a traffic circle that includes Massachusetts Avenue. Routes 4/225 merge with Massachusetts Avenue at this traffic circle and west of the traffic circle. Near the National Heritage Museum, the Byway can be accessed from Marrett Road/Route 2A from the west and Maple Street/Route 2A from the east.

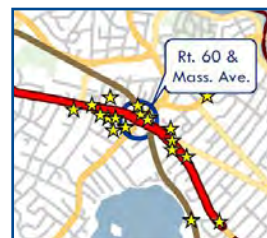
Just east of Lexington’s Town buildings (the police station, Cary Memorial Hall, and Lexington Town Building) at Fletcher Triangle, the Byway can be accessed from the east at Woburn Street. In



Refer to the Battle Road Scenic Byway Overview Map near the beginning of this document to see all the entry points as a single image. The images below and on the following page are close-ups of intersections shown in the overview map.



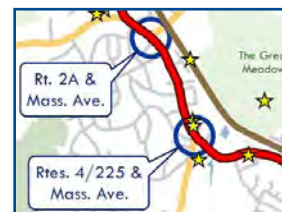
1. The distance from Alewife Brook Parkway at the Arlington town line to Mass. Ave. at Lake St. is 0.5 miles. Also shown here is the proposed extension from the town line to Tufts St., which would add 0.8 miles to the Byway.



2. The distance from Lake Street to Route 60 along Mass. Ave. in Arlington is 0.9 miles.



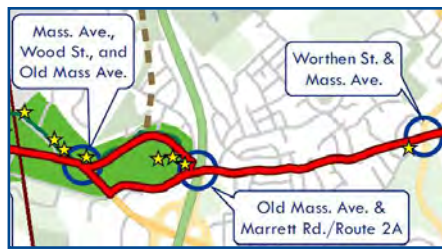
3. The distance from Rt. 60 to Appleton Street along Mass. Ave. is 1.3 miles. The section shown here, Appleton St. to Park Ave. is 0.4 miles. Also shown is the proposed Appleton St./Paul Revere Rd. extension, which would add 0.7 miles to the Byway.



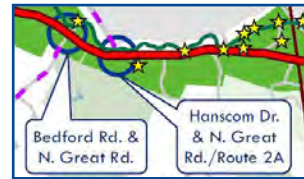
4. The distance from Park Ave. in Arlington to Pleasant St. (Rtes. 4/225) in Lexington along Mass. Ave. is 1.3 miles. The section shown here, from Pleasant St. to Maple St. (Rt. 2A) is 0.5 miles.



5. Maple St. to Woburn St. is 1.0 mile, and Woburn St. to Bedford St. along Mass. Ave. is 0.4 miles. The spur to the Hancock-Clarke House is about 0.3 miles.



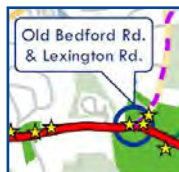
6. Bedford St. at Lexington Battle Green to Worthen St. is 0.4 miles. Worthen St. to Wood St. is 1.0 mile. From Wood St. along Mass. Ave. to Rt. 2A is 0.5 miles, and along Old Mass. Ave. is 0.6 miles.



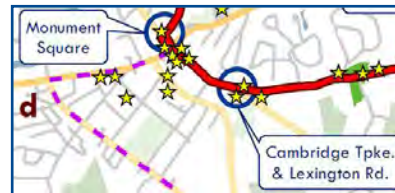
7. The Byway crosses into Lincoln. From Old Mass. Ave. and Rt. 2A to Hanscom Dr. is 1.0 mile. From Hanscom Dr. to Bedford Rd. is 0.2 miles.



8. Bedford Rd. to the Concord/Lincoln line is 1.1 miles.



9. The distance from the Concord town line to Old Bedford Rd. along Lexington Rd. is 0.9 miles.

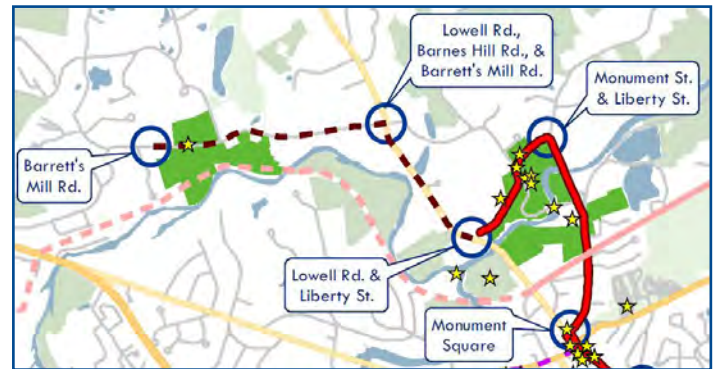


10. Old Bedford Rd. to Cambridge Turnpike is 1.0 mile. Cambridge Tpke. to Monument Square is 0.3 miles.

Lexington Center, the Byway can be accessed from the north by Grant Street and from the south by Waltham Street.

The Byway continues along Massachusetts Avenue at Lexington Battle Green, but includes a spur to the Hancock-Clarke House on Hancock Street, which can be accessed from Bedford Street at Lexington Battle Green. Lexington Battle Green is a triangular common area and provides access to the Byway from Bedford Street and Harrington Road. West of Lexington Battle Green, the Byway can be accessed from Worthen Road.

Close to the Lexington town line, the Byway can be accessed from the north and south along Interstate 95/Route 128 via the Route 2A exit. After crossing the bridge over Interstate 95/Route 128 interchange, the Byway forks, continuing along Massachusetts Avenue then Route 2A/Marrett Road on the south side, and on the other side, travels north briefly on Wood Street and then onto Old Massachusetts Avenue, which merges with Route 2A.



11. From Monument Square to Monument Street at Liberty Street is 0.9 miles. From Liberty St. to Lowell Rd. is 0.6 miles. Here the designated Byway ends and the proposed Byway extension begins. From Liberty St. at Lowell Rd. to Barrett's Mill Rd. is 0.6 miles, and Barrett's Farm is about 0.6 miles west on Barrett's Mill Road.

After crossing into the Town of Lincoln, Route 2A is called North Great Road. The Byway can be accessed from the north on Hanscom Drive and from the south on Bedford Road, which are located between the Paul Revere Capture Marker and the Captain William Smith House on North Great Road. Crossing into the Town of Concord, North Great Road becomes Lexington Road. Route 2A leaves the Byway once again at another entry point from the south, Bypass Road/Concord Turnpike Cut-Off. The Byway continues along Lexington Road. The Byway can be accessed from the north from Old Bedford Road, which intersects with Lexington Road at Meriam's Corner.

The Cambridge Turnpike approaches the Byway from the south, and the Ralph Waldo Emerson House is located on the Cambridge Turnpike near its intersection with the Byway on Lexington Road. The Byway continues from Lexington Road along Monument Square, which offers multiple access points to the Byway: From Concord Center to the west, the Byway can be accessed from Main Street/Route 62, and moving clockwise, from the northwest Lowell Road merges with Monument Square, Monument Street merges with Monument Square from the north, and Bedford Street/Route 62 merges with Monument Square from the northeast.

The Byway continues north towards North Bridge on Monument Street. The Byway then makes a sharp turn to the southwest onto Liberty Street. Then, from the intersection of Liberty Street and Lowell Road the Byway travels northwest on

Lowell Road and turns west onto Barrett's Mill Road and terminates at Barrett's Farm (note that this assumes the proposed extension of the Byway to Barrett's Farm). This end of the Byway can be accessed from Barrett's Mill Road, which connects with the Concord Rotary. The Concord Rotary connects with Routes 2, 2A, 111, and 119.

## Accessing the Byway by public transportation

The overall availability of public transit to, from and along the Byway is limited and varies among the four towns. There is no single public transit service that provides access along the entire length of the Byway. However, segments of the Byway may be accessed by public transportation. Public transportation is also available in close proximity to the Byway.

### MBTA Bus Service

Massachusetts Bay Transportation Authority (MBTA or the "T") is the public transportation authority for the Greater Boston region. There are six MBTA bus routes that operate on segments of the Byway but no one route extends the entire length of the Byway. Most bus access to the Byway is in Arlington and bus service declines traversing west along the Byway. No MBTA bus routes provide access to the Byway in Concord. At over 6,550 weekday boardings, Route 77 has the highest ridership servicing Massachusetts Avenue in Arlington. Routes with heavy ridership include Routes 62, 79 and 350. The accompanying table summarizes bus service along the Byway and provides data about ridership and days/hours of service for the six bus routes.<sup>1</sup>



### MBTA Commuter Rail

Part of the Fitchburg/South Acton Line passes south of the Byway. The Fitchburg/South Acton Line is an MBTA commuter rail line that runs from Boston's North Station to Fitchburg, Massachusetts. Passing by Walden Pond between Lincoln and Concord, this commuter rail line is considered to be one of the more scenic commuter rail lines. In February 2008, the annual average weekday ridership of the Fitchburg/South Acton Line was 9,900. The Fitchburg/South Acton Line is the longest line in the MBTA's system in terms of both length and travel time.

In Lincoln, the Lincoln Station stop on the Fitchburg/South Acton Line is located slightly more than three miles south of the Byway on Lincoln Road and had 275 weekday inbound boardings in February 2008. On a typical weekday, there are about 16 inbound and outbound boardings between 6:00am to 1:00am with less frequent service on Saturday and Sunday.

In Concord, the Concord Station stop on the Fitchburg/South Acton Line is located approximately one-half mile southwest of the Byway on Thoreau Street. In February 2008, the number of weekday inbound boardings from the Concord Station stop traveling east to Boston's North Station was 541.<sup>2</sup>

### Additional Transit Services

There are other public and private bus and shuttle services in the Byway area serving both commuter and residential needs. Bus services include Lexpress operated by the Town of Lexington and the Alewife Shuttle operated by the Route 128 Business Council. Primarily serving Lexington, annual ridership for Lexpress and the Alewife Shuttle slightly exceeded 70,000 and 90,000 respectively in fiscal year 2009.



Hanscom Air Force Base and MIT Lincoln Laboratory run private commuter shuttles. These fixed routes provide access outside the Byway (e.g., to Alewife Station). There is a daily shuttle that provides service between MIT Lincoln Laboratory in Lexington and the main MIT (Massachusetts Institute of Technology) campus in Cambridge. This shuttle is available to employees, students, subcontractors and families, but not the general public. This service has experienced a steady increase in ridership. Ridership in fiscal year 2009 was almost 33,000, an increase of 66 percent from fiscal year 2005.



<sup>1</sup> (Massachusetts Bay Transportation Authority, 2009)

<sup>2</sup> (Massachusetts Bay Transportation Authority, 2009)

**MBTA Bus Routes Along the Byway: Areas Served, Typical Number of Daily Boardings, Hours of Service**

MBTA Bus Route	Areas Served along the Byway	Municipalities Served	Typical Daily Inbound Boardings (Weekday, unless noted)	Typical Daily Outbound Boardings (Weekday, unless noted)	Typical Daily Total Boardings (Weekday, unless noted)	Approximate Days/ Hours of Service
<b>62:</b> Bedford V.A. Hospital – Alewife Station via Lexington Center and Arlington Heights	Mass. Ave. from intersection of Mass. Ave./Clarke St. in Lexington to Mass. Ave./Park Ave. in Arlington.	Lexington and Arlington	502	620	1,122	Monday-Saturday, 6:40am-8:20pm
<b>67:</b> Turkey Hill – Alewife Station (via Arlington Center)	Mass. Ave. from intersection of Mass. Ave./Mill St. to Mass. Ave./Pleasant St.	Arlington	331	186	517	Monday-Friday, 6:45am-8:25pm
<b>76:</b> Hanscom/Lincoln Lab – Alewife Station (via Lexington Center and Civil Air Terminal)	Massachusetts 2A from intersection of Mass 2A/Hanscom Dr. changing to Old Mass. Ave., from intersection of Old Mass. Ave. and Wood St.; Massachusetts 2A from intersection of Mass 2A/Marrett St. to Marrett Rd./Waltham St.; Mass. Ave. from intersection of Mass. Ave./Clarke St. to intersection of Mass. Ave./Pleasant St.	Lexington and Lincoln	284	342	626	Monday-Saturday, 6:20am-10:00pm
<b>77:</b> Arlington Heights – Harvard Station (via Mass. Ave.)	Mass. Ave. from intersection of Mass. Ave./Arlington Heights Busway (west of Park St.) to near Spy Pond where Route 3 turns north	Arlington	Weekday: 32,742 Saturday: 2,085 Sunday: 1,273	Weekday: 32,772 Saturday: 2,156 Sunday: 1,457	Weekday: 65,512 Saturday: 4,241 Sunday: 2,730	Monday-Sunday, 4:50am-1:45am
<b>79:</b> Arlington Heights – Alewife Station (via Mass. Ave.)	Mass. Ave. from intersection of Mass. Ave./Arlington Heights Busway (west of Park St.) to near Spy Pond where Route 3 turns north	Arlington	579	516	1,095	Monday-Friday, 6:40am-10:10pm
<b>350:</b> North Burlington – Alewife Station via Burlington Mall	Mass. Ave. from near Spy Pond where Route 3 turns north to Alewife Brook Parkway	Arlington	Weekday: 5,853 Saturday: 323 Sunday: 146	Weekday: 7,593 Saturday: 1,498 Sunday: 215	Weekday: 13,443 Saturday: 731 Sunday: 361	Monday-Saturday, 6:15am-11:00pm, Sunday 7:00am-7:30pm

**MBTA Bus Routes Along the Byway: Total Trips Per Day**

MBTA Bus Route	Number of Weekday Trips (Inbound and Outbound)	Number of Saturday Trips (Inbound and Outbound)	Number of Sunday Trips (Inbound and Outbound)
62	43	13	No Service
67	25	No Service	No Service
76	45	13	No Service
77	182	167	101
79	41	No Service	No Service
350	59	19	12

With approximately 72,000 annual riders, the Lexpress is growing in ridership by about 8 percent each year with October and May being the busiest months. Lexpress currently relies on receiving annual funding from the MBTA to operate. Lexpress bus routes start and end at Lexington Center. The service is a demand stop system, meaning that passengers can stand at any point along a Lexpress route and flag the bus to stop so they can board. Three vehicles cover the six routes that comprise the Lexpress system. Segments of the Lexpress routes traverse parts of the Byway. Specifically, the Lexpress traverses Massachusetts Avenue from east of the Arlington Reservoir on Bow Street through Lexington Center and west until Worthen Road. All transit services in the Byway area are fixed route services.<sup>3</sup>

The Liberty Ride trolley tour in Lexington, owned and operated by the Town of Lexington since 2002, takes passengers along the historic Battle Road in Lexington and Concord while a guide describes local landmarks and historic events. Liberty Ride passengers have the option of getting off the trolley in designated locations and can re-board when another one comes by. The Liberty Ride is offered four times a day from April through October with tours beginning every 90 minutes.<sup>4</sup> There were an estimated 6,000 riders in 2008 with the peak season between July and October. According to a recent Town of Lexington Economic Development Office report, “Liberty Ride ridership continues to grow. Through fees, this tour of Lexington and Concord serves as the only public transportation link to the area’s historic sites. Designed to spur economic development, it has continued to improve the tourism experience. In FY 2012 the Liberty Ride will celebrate its tenth season. The Liberty Ride continues to be self-sufficient from an operational and cash flow standpoint.”<sup>5</sup>

### Accessing the Battle Road Scenic Byway via transit and/or bus

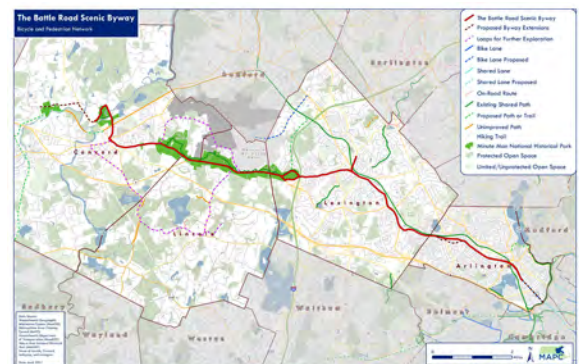
Individuals seeking to access the Battle Road Scenic Byway by bus would take different buses depending upon which section of the Byway they wanted to visit. The #77 or #79 buses to Arlington Heights from Harvard Station (#77) or Alewife Station (#79) on the Red Line would provide access to the entire length of the Byway in Arlington. Visitors seeking to go to the Lexington Byway sites (and for possible connections to the LexPress or the Liberty Ride) would take the #62 or #76 bus. Connection to the Liberty Ride would connect the visitors to Byway sites farther to the west in Lincoln and Concord. Individuals wanting to take commuter rail to the Byway can access the Concord Center/North Bridge areas by taking the Fitchburg Line from South Station directly to Concord Station. Many of these services run less frequently on weekends; see the MBTA web site at [www.mbta.com](http://www.mbta.com) for more details.

### Accessing the Byway by bicycle or on foot

Perhaps the most effective way to immerse oneself in the Battle Road Scenic Byway visitor experience is to travel by foot and/or bicycle. On foot or bike, one can easily stop and take in a historical marker, explore a historic building, and appreciate the landscapes that have been preserved along some of the corridor.

The popular Minuteman Bikeway begins at the Alewife Station on the MBTA red Line, parallels the Byway in close proximity from Arlington Center to Lexington Center, and offers bicyclists and pedestrians a way to access Byway sites and resources while also enjoying one of the Byway’s key recreational amenities.

Walking or bicycling along the Battle Road Trail in Minute Man National Historical Park, a trail that follows the original 1775 Battle Road, is the only way to experience the Battle Road landscape restored to what it looked like in the Colonial era and to see key Byway visitor attractions including the Captain William Smith House, Ephraim Hartwell Tavern, and Bloody Angle battleground.



A map showing the Byway's bicycle and pedestrian network is included at the end of this chapter.

<sup>3</sup> (Town of Lexington, MA , 2011), (128 Business Council, 2011), (Felix, 2011)

<sup>4</sup> (Town of Lexington Tourism Committee, 2011)

<sup>5</sup> (Town of Lexington, MA, 2011, pp. IX-10)

## Bicycling on the Byway

Bicycling is currently quite popular with high numbers of riders throughout the Byway corridor. The Minuteman Bikeway provides access from urban areas such as Cambridge and Somerville to the more open roads in the Concord area and beyond. Concord Center and Lexington Center are popular starting points for many group rides. Note that bicycles can be taken onto the Commuter Rail in off-peak hours; visitors wishing to access bicycling areas may choose to take the train to Concord to begin their journey.

One can bicycle the entire corridor within about one hour without stopping. The bicycle is perhaps the most effective and flexible way to spend the day learning about all the Byway offers. Dedicated bicycle facilities do not currently exist along the roadway.



## Walking on the Byway

Pedestrian facilities, either sidewalks or trails, exist along most of the Byway. Sidewalks exist along Massachusetts Avenue in Arlington and Lexington. As mentioned earlier, the Minuteman Bikeway and Battle Road Trail are also open to pedestrians. There is no pedestrian access to areas south of the Byway along Route 2A in the Battle Road Unit of Minute Man National Historical Park. Details regarding the presence of sidewalks are included later in this chapter under the heading “Streetscapes.”

## Characteristics of the roadway

This section describes the jurisdiction and classification of all roads along the Byway, as well as pavement conditions, drainage and flood zones, streetscape, signage, and parking.

## Jurisdiction and classification

Roads along the Battle Road Scenic Byway are primarily under Town Jurisdiction. Roads under State Jurisdiction include Marrett Road and Massachusetts Avenue in Lexington and North Great Road (Route 2A) in Lincoln. As shown in the table below, the Functional Classification of the roads along the Byway range from Urban Principal Arterials, Urban Minor Arterials, Urban Collectors, and Local Roads.

According to MassDOT’s (Massachusetts Department of Transportation) 2009 *Road Inventory Year End Report*,<sup>6</sup> Functional Classification defines the character of services that a particular roadway is intended to provide. Roadways are divided into three classification categories: Arterials, Collectors and Local Roadways. All three classification categories exist along the Byway.

Arterials provide the highest level of mobility at the greatest vehicular speeds for the longest uninterrupted distances. Collectors connect the arterial network with the local roadways. Local roadways provide the lowest level of mobility by accessing adjacent land use, serving local trip purpose and connecting to higher order roadways.

Some sections of the Byway are part of the NHS (National Highway System) designated roadway system. Developed by the United States Department of Transportation, the NHS comprises approximately 160,000 miles of roadways nationwide which are considered to be important to the nation’s economy, defense and mobility. These NHS roads are also part of the Massachusetts Trucking Network. The Byway segments that are part of the NHS designated roadway system and the Massachusetts Trucking Network are Massachusetts Avenue in Lexington, Route 2A/Marrett Road west of I-95 in Lexington, and Route 2A/North Great Road in Lincoln.

<sup>6</sup> (Massachusetts Department of Transportation Office of Transportation Planning, 2009)

**Jurisdiction and functional classification of roads along the Byway**

Community	Road	Jurisdiction	Functional Classification	Federal Functional Classification
Arlington	Massachusetts Avenue – between Town Line with City of Cambridge and Route 60	Town	Principal Arterial	Urban Other Principal Arterial
Arlington	Massachusetts Avenue – between Route 60 and Town Line with Town of Lexington	Town	Urban Principal Arterial	Urban Other Principal Arterial
Arlington	Paul Revere Road	Town	Local Road	None
Arlington	Appleton Street	Town	Urban Collector	Urban Collector
Lexington	Massachusetts Avenue	State	Urban Minor Arterial	Urban Minor Arterial
Lexington	Route 4/225	Town	Urban Principal Arterial	Urban Other Principal Arterial
Lexington	Wood Street	Town	Urban Collector	Urban Collector
Lexington	Old Massachusetts Avenue	Town	Local Road	None
Lexington	Marrett Road	State	Urban Minor Arterial	Urban Minor Arterial
Lincoln	North Great Road (Route 2A)	State	Urban Minor Arterial	Urban Minor Arterial
Lincoln and Concord	Lexington Road	Town	Urban Minor Arterial	Urban Minor Arterial
Concord	Monument Square	Town	Urban Minor Arterial	Urban Minor Arterial
Concord	Monument Street	Town	Urban Collector	Urban Collector
Concord	Liberty Street	Town	Local Road	None
Concord	Lowell Road	Town	Urban Minor Arterial	Urban Minor Arterial
Concord	Barrett's Mill Road	Town	Urban Collector	Urban Collector

**Pavement**

The Byway's pavement conditions are extremely important since they affect the experience of the driver, pedestrian or bicyclist. The Towns of Arlington, Lexington and Concord use a Pavement Condition Index, also referred to as PCI. PCI is a measurement of roadway serviceability and is a method to establish performance criteria. The PCI describes the condition of the pavement segment on a scale of 0-100, with 100 being equivalent of a newly paved roadway.

Generally, once a roadway's PCI drops to 70 or below it becomes a candidate for a pavement overlay, once the PCI drops to 55 or below, it becomes a candidate for reconstruction. PCI data is analyzed and tracked using software that calculates various budget scenarios and alternatives that enable towns use to develop their annual road improvement programs. The PCI values generated are grouped into criteria which are defined by the town depending on the type and functional class of each segment.

**Arlington pavement conditions**

In Arlington, pavement conditions along the entire length of Massachusetts Avenue are considered to be "poor." However, the town is currently working with MassDOT on a project that will rehabilitate the first mile of Massachusetts Avenue from the Cambridge Line. This project is tentatively scheduled to begin construction in 2012-2013.

The Town of Arlington had a PCI report created in 2005. The table below summarizes the PCI rating for street segments that are part of the Byway. According to the Town of Arlington, these PCI ratings are outdated so should be evaluated with caution; all sections of Massachusetts Avenue and Paul Revere Road have declined significantly over the past 7-8 years.<sup>7</sup>

<sup>7</sup> (Rademacher, 2011)

**Arlington PCI Ratings along the Byway**

Street	From	To	PCI Rating
Massachusetts Avenue	Thorndike	Alewife Brook	87
Massachusetts Avenue	Bates Road	Thorndike	87
Massachusetts Avenue	Whittemore	Bates	89
Massachusetts Avenue	Library Way	Whittemore	71
Massachusetts Avenue	Jason Street	Library Way	87
Massachusetts Avenue	Coleman Avenue	Jason Street	75
Massachusetts Avenue	Brattle Street	Coleman Avenue	74
Massachusetts Avenue	Clark Street	Brattle Street	79
Massachusetts Avenue	Daniels Street	Clark Street	87
Massachusetts Avenue	Park Avenue	Daniels Street	89
Massachusetts Avenue	Paul Revere	Park Avenue	87
Massachusetts Avenue	Lexington Town Line	Paul Revere	76
Paul Revere Road			87

**Lexington pavement conditions**

In 2010, the Town of Lexington hired an engineering firm, Fay, Spofford, and Thorndike, to perform a detailed roadway condition analysis. The table below contains PCI report data for Massachusetts Avenue and Wood Street. No data was available for other roads included in the Byway such as Hancock Street and Old Massachusetts Avenue.<sup>8</sup>

**Lexington PCI Ratings along the Byway**

Street	From	To	PCI Rating
Massachusetts Avenue	Arlington Town Line	Pleasant Street	71
Massachusetts Avenue	Pleasant Street	Plainfield Street	68
Massachusetts Avenue	Plainfield Street	Marrett Road (E)	85
Massachusetts Avenue	Marrett Road (E)	100' E of Winthrop Road	73
Massachusetts Avenue	100' E of Winthrop Road	150' E of Wallis Court	49
Massachusetts Avenue	150' E of Wallis Court	Clarke Street	31
Massachusetts Avenue	Clarke Street	375' E of Wood Street	80
Massachusetts Avenue	375' E of Wood Street	100' E of Wood Street	61
Massachusetts Avenue	100' E of Wood Street	350' E of Marrett Road (W)	33
Massachusetts Avenue	350' E of Marrett Road (W)	Marrett Road (W)	85
Wood Street			97

**Lincoln pavement conditions**

The designated Battle Road Scenic Byway is under State jurisdiction across the length of the Byway in Lincoln; see below for pavement conditions for State-maintained roads.

**Concord pavement conditions**

Concord's pavement management system involves field inspections to inventory the physical conditions of roadway segments and develop a PCI for each segment. Based on an inventory conducted in fall 2010, the following is a list of PCI's for the roadway segments that comprise the Byway in Concord.

The Town of Concord expects that Liberty Street and a one mile section of Lexington Road will require a pavement overlay within the next two to three years.<sup>9</sup>

<sup>8</sup> (Livsey, 2011)

<sup>9</sup> (Maglio, 2009-2011)

**Concord PCI Ratings along the Byway**

Street	From	To	PCI Rating
Lexington Road	Town Line	Old Bedford Road	88
Lexington Road	Old Bedford Road	Cambridge Turnpike	74
Lexington Road	Cambridge Turnpike	Monument Square	93
Monument Square	Lexington Road	Monument Street	88
Monument Street	Monument Square	Liberty Street	83
Liberty Street	Monument Street	Lowell Road	73
Lowell Road	Liberty Street	Barrett's Mill Road	93
Barrett's Mill Road	Lowell Road	Barrett's Farm	83

**Pavement conditions on State-maintained roads**

MassDOT is responsible for conducting pavement condition surveys in order to assist with prioritizing and completing routine maintenance and repairs to roads that are under state jurisdiction. MassDOT utilizes a Pavement Serviceability Index (PSI) rating to generally rank pavement conditions. According to the PSI, the condition of the pavement is ranked on a scale of 0 to 5. At thresholds within this scale, roads are determined to be in poor, fair, good or excellent condition. Specifically, the thresholds are categorized as:

- 3.50 – 5.00 Excellent
- 2.80 – 3.49 Good
- 2.30 – 2.79 Fair
- ≤ 2.29 Poor

The table below summarizes PSI Ratings for the sections of the Byway that are under State jurisdiction. These PSI Ratings were calculated in 2006, with the exception of the segment of Route 2A between Elm Street and Cambridge Turnpike, which is from 2009.<sup>10</sup>

**State PSI Ratings along the Byway**

Town	Street	From	To	PSI Rating
Lincoln	North Great Road - Eastbound	Concord Town Line	Lexington Town Line	3.42
Lexington	Massachusetts Avenue - Eastbound	Route 128	Marrett Street	3.44
Lexington	Marrett Road	Massachusetts Avenue	Massachusetts Avenue	3.43

**Drainage and flood zones****Drainage along the Byway**

Efficient roadside drainage is an important function required for a road's long-term maintenance as well as the safety of the user. Surface runoff should not flow onto the surface of the road and should not accumulate underneath the road. On the whole, drainage along the Byway is adequate and efficient. The following issues in Arlington and Concord were identified by the respective Town's Engineer.

- In Arlington, a section of Massachusetts Avenue from Park Avenue to Paul Revere Road lies within a flood zone and experiences flooding during significant rainfall.
- In Concord, there have been intermittent flooding conditions at the old stone culvert under Lexington Road at Meriam's Corner.
- Also in Concord, Save Our Heritage, the nonprofit organization that is rehabilitating Barrett's Farm, has issued a proposal to reduce seasonal flooding near Barrett's Farm, the adjacent field, and possible flooding that could occur on Barrett's Mill Road. The proposal involves construction of a 600-foot drain line with associated manholes.

<sup>10</sup> (Onorato, 2009-2011)

## Federal Emergency Management Agency (FEMA) Flood Zone Designations

A few locations along the Byway are in high risk Federal Emergency Management Agency (FEMA) Flood Zone Designations. According to FEMA, these areas have at least a one percent chance of flooding each year.

In Arlington, there is a small Flood Hazard Zone directly south of the Arlington Reservoir crossing Massachusetts Avenue on its north and south sides. There is a small Flood Hazard Zone bordering the southeast side of Route 2A in Lexington west of Forbes Road and crossing Route 2A east of Brooks Road. West of Concord Center, FEMA flood zone areas traverse and border several sections of the Byway primarily sourcing from the Assabet River.

## Streetscape

This section describes what the roadway looks like, including elements such as road width, sidewalks, and lighting. Some of the terminology used in this section includes:

- **Continental style crosswalks:** A preferred type of crosswalk marking is the ladder or ‘continental’ pattern consisting of white longitudinal lines parallel to traffic flow.<sup>11</sup>
- **Curb cut:** A ramp cut into a street curb at a corner for wheelchair access or at a driveway for vehicular access.<sup>12</sup>
- **Curb extensions:** Extension of curb which shortens the crossing distance, provides additional space at the corner (simplifying the placement of elements like curb ramps), and allow pedestrians to see and be seen before entering the crosswalk; sometimes called curb bulbs or bulb-outs<sup>13</sup>
- **Flush medians:** Painted or delineated through a contrasting surface material such as scored white concrete; generally paved and may or may not have a barrier depending on traffic conditions; normally crowned to provide positive drainage and discourage parking.<sup>14</sup>
- **Mid-block crosswalks:** Path which crosses a street at a location other than an intersection.<sup>15</sup>
- **Pavement marking:** The lane lines or symbols affixed to pavement surfaces.<sup>16</sup>
- **Single or double cobra head lighting:** A commonly used type of roadway light fixture. A cobra head can have a one (single) or two (double) lights.
- **Standard crosswalks:** A type of crosswalk marking which are two 12-inch white lines, 6 feet apart.<sup>17</sup>
- **Stone wall:** Stone walls are typically drystone farmer’s walls, laid without mortar, and usually between two and three feet high. Stone walls can also serve as retaining walls, and can reach heights of four or more feet.<sup>18</sup>
- **Street furniture:** Street furniture includes objects installed along a roadway such as street lighting, planters, benches, trash cans, bicycle racks, bus stops, and signs.<sup>19</sup>
- **Traffic calming:** Changes in street alignment, installation of barriers, and other physical measures to reduce traffic speeds and/or cut-through volumes, in the interest of street safety, livability, and other public purposes.<sup>20</sup>

<sup>11</sup> (Massachusetts Department of Transportation Highway Division, 2008)

<sup>12</sup> (Merriam-Webster, 2011)

<sup>13</sup> (Massachusetts Department of Transportation Highway Division, 2006)

<sup>14</sup> (Massachusetts Department of Transportation Highway Division, 2006)

<sup>15</sup> (Massachusetts Department of Transportation Highway Division, 2006)

<sup>16</sup> (Massachusetts Department of Transportation Highway Division, 2006)

<sup>17</sup> (City of Columbia, Missouri, 2000)

<sup>18</sup> (Roadside Committee of the Lincoln Garden Club, 2009)

<sup>19</sup> (East-West Gateway Council of Governments, 2007)

<sup>20</sup> (Institute of Transportation Engineers, 2011)

## Streetscape in Arlington

Along Massachusetts Avenue in Arlington, the roadway is four lanes (two lanes in each direction) with ample metered parallel parking on both sides of the street. Street widths along Massachusetts Avenue range between 50 and 70 feet. There are several intersections with traffic signals and major intersections with left or right turn only lanes. There are numerous signs providing adequate information for drivers. Several driveways with access to small parking lots for businesses or private residences are present along both sides of Massachusetts Avenue.

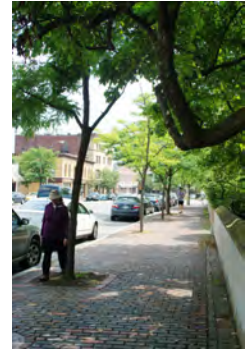
Sidewalks, ranging in width from 8 to 15 feet, are generally in good condition. The use of sidewalk materials varies intermittently between brick and concrete along both sides of the street. The lane markings and crosswalks are in fair to good condition. Intersections are clearly marked with continental style crosswalks along most of Massachusetts Avenue; however the crosswalks between Davis Road and southeast of the Arlington Reservoir are standard. Some curb extensions and mid-block crosswalks are located along Massachusetts Avenue. Flush medians and street trees indiscriminately line both sides of Massachusetts Avenue. Street lighting is consistent along Massachusetts Avenue, and is either single or double cobra head. There is some street furniture, such as benches and trash receptacles, but it is sporadic and inconsistently designed. The Town of Arlington is currently redesigning the streetscape in East Arlington as part of the Massachusetts Avenue Corridor Project, which is described later in this chapter. This project is intended to accommodate multiple types of users, including motorists, bicyclists, and transit users in a more user-friendly manner.

Along the proposed Appleton Street/Paul Revere Road extension, the land use character is mostly residential. Both Appleton Street and Paul Revere Road are lined with street trees, have numerous residential driveway curb cuts and minimal signage. Neither street has public lighting fixtures nor street furniture. Sidewalks continuously line both sides of the street and average five feet in width. Both streets have a few striped crosswalks which are in fair condition. Both Appleton Street and Paul Revere Road are two lanes (one in each direction) and average about 30 feet in width. Paul Revere Road is striped with a centerline whereas Appleton Street is not. Both roads provide on-street parking on the southern side.

## Streetscape in Lexington

In Lexington, the Byway along Massachusetts Avenue from the Arlington Reservoir to Pleasant Street, where the Byway joins with Route 4/225 is consistently two lanes (one lane in each direction). The shopping establishments near the town line in East Lexington have their own off-street parking lots, resulting in fewer on-street parked vehicles in this area. Further west along Massachusetts Avenue, the land use includes fewer businesses and more residences. No striped center medians, significantly less parallel parking, and numerous curb cuts for residential driveways exist along this stretch of Massachusetts Avenue. In this area, Massachusetts Avenue's street width is approximately 50 feet and sidewalk widths range between 8 to 20 feet. Sidewalk materials vary between concrete and asphalt and crosswalk styles alternate between continental and standard design. A solid yellow center line clearly demarcates this section of Massachusetts Avenue.

In Lexington Center, there is consistent street signage, plantings, and street furniture (i.e., trash receptacles and benches). Metered parallel parking is present at Lexington Center. Sidewalks in Lexington Center



vary between brick and concrete. Pavement striping is in good condition and some traffic calming measures, such as curb extensions, are present. Single cobra head lighting, consistent with Arlington's, is present. The Town of Lexington began a streetscape initiative in 2011 to establish the framework for streetscape improvements in Lexington Center to revitalize the aging landscape and infrastructure.

Until it meets Interstate 95, Massachusetts Avenue roadway characteristics immediately west of Lexington Center are similar to those immediately east of Lexington Center.

After crossing I-95, Massachusetts Avenue enters Minute Man National Historic Park and briefly forks at this location. West of Interstate 95, the Byway is generally characterized by having no street lighting nor street furniture and minimal signage. Curb cuts are primarily those for residential driveways with fewer intersecting streets. The average roadway width in this area is approximately 30 feet. To the north, the Byway includes a short section of Wood Street leading to Old Massachusetts Avenue. To the south, the Byway continues on Massachusetts Avenue and includes a short section of Marrett Road.

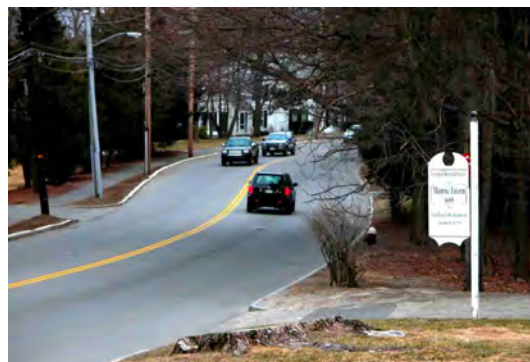
### Streetscape in Lincoln

The branches rejoin in Lexington and shortly after, become North Great Road (Route 2A) in Lincoln. The Byway continues at two lanes wide (one lane in each direction) and is demarcated by a double yellow line. There are no sidewalks or street lighting in the section of the Byway that traverses through Minute Man National Historical Park. The street signage is the U.S. National Park Service standard and is used minimally. Wood fences, stone walls and guard rails intermittently line both sides of Massachusetts Avenue.

### Streetscape in Concord

Crossing into Concord, North Great Road becomes Lexington Road. Asphalt sidewalks are infrequently placed along both sides of Lexington Road. After the intersection of Lexington Road and Old Bedford Road, asphalt sidewalks are more prevalent but still not consistently placed. The number of driveway curb cuts increase due to residences along both sides of the street. The road continues at two lanes (one lane in each direction) and on-street parallel parking is provided on Lexington Road near Concord Center. Lexington Road ends at its intersection with Main Street, and the Byway continues for 500 feet through Monument Square until the intersection with Monument Street. The east side of Monument Square includes angled parking spaces and the west side includes parallel parking spaces. Monument Street is two lanes wide, one lane in each direction, with no sidewalks along most of the road's east side. Monument Street has some stone walls, minimal signage, and a single yellow center line. The Byway continues onto Liberty Street. Liberty Street is two lanes wide (one lane in each direction), averages about 20 feet in width, and has no striping or sidewalks as well as minimal signage. Stone walls run along both sides of Liberty Street.

Continuing onto the proposed extension to Barrett's Farm, on Lowell Road starting at its intersection with Liberty Street and traveling northwest, there is a consistent asphalt sidewalk on the street's south side and stone walls and guard rails are intermittently located along both



sides of the street. The proposed extension turns west onto Barrett's Mill Road and ends at Barrett's Farm, located at 448 Barrett's Mill Road. Both Lowell Road and Barrett's Mill Road are two lanes wide, one lane in each direction, and average about 20 feet in width. Barrett's Mill Road has a continuous asphalt sidewalk along its south side. Fences and stone walls are sited randomly along both sides of Barrett's Mill Road.



## Signage

On the whole, signage used along the Byway is inconsistent and is often missing at critical locations. The following is a description of existing signage and signage programs in the four towns.

### Signage in Arlington

Arlington uses a certain type of signage for each of their historic districts, but beyond that, there is no formalized signage program. Signs are regulated through the town's sign permitting process. The zoning bylaw regulating signs in Arlington is Article 7, Signs.<sup>21</sup>



### Signage in Lexington

The Town of Lexington has a Design Advisory Committee but ultimately it is the Historic Districts Commission that reviews and approves signs and logos in the Historic Districts.

Lexington recently completed a downtown signage program which was developed by the Lexington Tourism Committee. A consultant was selected by the Town to design the shape, color and font for the signs. The Lexington Tourism Committee met with the Historic Districts Commission, the Department of Public Works, the Police Department, and area merchants to determine the locations of new signs and the removal of redundant signs. The Board of Selectmen and Police Department both approved the downtown signage program. When the program was completed, more existing signs were removed compared to new signs installed, reducing clutter. Specifically, the number of existing signs was reduced from 275 to 173. From design to installation, the downtown signage program was implemented in about one year. Sign maintenance is funded through the Department of Public Works' budget. Subsequent to completion of the downtown signage program, Lexington has received requests to have similar signs installed at additional locations.<sup>22</sup> The zoning bylaw regulating signs in Lexington is Chapter 135, Article 8, Signs.<sup>23</sup>



<sup>21</sup> (Town of Arlington, MA, 2010)

<sup>22</sup> (McKenna, 2009-2011), (Canale, 2009-2011)

<sup>23</sup> (Town of Lexington, MA, 2009)

## Signage in Lincoln

Lincoln does not have a formal signage program, but some historic district signage does exist. Lincoln regulates commercial private signage. The zoning bylaw regulating signs in Lincoln is Section 16, Signs.<sup>24</sup>

## Signage in Concord

Concord does not have a formal signage program and Concord Center has a variety of historic signs. Concord has a Sign Bylaw regulating signs that was most recently updated at Concord's 2010 Annual Town Meeting.<sup>25</sup>

## Signage in Minute Man National Historical Park

The National Park Service has its own sign standards and guidelines, which Minute Man National Historical Park follows.<sup>26</sup>



## Parking

This section summarizes parking regulations and parking availability in the four towns and Minute Man National Historical Park.



### Parking in Arlington

The Town of Arlington owns a municipal parking lot near Route 60 and Massachusetts Avenue, at the corner of Mystic and Chestnut Streets near the Minuteman Bikeway entrance. This parking lot includes 223 parking spaces including 7 handicap spaces. Behind the Not Your Average Joe's restaurant on Massachusetts Avenue, there is a Town-owned municipal parking lot with 57 parking spaces including 2 handicap spaces, parallel to the Minuteman Bikeway. Both lots are open Monday through Saturday from 8:00am to 6:00pm charging 50 cents an hour with a 2-hour parking limit. There is no fee for Sunday parking and overnight parking is by Permit Only.

There is no metered parking along the Byway in Arlington. There is a 2-hour parking limit along Massachusetts Avenue with the following exceptions: 1) from Library Way to Avon Place, the limit is 1-hour parking between 8:00am-6:00pm, 2) from Franklin street to Medford Street, the limit is 1-hour parking between 8:00am-6:00am, 3) from Water Street to Central Street, the limit is 1-hour parking, and 4) various locations are limited to 15 minute parking for the use of delivery trucks. Along Massachusetts Avenue there are no areas designated for residential permit parking. Overnight parking is not allowed from 1:00am to 7:00am on public streets in Arlington, except for emergencies or by Permit Only.<sup>27</sup>



### Parking in Lexington

In Lexington, north of Massachusetts Avenue between Grant Street and Meriam Street there is a 300 space attended parking lot. The parking fee is 25 cents for two hours with no time limit. Visitors can also park for \$2.00 a day at a 117-space municipal lot behind the Lexington Depot Building.

There are 500 metered on-street parking spaces within Lexington Center. Parking fees and time limits vary from 25 cents for 30 minutes to 25 cents for two hours. Lexington also has a winter overnight parking ban between the hours of 2:00am-6:00am from December through March.<sup>28</sup>

<sup>24</sup> (Town of Lincoln, MA, 2010)

<sup>25</sup> (Town of Concord, MA, 2010)

<sup>26</sup> (Sideris, 2009-2011)

<sup>27</sup> (Rademacher, 2011)

<sup>28</sup> (Cannon, 2011)

## Parking in Lincoln

The Town of Lincoln does not own municipal lots in close proximity to the Byway. Parking is not allowed on either side of Route 2A in Lincoln.

## Parking in Concord

Parking in Concord tends to be in small, fragmented lots, both public and private. This often results in an inefficient use of available space and is frequently exacerbated by the tourists and visitors to the area. There are over 1,000 parking spaces in Concord center, with more than half of them being small and privately owned. The Byway includes some on-street parallel and angled parking. Where on-street parking is allowed in and around Monument Square, it is limited to one hour.<sup>29</sup>

### Concord parking lots close to the Byway

Location	Spaces
<b>Municipal Lots</b>	
Keyes Road Lot (both sides)	149
Public Lot behind Vanderhoof's (off Main St)	30
Walden Street Lot (behind Post Office)	90
Emerson Annex Lot at Stow & Hubbard Sts	36
Library Lot at Stow Street & Sudbury Road	48
Hunt Gym Lot on Stow Street	17
<b>Privately Owned Lots</b>	
1-10 Spaces Provided – 10 Lots	52
11-49 Spaces Provided – 16 Lots	384
50+ spaces provided – 3 Lots	265
<b>TOTAL</b>	<b>1,071</b>

## Parking in Minute Man National Historical Park

The National Park Service owns and maintains ten surface parking lots along Minute Man National Historical Park for visitor parking. These lots provide parking for close to 300 cars and 25 buses. All parking lots are for public use, free and are open from sunrise to sunset. The parking lots are dispersed evenly along the Byway with the heaviest concentration of parking spaces in two lots near the North Bridge in Concord with slightly over 100 spaces total. The table below indicates the capacity of parking lots in Minute Man National Historical Park, based on data collected by MMNHP in 2008. At the Minute Man Visitor Center, there is also overflow parking available on the median.<sup>30</sup>

### Parking lots in Minute Man National Historical Park

Location	Spaces	Buses	Handicap
North Bridge Visitor Center	44	5	3
North Bridge, Monument Street	58	4	3
Wayside	22	2	1
Meriam's Corner	21	None	1
Samuel Brooks	14	None	1
Hartwell	35	2	2
Paul Revere Capture Site	25	None	1
Minute Man Visitor Center	28	12	3
Lower Fiske Hill	22	None	1
Fiske Hill (at Wood Street)	10	None	1
<b>TOTAL</b>	<b>279</b>	<b>25</b>	<b>17</b>

<sup>29</sup> (Maglio, 2009-2011), (Town of Concord, MA Comprehensive Long Range Plan Committee, 2005, pp. 156-157)

<sup>30</sup> (Sideris, 2009-2011)

## Traffic and safety

### Traffic volumes

MassDOT has collected traffic volume data at a number of locations along the Byway in the past as part of its statewide annual traffic data collection program. Average Annual Daily Traffic (AADT) volumes vary dramatically from a low of 2,400 vehicles per day on Old Massachusetts Avenue in Lexington to a high of 31,800 vehicles per day on Massachusetts Avenue to the west of Route 3 in Arlington. Daily traffic volumes along Massachusetts Avenue are fairly consistent among the four communities, averaging an estimated 20,000 daily vehicles. In the table “Traffic count data along the Byway,” most of the data included is from MassDOT, except for the last two streets listed: data for Old Massachusetts Avenue in Lexington and North Great Road west of Mill Street in Lincoln were provided by Minute Man National Historical Park.

**Traffic count data along the Byway**

Town	Street	Location	Year	AADT
Cambridge	Massachusetts Avenue	East of Route 16	2006	15,583
Arlington	Massachusetts Avenue	West of Route 16	2002	18,900
Arlington	Massachusetts Avenue	East of Broadway	2002	19,700
Arlington	Massachusetts Avenue 2A	East of Route 3	2002	18,900
Arlington	Massachusetts Avenue 2A	West of Route 3	2002	31,800
Arlington	Massachusetts Avenue	West of Appleton Place	2002	16,400
Lexington	Massachusetts Avenue	East of Pleasant Street	2002	14,000
Lexington	Massachusetts Avenue	East of Locust Street	2002	25,200
Lexington	Massachusetts Avenue	South of Maple Street	2002	20,300
Lexington	Massachusetts Avenue	North of Maple Street	2002	12,700
Lexington	Massachusetts Avenue	West of Marrett Road	2002	21,300
Lexington	Massachusetts Avenue	East of Hunt Road	2002	18,600
Lexington	Massachusetts Avenue	West of Woburn Street	2002	22,100
Lexington	Old Massachusetts Avenue	West of I-95	2009	2,400
Lincoln	North Great Road	West of Mill Street	2009	19,600

Daily traffic volumes on roads that intersect with the Battle Road Scenic Byway vary considerably 6,200 in Concord at the Cambridge Turnpike to 28,300 daily trips on Route 16 in Cambridge. Overall, annual daily traffic volumes are higher in the east and decline traveling west along the Byway. In the table “Traffic count data for roads that intersect with the Byway,” most of the data included is from MassDOT, except for the data for Hanscom Drive and Bedford Road in Concord, which is from Minute Man National Historical Park.

**Traffic count data for roads that intersect with the Byway**

Town	Street	Location	Year	AADT
Cambridge	Route 16	North of Massachusetts Avenue	2006	28,300
Arlington	Pleasant Street	South of Massachusetts Avenue	2002	24,000
Arlington	Massachusetts Avenue 2A	North of Massachusetts Avenue	2002	23,900
Lexington	Pleasant Street	South of Massachusetts Avenue/North of Fern Street	2002	18,800
Lexington	Woburn Street	East of Massachusetts Avenue	2004	8,500
Lexington	Waltham Street	North of Forest Street	2002	10,000
Lexington	Bedford Street	North of Hancock Street	2002	18,900
Concord	Hanscom Drive	North of Massachusetts Avenue	2009	9,100
Concord	Bedford Road	South of Massachusetts Avenue	2009	5,200
Concord	Cambridge Turnpike	East of Lexington Road	2004	6,200
Concord	Main Street	West of Walden Street	2006	13,900

## Impact of Hanscom Field and Hanscom Air Force Base

Hanscom Air Force Base is a joint civil airport/military base with Hanscom Field which provides general aviation and charter service. Massport is the primary operator of the public airfield and runways. In 2009, there were almost 150,000 flight operations at Hanscom Field. Less than one percent of the flight operations belonged to military aircraft.

Hanscom Field also serves as a corporate reliever for Logan International Airport. Commuter, business, charter, cargo, personal aircraft, air taxi, medical and flight school are the primary aircraft operations at Hanscom Field. Hanscom Field is an important resource for Hanscom Air Force Base, a research and development facility abutting the airfield.

Hanscom Field and Hanscom Air Force Base have several access points. The two facilities can be accessed by Hartwell Road from the north; Hanscom Drive, Marrett Street and Wood Street from the south; Hartwell Avenue from the east; and Virginia Road from the west. In 2002, it was estimated that these two facilities together generate more than 13,000 vehicle trips each day.

## Safety

Massachusetts' law requires that all vehicular crashes resulting in \$1,000 or more of property damage or an injury or a fatality, be reported to the RMV (Registry of Motor Vehicles) and the local Police Department within 5 days, using a standardized *Motor Vehicle Crash Operator Report* form. The RMV maintains a database of these crash reports which provides basic details on all crashes reported to them, such as location, severity, weather and road conditions and type of collision.

The RMV's crash data files for the three-year period 2005 through 2007 (most recently available) were reviewed for the Byway corridor in order to determine locations or sections along the Byway that are experiencing a high number of crashes. The table below provides general statistics for this three-year period from the reported crashes that occurred along the Byway.

During the three years reviewed (2005-2007), slightly over 1,000 crashes occurred along the length of the Byway. Over 84 percent of the crashes occurred in Arlington and Lexington with each town experiencing about 42 percent of the crashes.

**Crash statistics along the Byway, 2005-2007**

	Arlington	Lexington	Lincoln	Concord	Total
<b>Length of Roadway (Miles)</b>	<b>3.1</b>	<b>5.9</b>	<b>2</b>	<b>3.9</b>	<b>14.9</b>
<b>Total Number of Reported Crashes</b>	<b>430</b>	<b>427</b>	<b>45</b>	<b>114</b>	<b>1,016</b>
<b>Crash Severity</b>					
Property Damage Only	220	289	30	84	623
Injury	121	93	14	20	248
Fatality	1	2	0	0	3
Unknown or Not Reported	88	43	1	10	142
<b>Crash Type</b>					
Single Vehicle	47	63	9	32	151
Multiple Vehicles	383	364	36	82	865
<b>Road Conditions</b>					
Snowy/Icy	15	35	2	17	69
Wet	85	61	6	18	170
Dry	309	324	37	78	748
Unknown or Not Reported	21	7	0	1	29
<b>Light Conditions</b>					
Daylight	320	337	36	83	776
Dawn or Dusk	30	18	3	2	53
Dark	70	68	6	28	172
Unknown or Not Reported	10	4	0	1	15

These crash rates reflect the fact that more accidents occur in the more densely developed and higher trafficked sections of the Byway. Approximately 85 percent of the crashes involve two or more vehicles (typical to intersection crashes) in these four towns.

With respect to the severity of the crashes, each town saw between 51 to 74 percent of the crashes resulting in property damage only. Crashes that resulted in injuries to one or more of the individuals involved accounted for approximately 24 percent of the crashes. Three fatalities near the Byway were recorded during this three year time period. One fatality occurred in Arlington and two in Lexington.

With respect to road conditions 74 percent of the crashes occurred under “dry” road conditions, 17 percent under “wet” and seven percent under “snow/ice” road conditions. Since most of the daily driving is conducted during the hours of daylight it is not surprising that 76 percent of the crashes occurred in daylight and around 17 percent occurred during the hours of darkness. This proportion appeared to be uniform along the length of the Byway.

Over this three year period, reported vehicle crashes involving either bicyclists or pedestrians were minimal. In Arlington and Lexington, 17 crashes involving bicyclists were reported by each community and four crashes were reported in Concord involving bicyclists. Lexington reported 12 crashes, Arlington reported eight crashes and Concord reported two crashes involving pedestrians. There were no reported crashes in Lincoln that involved either bicyclists or pedestrians.<sup>31</sup>

## Transportation Improvement Program projects

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This section contains the roadway projects that are in the Transportation Improvement Program (TIP) for Federal Fiscal Years 2011-2014. The TIP lists all transportation projects that are slated to receive federal funds over a four-year horizon, as well as all projects programmed with federal and state highway funds that are expected to be available.

### Current Transportation Improvement Program (TIP) projects

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In the Transportation Improvement Program (TIP) database<sup>32</sup> for the Boston Region Metropolitan Planning Organization (Boston MPO), there are twenty-one projects on or in close proximity to the Byway. About half of these projects are in the TIP category of Arterial and Intersection but there are also Bicycle and Pedestrian, Bridge, and Highway and Enhancement projects. The projects are at different stages of project completion ranging from conceptual, pre-TIP, on the FFYs (Federal Fiscal Years) 2011-14 TIP, advertised, and complete. Listed from east to west, a more detailed description of the projects is provided in the table below. Two of these projects, Crosby’s Corner in Lincoln and Concord and the Massachusetts Avenue Corridor Project in Arlington are described in greater detail after the following table, because they will likely have a significant impact on the Byway.

#### Crosby’s Corner

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The purpose of this project is to provide safety improvements at Crosby’s Corner (intersection of Route 2, Cambridge Turnpike and Route 2A/ the Concord Turnpike). Safety improvements will be accomplished by constructing neighborhood service roads which will be parallel to Route 2 and by constructing a bridge to carry Route 2 over the other on-grade routes. Upon project completion, Crosby’s Corner will safely and efficiently accommodate traffic and provide safe access to the residences and businesses located along the project corridor.

The project extends from the Bedford Road intersection in the Town of Lincoln to 300 feet west of Sandy Pond Road in the Town of Concord. When Crosby’s Corner is finished, it is anticipated that Route 2 will be much better equipped to handle traffic, including truck traffic. The Crosby’s Corner project is listed in the Federal Fiscal Years 2011-2014 TIP.

#### Massachusetts Avenue Reconstruction

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A reconstruction project for Massachusetts Avenue in Arlington is currently underway from the Cambridge city line to Pond Lane, approximately one mile (Phase 1). The primary goal of the project is to redesign the roadway to establish a balance between motor vehicles, bicycles, pedestrians and transit users. The roadway redesign will strive to create a safe and user-friendly environment for all modes of transportation.

<sup>31</sup> (Massachusetts Registry of Motor Vehicles, 2005-2007)

<sup>32</sup> (Boston Region Metropolitan Planning Organization, 2011)

Some of the roadway improvements under consideration include:

- Shorter and more visible crosswalks.
- Clearly marked and dedicated bikeways and travel lanes.
- Changes in street width and sidewalk width that offer options for seating, cafés and landscaping.
- Improved on-street parking to support a healthy retail environment.
- Improved and coordinated traffic signals.
- Pedestrian scale lighting for safety at key locations.
- Street furnishings.

Construction is expected to begin in the fall of 2012, or the spring of 2013. After the completion of Phase 1, there are plans for future development of the Massachusetts Avenue corridor to Arlington Center. The Massachusetts Avenue Reconstruction project is listed in the Federal Fiscal Year 2011-2014 TIP. There are plans for future development of the Mass. Ave. Corridor to Arlington Center after the completion of Phase 1.

### Projects listed in the FFYs 2011-2014, as of March 2011 (continued on following page)

Community	Project Name	TIP ID Number	TIP Project Category	Description	TIP Status
Arlington, Cambridge & Somerville	Minuteman Bikeway Connector	605672	Bicycle and Pedestrian	An 8 -10 -wide stabilized aggregate path, asphalt and elevated boardwalk are planned on both the eastern and western sides of Alewife Brook between Route 2 and Mystic Valley Parkway.	Advertised
Arlington & Lexington	Minuteman Bikeway Bridges	30412	Bridge	Replace three bridges over the Minuteman Bikeway: Park Avenue (A-10-1) and Lowell Street (A-10-4) in Arlington and Maple Street (L-10-1) in Lexington.	Advertised
Arlington, Boston, Cambridge & Watertown	Bicycle Facility	180700	Bicycle Facility	Acquire the Watertown Branch right-of-way to connect the Minuteman Bike Path, from Arlington through Cambridge and Watertown, to the Dr. Paul Dudley White Bike Path in Boston.	Advertised
Arlington & Cambridge	Minuteman Bikeway Extension	601298	Bicycle and Pedestrian	Construct the Minuteman Bikeway Extension, including the installation of a pre-manufacture timber footbridge.	Advertised
Arlington, Belmont, Cambridge, Lexington & Lincoln	Craige Bridge	604896		Replace and update all overhead and ground mounted guide sign panels, exit gore, warning, regulatory, and route marker panels on the State Route 2 mainline and intersecting secondary roadways from the Bedford Road intersection in Lincoln easterly to the Route 3/Route 16 intersection in Cambridge.	Advertised
Arlington	Route 2A (Summer St.)	602286	Arterial and Intersection	Reconstruct the roadway, constructing cement concrete sidewalks, installing granite curbing, and upgrading the existing drainage, traffic signals, traffic signs and markings.	Complete
Lexington	East Mass Ave Intersections	1157	Arterial and Intersection	The project area extends from Pleasant Street to Marrett Road and includes three intersections. The goal is to improve pedestrian and vehicular safety as well as improve traffic operations along this section of Massachusetts Avenue.	Conceptual
Lexington	Route 2A-Waltham Street	602133	Arterial and Intersection	The proposed project at the intersection of Route 2A (Marrett Road) and Waltham Street improves the safety of pedestrians and vehicles through the reconstruction of traffic signals and sidewalks. Additional work includes pavement resurfacing, minor pavement widening, new pavement markings, signing, and minor landscaping.	Pre-TIP
Lexington	Waltham St	1159	Arterial and Intersection	The project area extends from the Route 2 interchange to the Concord Ave intersection with Waltham Street. The goal of this project is to improve pedestrian and vehicular safety as well as improve traffic operations along this section of Waltham Street.	Conceptual
Lexington	Route 2A (Marrett Road) Bridge	603722	Bridge	The existing bridge will be replaced in the same alignment with improvements made to the approach roadways and the interchange ramps. The proposed bridge will maintain the 23.8 meter width to include four 3.5 meter travel lanes, two 3.5 meter speed change lanes, a 1.8 meter median and a 1.8 meter northerly sidewalk.	Pre-TIP

Community	Project Name	TIP ID Number	TIP Project Category	Description	TIP Status
Lexington	Route 2A (Marrett Rd.)	43550	Arterial and Intersection	Reconstruct Route 2A (Marrett Road) from Interstate 95 (Route 128) west to beyond the Massachusetts Avenue Extension.	Complete
Concord, Lexington & Lincoln	Route 2A Fieldstone Wall	601844	Enhancement	Restore a fieldstone wall along a section of Route 2A.	Advertised
Lexington	Depot Sq. @ Emery Park	602353	Enhancement	Make landscaping and other scenic beautification improvements at Depot Square.	Complete
Lexington	West Lexington Greenway	1141			Conceptual
Lexington	Hartwell Avenue Intersections	604619	Arterial and Intersection	Intersection improvements and traffic sign upgrades on Hartwell Avenue at Macguire Road, Wood Street, Route 4/225, and Hartwell Avenue.	Pre-TIP
Concord, Lexington & Lincoln	Route 2A Fieldstone Wall	601844	Enhancement	Restore a fieldstone wall along a section of Route 2A.	Advertised
Lincoln	Hanscom Dr. Bicycle Facility	602779	Bicycle and Pedestrian	The purpose of this project is to construct a bicycle/pedestrian underpass within the Minute Man National Park as part of the Park's 5.5 mile long Battle Road Trail. The Trail will provide for safe pedestrian/bicycle access to the Park's 800 acre Battle Road Unit. The underpass will provide a safe crossing of Hanscom Drive at Route 2A, where currently, an at-grade crossing exists.	Complete
Lincoln	Route 2 (Crosby's Corner)	604629	Major Highway	This is a State Highway resurfacing project including new pavement, guardrail, painting and signage.	Complete
Concord & Lincoln	Route 2 (Crosby's Corner)	602984	Arterial and Intersection	The purpose of this project is to provide safety improvements at Crosby's Corner (intersection of Route 2, Cambridge Turnpike and Route 2A/ the Concord Turnpike). This will be accomplished by constructing neighborhood service roads which will be parallel to Route 2. This will also be accomplished by constructing a bridge to carry Route 2 over the other routes. The benefits of the project include the ability to safely and efficiently accommodate traffic and to provide safe access to the residences and businesses located along the project corridor. The project starts at the Bedford Road intersection in the Town of Lincoln and extends to 300 feet west of Sandy Pond Road in the Town of Concord.	FFYs 2011-14 TIP
Concord	Monument Street/Flint's Bridge	601442	Bridge	The structure is located within the North Bridge/Monument Square Local Historic District and adjacent to the Minute Man National Historic Park. Bridge rehabilitation will be achieved through the utilization of a masonry arch strengthening system. Work includes a small amount of roadway approach work with guardrail installation. The bridge will be closed with traffic detoured around the bridge during construction.	Complete
Concord	Concord Rotary (Routes 2/2A/119)	602091	Arterial and Intersection	The purpose of the project is to reduce congestion and improve safety. The proposed project will replace the existing Concord Rotary with a highway interchange and add an auxiliary westbound lane on Route 2 for one-half mile approaching the proposed interchange. A bridge over Route 2 will connect relocated Commonwealth Avenue (west of the MCI Concord employee parking lot) to the intersection of Route 2A/119. The Bruce Freeman Rail Trail is a public bike/hike trail that will pass west of the Route 2 Concord Rotary and will be addressed in the environmental study and the preliminary design.	Pre-TIP

[illegible]

- A. Arlington – Massachusetts Avenue and Pleasant Street
- B. Arlington – Massachusetts Avenue and Shouler Court
- C. Arlington – Massachusetts Avenue and Lowell Street
- D.1. Lexington – Massachusetts Avenue and Pleasant Street
- D.2. Lexington – Maple Street and Massachusetts Avenue
- E.1. Lexington – Massachusetts Avenue and Woburn Street
- E.2. Lexington – Massachusetts Avenue and Grant Street
- F.1. Lexington – Massachusetts Avenue and Bedford Street
- F.2. Lexington – Bedford Street at Harrington Road and Hancock Street
- G.1. Lexington – Massachusetts Avenue, Old Massachusetts Avenue, and Wood Street
- G.2. Lexington – Massachusetts Avenue, Old Massachusetts Avenue, and Marrett Street
- H.1. Lincoln – Airport Road and Marrett Street
- H.2. Lincoln – North Great Road and Hanscom Drive
- I. Lincoln – North Great Road and Bypass Road

A map of the Lexington and Lincoln area in Massachusetts. The map shows major roads, including Massachusetts Avenue, and various landmarks. A red line highlights a specific route through the area. The map includes a legend, a scale bar, and a north arrow.

A map showing the  
end of this chapter.

In many cases, communities already have roadway management policies in place. Serving as examples, the application and expansion of existing roadway management policies will ensure effective and consistent policies for the entire Byway. This section summarizes the following roadway management policies from Byway communities: Lexington's Traffic Calming Policy, Lincoln's Scenic Roads Bylaw and Roadsides Report, and Concord's Context Sensitive Roads Policy.

In November 2009, the Town of Lexington adopted a traffic-calming policy. The traffic-calming policy states that Lexington is committed to:

- Improving the livability and safety of Lexington neighborhoods by mitigating the impacts of traffic and promoting safer conditions for residents, motorists, bicyclists, and pedestrians
- Installing traffic calming measures on streets where their implementation will reduce traffic speeds, minimize cut-through traffic where appropriate, or improve the safety of movements by pedestrians and bicyclists
- Implementing traffic calming techniques that are both effective and compatible with the character of the affected neighborhoods and improve public safety without jeopardizing emergency response needs, creating hazards, or reducing mobility beyond acceptable levels
- Encouraging citizen input in neighborhood traffic management

- Influencing driver behavior through education and design
- Ensuring that Town resources are utilized in a cost-effective and efficient manner

The Town's Traffic Safety Advisory Committee (TSAC) is the main evaluator of traffic calming issues.

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### Lincoln's Scenic Roads Bylaw

The Town of Lincoln has a Scenic Road Bylaw (Article XVII) which limits tree cutting, avoids the destruction of stone walls and ensures repair, maintenance, reconstruction and paving work. Towns in Massachusetts are granted authority to adopt scenic road by-laws under Massachusetts General Law, Chapter 40, Section 15C (The Scenic Roads Act).

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### Lincoln's Roadsides Report

In 2009, the Lincoln Garden Club Roadsides Committee prepared a report, *Lincoln's Roadsides*, with the intent to raise awareness of the need to protect and maintain the rural and historic character of Lincoln's roadsides. *Lincoln's Roadsides* is intended to provide guidance to private property owners as well as town officials and staff.

Many of the recommendations in *Lincoln's Roadsides* may be applied to the Byway. Specifically, *Lincoln's Roadsides* addresses maintaining and enhancing guardrails, stone walls and fences. These features are important components to ensure that the qualities of the Byway are upheld. By adhering to the Lincoln's Roadsides report, public safety will improve with better visibility for motorists, pedestrians and bicyclists.

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#### Guardrails

A safety feature along roadways, the appearance and placement of guard rails should be improved and a consistent and standardized approach to the replacement and repair of guardrails should be considered. The standardized approach should lessen visual obtrusiveness and reduce costs.

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#### Stone Walls

In Lincoln, stone walls are protected by the Planning Board and are considered to be integral to the community's character. *Lincoln's Roadsides* emphasizes the importance of repairing and maintaining stone walls as well as working towards their preservation and protection.

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#### Fences

*Lincoln's Roadsides* emphasizes the use of traditional fencing styles (e.g.; split rail) and use of materials, color and design that is harmonious with the surrounding landscape. In addition, Lincoln has a Fence Bylaw (Section 18.5, General Regulations).

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### Concord's Context Sensitive Roads Policy

Since 1999, Concord has been following a Roads Policy Statement which seeks to balance roadway reconstruction or construction with the existing environment as well as public safety and consideration of alternative transportation. Concord's Context Sensitive Roads Policy is:

In the reconstruction or construction of roads, the Town of Concord seeks to maintain those aspects of the existing environment which enhance the historic, scenic, and agricultural properties of the roadway consistent with public safety, and, in addition, to consider alternative transportation accommodation(s) on the Town's roads consistent with this policy and public safety.

## State and federal roadside improvement resources

In addition to local roadway development and design guidelines, there are several national and state resources that provide roadway and design guidelines. Some of these resources are already in use by the Byway communities, and these resources should be considered if new or revised roadway development and design guidelines are established along the Byway.

### Federal Highway Administration design guide for Scenic Byways

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*Scenic Byways - A Design Guide for Roadside Improvements* (Federal Highway Administration, 2002) is a design guide that shows examples of improvements, outlines the planning process, and describes design principles for Byways.

### MassDOT Development and Design Guidebook, 2006

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This road and bridge design and construction manual emphasizes context sensitive design and environmental protection. Multimodal accommodation that encourages and supports safe travel for pedestrians, bicyclists and other modes of travel is a key feature of the MassDOT *Development and Design Guidebook*.

### Manual on Uniform Traffic Control Devices (MUTCD), 2009

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The Manual on Uniform Traffic Control Devices, or MUTCD, defines the standards used by road managers nationwide to install and maintain traffic control devices (traffic signs, signals and road surface markings) on all public streets, highways, bikeways and private roads open to public traffic. The MUTCD is issued by the Federal Highway Administration.

### Highway Capacity Manual (HCM), 2010

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A publication of the Transportation Research Board (TRB), the Highway Capacity Manual (HCM) contains concepts, guidelines, and procedures for computing the capacity and quality of service of freeways, highways, arterial roads, roundabouts, as well as signalized and unsignalized intersections and the effects of mass transit, pedestrians, and bicycles on the performance of these systems. The HCM provides an integrated multimodal approach to the analysis and evaluation of urban streets from the points of view of automobile drivers, transit passengers, bicyclists, and pedestrians.

### American Association of State Highway and Transportation Officials (AASHTO )

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AASHTO is a standards-setting body which sets design practices for standard highway geometric design. In 2004, AASHTO released *A Policy on Geometric Design of Highways and Streets*. Frequently referred to as the 'Green Book', this policy manual contains information about the latest design practices in universal use.

### Design for Individuals with Physical Disabilities

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On a Federal level, ADA (American with Disabilities Act) Standards for Accessible Design are requirements for accessibility to places of public accommodation by individuals with disabilities. The U.S. Access Board, whose primary mission is accessibility for people with disabilities, develops and maintains design criteria and is a leading source of information on accessible design. The U.S. Access Board has developed standards for building sites (curb ramps, accessible routes, bus stops and shelters).

### Massachusetts Department of Public Safety's Architectural Access Board

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The Architectural Access Board (AAB) is a regulatory agency within the Massachusetts Office of Public Safety. AAB develops and enforces related to the accessibility of public buildings for persons with disabilities. The code of Massachusetts Regulations includes the Architectural Access Board's Rules and Regulations under 521 CMR 1.00.

### NACTO Urban Bikeway Design Guide

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The NACTO (National Association of City Transportation Officials) Urban Bikeway Design Guide, part of the Cities for Cycling Initiative, provides "state-of-the-practice solutions that can help create complete streets that are safe and enjoyable for bicyclists."<sup>33</sup>

<sup>33</sup> (National Association of City Transportation Officials)

## 3.2. Transportation recommendations

Section 3.1 of this chapter described the existing transportation conditions of the Byway in order to provide an understanding of what traveling the Byway is like today. The Battle Road Scenic Byway management entity established after approval of this plan can use this review of existing conditions to identify projects and policies that would improve transportation management along the Byway. The following recommendations and action steps, organized by Corridor Management Plan goal, were developed based upon analysis by the Battle Road Scenic Byway Working Group and from feedback received Working Group members, the Transportation/Roadway Subcommittee, at public meetings conducted at each phase of developing this plan, and comments received from members of the four Byway communities.

**Stewardship:** Use the Byway designation to promote stewardship of the corridor's historic, natural, scenic, cultural, recreational and archaeological resources and intrinsic qualities. Seek funding and develop new programs to support the Byway's resources and visitor attractions.

★ **Recommendation:** Ensure existing Byway resources are in good repair.

- Maintain bicycle and pedestrian facilities in close proximity to the Byway.
- Ensure roads are in good repair, to facilitate bicycling even where no bicycle lane is present.

**Coordination and Partnerships:** Use the Battle Road Scenic Byway to promote regional cooperation and partnerships.

**Recommendation:** Ensure that appropriate local boards, committees, departments, organizations, and service providers are involved in projects that the Byway management team undertakes.

- Coordinate with Departments of Planning and Public Works in each town regarding streetscape improvements.
- Consider implementing a review process for roadway modification projects, to ensure that projects follow context-sensitive roadway design guidelines.

**Recommendation:** Provide comment on development regulations, projects and planning efforts that will impact the Battle Road Scenic Byway.

- Support the completion of the Massachusetts Avenue Corridor Project in Arlington.
- Implement Minute Man National Historical Park's master plan and conceptual plan at Route 2A (North Great Road) and Bypass Road (Lincoln) which includes a proposed roundabout.
- Support Minute Man National Historical Park's plan to close a portion of Old Mass Ave in order to eliminate through traffic.

**Recommendation:** Evaluate Battle Road Scenic Byway projects and initiatives within the context of regional, state, and federal projects and initiatives.

- Promote long-range and regional transportation solutions by coordinating Byway transportation improvement goals, studies, and projects with regional transportation studies (for example, the Route 128 Corridor Study) and the Boston Metropolitan Planning Organization's long-range regional transportation plan and the Transportation Improvement Program (TIP) process.

**Identity:** Create a distinct identity for the Battle Road Scenic Byway as a destination.

**Recommendation:** Develop a Battle Road Scenic Byway signage program.

- Research signage programs used for other Byways and National Heritage Areas. For example, the Essex National Heritage Area has a Sign Standards Manual that could serve as a model for the Battle Road Scenic Byway.
- Determine how the Battle Road Scenic Byway signage program can complement and draw from existing signage programs, such as the signage program developed by the Lexington Tourism Committee and the signage used in Minute Man National Historical Park.
- When applicable, follow signage guidelines developed by the Massachusetts Scenic Byways Program and the National Scenic Byways Program.
- Inventory existing signage and demonstrate how a signage program can reduce sign clutter. Document the location and research the history of signs prior to their removal.
- Develop graphic standards for the Battle Road Scenic Byway signage program, including use of the Byway logo, use of secondary logos, use of artwork, official typography, and arrow designs for Byway signs.
- Create guidelines for different sign types, including guidelines for directional signs, site identification signs, and informational and interpretive signs. Provide a range of options for each sign type so signs may be adapted to the character of the surrounding area.
- Provide signs at transit stations, on highway interchanges, along access routes to the Byway, and at key intersections where visitors might enter or leave the Byway, include on trails and bikeways.
- Consider striping or symbols along the roadway to make it clear when a traveler is on the Byway, similar to the red line used along the Freedom Trail in Boston, or the bronze horseshoes in Cambridge commemorating William Dawes' midnight ride.
- The Byway signage program could include design guidelines for temporary signs, such as street banners for special events.

**Accessibility:** Make the Byway accessible to a diversity of potential visitors, including people of all ages, abilities, incomes, and ethnicities. Ensure that the Byway can be accessed by pedestrians, bicyclists, mass transit riders, and motorists.

**Recommendation:** Make the Byway easy and safe to navigate for people with physical disabilities.

- Ensure ADA compliance and follow universal design principles to the extent possible when developing or redeveloping roadways and other transportation infrastructure.

★ **Recommendation:** Follow context-sensitive roadway design guidelines to preserve the intrinsic qualities of the Byway, provide access to bicyclists and pedestrians, and improve safety and mobility along the roadway.

- Review existing roadway design policies including the Highway Design Manual and the Town of Concord's Context-Sensitive Road Design policy and adapt these policies to create context-sensitive roadway design guidelines for the entire Byway.
- Consider striping bicycle lanes along the length of the Byway from the Arlington/Cambridge line to Lexington Battle Green, as well as in other areas along the Byway when possible. Where constraints exist, consider applying shared lane markings.

★ = Indicates one of this plan's top eleven recommendations, see Implementation Chapter for more information

- Consider options for accommodating bicycles on Route 2A without adding pavement or increasing road width. The travel lanes for motor vehicles could be narrowed, creating a travel lane as narrow as 10.5 feet, to create wider shoulders for bicycle travel.
- Consider reconfiguring the Hanscom Drive intersection with Route 2A in order to eliminate the slip lanes and narrow the intersection to provide well-defined and slower speed turns. Eliminating the slip lanes will significantly improve the safety of drivers turning onto 2A by lowering speeds and eliminating the high speed merge.
- Improve existing and install new crosswalks on the Byway, following consistent, context-sensitive design standards.
- Ensure that individual intersection improvement projects follow consistent, context-sensitive design standards.
- Consider improving bicycle and pedestrian accommodations and amenities for all roadway modification projects, including during roadway resurfacing projects as well as when re-striping.
- Develop bicycle rack standards for the Byway. Follow design standards developed by MAPC for bicycle racks to ensure bicycles can be properly secured with a U-lock and allow the bicycle to be fully supported by the rack with two points of contact.
- Consider adding bicycle racks at all visitor sites and points of interest, including in parking lots, in Lexington Center, and in Concord Center.

**Recommendation: Develop continuous off-road access to the Battle Road Scenic Byway for bicyclists and pedestrians.**

- Work with the West Lexington Greenway Task Force to implement the Minuteman Connector that would link to the Minuteman Bikeway to the Battle Road Trail adjacent to Route 128.
- Support the Minuteman Extension project that would extend the Minuteman Bikeway from its current terminus in Bedford to nearby Concord Center and the North Bridge.
- Support connecting the greenway along Alewife Brook to the Minuteman Bikeway, a project currently under construction by the Department of Conservation and Recreation.
- Support the proposed trail connecting Thoreau Farm (the birthplace of Henry David Thoreau) on Virginia Road to Battle Road Trail in Minute Man National Historical Park.

**Recommendation: Facilitate multimodal access to and along the Byway.**

- Facilitate access to and from Boston and the Byway.
- Improve access to the Byway from existing and future transit stations, including connectivity of buses to transit stations, and frequency of bus service.
- Evaluate access to and from available hotels and lodging facilities.
- Improve access to the Byway for bicyclists.
- When a bike share program is implemented in the Boston Metro area, work with program coordinators to make bicycles available in close proximity to the Byway.

**Visitor Experience:** Ensure that the Byway is an exciting place to visit that has adequate traveler facilities and is easy and safe to navigate.

★ **Recommendation:** Develop facilities that will enhance the Byway visitor experience.

- Complete installation of bicycle racks on buses that provide access to the Byway.
- Evaluate existing parking requirements and availability and provide parking facilities for bicycles, cars, and buses that will not detract from the Byway's intrinsic qualities.
- Consider options for providing shuttles from designated parking locations and/or transit stops, to reduce number of vehicles traveling along the Byway.
- Create visitor facilities along the Minuteman Bikeway and other bicycle/pedestrian paths adjacent to the Byway.
- Include information about bicycle shops on maps and other Byway literature.

**Recommendation:** Calm traffic and improve safety along the Byway.

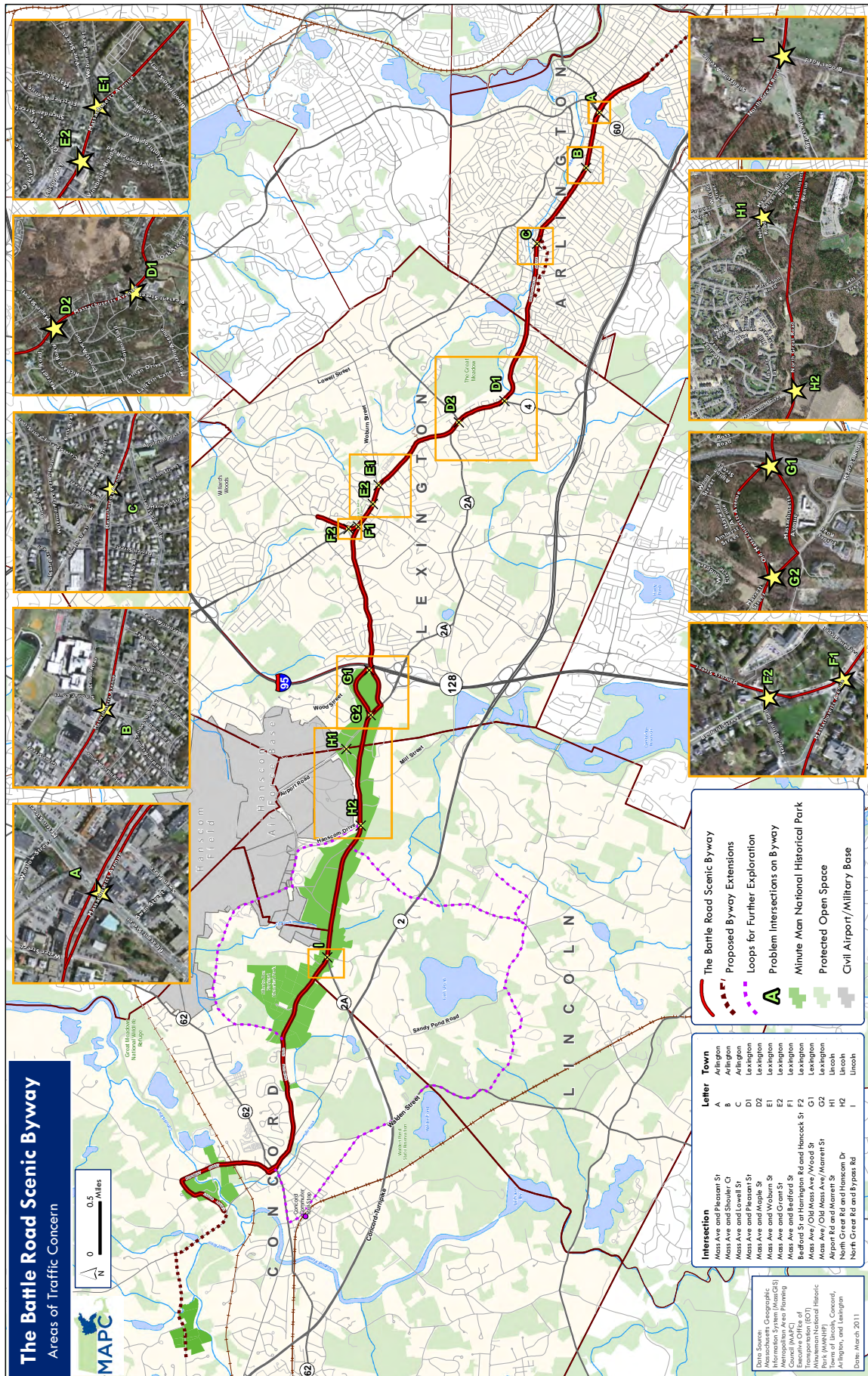
- Implement traffic calming measures where possible.
- Create a schedule and identify priorities for making intersection improvements along the Byway.
- Consider providing alternate routes for trucks to manage traffic.
- Consider lowering speed limits.
- Install Share the Road signs in appropriate locations.
- Install pedestrian crossing signs (such as yellow pennants) for street crossings in high volume pedestrian areas.
- Evaluate pedestrian and bicycle safety along the Byway to ensure complete access is provided throughout the Byway. This includes sidewalks or walkways, and bike lanes or shoulders.
- Conduct a study to obtain a better understanding of truck traffic along and in the vicinity of the Byway, including investigations of the volume of trucks and their origin-destination patterns.
- Conduct a study to identify traffic congestion that might be associated with increased tourism.
- Consider removing the state highway designation from the portion of the Byway west of I-95 and rerouting Route 2A west of I-95 to Route 2 in order to remove 2A from bisecting Minute Man National Historical Park. Consider renaming the portion of the Byway through Minute Man National Historical Park (and possibly other portions) as "Battle Road."
- Consider traffic calming measures such as reducing the speed limit on Lexington Street in Concord between Route 2A and Old Bedford Road to allow the road to be more safely shared with bicyclists and pedestrians.

**Recommendation:** Accommodate tour buses without detracting from the Byway's intrinsic qualities.

- Designate locations for long term tour bus parking, perhaps in Arlington.
- Consider options for a bus turnaround near Barrett Farm in Concord.
- Designate pick up/drop off locations for tour buses and trolleys.



# Map: Areas of Traffic Concern



## 4. LAND USE

This chapter reviews current land uses and the regulations controlling land use and development along the Battle Road Scenic Byway. The review identifies gaps in current regulations and recommends strategies to ensure that the land use regulations protect and preserve the Byway's intrinsic qualities.

The chapter begins with data and analysis describing the existing conditions of both the natural and built environments. This includes current land uses, protected open space, and environmental resources in each Byway community. Current land management techniques including zoning and other regulations are summarized. These land use controls are evaluated to determine if they assist in maintaining the intrinsic qualities of the Byway. Land use and regulatory issues are noted.

Following the existing land use and regulatory summary, the chapter concludes with recommendations to guide future development while protecting the historic, cultural and scenic resources. The recommendations focus on: 1) Historic Preservation, 2) Visual Continuity, including preservation of natural features and 3) Civic Engagement.

Existing land uses refers to the alteration of the natural environment by the development of buildings, transportation corridors, parks, etc., to create the "built environment." The built environment is most complex in dense urban areas, but town centers and clusters of residences also represent significant alteration of the natural environment.

There is a continuum of land uses along the Byway, from the densely developed community of Arlington through the maturing suburb of Lexington to more rural communities of Lincoln and Concord. The greatest variety of land use along the Byway occurs in Arlington, with single and two family homes interspersed with low and mid-rise apartment buildings. Three distinct clusters of commercial development are located along Massachusetts Avenue in Arlington: East Arlington, Arlington Center, and Arlington Heights. Lexington's land use is predominantly single family residential, with a downtown commercial center located just east of the Lexington Battle Green and commercial uses in East Lexington. Part of Minute Man National Historical Park (MMNHP) is on the western end of Lexington, with the park boundary located close to the I-95/Route 128 interchange. Lincoln represents a unique case: the entire length of the designated Byway is within MMNHP. Proximate to the northern boundary of MMNHP are Hanscom Air Force Base, which includes a variety of land uses including industrial, commercial, research and development, administration, housing, and open space<sup>1</sup> and Laurence G. Hanscom Field, which is operated by the Massachusetts Port Authority (Massport) and is used for general aviation. Minute Man National Historical Park crosses the town boundary from Lincoln into Concord. The Concord section of Minute Man National Historical Park includes, moving westward, the Battle Road Unit with historic houses and fields, and the North Bridge Unit of MMNHP, and residential, open space, and agricultural uses between North Bridge and Barrett Farm. In between the Battle Road and North Bridge units is Concord Center, the main commercial area for the community. This area is not within MMNHP, but is protected by Historical District regulations.

### 4.1. Existing Land Use

#### General description of land use along the Byway

The major land uses directly along the Battle Road Scenic Byway include land owned by the National Park Service as part of Minute Man National Historical Park, and land used for residential, commercial, and light industrial purposes. The table below summarizes the land uses by community, traveling westward along the Byway.<sup>2</sup>

The following sections provide an overview of the land use within each town, and describe in greater detail the uses that are immediately contiguous to the Byway and uses that may be beyond the immediate vista, but have the potential to impact the intrinsic qualities of the Byway. An example of properties beyond the current viewshed of the Byway that have land uses that impact the Byway are Hanscom Field and Hanscom Air Force Base. While not visible from most of the Byway, the Hanscom AFB shares a boundary with MMNHP and Hanscom Field is in close proximity to MMNHP. Future plans for these properties could have a major impact on the Byway, including noise and traffic generation.

Included in the land use analysis for each town will be information regarding protected open space. This category of land

<sup>1</sup> (Sasaki Associates, 2005)

<sup>2</sup> (Metropolitan Area Planning Council (MAPC), 2011), (Massachusetts Office of Geographic Information (MassGIS), 2011)

use refers to open spaces, whether municipal fields or conservation areas, that have a formal designation from a government entity that would preclude development of the land for anything other than open space, recreation, or conservation purposes. Similarly, land held by private, non-profit organizations for the purpose of preserving the land is included in this category. Other major undeveloped lands that are not currently protected open space are also identified.

### Byway land use summary, by Town

Town	# of miles of Byway	General description of land uses	Estimated percent use within section of Town along Byway	Comments
Arlington	2.5	Residential	20%	Most varied: single family to 12-story apartment building
		Commercial	70%	3 distinct nodes, with commercial development fronting on the Byway
		Other: light industrial, parkland	10%	Arlington Heights
Lexington	5.0	Residential	75%	Low density, single family homes
		Commercial	5%	East Lexington near town line and Lexington Center
		Park/open space	20%	Includes portion of Minute Man National Historical Park, local parks
Lincoln	2.0	Park	100%	Minute Man National Historical Park
Concord	2.5	Park	49%	Minute Man National Historical Park
		Residential	49%	Low density, single family homes
		Commercial	2%	Concord Center

## Land use in Arlington

Arlington is located six miles northwest of Boston, has the most diverse and complex land use. Arlington had a population of 42,844 residents according to U.S. Census 2010, a 1.2% increase from U.S. Census 2000, which recorded a population of 42,289 residents.<sup>3</sup> Proximity to Boston, coupled with a long history of evolving land uses has resulted in a mix of residential types, extant light industrial uses, and the continuation of historic small commercial centers that anchor segments of Massachusetts Avenue. Reasonable commuting time to jobs in Boston and Cambridge, as well as local manufacturing businesses, created demand for multi-family housing types, primarily two and three family styles mostly constructed in the 19<sup>th</sup> century. In the mid-20<sup>th</sup> century, garden-style apartment complexes and mid-rise (5 and 6 story) structures added to the housing mix. As a major thoroughfare since Colonial times, commercial activity was centered on Massachusetts Avenue. Along the Byway, there are three centers of commercial activity in Arlington: East Arlington, Arlington Center and Arlington Heights. These commercial areas offer a variety of type and size of establishments, providing a range of shopping, restaurants and services to the community. Interspersed with residential uses are other small commercial buildings. The Town Hall and Library are also located in Arlington Center along the Byway. There is some intrusion by mid-rise (7 story) residential development that is out of character with the surrounding area, and with the Byway.<sup>4</sup>

## Open space

Arlington has 110 acres of protected open space, most of which is not directly abutting the Byway. The protected open space that abuts the Byway includes the Arlington Heights Playground and the Arlington Reservoir, which no longer supplies drinking water and has been converted to a recreational use. Additionally, the Great Meadow in Lexington is managed by the Town of Arlington.

The proposed extension of the Byway to the municipal boundary between Arlington and Cambridge would incorporate additional open space along the Byway, namely, the Alewife Brook Reservation. Alewife Brook Reservation is located about

<sup>3</sup> (U.S. Census Bureau, 2010)

<sup>4</sup> (Kowalski, 2009-2011)

one-half mile east of the original designated starting point of the Scenic Byway at the intersection of Massachusetts Avenue and Tufts Street. This extension is desirable, and would incorporate a positive adjacent land use: a portion of Alewife Brook and surrounding public parkland. This area seems to form a natural starting point for the Byway designation, coming at the boundary of Arlington and Cambridge, while providing welcoming green space and a possible location for a Byway information kiosk.

Additionally, Spy Pond and Spy Pond Park are major intrinsic resources within the viewshed of the Byway, although they do not abut the Byway directly.

The Minuteman Bikeway, perhaps the most notable recreational resource of the Battle Road Scenic Byway, is located along former railroad right of way and traverses the entire length of Arlington. It runs parallel to the Byway from its intersection with Route 60 (Pleasant Street) and Massachusetts Avenue.<sup>5</sup>



Spy Pond

## Town-wide existing land uses

This summary is based on aerial photography from 1999. Note that if the four residential categories are combined, residential uses make up 70% of the area of Arlington's land use. The greatest percentage land use is High Density Residential, at 67.35% of the total 3,479 acres.<sup>6</sup>

**Land use in Arlington, 1999**

Land Use Type	Acres	% of Town
Cropland	0	0
Pasture	0	0
Forest	55.29	1.59
Non-forested wetlands	8.63	0.25
Mining	0	0
Open land	20.37	0.59
Participatory recreation	214.9	6.18
Spectator recreation	0	0
Water recreation	3.86	0.11
Multi-family residential	65.5	1.88
High density residential (less than ¼ acre lots)	2343.88	67.35
Medium density residential (¼ - ½ acre lots)	31.2	0.9
Low density residential (larger than ½ acre lot)	9.38	0.27
Salt water wetlands	0	0
Commercial	248.99	7.16
Industrial	10.34	0.32
Urban open	180.08	5.17
Transportation	61.75	1.77
Waste disposal	0	0
Water	225.78	6.49
Woody perennials	0	0
<b>Total</b>	<b>3,479.94</b>	

<sup>5</sup> (Massachusetts Office of Geographic Information (MassGIS), 2011), (Kowalski, 2009-2011)

<sup>6</sup> (Massachusetts Office of Geographic Information (MassGIS), 2002)

## Land use in Lexington

Lexington is the next town traveling westward along the Byway. Located 11 miles northwest of Boston, Lexington is characterized as a suburban residential community, balanced with concentrations of industrial and commercial land uses. Lexington Center is the primary commercial/retail center for the town and includes several historic tourist attractions including Lexington Battle Green. The population of Lexington according to the U.S. Census 2010 was 31,394, a 3.4% increase from U.S. Census 2000, which recorded 30,355 residents.<sup>7</sup> The total land area is 10,648 acres with residential uses making up almost half of the land area in Lexington. One-quarter of the residential land area is categorized as medium density single family residential. All other categories of residential development make up smaller shares of total residential development.

The municipal boundary between Arlington and Lexington, located near Hibbert Street on Massachusetts Avenue, is almost imperceptible because of the similarity in land uses in the two towns. Development in East Lexington is composed of light industrial and commercial uses, often with large parking areas in front of the buildings. Several sites have the potential for redevelopment. A portion of the Jerry Cataldo Reservation abuts the Arlington Reservoir and the Arlington Heights Playground. Continuing west along the Byway, the low density single family residential development includes newer, mid-20<sup>th</sup> century dwellings. Approaching Lexington Center, older 19<sup>th</sup> century and some 18<sup>th</sup> century homes predominate. Leaving the Center, suburban residences, many constructed in the latter part of the 20<sup>th</sup> century predominate until the junction of Interstate Route 95. The Minute Man National Historical Park boundary is located west of the right-of-way of Interstate 95.

Land uses adjacent to the Byway are primarily residential, mostly single family dwellings on individual lots, many developed since 1940 east of Interstate 95. Commercial uses immediately north and south of Minute Man National Historical Park in Lexington pose a challenge to maintaining the integrity of the Byway's intrinsic qualities.<sup>8</sup>

## Open space

The Town of Lexington manages over 1,300 acres of conservation land, including 26 areas with public access. This represents 12% of Lexington's land area. Other protected open spaces include Minute Man National Historical Park and the City of Cambridge water supply reservoirs.<sup>9</sup>



Lexington Battle Green



Parker Meadow

<sup>7</sup> (U.S. Census Bureau, 2010)

<sup>8</sup> (McCall-Taylor, 2009-2011)

<sup>9</sup> (Massachusetts Office of Geographic Information (MassGIS), 2011), (McCall-Taylor, 2009-2011)

## Town-wide existing land uses

**Land use in Lexington, 1999**

Land Use	Acres	% of Town
Cropland	142	1.3
Pasture	44	0.4
Forest	2,591	24.3
Non-forested Wetlands	438	4.1
Mining	0	0
Open Land	322	3
Participatory Recreation	308	2.9
Spectator Recreation	0	0
Water Recreation	7.7	0.1
Multi-family Residential	127	1.2
High Density Residential (less than ¼ acre lots)	1,397	13.1
Medium Density Residential (¼ – ½ acre lots)	2,649	24.9
Low Density Residential (Larger than ½ acre lots)	976	9.2
Salt Water Wetlands	0	0
Commercial	464	4.4
Industrial	128	1.2
Urban Open	456	4.3
Transportation	381	3.6
Waste Disposal	41	0.4
Water	120	1.1
Woody Perennials	57	0.5
<b>Total</b>	<b>10,648</b>	

## Land use in Lincoln

The population of Lincoln according to U.S. Census 2000 was 8,056, of which 2,904 residents lived on Hanscom Air Force Base (Census Tract 3601) and 5,152 were permanent residents of the Town of Lincoln (Census Tract 3602). The population of Lincoln according to U.S. Census 2010 was 6,362, indicating a 21% decline. Most of the population decline was at Hanscom Air Force Base (Census Tract 3601), which had a population of 1,286, less than half the population recorded at Hanscom Air Force Base in U.S. Census 2000. The permanent residential population in Lincoln (Census Tract 3602) was 5,076, a decline of 1.2% or 76 residents.<sup>10</sup>

Lincoln has a land area of 9,591 acres and is the least densely developed of the Byway communities; it can be described as rural in character. Low-density residential development occupies 27.6% of the land area. Over 50% of the land is in open land uses, including forest, cropland and pasture. Lincoln is 13 miles northwest of Boston and is served by a network of state roadways and the commuter rail.

The land on either side of the Byway is part of Minute Man National Historical Park. MMNHP ownership varies from a few hundred feet to over a quarter mile. The adjacent uses on the southern edge of MMNHP are primarily forest and agricultural land uses, with scattered single family residential development. MMNHP shares its northern boundary with Hanscom Air Force Base for approximately 1 ¾ miles, from the Lexington town border to the Concord town boundary. Housing for Hanscom AFB and the main entrance gate abut MMNHP. The housing, currently under construction, was originally planned for 850 units but is being built to accommodate 450 units. The juxtaposition of these uses owned and managed by the Federal government, one dedicated to preserving important historical resources, and the other an active military base, poses significant challenges to preserving Byway resources. Also abutting MMNHP is a small affordable housing

<sup>10</sup> (Felix, 2011), (U.S. Census Bureau, 2010), (Mattes, 2009-2011)

development, and small portion of the Laurence G. Hanscom Field, a public airport operated by the Massachusetts Port Authority (Massport).<sup>11</sup>

## Open space

Lincoln has a wide variety of protected open spaces, with fifty percent of the land in the Town conserved by various mechanisms, such as public ownership or conservation restrictions. Minute Man National Historical Park represents a significant portion of this protected land, and as noted above, comprises the land use along the entire portion of the Battle Road Scenic Byway in this community.<sup>12</sup>



Hartwell Field

## Town-wide existing land uses

Land use in Lincoln, 1999

Land Use	Acres	% of Town
Cropland	627	6.5
Pasture	180	1.9
Forest	4,592	47.9
Non-forested Wetlands	236	2.5
Mining	0	0
Open Land	54	0.6
Participatory Recreation	70	0.7
Spectator Recreation	0	0
Water Recreation	13	0.1
Multi-family Residential	250	2.6
High Density Residential (less than 1/4 acre lots)	0	0
Medium Density Residential (1/4 – 1/2 acre lots)	17	0.2
Low Density Residential (Larger than 1/2 acre lots)	2,651	27.6
Salt Water Wetlands	0	0
Commercial	29	0.3
Industrial	0	0
Urban Open	242	2.5
Transportation	120	1.3
Waste Disposal	0	0
Water	436	4.6
Woody Perennials	74	0.8
<b>Total</b>	<b>9,591</b>	

## Land uses in Concord

Concord was founded in 1635 as the first inland settlement in Massachusetts, making it one of the oldest towns in the Commonwealth. A keen appreciation of its place in history informs many community decisions about land use. Located 18 miles northwest of Boston, Concord's population according to U.S. Census 2010 was 17,668, an increase of 4% from the U.S. Census 2000 population, which was 16,933. Low density residential land use makes up 18% of the land area and an additional 8.8% is developed as medium density residential uses. Open space uses, including forest, cropland and pasture total 50% of the land area. Concord has over 50 working farms.

11 (Reilly, 2010-2011), (Sideris, 2009-2011), (Massachusetts Office of Geographic Information (MassGIS), 2011)

12 (Massachusetts Office of Geographic Information (MassGIS), 2011), (Metropolitan Area Planning Council (MAPC), 2011)

Other land uses in Concord include Minute Man National Historical Park, Walden Pond and the Great Meadows National Wildlife Refuge. A portion of Hanscom Field is located in Concord, as well as Emerson Hospital, four private schools, and a state prison housing some 1,300 inmates.

Land uses on either side of the Byway are primarily low density residential, agricultural and open space. The Byway crosses Concord Center, the town's primary commercial area, where four of the community's six Historic Districts converge. Concord is also the terminus of the Battle Road Scenic Byway.

A section of Hanscom Field is immediately contiguous to Minute Man National Historical Park at the boundary with Lincoln for approximately 2/10 of a mile. After that, MMNHP provides an extensive buffer to the Byway. Beyond MMNHP boundary, there is protected open space and residential uses. Hanscom Field, including Hangar 24 and Draper Labs are located to the north of the Byway, adjacent to protected open space. At the North Bridge portion, adjacent uses include protected open space at the Great Meadows National Wildlife Refuge. North Bridge is directly under the Hanscom Field flight path.

## Open space

Similar to Lincoln, Concord enjoys a wide variety of protected open space. This includes Minute Man National Historical Park, continuing into Concord from Lincoln, and the portion at the North Bridge, bordered by Monument and Liberty Streets, on both sides of the Concord River.

## Town-wide existing land uses

**Land use in Concord, 1999**

Land Use	Acres	% of Town
Cropland	1,674	10.1
Pasture	216	1.3
Forest	6,431	39
Non-forested Wetlands	1,003	6.1
Mining	5.6	0.03
Open Land	284	1.7
Participatory Recreation	281	1.7
Spectator Recreation	0	0
Water Recreation	9	0.1
Multi-family Residential	60	0.4
High Density Residential (less than 1/4 acre lots)	384	2.3
Medium Density Residential (1/4 – 1/2 acre lots)	1,458	8.8
Low Density Residential (Larger than 1/2 acre lots)	2,938	17.8
Salt Water Wetlands	0	0
Commercial	156	0.9
Industrial	233	1.4
Urban Open	326	2
Transportation	262	1.6
Waste Disposal	51	0.3
Water	712	4.3
Woody Perennials	27	0.2
<b>Total</b>	<b>16,510</b>	

## Population density of the four Byway towns

The following table provides a snapshot of the population density in the four Byway towns.

**Population density of the four Byway Towns**

Town	2010 Population	Land Area (Acres)	2010 Population Density
Arlington	42,844	3,480	12.31 persons/acre
Lexington	31,394	10,648	2.95 persons/acre
Lincoln	6,362	9,591	0.66 persons/acre
Concord	17,668	16,510	1.07 persons/acre

## Environmental characteristics of the Byway

This section outlines environmental characteristics along the Battle Road Scenic Byway, including topography, wetlands and river floodplains.

### Topography

The terrain surrounding the Byway is relatively flat through Arlington, rises noticeably at Arlington Heights and evens out in Lexington. Just past the junction with Marrett Road (Massachusetts Route 2A), a rolling hillside is used to effectively buffer the Youville Place Assisted Living Facility on the west side of Massachusetts Avenue. The topography along the Byway is relatively flat through the rest of Lexington, to Concord, until the vicinity of the North Bridge, where the Byway continues to climb until the hill overlooking the Concord River. As a main transportation route, the topography of the original Battle Road has been altered over the centuries to accommodate evolving types of transportation, from horse to wagon to automobile.



View of Massachusetts Avenue from Youville Place Assisted Living Residences. This development includes a 150-foot easement for a permanent open space buffer.

### Wetlands

Wetlands are regulated under Massachusetts General Law (MGL) Chapter 130, Section 40. Each community along the Byway had adopted additional wetlands bylaws. The MGL provides definitions and minimum standards that must be met for construction within 100 feet of a wetland or 200 feet of a river or stream. Regulations may require modification to proposed location or design of the structure(s) and parking, as well as storm water control features within a proposed development project in order to protect the environmental resources of the wetland or river.

Small pockets of designated wetlands are found in Lexington and in Lincoln. At the Lincoln-Concord boundary, the Byway is near portions of the large Elm Brook wetland. Other larger areas of wetlands are in Concord, on the south side of the Byway, within Minute Man National Historical Park and in the vicinity of the North Bridge, also within the designated MMNHP area.



Elm Brook Wetlands

### River floodplains (100-Year floodplains)

The 100-year floodplain is defined as the relatively flat lowland that adjoins a watercourse or other body of water and that is subject to seasonal or periodic flooding by the watercourse or water body at a storm frequency of 100 years. Concord is the only town where the Battle Road Scenic Byway is significantly impacted by the 100 year floodplain. The Assabet and

Sudbury Rivers converge to become the Concord River, and are all associated with significant amounts of floodplain. The portion of Minute Man National Historical Park on both sides of the Concord River includes land within the 100 year floodplain. Also, in the vicinity of the Virginia Road Loop of the Byway, there is land located within the 100 year floodplain.

## Geologic features

The Bloody Bluff fault zone is named after one of the battle locations in the Lexington portion of Minute Man National Historical Park where British troops assembled during their retreat. The fault is one of the most significant natural features, representing a portion of a fault zone approximately 80 miles long.<sup>13</sup>



This photo of the Bloody Bluff Fault Zone, taken near Fiske Hill in Lexington, shows dark-colored basalt with light-colored veins, which are metamorphosed basalt called amphibolite, as well as light-colored granite. This rock formation was the result of the Avalone terrane collided with the Nashoba terrane around 400 million years ago. Information and photo from Boston Geology website, a project by Deb Allen and Mark Goldner of Brookline Public Schools and funded by the National Science Foundation, 2009.

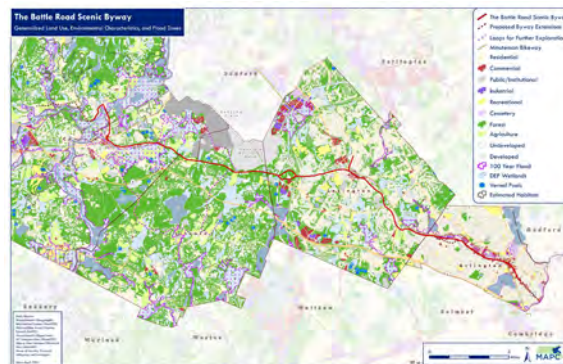
## Anticipated future land use changes

### Arlington

The town of Arlington is largely built out. Potential future land uses will most likely be redevelopment of property, including mixed use development within the commercial areas along Massachusetts Avenue, and higher density residential development replacing lower density development.

### Lexington

A Build-out Analysis conducted by MAPC in 2000 estimated there were 673 acres of developable land in Lexington. The potential for development includes expansion of Lexington Technology Park and commercial/office complexes along Routes 2, 2A and 95/128. Along the Byway, re-development of properties, including expansion of existing residences, is expected to account for future change. The primary locations for expansion would be at Lexington Center, and at the research office park adjacent to the National Park entrance.



A map of current land uses, environmental characteristics, and flood zones along the Byway is included at the end of this chapter.

### Lincoln

The continued development of housing at Hanscom Air Force Base, adjacent to the Byway, as well as potential expansion of commercial aviation at Hanscom Field are the major future land use changes and challenges affecting the Byway in Lincoln. In the 2000 MAPC Build-out Analysis, some 875 acres with development potential were identified. It is very unlikely this amount of development, even of residences, will occur given constraints of providing on-site waste disposal. The exception is at Hanscom, where the Massachusetts Water Resources Authority (MWRA) provides sewer service.

### Concord

Concord, of the four Byways communities, could see the most new low density development. The 2000 MAPC Build-out Analysis found 2,796 acres of potentially developable land. Very strict local environmental and historic district controls, however, will regulate development and ensure that any new development along and adjacent to the Battle Road Scenic Byway is appropriate.

<sup>13</sup> [http://www.geologicresources.com/bloody\\_bluff\\_fault.html](http://www.geologicresources.com/bloody_bluff_fault.html)

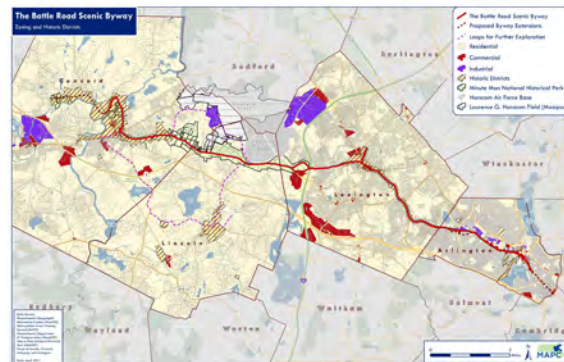
## 4.2. Land management and the regulatory environment

Land management refers to the various laws and regulations that control how land is used. The main regulatory tool is zoning, but there are other land use controls that impact how land is developed, including but not limited to: historic district regulations, sign codes, and tree ordinances. This section examines the regulatory environment of the four Scenic Byway towns.

### Zoning, regulations, and other land use management techniques

The locally granted permits necessary to develop land and/or modify existing structures are generally based on state laws that set parameters or minimum standards and then allow individual cities and towns the discretion to establish additional standards adapted to suit local conditions and objectives. This is achieved through the adoption of local rules, regulations and bylaws. The major land use regulatory device is zoning. Codified in local bylaws, zoning regulates what can be developed, where, and under what conditions.

In addition to zoning, land development must fulfill the requirements of other rules and regulations, such as subdivision rules and regulations, wetlands bylaws, and historic district guidelines. These land use management techniques serve different specific purposes, but all are designed to protect the health, safety and general welfare of the community. Interpreted broadly by the courts, these regulatory powers extend to issues dealing with the environment, site planning, aesthetics, and historic preservation.



A map of zoning and historic districts is included at the end of this chapter.

### Zoning

Zoning is the legal framework that regulates land use. Each community along the Battle Road Scenic Byway has adopted a zoning bylaw to control how development occurs. All of the zoning bylaws along the Byway regulate uses, lot and development dimensions such as setbacks, height, yards, and parking. Each Bylaw also includes provisions specific to the conditions in the community. Land use patterns in the Byway are products of the historic settlement patterns, and zoning. Current zoning along the Byway varies from a relatively complex bylaw in Arlington, with many categories of uses, to a less complex bylaw in Lincoln, where development is restricted mainly to single family residences.

Zoning laws enable a community to confirm and support existing land uses, and to promote desired future land uses and development patterns. More than any other regulation, zoning can impact the experience of travelling the Battle Road Scenic Byway.

The following sections are a town-by-town summary of zoning districts along the Battle Road Scenic Byway, traveling from east to west. In general, these communities have had zoning bylaws for decades, so the zoning reflects historic development patterns, and in most cases provides adequate protection for Byway resources.

### Arlington zoning summary

Land directly abutting the Battle Road Scenic Byway in Arlington is included in six different residential zones, ranging from Single Family with lot sizes of 6,000 sf, to High Density Apartment zoning for apartment buildings and office uses. Beginning at Tufts Street, the land along the Byway is zoned on the south side for Neighborhood Office (B-1), and B-4 on the north side of Massachusetts Ave for Vehicular Oriented Business to reflect the gas service station in this location. Approaching Arlington Center, the zoning varies from B-1 (Neighborhood Office) to B-5 Central Business in the Center. Residential zoning, including Medium Density Apartment (R-6) is across Massachusetts Avenue from an R-1, Single Family zone. Various Business and Residential zones are interspersed along the Byway until the boundary with Lexington. The zoning is very specific to the existing uses, sometimes changing every few blocks. The Minute Man Bikeway, paralleling the Byway, is zoned Open Space.

**Arlington zoning districts along the Byway**

<b>6 Residential Districts</b>	R1: Single Family
	R2: Two Family
	R3: Three Family
	R5: Apartments, Low Density
	R6: Apartments, Mid Density
	R7: Apartments, High Density
<b>6 Commercial Districts</b>	B1: Neighborhood Office
	B2: Neighborhood Business
	B2A: Major Business
	B3: Village Business
	B4: Vehicular Oriented Business
	B5: Central Business District

**Lexington zoning summary**

The land along the Battle Road Scenic Byway in Lexington is predominantly zoned One Family Dwelling (RS). Traveling from the boundary with Arlington, the northern side of Massachusetts Avenue, and a small portion of the southern side are zoned for commercial uses, CRS (Commercial Retail Shopping) and CN (Neighborhood Business), respectively. The southern side is primarily zoned RT (Two Family Dwelling) interspersed with a short section of RS (single family). At the East Village Historic District, the zoning becomes RS, with one node of Planned Residential Development (RD-8) east of the Monroe Tavern Historic District. Approaching Lexington Center, the northern portion of the Byway includes a Multi-family district, and the center is zoned Central Business on both sides of Massachusetts Avenue. Traveling west from the Lexington Center the land adjacent to the Byway is zoned RS, except for two commercial areas on the southern side of Massachusetts Avenue. On the westerly side of Route I-95, Minute Man National Historical Park begins, and includes land on both sides of the Old Massachusetts Avenue portion of the Byway. The zoning is RO, One Family dwelling. On the Massachusetts Avenue portion of the Byway, the southern boundary is zoned CD, for Planned Commercial development, and then RO. There is no Open Space zoning for Minute Man National Historical Park land.

**Lexington zoning districts along the Byway**

<b>5 Residential Districts</b>	RO: One Family
	RS: One Family
	RT: Two Family
	RM: Multi-Family Dwelling
	RD: Planned Residential Development
<b>5 Commercial Districts</b>	CRS: Retail Shopping
	CS: Service Business
	CB: Central Business
	CD: Planned Commercial Development
	CN: Neighborhood Business

**Lincoln zoning summary**

The zoning in Lincoln along the Battle Road Scenic Byway is R-1, or Single Family Residence. This is the predominant zone in the entire Town. It requires a minimum lot size of 80,000 sf with a height limit for new construction of 36 feet or 2 ½ stories. The zoning Allows for one dwelling unit to be used as a single family residences, and accessory uses including professional offices, studio, and workshops. The Battle Road Scenic Byway is entirely within the jurisdiction of Minute Man National Historical Park. Because this Federal park is not subject to zoning, none of the restrictions or requirements applies. The zoning does apply, however, to areas proximate to the Byway. In addition, there is the North Lincoln Planning District north of MMNHP. This District provides for flexible commercial development, but requires Town Meeting approval

of any development proposal. Presumably, the proximity to MMNHP would result in development proposals and approvals consistent with height limits and uses compatible to MMNHP.

### Lincoln zoning districts along the Byway

**1 Residential District**

RO: One Family

## Concord zoning summary

The Battle Road Scenic Byway includes a portion of Minute Man National Historical Park, which as a Federal property is not subject to zoning. The Byway is zoned for increasingly denser single family dwellings until it reaches Concord Center, where the zoning allows business uses. Respectively, the zoning is R-A with a lot size of 40,000 sf; R-B, requiring 20,000 sf, and nearest the Center, RC with a lot size of 10,000 sf. On the western side of the center, the same pattern prevails, with Residence B and then Residence C zones. In all of the Residential zones, two family homes are allowed provided a Special Permit is obtained from the Zoning Board of Appeals. Within the Center, there are two business zones: Limited Business and Business. The Limited Business zone allows for restaurants and professional offices. The Business zone allows retail stores, craft shops, restaurants, financial and business offices, professional offices and single family dwellings.

### Concord zoning districts along the Byway

<b>3 Residential Districts</b>	R-A: Single Family, 40,000 sf lot
	R-B: Single Family, 20,000 sf lot
	R-C: Single Family, 10,000 sf lot
	2 family dwellings allowed by Special Permit in all 3 zones above
<b>2 Commercial Districts</b>	Business
	Limited Business

## Zoning provisions applicable to the Byway

Zoning bylaws have become increasingly complex over time, including provisions for affordable housing, wireless communications facilities, etc. There are key zoning provisions, however that have the greatest potential to impact the Battle Road Scenic Byway. These are the local zoning regulations dealing with Allowed Uses, Height of Structures, and Site Plan Review. They will be discussed below.



### Uses

A major function of zoning is to regulate uses: how land is allowed to be used in a given location. The Allowed Use affects what can be built, as well as how structures can be re-used. Evaluating the uses allowed by the different zoning bylaws can help identify uses that may detract from the Byway's intrinsic qualities.

**Allowed Uses** are uses that are permitted or permissible uses. No additional review or approvals by any boards/commissions or departments is needed for the use. (Dimensional requirements, such as lot size and setbacks would have to be met. Other regulatory reviews, such as by the Conservation Commission may also apply.) These uses are also called "As of Right Uses" within a specific zone. For example, all four towns have a zoning district for single family residences along the Byway. Within that zone, construction of a single family home is an Allowed or As of Right Use. Allowed Uses can be critical to the Byway because they are not subject to additional review or modification. The question is: are the Allowed Uses appropriate to protecting the intrinsic qualities? Along most of the Byway, the answer is yes.



Arlington has the most complex array of Allowed Uses, ranging from Single Family to Industrial within a quarter mile of the Byway. The residential and commercial uses adjacent to the Byway are appropriate with the possible exception of the denser Residential zone that allows heights up to 70 feet.

One issue is the land use at the Arlington/Lexington boundary. Currently, the area is zoned for Neighborhood Office (B-1) and Vehicular Oriented Business (B4) in Arlington, reflecting the car dealerships, and Retail Shopping (CRS) in Lexington, with uses that have large parking lots with no landscaping fronting the Byway. The uses and building styles do not enhance the Byway experience. The Towns might consider a joint study to evaluate alternative land use options, emphasizing building and site design appropriate to the Byway, for new and rehabilitated structures, and enhanced landscaping.

Lincoln's zoning is not applicable to Minute Man National Historical Park or to Hanscom Air Force Base, because of the Federal ownership of the land. Zoning may not regulate owned by the State or Federal government. In the case of Hanscom Air Force Base, incompatible uses could be built that could negatively impact the Byway.

Concord's Allowed Uses are the least varied: Single Family residences are Allowed along the length of the Byway, with required lot sizes varying from 10,000 to 40,000. With approval of a Special Permit from the Zoning Board of Appeals, two family dwellings may be constructed in any of the Residential zones along the Byway. Concord Center is zoned Business and Allows retail stores, restaurants and single family homes.

## Height

The Scenic Intrinsic Quality may be difficult to quantify: Described as “visually beautiful or interesting, whether natural or human made—it is a view from the road that provides pleasure or inspires awe”. What are the elements that make up the Scenic Intrinsic Quality for Battle Road?

One element is the tree canopy. In New England, the leafing out of trees in the Spring, lush green shade in the summer, color provided by fall foliage, and the winter landscape of bare branches are treasured reminders of the four seasons and our particular climate. Along the Byway, the tree canopy softens the more urban environment in Arlington, and provides a forested experience in Lincoln. The zoning provision that helps ensure the prominence of the tree canopy is a height limit. Once buildings are constructed that are taller than the surrounding mature trees, the sense of tree canopy is lost. Therefore, the allowed height limits are critical to maintaining the prominence of the tree canopy on the Byway and to protecting the Scenic Intrinsic Quality, particularly scenic vistas. Generally, building heights in excess of three stories or 35 feet visually intrude on the mature tree canopy. One exception is in commercial areas, where desirable tree plantings and landscape elements may result in shorter trees in order to enhance the pedestrian experience.



These photos from Arlington and Lexington illustrate commercial and residential districts along the Byway.

**Height regulations along the Byway**

Town	Zoning Category	Height Limit	Comment
Arlington	<b>Residential Zones</b>		
	R1, R2	35 feet, 2.5 stories	
	R-3, R5	35 feet, 3 stories	
	R6	40 feet, 4 stories	
	R7	60 feet, 5 stories	
	<b>Business Zones</b>		
	B1, B2	35 feet, 3 stories	
	B2A, B4	40 feet, 4 stories	
	B3	60 feet, 5 stories	
	B5	75 feet	Central Business District in Arlington Center
	<b>Industrial Zone</b>	52 feet, 4 stories	Near the Byway
Lexington	<b>Residential Zones</b>		
	RO	2.5 stories/40 ft	
	RS	2.5 stories/40 ft	
	RT	2.5 stories/40 ft	
	RM	No Requirement/40 ft	
	RD	No Requirement/40 ft	
	<b>Business Zones</b>		
	CRS	2 stories/25 ft	
	CS	2 stories/25 ft	
	CB	2 stories/25 ft	
	CN	1 story/15 feet	
	CD	No limit	Town Meeting approval necessary
Lincoln*	<b>Residential Zone (R-1)</b>	36 feet or 2 ½ stories	Area adjacent to Byway is all zoned R-1
Concord	<b>Residential Zones</b>		All projects will also undergo review by the Historic Districts Commission
	R-A	35 feet	
	R-B	35 feet	
	R-C	35 feet	
	<b>Business Zones</b>		
	Business	35 feet	
	Limited Business	25/35 feet	

## Site Plan Review

Site Plan Review is a comprehensive process to evaluate a proposed development project. The goals of the review are to ensure compliance with the zoning bylaw, to minimize adverse impacts of the development, and to promote development that is harmonious with the surrounding area. The site plan shows the existing conditions of the lot, and the design of all improvements proposed to facilitate development of a lot. The site plan graphically portrays the proposed development's response to the community's land use regulations.

Site Plan Review can be used to regulate a use, and improve the overall layout of the project. It cannot be used to prohibit a particular use. Site Plan Review can ensure, for example, that zoning provisions requiring enhanced landscaping for commercial or multi-family uses be met. Lexington, Lincoln and Concord all have Site Plan Review provisions in their respective zoning bylaw.

Arlington has Environmental Design Review, conducted by the Arlington Redevelopment Board (ARB), that applies to construction or reconstruction for certain uses on a site abutting Massachusetts Avenue, Pleasant Street and the Minuteman Bikeway, all areas either abutting or near to the Byway. These uses include six or more dwelling units; gasoline service stations, bed and breakfasts, hotels and motels, outdoor uses, etc. The Environmental Design Review functions like Site

Plan Review for the Byway within Arlington and affords a good degree of oversight. One of the standards for review includes “Heritage: With respect to Arlington’s heritage, removal or disruption of historic, traditional or significant uses, structures or architectural elements shall be minimized insofar as practicable, whether these exist on the site or on adjacent properties.”

## Other land use management tools and regulations

In addition to zoning bylaws, there are other ways for a community to control land use and development. For the Battle Road Scenic Byway these include Historic District protections, Demolition Delay bylaws, and Design Guidelines.

These land management regulations are usually codified within the Town Bylaws, and work in concert with the zoning to provide comprehensive review of development projects.

## Historic Districts

Preserving the historical resources of their communities has been a hallmark of the towns of Concord, Lexington and Lincoln, and to a much lesser extent, Arlington. It is because of this respect for history, including events, architecture, streetscape and culture that the Battle Road Scenic Byway could designated.

One of the chief tools to preserve historic character and architecture is through the designation of local Historic Districts. This mechanism is one of the oldest and strongest forms of protection for irreplaceable architectural and other elements that impact the scenic, natural, historic, cultural and recreational intrinsic qualities of the Byway. All Byway towns have local Historic Districts.

Special Acts of the Massachusetts Legislature established the Historic Districts in Lexington and Concord in 1956 and 1960, respectively. In 1960, a statewide enabling statute, the Massachusetts General Law Chapter 40C, allowed municipalities to establish local historic districts. Arlington’s first Historic District was established in 1977, and Lincoln’s Town Meeting approved a Historic Districts Commission Bylaw in 1981.

Along the Battle Road Scenic Byway, there is a variety of Historic District protection. In Concord, the entire Byway is included within four different Districts overseen by one commission, the Historic Districts Commission. In Lincoln, the Byway corridor is not included in a Historic District but is protected by the abutting Minute Man National Historical Park. Lexington has four Historic Districts protecting two-thirds of the Byway. Unprotected portions include land east of Hillside Avenue and south of Hastings Road. Arlington has seven Historic Districts, six of which protect resources identified as contributing to the intrinsic qualities of the Battle Road Scenic Byway in Arlington.

Historic District designation always includes Guidelines as to what is regulated. For example, in Arlington, the color of paint, lighting fixtures, and storm windows and doors are not subject to review by the applicable Historic District Commission. In Concord, these types of changes would be reviewed by the Historic Districts Commission. The advantage to allowing each community to determine the level of review is that without such flexibility, some communities would not adopt a Historic District. The potential disadvantage along Byway is the variation in approved changes to the identified intrinsic resources, and the possible negative cumulative change to the Byway experience.

In addition to variations in regulations, residents of the Byway towns differ in appreciation for Historic Districts. In Concord, a high degree of regulation is expected and for the most part, welcomed. At the other end of the spectrum, Arlington residents have yet to embrace the potential of historic preservation both as an economic development tool and an urban design goal, so are more hesitant to support regulation. Most Lexington residents are very aware of their cultural and historical resources, and their obligation to preserve the past for future generations. Residents of Lincoln are also accepting of additional land use regulation, but as noted, because of the Minute Man Historical Park, Historic District protections are not needed in this portion of the Byway.

The following table summarizes the Historic Districts with jurisdiction over the Battle Road Scenic Byway and/or intrinsic resources identified for the Byway.

### Local Historic Districts along the Byway

Town	Name of Local Historic District	Year Established
Arlington	Broadway Historic District	1977, enlarged 1981, 1991
	Central Street Historic District	1982
	Russell Historic District	1983, enlarged 1985
	Pleasant Street Historic District	1988, enlarged 1991, 2002
	Avon Place Historic District	1996
	Jason/Gray Historic District	1998
Lexington	East Village Historic District	
	Munroe Tavren Historic District	
	Battle Green Historic District	1956
	Hancock-Clarke Historic District	
Lincoln	None: entire Byway is protected by MMNHP	
Concord	American Mile Historic District	1960
	Monument Square/North Bridge Historic District	1960
	Main Street Historic District	1960
	Barrett Farm Historic District	1960

## Demolition Delay

Demolition delay is a technique to provides an opportunity for the community and a project proponent to modify a proposal that includes demolishing a “significant building or a significant structure”. Each of the Byway Towns has a provision for Demolition Delay in their respective Town Bylaw. Specifics vary by Town, but the process involves determining that the building/structure to be demolished is “significant” and a delay is warranted.

There are different methods for determining significance. In Concord, there is a listing of specific houses voted on by Town Meeting. If a property is on this list, it is subject to the Demolition Delay of six months. The listing is updated through a Town Meeting vote. Demolition Delay does not apply to any property along the Byway because it does not apply to the Historic Districts.

Arlington, as specified in Town Bylaw Article 6: Historically or Architecturally Significant Buildings, uses a list on file at the Massachusetts Historical Commission of buildings that have been designated as “significant”, as well as defining as “Significant” any building listed on the National Register of Historic Places or for which there is a pending application. If a property meets the criteria, the Arlington Historical Commission then holds a public hearing to determine if the building is “Preferably-Preserved” and in the public interest to be preserved or rehabilitated rather than demolished. If this determination is made, a 12 month demolition delay is in effect.

In 2005, Arlington added a requirement that an owner intending to demolish a building must given written notice to abutters within 200 feet of the building seven days prior to demolition. This Bylaw applies to any building in Town and could result in heightened awareness and sensitivity for historic buildings in Arlington.

Lexington’s Demolition Delay Bylaw, Chapter 19, Article 1 of the Code of Lexington, is administered by the Historical Commission. It requires a public hearing and an affirmative finding that the property is “preferably preserved” before any building categorized as “Significant” is subject to a 12 month Demolition Delay. “Significant” is defined in one of three ways: Properties listed on, or being within an area listed on, the National Register of Historic Places, or which has a pending application for listing; properties included in the *Cultural Resources Inventory* prepared by the Historical Commission, including buildings for which surveys may be pending; or a property that has been determined by vote of the Commission to be historically or architecturally significant, provided that the owner and the Building Commissioner have been notified within ten days of such vote.



Demolition Delay was used to help preserve the Caesar Robbins House, which was located outside a historic district prior to the house being moved near North Bridge on May 21, 2011.

In Byway Towns, the Demolition Delay process is overseen by the Historical Commission, which is different from the local Historic District(s) Commission, the body that works with the designated local Historic Districts.

During the stipulated Demolition Delay period, town officials, staff, Historical Commission members, and the project proponent are encouraged to work together to find alternatives to demolition: purchase by another party, an alternative design that could preserve the structure, etc. The Delay period may be shortened if the Historical Commission determines that there is no reasonable likelihood of a preservation alternative.

## Design Guidelines

Design Guidelines may be included in the zoning bylaw, or may be in a separate document. Often, design review is applicable to specific areas of the community, such as a downtown or village center in order to ensure that new construction/reconstruction is compatible with the existing character. If there is a Historic District designation in place, these regulations apply.

Arlington does not have Design Guidelines for areas outside of the historic districts. Lexington, by contrast, created a Design Advisory Group in 1965. The entire Byway in Concord is included within one of four Historic Districts, and is subject to the specific guidelines for each Historic District.

## Effectiveness of current regulatory techniques applicable to the Byway

The next section lists and evaluates various provisions of each town's zoning and other land use regulations. These provisions were selected because they control factors that directly impact land development along the Byway. These impacts could be potentially positive or negative. For example, some zoning provisions could promote appropriate economic development, such as bed and breakfast uses and other tourist amenities. Other bylaws, however, could allow new commercial development to have incompatible design, no screening from adjacent properties and/or to put parking in front of stores. This type of new development could negatively impact adjacent historic resources, and the visitor experience traveling the Byway.

The point of the evaluation is to determine if the existing zoning and other land management techniques adequately protect the historic, cultural, natural, scenic, and recreational qualities of the Byway. The evaluation also assists in developing strategies to maintain and enhance the intrinsic qualities, and to develop efforts to minimize intrusions on the visitor's experience of the Byway.

The regulations are organized around three land use objectives. These objectives help to focus the purpose of the regulations specifically for any potential impact on the Byway. The objectives are: 1) Preserving the Historic and Cultural Resources and the Locational Context/the Built Environment, 2) Preserving the Scenic and Natural Resources, and 3) Providing Opportunities for Visitor Amenities.

The regulatory environment in the four towns along the Battle Road Scenic Byway may be characterized as robust. Zoning has been in place for decades in these communities, and has evolved to both mirror and shape the community character and the development agenda for each town. Arlington, unlike Lexington, Lincoln and Concord has never adopted the Massachusetts General Law enabling creation of local subdivision regulations. As a result, land subdivisions are guided by the Board of Survey, whose responsibilities were transferred recently from the Board of Selectmen to the Arlington Redevelopment Board. Similarly, Arlington does not have Design Review applicable to the entire Town. It does have an Environmental Design Review that serves the same function for selected areas of Arlington. Fortunately, Massachusetts Avenue is one of those areas, so the Battle Road Scenic Byway has a level of design review.

Historic Districts and Demolition Delay bylaws protect the Byway and intrinsic resources in Arlington, Lexington and Concord. Zoning and Historic District regulations do not apply to Minute Man National Historical Park or to Hanscom Field and Hanscom Air Force Base in Lincoln because these properties are under federal or state jurisdiction. The former does not require local protections. For the Hanscom properties, however height and use guidance would be useful.

The table on the following pages shows the range of regulations within each Byway community. The details differ in each Town, but the key point is that extensive and comprehensive land use regulations are available in each community that can be utilized to protect the Battle Road Scenic Byway and its intrinsic resources.

**Summary of the regulatory environment along the Byway**

Land Use Regulation	Arlington	Lexington	Lincoln	Concord
<b>Objective: Preserve historic and cultural resources and the locational context/built environment.</b>				
Architectural Design Standards/Guidelines	No	Yes	Yes	Yes, for Historic Districts
Historic Districts	Yes	Yes; portions in East Lexington and south of Hastings Road not included	Byway is included within MMNHP	Yes Historic Districts protect entire Byway in Concord
Site Plan Review	Environmental Design Review	Yes	Yes	Yes
Zoning Regulations for:				
Cluster/Open Space Development	No	Yes	Yes	Yes
Historic Districts referenced in zoning	No	Yes, "Historic Preservation Incentives," Section 135-18	No	No
Village Overlay	No	Yes	Yes	Yes
Landscaping	Yes	Yes	Yes	Yes
Lighting	Yes	Yes	Yes	Yes
Parking Lot Design	Yes	Yes	Yes	Yes
Signage	Yes subject to Historic Districts Commission review	Yes, subject to Historic Districts Commission review	Yes	Yes - separate bylaw, also subject to Historic Districts Commission review
<b>Objective: Preserve scenic and natural resources of the Byway with regulations relating to the following.</b>				
Accessory Structures	Yes	Yes	Yes	Yes
Earth Removal	Yes	Yes	Yes	Yes, Section 7.5
Fence Regulations	No	Yes	Yes	When part of Historic Districts
Farmland Preservation	No	PUD	Yes: Open Space Conservation	Zoning: Residential Development options
Forestland Preservation	No	No	Yes: Open Space Conservation	Zoning: Residential Development options
River Protection (Local Regulation)	Yes	Yes	Yes	Yes: Floodplain District
Satellite Dish Antennas	In Historic Districts	Use Item	No	Within Historic District regulations
Scenic Roads	No	No	Yes-General Bylaw	Public Works Policy for all roads
Screening and Buffer	Yes	Yes	Yes	Yes
Shade Tree Protection	No	Yes	Yes, within Scenic Roads	Department of Public Works Tree Protection Standard Operating Procedure
Storage of cars, boats, etc.	No	Motor vehicles	Unregistered MV	Vehicular storage
Wetlands	Yes	Yes	Yes	Yes

Land Use Regulation	Arlington	Lexington	Lincoln	Concord
<b>Objective: Provide opportunities for visitor amenities with regulations relating to the following.</b>				
Bed and Breakfast	Yes	Yes, only in 2 Residential zones	Yes, as an accessory use	Yes, as an accessory use with Special Permit
Home Occupations	Yes	Yes; some require Special Permit	As an accessory use	Yes, as accessory use with Special Permit
Outdoor Recreation	No	Yes	No	Yes

## Efforts to minimize intrusions on the visitor experience

A variety of techniques have been used to minimize interruptions to the visitor experience along the Battle Road Scenic Byway. Chief among these is the establishment of Minute Man National Historical Park. This required vision and a plan, federal legislation, land acquisitions and property demolition. Re-creating the landscape and visceral experiences of 1775 is neither possible, nor feasible for most of the Byway outside of the Park. Concord has done an enviable job preserving and protecting Revolutionary-era buildings and streetscapes along the Byway, largely through Historic District legislation and a fortunate pride of history and of place.

Some of a community's ability to minimize intrusions is due to the size of the community and proximity to Boston. Arlington, closest of the four Byway Towns to the region's capital experienced much stronger and earlier demands for denser development. Many historical sites and landscapes were lost, and some of those that remain lack context. Parts of the Battle Road Scenic Byway in East and West Lexington and outside of the Historic Districts similarly do not provide a context for the magnificent Revolutionary sites that have been protected. These areas do intrude to some degree on the Byway experience because of change in visual character.

Following is a summary of the key initiatives in the communities to minimize intrusions (or maximize) the visitor experience. The emphasis is on the visual experience of the visitor: s/he wants to "see" the resources associated with the American Revolution or the authors and philosophers who lived and wrote in these communities.

1. Historic District protections for much for the Byway. The review of changes to the exteriors of buildings ensures that visitors will see the resources as they existed at a particular point in time. There is no guarantee of, or desire, for "historical re-creations". Owners have been modifying dwellings and landscapes since before the Revolution. The Historic Districts do guarantee preservation of the asset and that only appropriate changes will be allowed.
2. History of zoning controls. All of the Towns have adopted provisions to regulate development, such as buffering and screening requirements for parking areas, while allowing for visitor amenities, such as bed and breakfast establishments.
3. Sign controls. Often, there is a two-tier system of sign review for properties located within Historic Districts. The Historic District(s) Commission and/or staff reviews sign applications for conformance with Historic District criteria, in addition to the Building Commissioner's review.

## Specific Examples

### Arlington

Massachusetts Avenue, in Arlington Center, is being reconstructed as a "complete street" to include bicycle lanes, widened sidewalks, and landscaping. The overhead utility wires were previously put underground.

There are several sections of the Byway along Massachusetts Avenue with very ample front yard setbacks, particularly for some apartment buildings. These green spaces provide contrast to the commercial buildings constructed at the sidewalk line.

Although neither of these activities protects the intrinsic resources, they combine to make the visitor experiences of these Byway sections more pleasant, particularly for the pedestrian.

## Lexington

The treed and vegetated hillside west of the Massachusetts Avenue/Marrett Road intersection will remain as open space in perpetuity because of Special Permit conditions attached to development permissions for the Youville Assisted Living Facility. The facility is not visible from the Byway because of sensitive site design and the hillside topography. This illustrates what an attentive and supportive Planning Board can achieve to limit intrusions on the Battle Road Scenic Byway.

## Concord

Residents voted to underground all existing overhead wires in the Town over the next 25 years. This requires a tax surcharge on utility and cable bills. A Town bylaw forbidding the new construction of utility poles and overhead wires has been in place since 1987. This action removes a modern intrusion on the Battle Road Scenic Byway landscape.

## Land use management challenges

Challenges to the Byway focus on the maintaining the visual experience. These include the following:

1. **Potentially inappropriate height limits.** The challenge in Arlington is as of right zoning allowing buildings as high as 70 feet adjacent to the Byway. At the other end of the spectrum, the Neighborhood Business zone (CN) in East Lexington, on the south side of the Byway has a height limit of 15 feet or one story. This could encourage single story structures that are not attractive or have enough design “presence” for the Byway. Ensure that zoning bylaws have appropriate height limits, and/or strengthen landscaping regulations to provide a visual buffer for Byway users.
2. **Non contributing streetscapes.** As previously mentioned, the East Lexington land uses and urban design do not contribute very positively to the Byway experience. The one story buildings with large parking lots in front, including car dealerships, are grandfathered structures and uses. However, the Byway designation provides an incentive and an opportunity to prepare a planning study to address these issues to promote redevelopment into more appropriately designed land uses. This could also be an opportunity to work jointly with Arlington so that the zoning in both communities is complimentary and reinforces the new development in that town (Starbuck’s and Trader Joe’s). Creating a Village Center District with specific design criteria and landscaping is one option to explore.
3. **Preserving existing features.** There are scenic vistas, stone walls, and heavily treed roads that need to be protected. Protecting stone walls includes not just the stone structure, but control of invasive species as well. Lincoln has a Scenic Roads bylaw in their General Town Bylaws that regulates tree cutting, destruction of stone walls and paving work. Concord has a Roads Policy Statement and a Public Works Construction and Tree Protection Standard Operating Procedures memo. Whether formally codified or not, all Towns should consider how to protect existing features.
4. **Coordination with Hanscom Air Force Base and Hanscom Field.** Hanscom Air Force Base is a Federal military installation with rights to use the two runways at the Laurence G. Hanscom Field, a 1,125 acre general aviation facility owned and managed by the Massachusetts Port Authority (Massport). Zoning, particularly uses and height limits, do not apply to either Federal or State entities. Discussion and dialogue are important so that Minute Man National Historical Park and other Battle Road Scenic Byway resources are represented while development is planned for the Air Base or Field. The Hanscom Area Towns Committee (HATS) was constituted to address issues of concern to the residents of Bedford, Concord, Lexington and Lincoln relative to both the Air Base and Field operations. Some structure needs to be in place to allow the communities and MMNHP a “seat at the table”, for Hanscom Air Base and Field discussions. Additionally, Massport has recently allowed expanded commercial air services, and the potential exists for the Air Force base to be closed, in which case major redevelopment could take place.
5. **Additional protection for resources.** Historic District protection is desirable but not possible or suitable for the entire Byway. Neighborhood Conservation Districts, which provide a more flexible level of review for architectural features and unique areas, are one option. Another possibility is a Byway buffer zone that would allow for design review along the Byway to ensure redevelopment and new development is compatible with the Byway, or Byway wide design options. The Byway communities have done a very good job overall with monitoring design for changes outside of Historic Districts. With the designation of the Battle Road Scenic Byway, the challenge is to promote consistency both with adopting various land use regulations and with the interpretation and enforcement of the regulations.

## 6. Other challenges:

- **Overhead wires.** There is probably nothing more unsightly than a tangle of electric, telephone and cable wires strung beside portions of the Battle Road Scenic Byway. Removing the wires generally involves major coordination with the responsible companies, and a surcharge on electric, phone and cable bills. However, this has been successfully accomplished in a number of town centers. Concord has a 20-year program to do this throughout Town. Other Byway communities with overhead wires should consider a long term project to underground wires. The reconstruction of Massachusetts Avenue in Arlington will accommodate the wiring that is already placed underground in that community's section of the Byway.
- **Parking.** Accommodating the automobile is a challenge. Parking lot requirements, particularly where visible from the Byway, need to provide for landscaping and shielding. The number of required spaces should be evaluated to ensure that the number of spaces is not excessive.
- **Unprotected land/resources.** Any critical parcels that are not adequately protected should become priorities for protection, acquisition by the community as one option. All Byway towns except Arlington have voted for the Community Preservation Act, a matching funding source that can be used partially for open space and historic preservation.

## 4.3. Compliance with Outdoor Advertising Regulations

Outdoor advertising generally refers to signage that publicizes goods or services and is visible to passing motorists. Billboards, large signs often on stanchions, are designed to be seen at great distances by autos traveling at high speed. Outdoor advertising is regulated by local sign bylaws, and state and federal law, not only for public safety reasons, but also for aesthetic purposes.

Signage, particularly billboards, has the potential to negatively impact the visitor experience while traveling a scenic byway. Intrinsic qualities, particularly scenic vistas, may be compromised by too many or too large signs. Billboards are particularly problematic. Unlike signs on a storefront advertising what is for sale inside (an "on premises" sign), billboards frequently function solely as an advertising venue for a product or service, such as beverages or cable providers. They are not designed to provide any information to a traveler (locating a restaurant, for example), but exist for commercial advertising purposes only. These signs and billboards are considered "off-premises" signs.

This section of the Corridor Management Plan fulfills the requirement that there be a demonstration of outdoor advertising compliance along the Battle Road Scenic Byway.

### Description of Current Outdoor Advertising Characteristics

There are no billboards along, or visible from, the Battle Road Scenic Byway. They are prohibited by local bylaw in Arlington and by 711 Code of Massachusetts Regulations 3.07(11) in Lexington, Lincoln and Concord.

There is a range of on-premises signage controlled by bylaws in each Byway town. Signage along the Byway in Concord is also subject to review by the local Historic Districts Commission, as is most signage in Lexington, except for portions of the Byway south of Hastings Street that is not in a Historic District. Signs along the Byway in Lincoln are predominantly directional signage for Minute Man National Historical Park, and for Hanscom Field. Arlington, because of its more urban land development pattern, has the widest variety of signage advertising restaurants and stores located along the Byway. These are all on-premises signs.

## Existing Laws Controlling Outdoor Advertising

Outdoor advertising is controlled by Federal, State and local law. This section outlines the relevant legislation applicable to the Battle Road Scenic Byway.

### Federal

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Federal legislation to control outdoor advertising dates to the origin of the Interstate Highway System in 1958. Any state that voluntarily agreed to limit outdoor advertising adjacent to the Highways would be eligible for a construction funding bonus. Massachusetts was not one of the 23 states participating in the bonus program. The Highway Beautification Act of 1965 was a major Federal effort to address billboards. A major goal of the Act was to control “outdoor advertising signs, displays and devices in areas adjacent to the Interstate System...to protect the public investment in such highways, to promote the safety and recreational value of public travel and to preserve natural beauty. “

Subsequent federal legislation from the 1970s to the 1991 Intermodal Surface Transportation Efficiency Act have included sections on outdoor advertising. Currently, Title 23 subsection 131(s) of the United States Code prohibits the installation of any new signs along an Interstate or Federal-Aid Primary System road that is designated a scenic byway. Exempt signs that may be allowed include directional and official signs and on-premises signs. Subsection 131(s) applies to those portions of the Battle Road Scenic Byway, primarily west of Interstate 95, designated a Federal-Aid Primary System road as of June 1, 1991.

### State

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A fundamental aspect of Federal regulation of outdoor advertising is that the Federal law does not, on its own, control any sign. Federal law relies on each State to utilize its own police power and land use controls to implement and enforce the legislation. In Massachusetts, the Agreement for Carrying Out National Policy Relative to Control of Outdoor Advertising was signed in 1971. The Agreement is for “Areas Adjacent to the National System of Interstate and Defense Highways and the Federal Aid Primary System” and regulates only those portions of the Byway so designated.

In addition, Massachusetts has established general laws to control outdoor advertising. Massachusetts General Law (MGL) Chapter 16, Sections 13 and 14 established the Outdoor Advertising Division within the Massachusetts Highway Department and the Outdoor Advertising Board, respectively, “for the purpose of regulating and controlling, in the public interest, the erection and maintenance of billboards, signs or other advertising devices” and for a Board to administer the OAB regulations. With the consolidation of State transportation agencies on November 1, 2009, this legislation was repealed. The Acts of 2009, 25, Sec. 185 establish the Office of Outdoor Advertising (OOA) under the Massachusetts Department of Transportation, Highway Division, Right of Way Bureau. MGL Chapter 93, Sections 29-33 relates to the control of Outdoor Advertising and Chapter 93D, Sections 1-7 regulates outdoor advertising adjacent to the Interstate and Primary Highway Systems.

Detailed guidance is provided by 711 Code of Massachusetts Regulations (CMR) Part 3.00 et. seq. The Regulations, as noted above, include a section that designates the entire Towns of Lexington, Lincoln and Concord as “Sign Free Areas” in which no permits shall be issued.

Massachusetts regulations prohibit billboards or other advertising within any public way or private property within public view from any highway, public park or reservation unless the billboard conforms to the regulations established under Chapter 93. Section 29 of Chapter 93 allows cities and towns to further regulate and restrict billboards, signs or other devices provided the ordinances/bylaws are not inconsistent with state law.

### Local

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Each community regulates signage, either through the zoning bylaw or general town bylaw. Signage controls regulated by zoning include Arlington, Article 7 of the Zoning Bylaw; Lexington, Article 8 of the Zoning Bylaw and Lincoln, Section 16 of the Zoning Bylaw. Concord’s Sign Bylaw is included in the Town Bylaws, and was first adopted in 1971. In addition, billboards are specifically prohibited in Arlington by Article 1 of Title V of the General Town Bylaws.

## Documentation of compliance with laws controlling outdoor advertising

Enforcement of sign regulations can be problematic when a community's resources are constrained. Generally, the Building Commissioner/Inspectors are responsible. Sign control will generally be second priority to construction inspections and life safety inspections. It is therefore critical that all applications for signage be reviewed to ensure compliance. This is done through Historic District controls in Concord and Lexington where applicable. Another opportunity to review signage particularly for larger projects is Site Plan Review or the Environmental Review in Arlington. Signage should be included as one of the review criteria.

Sign control is extremely strict in Concord. During a meeting with Town officials, it was noted that Concord required the Bank of America to re-design its corporate signage/colors scheme to secure Historic Districts Commission approval. At the other end of the Byway, it was noted that there are many signs in Arlington that do not comply, and that enforcement could be enhanced.

The amount and location of signage in Lincoln is limited because of the presence of Minute Man National Historical Park along the Byway's northern edge. The southern side is regulated by the Town's sign bylaw. In Lexington, areas included in Historic Districts receive added protection, while the rest of the Byway is regulated by Lexington's sign bylaw. Pre-existing signs, such as those in East Lexington, will hopefully be replaced with conforming signage as the properties are redeveloped. Design guidance/strict review of any replacement signs should be a planning priority.

In summary, compliance is good to excellent along the Battle Road Scenic Byway. The absence of any billboards is very positive, and efforts by the individual Towns to control billboards and outdoor advertising for the past 30+ years indicate sensitivity to the visual impacts of inappropriate signage.

In February, 2011 the Federal Highway Administration Northeast Right of Way Team conducted a Process Review of the Massachusetts Office of Outdoor Advertising. One recommendation concerning scenic byways should be reiterated in this Corridor Management Plan: The Office of Outdoor Advertising should incorporate scenic byway roads into field and office reviews to ensure effective control. The OOA should also implement a change in state regulations to prohibit signs on scenic byways, except for those exclusions outlined in Federal regulations.

## 4.4. Proposed Land Use Recommendations

Corridor Management Plan requirements for land use include the development of strategies for maintaining and enhancing the Corridor's intrinsic qualities, and to describe how existing development might be improved, and new development accommodated while preserving intrinsic qualities. Two key strategies that guide more specific land use Recommendations and Action steps recognize the need for both sound regulations, and the willingness to embrace and enforce the regulations. Both are needed to protect and maintain the Battle Road Scenic Byway's intrinsic qualities while accommodating development.

### Key Strategies

- Ensure that land use management regulations are written and enforced to maximize protection of the intrinsic resources, and the context of these resources.
- Provide for context-sensitive development and redevelopment, with land use decisions based on the fundamental goals of preserving the historic fabric, cultural resources and scenic vistas of the Byway.

This chapter will include recommendations and action steps that, in conjunction with the Battle Road Scenic Byway goals, will lead to preserving and enhancing the Byway.

## Historic Preservation Recommendations

Historic preservation tools are among the most important techniques that can protect and preserve the Battle Road Scenic Byway, particularly the historical and cultural resources. Existing efforts include the Historic Districts in Arlington, Lexington and Concord. The Historic Districts provide sound protection for many of the intrinsic resources.

**Stewardship:** Use the Byway designation to promote stewardship of the corridor's historic, natural, scenic, cultural, recreational, and archaeological resources and intrinsic qualities. Seek funding and develop new programs to support the Byway's resources and visitor attractions.

**Recommendation:** Support historic preservation programs; seek funding for historic preservation

- Support the Community Preservation Act (CPA) as a potential source of funding for Byway projects
- Support efforts in Arlington to adopt the CPA and to use CPA for preservation of historic resources
- Identify, acquire or support acquisition and support rehabilitation of threatened historic structures

**Education and Awareness:** Increase awareness of the Byway's rich history and promote it as an educational resource.

**Recommendation:** Promote the value of historic preservation by using the Battle Road Scenic Byway and its resources as examples

- Raise awareness and build support in the Byway communities for historic preservation
- Advocate for the importance of stewardship and preservation at Byway sites
- Work as advocates for a "preservation ethic" and for funding of historic preservation and maintenance at the local, state and federal level
- Host workshops on the economic benefits of Historic Districts

## Visual Continuity Recommendations

The next series of Recommendations pertain to "visual continuity", helping to minimize visual interruptions on the Byway by regulating new development, providing guidelines for the redevelopment of non-contributing land uses and streetscapes, and maintaining existing contributing features. Changes in the landscape, whether to stone walls, signs, tree plantings, or buildings need to be reviewed in terms of the impacts of these changes on the visual experience of residents and visitors. The Action Steps listed below will provide guidance for this review.

**Continuity and Beautification:** Improve visual continuity of the Battle Road Scenic Byway, enhance its scenic qualities, and create an uninterrupted visitor experience.

**Recommendation:** Strengthen visual character of Byway through land management and encourage land uses compatible with Byway goals.

- Identify intrusive structures and land uses. Develop options to reduce intrusive structures and land uses along the Byway.
- Adopt or amend Site Plan Review bylaws in each Town for properties abutting and in close proximity to the Byway. Determine appropriate boundaries (define "in close proximity") for requiring Site Plan Review.
- Support adoption of a Town-wide Site Plan Review Bylaw in Arlington
- Consider implementing or modifying existing design guidelines or standards to advance Byway goals.
- Investigate historic district buffer mechanisms to ensure surrounding land uses do not detract from the Byway's intrinsic qualities
- Encourage studies to determine if Neighborhood Conservation District designation is appropriate in select

locations, and support designation of these district

- Encourage studies to determine where Village Center zoning districts could be established, and establish Village Center zoning districts where appropriate
- Consider implementing a Battle Road Scenic Byway Overlay district in each town

Several of the recommendations above deal with adopting or modifying land use regulations. Site Plan Review bylaws should be reviewed and/or amended to make sure that Bylaw land use recommendations can be included in the review criteria. In addition to changes to properties, or new construction on the Battle Road Scenic Byway itself, development nearby can have great impact on the view of and from the Byway. It is therefore important to include Byway review criteria for properties that are “in close proximity”, once that term is defined. Arlington should examine the feasibility of having a town-wide Site Plan Review administered by the Planning Board; currently, development along the Byway in Arlington is subject to Environmental Design Review.

The existing Historic Districts relate to specifically defined geographic areas. There is potential for visual disruption to the Byway from inappropriate development or redevelopment adjacent, but outside of Historic Districts in Arlington and Lexington. A mechanism that provides for a buffer zone or protection zone surrounding the Historic Districts should be investigated. (This is not applicable in Concord because the entire Byway is subject to Historic District regulations. The concept could be explored for Lincoln, for areas adjacent to Minute Man National Historical Park.) An example of the need for a buffer is the Johnnie’s Foodmaster grocery store in Arlington. On the same block as the Jason Russell House, any expansion or redevelopment on this site has the potential to impact the historic intrinsic resource, as well as the Byway itself. A buffer could allow for additional review and protection.

Another technique to be considered (and which has been enacted in the Town Bylaws in Lincoln) is the Neighborhood Conservation District. This is a form of overlay district designed to protect the historical character and features of a neighborhood or unique area, generally with less strict regulations than a Local Historic District. The focus is on preserving distinctive characteristics and architectural features with a targeted review of certain proposed changes.

Reviews within a Neighborhood Conservation District can be administered by a Planning Board, Historic District Commission or a designated Neighborhood Conservation District Commission. It is recommended that Arlington, particularly, explore this technique because it provides a flexible approach to preservation without creating an undue burden on property owners.

**Recommendation: Develop streetscaping guidelines that address street furniture, lighting, and plantings along the Byway.**

- Review existing streetscape guidelines and recent improvements in districts such as Arlington Heights and Lexington Center.
- Develop a “Byway Standard” for tree plantings and grates, benches, trash receptacles, sidewalk treatments, and other features in the public realm.
- Explore coordinating and regulating modifications utilities make along the Byway (e.g., tree cutting and utility boxes).
- Consider moving overhead utility lines underground in select locations or along the entire corridor.

The concept of a “Byway Standard” is to create a particular “look” for what the traveler sees along the public right of way. For instance, within commercial areas, a certain type of bench, light fixture, or trash receptacle would immediately signal that the visitor (or resident) was on the Battle Road Scenic Byway. More subtle than signage, a standard creates an experience or sense of place. Consistent materials and fixtures, which could include a family of options rather than one single treatment, will help improve the continuity of the Byway. In addition to what is within the public realm, distinguishing characteristics can include what is not visible, such as a lack of all overhead utility lines and satellite dishes.

**★Recommendation:** Develop landscape guidelines to buffer or screen land uses that do not contribute to the intrinsic qualities of the Byway.

- Consider reducing unneeded pavement and other impervious surfaces
- Develop a vegetation management plan and consider implementation through zoning
- Create a buffer around MMNHP in the residentially-zoned areas abutting the park to protect MMNHP from visual intrusion

Augmenting a full streetscape design, landscape guidelines could be developed to assist with screening uses that currently do not contribute to the Byway. While redevelopment of some of the parcels will inevitably occur over time, developing guidelines and encouraging landscaping in front of existing large parking lots, etc. can improve the visual experience of the Byway.

**Stewardship:** Use the Byway designation to promote stewardship of the corridor's historic, natural, scenic, cultural, recreational, and archaeological resources and intrinsic qualities. Seek funding and develop new programs to support the Byway's resources and visitor attractions.

**Recommendation:** Improve scenic vistas along the Byway

- Investigate Scenic Vista Protection Bylaws
- Identify critical land acquisitions; identify key historic sites for acquisition
- Identify any challenges/management issues for publicly-owned open spaces

The level of protection along the Byway varies according to ownership: publicly owned land enjoys greater protection than privately owned (with the exception of land protected by conservation easements, or generally owned by a non-profit entity whose purpose is land conservation). That is why the identification of critical parcels for acquisition is recommended. This action step compliments the first one: Identify intrusive structures and land uses. Develop options to reduce intrusive structures and land uses along the Byway. Land acquisition is expensive, but there may be properties, including historic structures, that can be protected by no other means. Similarly, if there are publicly owned parcels not designated as open space, (such as land owned by a school department), it is recommended that these be identified so that additional protections can be put in place if that is determined to be appropriate.

Many of the recommendations concerning Site Plan Review, a Byway Streetscape, regulating satellite dishes, etc. could be included within a Battle Road Scenic Byway Overlay District. This would need to be adopted by each Town, but it has the potential to provide a discrete “umbrella” of review and/or protection along the Byway.

## Hanscom Air Force Base and Civilian Airport Recommendations

**Coordination:** Use the Battle Road Scenic Byway to promote regional cooperation and partnerships.

**Recommendation:** Encourage coordination between Byway management team, Hanscom Air Force Base, and Laurence G. Hanscom Field/Massport.

The Towns of Concord, Lincoln and Lexington should continue their Hanscom Area Towns Committee (HATS) participation.

- Codify the relationship among Hanscom Air Force Base, LG Hanscom Civilian Airport (controlled by the Massachusetts Port Authority – “Massport”) and MMNHP/the National Park Service to help ensure communication and coordination of aviation and development activities with MMNHP
- Reinforce the value of each Town's and MMNHP's relationship with HAFB.

★ = Indicates one of this plan's top eleven recommendations, see Implementation Chapter for more information

- Review the reuse concepts outlined in the Hanscom Air Force Base pre-BRAC Community

Advance Planning report in light of Byways goals (BRAC: Base Closure and Realignment Commission ~for Defense facilities, 2005).

As one Byway Town official pointed out, two federal agencies with competing interests exist adjacent to each other. Both entities are trying to meet their needs. Created as a “growth and development policy committee” pursuant to MGL Chapter 40, Section 41 the Hanscom Area Towns Committee is an opportunity for the representatives of Bedford, Concord, Lexington and Lincoln to address issues of common concern pertaining to both the Air Force Base and Hanscom Field. Additional coordination, through HATS, can strengthen the Towns’ relationship with the Air Force Base and Hanscom Field, as well as potentially work with Minute Man National Historical Park, and National Park Service to “bring everyone to the table” to discuss development activities at both air facilities and to define their stewardship responsibilities.

## Civic Engagement Recommendations

**Coordination:** Use the Battle Road Scenic Byway to promote regional cooperation and partnerships.

**Recommendation:** Ensure that appropriate local boards, committees, departments, and organizations are involved in projects that the Byway management team undertakes

- Involve relevant Town boards and commissions, including Historic Districts, Planning, Selectmen, Conservation and Tourism in developing Byway projects.
- Consider implementing a multi-department review process for development and redevelopment projects abutting and/or visible from the Byway, to ensure these projects follow design, landscaping and any other guidelines related to the Byway.

**Recommendation:** Use the Battle Road Scenic Byway designation to increase cross-community collaboration

- Establish periodic meetings of Boards and Commissions from the four towns. These meetings could involve the Board of Selectmen/Planning Board/Conservation Commission/Historical Commission.
- Joint meetings with Historic District(s) Commissioners from the towns could be particularly useful for while there are guidelines for each regulated district, “best practices” for reviewing projects could be discussed.

**Recommendation:** Provide comment on development regulations, projects and planning efforts that will impact the Battle Road Scenic Byway.

- The Planning Board and other relevant land use decision-making entities in each town and Minute Man National Historical Park should solicit comments from the Byway management team on proposed regulatory changes, such as proposed zoning changes, along and within view of the Byway.
- The Planning Board and other relevant land use decision-making entities in each town and Minute Man National Historical Park should solicit comments from the Byway management team on proposed development and redevelopment along and within view of the Byway.
- The Byway management team should develop a mutual comment process for projects that require MEPA (Massachusetts Environmental Policy Act) review.

There are two components to the Civic Engagement recommendations: within the Byway towns, and among the Byway towns. Being aware of the Battle Road Scenic Byway, and its management goals, will assist town boards and commissions to provide for context-sensitive development and redevelopment, with land use decisions based on the fundamental goals of preserving the historic fabric, cultural resources and scenic vistas of the Byway. One way to do this is by engaging the Town

boards and commissions in identifying and creating projects to enhance or improve the Byway, and by having them work together to review projects along the Byway. Another way is to encourage networking among boards and commissions in the Byway communities. Informal periodic meetings of the Planning Boards/Redevelopment Board from Arlington, Lexington, Lincoln and Concord, for example, could include discussions of how site plan reviews are conducted, and to identifying what the members consider to be “best practices” for a site plan review. Citizens who serve on town boards and committees devote considerable time to these responsibilities, but even one meeting a year could be productive by increasing awareness of the Byway and its intrinsic resources.

## Outdoor advertising

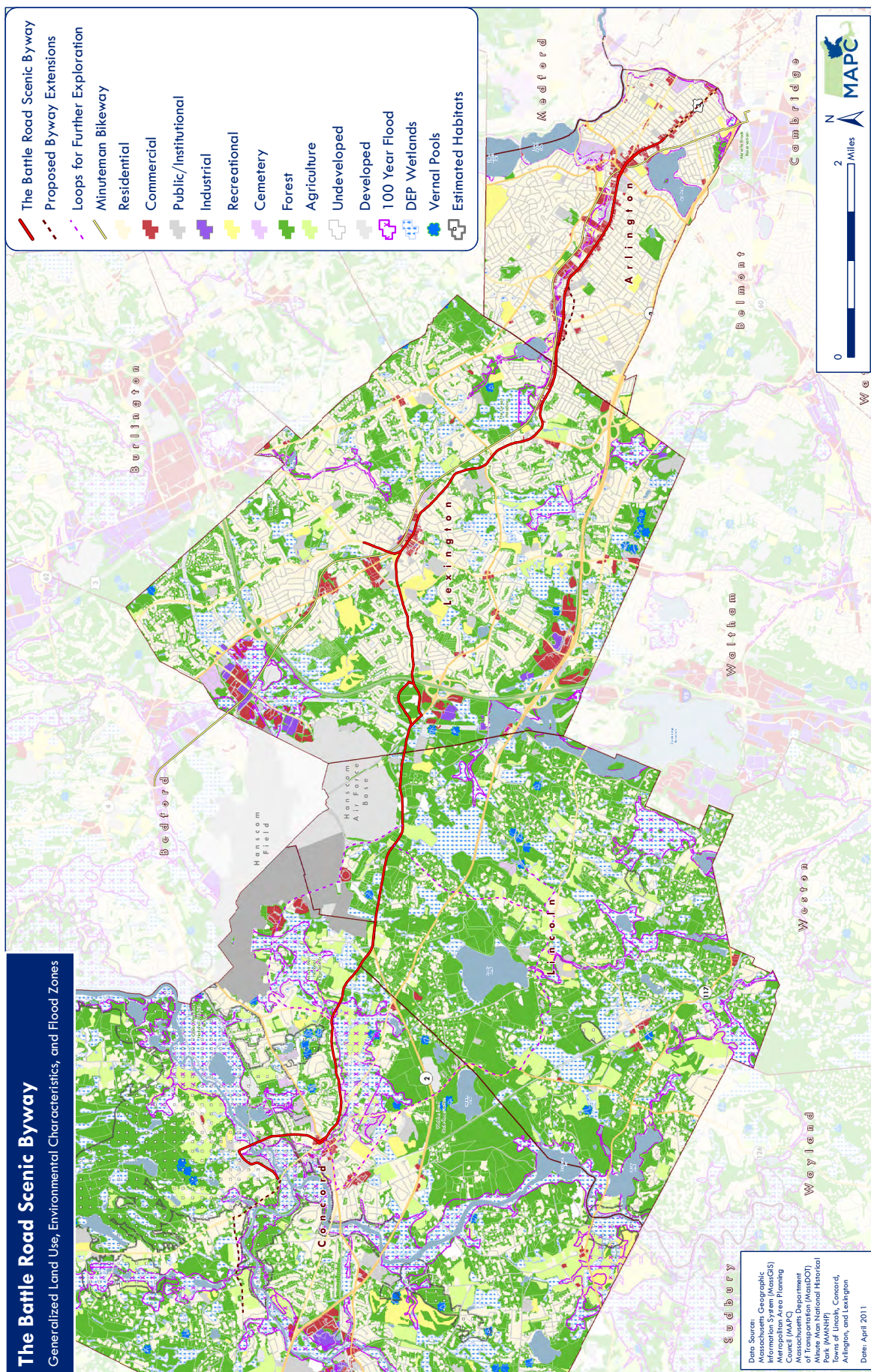
**Continuity and Beautification:** Improve visual continuity of the Battle Road Scenic Byway, enhance its scenic qualities, and create an uninterrupted visitor experience.

**Recommendation:** Encourage consistent enforcement of sign regulations to ensure that on-premises signs comply with all sign controls

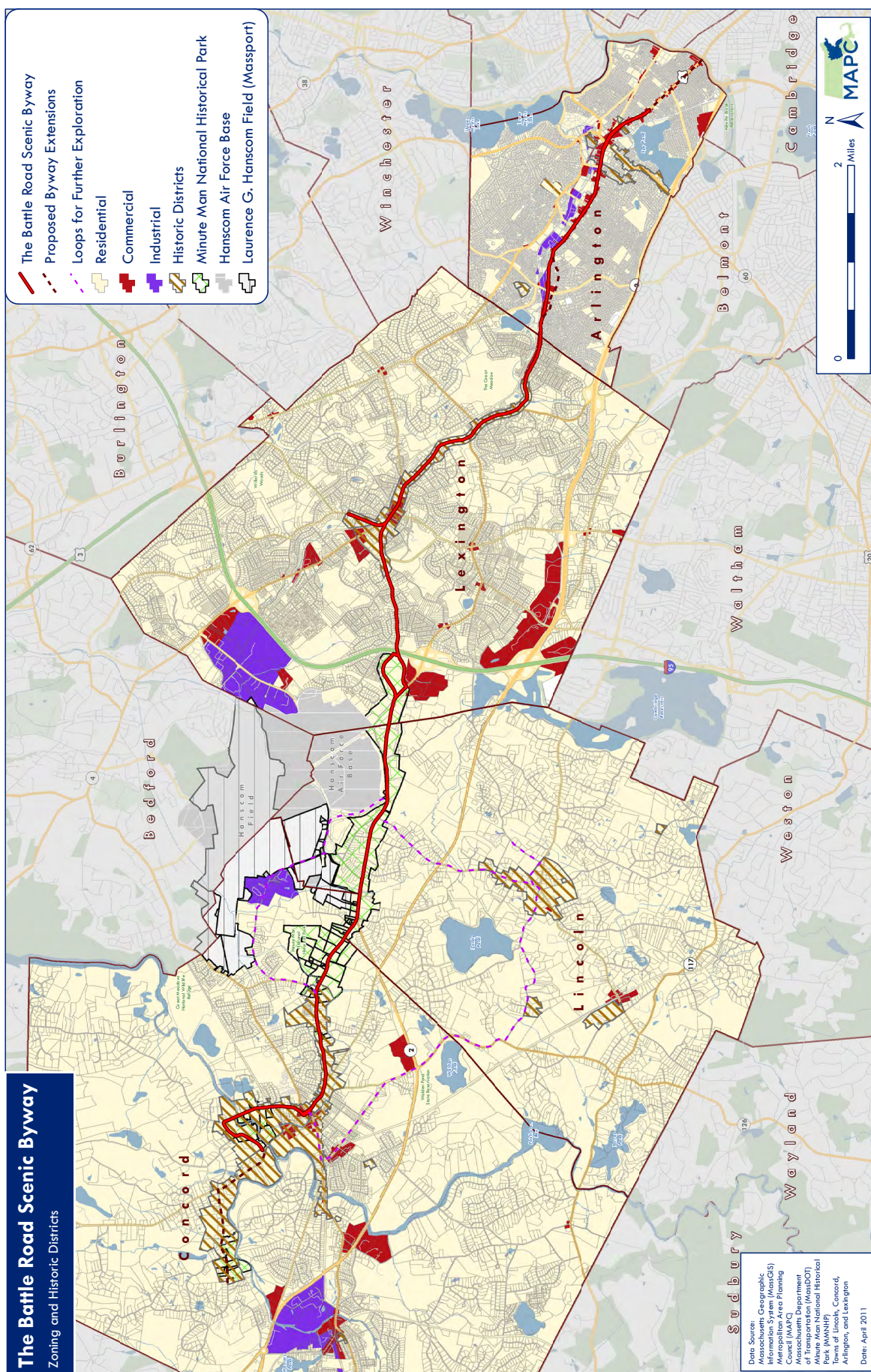
- Conduct a workshop for building department officials and other compliance officials to discuss best practices for sign application review and enforcement of sign bylaws.

As noted in Section 2.0 Compliance with Outdoor Advertising Regulations, sign control is successful along the Battle Road Scenic Byway. There are no billboards along the Byway; they have not been allowed by either State or local regulation for the past 30 years in the Byway communities. On-premises signage is controlled through zoning and/or Historic District regulations.

# Map: Generalized Land Use, Environmental Characteristics, and Flood Zones



# Map: Zoning and Historic Districts



## 5. TOURISM AND BYWAY PROMOTION

This chapter lists visitor sites and resources in each town along the Battle Road Scenic Byway, describes local organizations that promote tourism along the Byway, documents previous tourism-related studies pertaining to this corridor, and references promotions, special events, and interpretive activities that occur along the corridor. Many of the resources and events listed in this chapter are described in greater detail in Chapter 2: Intrinsic Qualities Management. This chapter concludes with several recommendations that will promote the Battle Road Scenic Byway as a destination and will enhance the Byway visitor experience.

### 5.1. Existing Tourism Conditions

#### Battle Road Scenic Byway visitor sites and resources

Many of the intrinsic resources described in Chapter 2: Intrinsic Qualities are places that one can visit or are resources that may be utilized by tourists. These resources are described in greater detail in the Intrinsic Qualities chapter.

#### Byway visitor sites and resources in Arlington

- Alewife Brook Reservation
- Capitol Theatre
- Spy Pond and Spy Pond Park
- Regent Theatre
- Jefferson Cutter House/Cyrus E. Dallin Museum
- Uncle Sam Memorial Statue
- Minuteman Bikeway
- Old Burying Ground
- Jason Russell House/George A. Smith Museum
- Old Schwamb Mill



#### Byway visitor sites and resources in Lexington

- Minuteman Bikeway
- Wilson Farm
- Liberty Ride
- National Heritage Museum
- Tower Park
- Munroe Tavern
- Belfry Hill/Belfry Tower
- Lexington Battle Green
- Lexington Visitor Center
- Buckman Tavern
- Hancock-Clarke House
- Old Burying Ground
- Minute Man National Historical Park
- Fiske Hill



#### Byway visitor sites and resources in Lincoln

- Minute Man National Historical Park
- Minute Man Visitor Center
- Paul Revere Capture Site
- Captain William Smith House
- Ephraim Hartwell Tavern
- Battle Road Trail
- Bloody Angle
- DeCordova Museum (on loop)
- Gropius House (on loop)



## Byway visitor sites and resources in Concord

- Minute Man National Historical Park
- Meriam's Corner
- The Wayside House and Barn
- Orchard House
- Concord Museum
- Ralph Waldo Emerson House
- Concord Art Association
- Old Hill Burying Ground
- Author's Ridge at Sleepy Hollow Cemetery
- Colonial Inn
- Old Manse
- North Bridge
- North Bridge Visitor Center at Buttrick Mansion
- Drinking Gourd Project African American and Abolitionist Heritage tour
- South Bridge Boat House
- Concord Visitor Center (on loop)
- Thoreau's Path on Brister's Hill (on loop)
- Walden Pond (on loop)
- Thoreau Farm (on loop)



## Tourism organizations for Byway visitors

### Arlington

#### Arlington Committee on Tourism and Economic Development

On April 12, 2010, the Arlington Board of Selectmen created a new Town Committee, the Scenic Byway/Tourism/Economic Development Committee, which was later renamed the Arlington Committee on Tourism and Economic Development. They appointed eleven members for a three-year term and two associate members for open terms.<sup>1</sup> The composition of the committee includes two Selectmen, the Planning Director, a member of the Arlington Redevelopment Board, a member of the Arlington Cultural Council, a member of the Arlington Historical Commission, a member of the Chamber of Commerce, a member of the School Committee, and others.<sup>2</sup> Part of the impetus for creating this committee was the designation of the Battle Road Scenic Byway and the creation of this Corridor Management Plan.

#### Arlington Historical Society

The Arlington Historical Society preserves and operates the Jason Russell House, the George A. Smith Museum, and the George A. Smith and Arlington Historical Society collections. Arlington Historical Society promotes Arlington's history and disseminates historical information about the Town. They offer a lecture series and provide tours of the Jason Russell House.



#### Arlington Chamber of Commerce

The Arlington Chamber of Commerce provides resources and programs to member businesses to help strengthen the business environment in Arlington.<sup>3</sup> Among its programs are the Storefront Improvement Program (described later in this chapter) and the Shop Arlington First initiative. Shop Arlington First is a gift

<sup>1</sup> (Selectmen's Minutes 04-12-10, 2010)

<sup>2</sup> (Lexington: Birthplace of Liberty, 2010-2011 Visitors Guide and Map, 2010)

<sup>3</sup> (Arlington Chamber of Commerce)

certificate program designed to promote local businesses and to boost the local economy. As of October 2010, there were approximately 70 participating businesses, and about 60% of these were located along the Battle Road Scenic Byway on Massachusetts Avenue, which is the primary commercial spine of Arlington.<sup>4</sup>

## Lexington

### Tourism Committee

The Town of Lexington Tourism Committee works to enhance and promote tourism in Lexington. The committee works with Lexington Chamber of Commerce, Lexington Historical Society, the National Park Service, the National Heritage Museum, and Freedom's Way Heritage Association to "ensure a cohesive tourism experience." The current committee charge was adopted by the Lexington Board of Selectmen in November 2001. The committee may include 7 to 12 members for one-year terms. Membership positions include a member of the Chamber of Commerce, a member of the Historical Society, a representative from the National Park Service, a representative from the National Heritage Museum, a representative from Freedom's Way Heritage Association, a Selectman Liaison, and interested Lexington residents.<sup>5</sup>

The Lexington Tourism Committee maintains the Tour Lexington website and runs the Liberty Ride. Additionally, the Tourism Committee has been developing the *Lexington Battle Green Area Draft Master Plan*. The plan will be presented to, and approved by, the Town of Lexington Selectmen in spring 2011.



### Lexington Historical Society

The Lexington Historical Society "preserves and celebrates Lexington's history, with a special emphasis on the town's important role in the beginning of the American Revolution." With a mission of being "a premier interpreter of the events of April 1775," the Lexington Historical Society offers educational programs, tours, and other interpretive activities for visitors and students of all ages.

The Society maintains a website, FIRST SHOT: The Lexington Revolutionary Experience, which includes suggested one-day and half-day itineraries for visitors to Lexington, as well as information about the programs it offers, maps, and information about places to visit and shop while in Lexington. Lexington Historical Society offers educational programs at Lexington Depot, historic house museum tours of Buckman Tavern, Munroe Tavern, and Hancock-Clarke House, guided ninety-minute walking tours of Lexington Center, and a research library. A video entitled *First Shot: The Day the Revolution Began* was created for the Lexington Historical Society, which can be viewed at each of the historic house museums it manages.<sup>6</sup>

### Lexington Celebrations Committee

The Town Celebrations Committee is "charged with planning and carrying out the proper observance of Patriots Day and all such holidays and special events as the Board of Selectmen may designate from time to time."<sup>7</sup> The committee is appointed by the Board of Selectmen and has eleven full members for three-year terms and up to fifteen subcommittee members for one-year terms.

### Battle Green Guides

Battle Green Guides are staff of the Town of Lexington. These guides wear colonial period costumes and offer free tours of Lexington Battle Green. They provide detailed accounts of the events of April 19, 1775 and offer information on Lexington's history and attractions.



<sup>4</sup> (Shop Arlington First)

<sup>5</sup> (Town of Lexington, MA)

<sup>6</sup> (Lexington Historical Society)

<sup>7</sup> (Town of Lexington, MA)

## Lexington Chamber of Commerce

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The Lexington Chamber of Commerce offers gift certificates that can be used at over 80 businesses in Lexington. It offers a number of services for its member businesses, such as technical assistance on business topics, a Member-to-Member Discount Program, and listing on its website and in its Annual Member Directory. The Chamber of Commerce operates the **Lexington Visitors Center**, which is open 362 days a year.

## Lincoln

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Although Lincoln hosts a number of tourist attractions, the town does not have a Tourism Committee or a Chamber of Commerce to manage tourism activities. The Town website has a Visitor Information page, which includes links to the town's attractions.

## Concord

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### Concord Chamber of Commerce

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The Concord Chamber of Commerce “is dedicated to promoting and serving business, supporting tourism and fostering a strong economic climate, all consistent and in harmony with the character and culture of Concord.”<sup>8</sup> Visitor information, including direction, information about arts and culture, food, historic sites and museums, lodging, recreation, shopping, tours, transportation, commuter rail, a walking map, and other resources are provided on the Concord Chamber of Commerce's website. The Concord Chamber of Commerce operates the Concord Visitor Center at 58 Main Street in Concord Center. The visitor center, open from April through October, 10:00am-4:00pm, has public restrooms and offers guided tours.

### Concord Historical Collaborative

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The Concord Historical Collaborative is a joint effort by existing organizations to coordinate efforts and activities in Concord to present the town's rich history through diverse educational activities. The collaborative provides mutual support, shares resources and promotes cooperative efforts, while maintaining the unique missions of each member organization.<sup>9</sup>

### Concord Celebrations Committee

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A committee of the town of Concord responsible for coordination and planning of events such as the Patriot's Day parade, Meriam's Corner Exercise, Veteran's Day flag retirements, etc.<sup>10</sup>

### Concord Guides Walking Tours

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Concord Guides Walking Tours is an organization that offers licensed, local guides that lead two-hour walking tours as well as guides for bus and van tours. Advance registration is required. The walking tours meet in front of the Colonial Inn at 48 Monument Square and highlights Concord's Colonial, Revolutionary, literary, Native American, and natural heritage as well as its present-day small town spirit. The organization maintains a website ([www.concordguides.com](http://www.concordguides.com)) and a pamphlet that both include contact information and details regarding the tours offered. The Founding Director of the organization also wrote a history/guidebook called *Revolutionary Boston, Lexington, and Concord: The Shots Heard 'Round the World!* which can be purchased in stores and online. More information on the guidebook is available at [www.concordpress.com](http://www.concordpress.com).<sup>11</sup>



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<sup>8</sup> (Concord Chamber of Commerce, 2010)

<sup>9</sup> (The Concord Historical Collaborative)

<sup>10</sup> (Town of Concord, MA)

<sup>11</sup> (Concord Guides)

## Pedicabs

As of May 2011, the Town of Concord Board of Selectmen is considering allowing pedicabs (bicycle rickshaws) to operate in Concord and rules and orders for pedicabs are under development.<sup>12</sup>

## Minute Man National Historical Park

### Minute Man National Historical Park/National Park Service

Minute Man National Historical Park offers a website and two visitor centers, the **Minute Man Visitor Center** near the Lexington and Lincoln town line on Route 2A and the **North Bridge Visitor Center** at 175 Liberty Street in Concord. The park offers educational programming and interpretive materials to enrich the visitor experience.

### Friends of Minute Man National Park

The Friends of Minute Man National Park is a member-based nonprofit organization dedicated to supporting Minute Man National Historical Park. The mission of this organization is “to preserve the birthplace of the American Revolution and inspire visitors to learn the causes, events, and continuing impact of the War and its principles of Liberty and Democracy. The Friends work side-by-side with the Park and supplement the Park’s work with volunteer and financial resources.”<sup>13</sup> Programs offered by the organization include lectures, concerts, educational programs, and living history experiences. The group maintains a website, [www.friendsofminuteman.org](http://www.friendsofminuteman.org), as well as a blog and Facebook page. A recent project of the Friends of Minute Man National Park was to support the rehabilitation of Meriam House.<sup>14</sup>



## Tourism-related studies of the Byway area

### Town of Arlington Commercial Revitalization Initiative 2008

In 2008, the Arlington Redevelopment Board (ARB), Town Manager, and the Department of Planning and Community Development undertook a Commercial Revitalization Initiative to encourage and facilitate street and storefront improvements in the Town’s commercial districts. Town visioning sessions in 2007 highlighted commercial revitalization as a primary concern for the town. The 2008 Commercial Revitalization Initiative identified four areas of focus for commercial revitalization improvements: public spaces, storefronts, signage, and parking management.<sup>15</sup>

With regards to tourism development, the initiative identified a number of future projects for the Town to pursue. Among these was “improving and developing our historic properties such as the Dallin Museum, Jason Russell House, and the Schwamb Mill; creating facilities to accommodate tourism; and marketing Arlington’s colonial history.”<sup>16</sup> Other future projects include a study of the business mix, retention, and attraction, increased collaboration with the Chamber of Commerce to market Arlington’s assets, creating local programs in each of the three business centers along Massachusetts Avenue (East Arlington, Arlington Center, and Arlington Heights), studying the potential of Business Improvement Districts and zoning overlay districts, reimagining Arlington’s industrial zones, and continued infrastructure improvement.

<sup>12</sup> (Woodward, 2010-2011)

<sup>13</sup> As stated on a membership registration form

<sup>14</sup> (Friends of Minute Man National Park, 2011)

<sup>15</sup> (Arlington’s Commercial Revitalization Initiative, 2008)

<sup>16</sup> (Arlington’s Commercial Revitalization Initiative, 2008)

## Town of Arlington Commercial Development Plan 2010

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Building upon the 2008 Commercial Revitalization Initiative, the Town retained Larry Koff and Associates in 2009 for a Commercial Development Study. This study, completed in July 2010, included recommendations for Arlington's three main commercial districts along Massachusetts Avenue: East Arlington, Arlington Center, and Arlington Heights. Additionally, the study includes recommendations for three key development sites and a marketing and promotion strategy.<sup>17</sup>

In *Town of Arlington: A Vision and Action Plan for Commercial Area Revitalization*, Arlington Heights is described as a "neighborhood center for basic shopping needs" that is "in the best physical condition" as compared with the other Arlington commercial districts. Concerns for Arlington Heights include "business organization and retention."<sup>18</sup>

East Arlington, with Capitol Square as its focal point, is described as a "center for creative arts and crafts, cinema, boutiques and eateries, and local convenience shopping."<sup>19</sup> Concerns for this district include the physical condition of signage and façades, as well as parking management.

Issues and Opportunities for Arlington Center are described in great detail in the report. This section of Massachusetts Avenue includes several sub-districts and improvements in continuity are recommended. Specific improvement projects throughout this section of Arlington, from approximately Pond Street to Mystic Street, a block or two on either side of Massachusetts Avenue including along the Minuteman Bikeway, are highlighted in the plan.

In addition to specific projects and strategies for Arlington Center, East Arlington, and Arlington Heights, the report highlights "Mass. Ave. Corridor Opportunities" including the Battle Road Scenic Byway, the proposed Mill Brook Overlay District, and a proposed wayfinding program.<sup>20</sup>

The Mill Brook Overlay District will connect Arlington's open spaces and create a pedestrian-friendly corridor throughout the Town. This will not only benefit residents and businesses already in Arlington, but will make Arlington a more attractive destination for visitors.

The report recommends supporting the Battle Road Scenic Byway "through installation of banners, information kiosks, tour bus parking and facilities, and tour organization" to "attract additional tourists to the three village centers."<sup>21</sup>

Undertaking a wayfinding program of "district towers and district banners in addition to highlighting district landmarks" was recommended in order to "highlight the districts as a cohesive series of destinations for vehicles and pedestrians."<sup>22</sup>

The *Phase III: Marketing and Promotion* strategies assessment for the Commercial Development Plan included a description of retail centers that compete with Arlington's commercial districts, an analysis of retail demand, supply, and leakage in Arlington, trade areas and niche markets, rents, the mix of uses, and analysis and strategies for Arlington Center, East Arlington, and Arlington Heights.

Arlington Center is considered "the commercial district that has the greatest potential to concentrate on tourism as a generator of economic development."<sup>23</sup> In order to promote tourism, the *Marketing and Promotion* strategy recommends improvements in marketing and awareness, support facilities such as a welcome center with public restrooms and information, and participation in regional and state tourism promotion programs.<sup>24</sup> Arlington's historic and cultural resources could become more popular destinations with investments that make them easier to get to, available at convenient hours for tourists, accessible to people with limited ability to walk, see, hear or understand English, part of a trail of related attractions, educational for all ages, and supportive of research projects.<sup>25</sup>

According to the *Marketing and Promotion* strategy, "tourists come to see in real life what they have learned about all their lives." If Arlington can capitalize on its role in the American Revolution and "increase its visibility along the Battle Road Scenic Byway, which connects the Town to other more well-known historic towns, tourism can become a more reliable source of visitors."<sup>26</sup>

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<sup>17</sup> (Commercial Revitalization Study 2010)

<sup>18</sup> (Larry Koff & Associates, July 14, 2010, p. 6)

<sup>19</sup> (Larry Koff & Associates, July 14, 2010, p. 6)

<sup>20</sup> (Larry Koff & Associates, July 14, 2010, pp. 25-26)

<sup>21</sup> (Larry Koff & Associates, July 14, 2010, p. 25)

<sup>22</sup> (Larry Koff & Associates, July 14, 2010, p. 26)

<sup>23</sup> (Larry Koff & Associates, 2010, p. 16)

<sup>24</sup> (Larry Koff & Associates, 2010, p. 17)

<sup>25</sup> (Larry Koff & Associates, 2010, p. 18)

<sup>26</sup> (Larry Koff & Associates, 2010, p. 19)

Tourism facilities and resources in Arlington include one hotel, one bed and breakfast, several restaurants, 62 sites “on, or nominated for” the National Register of Historic Places, and the Minuteman Bikeway which has seen as many as 1,500 visitors per day.

The *Phase III: Development Sites Overview* includes an overview of the hotel market. The analysis states that Arlington has a small hotel market, as it is not located as close to MBTA subway stations, nor is it immediately adjacent to the office parks along Route 128.<sup>27</sup>

## Lexington Battle Green Area Master Plan

The Lexington Tourism Committee worked with Lucinda A. Brockway of Past Designs LLC to develop a master plan for Lexington Battle Green and the surrounding area. The final master plan is on the Town of Lexington website.<sup>28</sup>

According to the Executive Summary, the master plan “offers recommendations for defining the Battle Green Area, unifying its design standards, and providing guidelines for its long-term stewardship.” It’s intended as a five to ten year plan. Among the recommendations is to broaden “the definition of the Battle Green to incorporate the other public spaces around the Green,” such as Belfry Hill, Ye Olde Burying Ground, Buckman Tavern, Lexington Visitor Center and streets and streetscapes around the Green. The plan proposes a Battle Green Area Advisory Committee to work with the Board of Selectmen and Historic Districts Commission to implement plan recommendations. The plan seeks to strike a balance between recognizing the Lexington Battle Green as a hallowed, sacred ground and its role in present day as Lexington’s Town Common.

## Minute Man National Historical Park visitor statistics

Minute Man National Historical Park receives over 1,000,000 visitors a year.<sup>29</sup> MMNHP records the number of visitors each month to the North Bridge Visitor Center, the Minute Man Visitor Center, Hartwell Tavern, the Wayside, North Bridge, Meriam House, and the Captain William Smith House. North Bridge receives the most visitors annually, followed by the Minute Man Visitor Center.

## 2007 Minute Man National Historical Park Visitor Study

During August 1-7, 2007, Minute Man National Historical Park conducted a visitor study. The study was distributed to 530 visitor groups and included 359 groups that responded. The survey collected demographic information, trip/visit characteristics and preferences, ratings of visitor services, facilities, elements, attributes and resources, overall quality, and visitor comments.<sup>30</sup>

Some of the findings of the report are as follows:

- A little less than half of the respondents were in groups of one to two visitors, and a little more than half were in groups of three or more. Two-thirds of the visitor groups were families. Only 3% of visitors were part of a larger organized tour group.
- Of the visitors recorded, 24% were 15 years old or younger, 14% were 16-35 years old, 16% were 36-45 years old, 35% were 46-65 years-old, and 11% were 66 years or older.
- Visitors from the United States included 36% from Massachusetts, 7% from California, and 6% from 39 other states and Washington, D.C.
- 6% of the visitors were from outside the United States. Of these international visitors, 32% were from the United Kingdom, 24% from Canada, 11% from Japan, and the remaining 33% were from eleven other countries: Scotland, France, Australia, China, Germany, Israel, Italy, New Zealand, Norway, Sweden, The Netherlands, and Morocco.

<sup>27</sup> (Larry Koff & Associates, 2010)

<sup>28</sup> (Town of Lexington Tourism Committee, 2011)

<sup>29</sup> (Sideris, 2009-2011)

<sup>30</sup> (Le, Holmes, Papadogiannaki, Lackey, & Hollenhorst, 2008)

- Of the 1043 individuals who responded to the question, 62% were at MMNHP for their first visit, and 7% were frequent visitors, who visit MMNHP weekly or more often.
- Most visitors, 98%, preferred using English for speaking while visiting places like MMNHP, and 99% preferred English for reading. Some of the languages spoken by visitor groups included Chinese, Japanese, and Korean, as well as bilingual groups that spoke German, Spanish, or French in addition to English. For reading, some visitors preferred reading in Japanese or Chinese and some preferred bilingual materials in Spanish and English. 16% of the visitors indicated that they would like translation into languages other than English.
- Most visitors, over 90%, obtained information about MMNHP prior to visiting.
- Of the visitors who were not from the local area, 47% were primarily there to visit MMNHP and 17% planned to visit other attractions in the area. Some of the other reasons for traveling to the area included to visit friends or family in the area, or for business purposes. Those who had visited other sites visited Lexington Battle Green (57%), Walden Pond (32%), Orchard House (27%), The Old Manse (24%), Buckman Tavern (24%), Concord Museum (22%), and other attractions (22%).
- Most visitors arrived at MMNHP from their overnight accommodations or home using an automobile: 74% used a private vehicle and 19% used a rental vehicle. Other modes of transportation included walking (5%), bicycling (2%), motorcoach or tour bus (2%), and public transportation (1%), hotel shuttle (<1%), and canoe or kayak (1%).
- Most visitors visited MMNHP for one day, and 9% visited on more than one day. Over half of the visitors spent two hours or less at MMNHP, and 24% spent more than four hours there.
- The most commonly used visitor services and facilities were restrooms, park brochure/map, indoor exhibits, and trails.
- The services and facilities that visitors considered important to their visitor experience included ranger-led programs and talks, the Minute Man Visitor Center theater presentation, directional signs to find park sites, and outdoor exhibits.
- Most visitor groups (94%) rated the overall quality of services, facilities, and recreational opportunities at MMNHP as “very good” or “good.”

## Promotions, Special Events, and Interpretive Activities

Interpretive activities along the Battle Road Scenic Byway range from individual interpreters in period costume through large-scale reenactments of the events of April 18-19, 1775. Such special events and other educational and interpretive opportunities are detailed in the Intrinsic Qualities section (Chapter 2) of this document.



## 5.2. Recommended Tourism Strategies

**Coordination:** Use the Battle Road Scenic Byway to promote regional cooperation and partnerships.

**Recommendation:** Ensure that appropriate local boards, committees, departments, organizations, and service providers are involved in projects that the Byway management team undertakes.

- Coordinate Byway projects in Lexington Center with the Lexington Tourism Committee
- Coordinate Byway projects in Arlington with the Arlington Committee on Tourism and Economic Development
- Coordinate with Town Cultural Councils
- Build relationships with local committees dedicated to community beautification such as the Arlington Public Art Committee and the Lexington Conservation Stewards.

**Recommendation:** Provide comment on development regulations, projects and planning efforts that will impact the Battle Road Scenic Byway.

- Support the Lexington Tourism Committee in implementation of the Lexington Battle Green Area Master Plan

**Recommendation:** Evaluate Battle Road Scenic Byway projects and initiatives within the context of regional, state, and federal projects and initiatives.

- Review recent (2010) economic development bill and advocate for tourism policies that will advance Byway goals.

**Outreach and Communication:** Promote and communicate Byway initiatives to local stakeholders, and market the Byway to regional, state, national, and international audiences.

★ **Recommendation:** Create a Battle Road Scenic Byway website and use the Internet and social media to promote the Byway.

- Create a Battle Road Scenic Byway visitor/tourist website that allows users to develop customized itineraries based on their preferred types of accommodations, Byway themes, activities, and tours.
- Consider a Battle Road Scenic Byway blog as part of the Byway website.
- Ensure that the Battle Road Scenic Byway website utilizes user-friendly content management software so it can be easily updated by volunteers without advanced knowledge of web code for editing.
- Ensure that the website is updated regularly, perhaps by hiring a website manager or freelance webmaster.
- Encourage timely submission of events (such as reenactments) along the Byway by cultural organizations, committees, and clubs for posting on the Byway website and other websites.
- Promote reenactment activities along the Byway on Byway website.
- Include links to organizations and venues on the Battle Road Scenic Byway website, and encourage them to link back to the Byway website.
- Ensure that information about the Battle Road Scenic Byway is updated and available on the National Scenic Byways Program website and any other State and Federal Scenic Byways websites and materials.

★ = Indicates one of this plan's top eleven recommendations, see Implementation Chapter for more information

- Create fan pages, groups, and news feeds to promote the Byway on social networking sites such as Facebook, Twitter, LinkedIn, and Foursquare.
- Encourage Byway businesses, organizations, and destinations to promote the Byway with a “badge” linking to the Byway website and/or Facebook, Twitter, LinkedIn, Foursquare and other Battle Road Scenic Byway pages/groups on social networking websites.

**Recommendation: Create engaging informational materials to promote the Byway.**

- Develop maps that highlight different destinations and different themes.
- Include bicycle facilities and places to stay on tourist maps.
- Ensure that information about the Battle Road Scenic Byway is available through a number of sources and media.
- Highlight what makes each Town along the Byway unique, and what ties them together on the Byway website as well as in promotional materials.
- Include information about farmstands and farmers markets along the Byway in promotional materials.
- Promote farmers markets and other local products markets on the Massachusetts Department of Agriculture’s MassGrown website.

**★ Recommendation: Work with the tourism and hospitality industry to promote the Byway.**

- Hire a tourism marketing consultant to help synthesize the multiple Byway themes into a coherent action plan to promote and manage Byway tourism.
- Communicate Byway promotion efforts with area Chambers of Commerce including but not limited to: Arlington Chamber of Commerce, Concord Chamber of Commerce, Lexington Chamber of Commerce, Middlesex West Chamber of Commerce, Greater Boston Chamber of Commerce, Greater Merrimack Chamber of Commerce, and Metrowest Chamber of Commerce.
- Communicate Byway promotion efforts with Convention and Visitors Bureaus including but not limited to the Greater Merrimack Valley Convention and Visitors Bureau, Greater Boston Convention and Visitors Bureau, and regional tourism organizations that may be created as a result of the economic development bill, such as a MetroWest Visitors Bureau.
- Communicate Byway promotion efforts with the Massachusetts Office of Travel and Tourism.
- Propose Battle Road Scenic Byway getaway packages to the Massachusetts Office of Travel and Tourism and other organizations that may offer tourism packages.
- Get involved with the US Travel Association (utilize their research, attend events, connect to national tourism network).
- Coordinate with Tourism/Travel agencies in Boston.
- Communicate Byway offerings to area hotels.
- Work with area hotels, travel agencies, business organizations to create travel packages for the Byway.
- Train “ambassadors” to promote the Byway to the “visiting friends and relatives market.” Can include real estate agents, businesses, hospitality workers, and others.
- Promote ecotourism on the Byway.

**Recommendation: Promote the local economy by creating incentives to use businesses located along the Battle Road Scenic Byway.**

- Create a Battle Road Scenic Byway visitor card that visitors can have stamped/get points for each time they visit a site on the Byway ~ points could be redeemed for discounts at local businesses or visitor sites.
- Organize a shopping day along the Byway.
- Promote “shop local” efforts that would bring additional business to the Byway.
- Use social media/internet-based incentive programs such as Foursquare and Groupon to attract business to the Byway. Foursquare and applications like it allow visitors to “check-in” to the business when they visit, and businesses and visitor attractions can offer specials to those who check-in and/or for repeat visitation.
- Create a Byway restaurant and shopping guide.
- Involve local arts and cultural organizations, such as the Lexington Arts and Crafts Society, in Byway promotion and special events.
- Work with local galleries and arts organizations to create arts events such as open studio nights and art walks.
- Consider expanding opportunities for food and beverage sales, including sale of alcohol.
- Connect Byway businesses and organizations with local farms to provide food at events and to use in restaurants/cafés.
- Connect Byway visitors to canoe and kayak rental facilities/businesses.
- Connect Byway visitors to bicycle rental facilities/businesses.

**Recommendation: Market and advertise the Byway.**

- Develop a Byway marketing plan.
- Promote the Byway at retail centers such as shopping malls.
- Promote the Byway at area farmers’ markets.
- Promote/advertise Byway on MBTA trains, buses, subway, and at stations.
- Get involved with travel and trade shows to promote the Byway.
- Promote/advertise Byway through media ad buys on radio and television.
- Promote/advertise Byway through media ad buys in local, regional papers and magazines.
- Promote/advertise Byway at regional colleges and universities.

**Identity:** Create a distinct identity for the Battle Road Scenic Byway as a destination.

★ **Recommendation:** Develop a Battle Road Scenic Byway logo and branding scheme that will be used in Byway print and online materials as well as along the corridor itself.

- Develop a Battle Road Scenic Byway logo (or series of related logos).
- Develop guidelines for use of the Byway logo(s) and branding. Consider how the logo(s) and branding can be used in print materials, on the internet, as well as on signs along the Byway. Use the branding scheme to promote the Byway. Encourage users of the brand to follow the guidelines to ensure that the brand is used appropriately.
- Sustain the Battle Road Scenic Byway brand by regularly updating print and online communications, as well as ensuring that signs along the Byway are up to date and in good repair.

**Continuity and Beautification:** Improve visual continuity of the Battle Road Scenic Byway, enhance its scenic qualities, and create an uninterrupted visitor experience.

**Recommendation:** Strengthen visual character of Byway through land management and encourage land uses compatible with Byway goals.

- Develop strategy for converting empty storefronts into attractive spaces while these storefronts are between/without tenants.
- Support local storefront improvement initiatives.

**Accessibility:** Make the Byway accessible to a diversity of potential visitors, including people of all ages, abilities, incomes, and ethnicities. Ensure that the Byway can be accessed by pedestrians, bicyclists, mass transit riders, and motorists.

**Recommendation:** Encourage a more diverse audience of visitors to the Byway and ensure that visiting the Byway can be an enjoyable and educational experience for all.

- Study the affordability of visiting the Byway and its attractions.
- Support interpretation of multiple Byway themes, as a diversity of themes could attract a greater diversity of visitors.
- Provide visitor information in multiple languages at select locations.
- Design facilities so all visitors have the same opportunity to enjoy the Byway experience.

**Visitor Experience:** Ensure that the Byway is an exciting place to visit that has adequate traveler facilities and is easy and safe to navigate.

★ **Recommendation:** Develop facilities that will enhance the Byway visitor experience.

- Inventory and map existing visitor facilities (restrooms, visitor centers, etc.) to help assess needs.
- Ensure there are adequate and easily accessible restroom facilities along the Byway.
- Create visitor facilities and promote the Byway along the Minuteman Bikeway and other bicycle/pedestrian paths adjacent to the Byway.

- Establish Battle Road Scenic Byway visitor center(s) or kiosk(s) at major Byway entrance points, including at the Arlington town line near Alewife Brook Reservation.
- Establish an Arlington Visitor Center in Arlington.
- Encourage visitor attractions along the Byway to coordinate operating hours and to be open at hours convenient to tourists.

**Recommendation: Use mobile technologies to promote the Byway and to enhance the visitor experience.**

- Consider the best ways to use ever-evolving mobile technologies to enrich the visitor experience.
- Develop wayfinding applications (“apps”) for Internet-enabled cellular phones (smartphones), GPS devices, and other mobile technologies that can be used create custom tours of the Byway, stream audio, video, and imagery to tell the Byway story, and collect visitor data.

**Recommendation: Develop municipal staff, board, and committee capacity for tourism planning and management.**

- Increase tourism planning expertise of Town Staff, whether through new hiring or additional job roles of existing staff.
- Support the recently-created Town of Arlington Committee on Tourism and Economic Development as it undertakes projects that advance Byway goals.
- Create a tourism training program for volunteers and staff.

**Recommendation: Accommodate tour buses without detracting from the Byway’s intrinsic qualities.**

- Develop guided tour or trolley service(s) that cover the entire length of the Byway, which may be an expansion of existing services such as the Liberty Ride, or may be new service(s).



## 6. IMPLEMENTATION

This chapter outlines the next steps for the Battle Road Scenic Byway after this Corridor Management Plan is approved by the towns of Arlington, Lexington, Lincoln, and Concord, the Minute Man National Historical Park, the Metropolitan Area Planning Council, Massachusetts Department of Transportation, and the Federal Highway Administration. A temporary Battle Road Scenic Byway Task Force will assume responsibility for moving this plan from approval to implementation, and will do so by proposing a permanent management structure and developing a Memorandum of Understanding for each entity to adopt. Eleven high-priority recommendations have been identified, which can inform the work plan developed by the Byway Task Force and subsequent management entity. This chapter concludes with a comprehensive list of the recommendations and action steps identified to advance each of the nine Corridor Management Plan goals, culling together the recommendations and action steps identified in each of the previous chapters in this document.

### 6.1. Battle Road Scenic Byway management entity

After the Battle Road Scenic Byway Corridor Management Plan is adopted, a management entity must be established to carry forward the recommendations identified in the plan, and an interim work plan will need to be established. The Battle Road Scenic Byway Working Group proposes the following next steps for establishing a Battle Road Scenic Byway management structure.

By June 15, 2011, a temporary **Battle Road Scenic Byway Task Force** will be established, similar in structure to the Working Group that developed this Corridor Management Plan. The Byway Task Force will consider alternative management structures and propose a management structure and work plan for the Battle Road Scenic Byway once the Corridor Management Plan is adopted. It is expected that the Byway Task force will dissolve by June 30, 2012, by which time it will have recommended a permanent organizational structure for the Battle Road Scenic Byway. Members of this Byway Task Force should include:

- 2 representatives from each town
- 1 Board of Selectmen liaison from each town
- 1 representative from the Minute Man National Historical Park (MMNHP)
- 1 representative from the Metropolitan Area Planning Council (MAPC)
- 1 non-voting representative from the Massachusetts Department of Transportation (MassDOT) Planning Division
- 1 non-voting representative from the MassDOT Highway Division

The Battle Road Scenic Byway Task Force will propose the structure, membership, and responsibilities of a management entity or propose some other means to carry out the Battle Road Scenic Byway Corridor Management Plan.

Any recommendations made by the temporary or permanent management entity that involve regulatory change or that require municipal funding must be approved by the appropriate Town entities. Any decision or project that would normally go before other Town boards and committees, including but not limited to Boards of Selectmen, Planning/Redevelopment Boards, Historic District Commissions, Tourism Committees, and Conservation Commissions, would continue to do so under this process.

The management entity may choose to incorporate as a nonprofit organization, or may elect not to. The Byway Task Force could make a recommendation regarding incorporation, or this decision could be reserved for a future date.

The management entity may consider whether to hire a Byway Coordinator and dedicated Byway staff and how such positions may be funded. The Byway Task Force should propose strategies for involving additional stakeholders, such as business owners, institutions, residents, and the general public. For example, the Byway Task Force could propose the structure, membership, and responsibilities of an advisory committee and/or ad-hoc committees that may form based on

specific topics or projects.

The Byway Task Force should develop a Memorandum of Understanding that could be adopted and signed by the appropriate authority from each of the Towns, Minute Man National Historical Park, Metropolitan Area Planning Council, and the Massachusetts Department of Transportation.

The Byway Task Force should initiate a process that enables the application for grant funding for the next round of Federal or State Scenic Byway Grants.

The fiscal agent for the Battle Road Scenic Byway is MAPC, the Regional Planning Agency for the Battle Road Scenic Byway, which will become the fiscal agent to receive and manage grant funding and to manage grants unless superseded by a Memorandum of Understanding that specifies otherwise.

The Byway Task Force should develop a **menu of funding sources** that may be used to support the Battle Road Scenic Byway. This would be based on the template provided in this plan, and would continue to evolve throughout the implementation of the plan.

## 6.2. Top eleven recommendations

The following list of recommendations emerged as the highest priorities for implementation of the Battle Road Scenic Byway project goals. This top-eleven list can inform the work plan that will be developed by the Byway Task Force.

1. Establish a Battle Road Scenic Byway management entity.
2. Seek designation of additional sections to become part of the Battle Road Scenic Byway.
3. Seek federal designation of the Byway as a National Scenic Byway or All-American Road.
4. Develop a Battle Road Scenic Byway logo and branding scheme that will be used in Byway print and online materials as well as along the corridor itself.
5. Create a Battle Road Scenic Byway website and use the Internet and social media to promote the Byway.
6. Ensure local regulations and development decisions that affect the Battle Road Scenic Byway corridor and its environs protect and enhance the intrinsic qualities of the Byway.
7. Develop landscaping guidelines to buffer or screen land uses that do not contribute to the intrinsic qualities of the Byway.
8. Ensure existing Byway resources are in good repair.
9. Follow context-sensitive roadway design guidelines to preserve the intrinsic qualities of the Byway, provide access to bicyclists and pedestrians, and improve safety and mobility along the roadway.
10. Work with the tourism and hospitality industry to promote the Byway.
11. Develop facilities that will enhance the Byway visitor experience.

## 6.3. Comprehensive list of recommendations

The Battle Road Scenic Byway Corridor Management Plan is intended to provide the framework for maintaining and enhancing the Battle Road Scenic Byway for several years to come. The following pages include goals, recommendations, and action steps for implementing the Battle Road Scenic Byway Corridor Management Plan.

The list is organized by the nine Corridor Management Plan goals outlined in Chapter 1 of this document:

- ★ **Organization:** Identify organizational structure(s) and assign responsibilities for achieving these goals.
- ★ **Coordination:** Use the Battle Road Scenic Byway to promote regional cooperation and partnerships.
- ★ **Stewardship:** Use the Byway designation to promote stewardship of the corridor's historic, natural, scenic, cultural, recreational and archaeological resources and intrinsic qualities. Seek funding and develop new programs to support the Byway's resources and visitor attractions.
- ★ **Education and Awareness:** Increase awareness of the Byway's rich history and promote it as an educational resource.
- ★ **Identity:** Create a distinct identity for the Battle Road Scenic Byway as a destination.
- ★ **Outreach and Communication:** Promote and communicate Byway initiatives to local stakeholders, and market the Byway to regional, state, national, and international audiences.
- ★ **Continuity and Beautification:** Improve visual continuity of the Battle Road Scenic Byway, enhance its scenic qualities, and create an uninterrupted visitor experience.
- ★ **Accessibility:** Make the Byway accessible to a diversity of potential visitors, including people of all ages, abilities, incomes, and ethnicities. Ensure that the entire Byway can be accessed by pedestrians, bicyclists, people with disabilities, mass transit riders, and motorists.
- ★ **Visitor Experience:** Ensure that the Byway is an exciting place to visit that has adequate traveler facilities and is easy and safe to navigate.

Recommendations help to advance project goals. Action steps are projects or other activities that will help advance each recommendation. On the list that follows, goals are shown on the list in yellow, the top eleven recommendations are shown in dark green, and the remaining recommendations are shown in light green. Action steps are shown in white. Note that multiple goals may be advanced by any particular recommendation or action step, but the goal they are listed under is the primary goal advanced by the recommendation.

The chapter in which each recommendation and action step is discussed is indicated with a star underneath the appropriate column in the list. For some recommendations and action steps, a priority, the timeline during which the recommendation or action step will be completed, the parties responsible for completing them and possible funding sources are identified. It is expected that the Byway Task Force and future Byway management entity will continue to fill in and revise this template as implementation proceeds.

	Goals, Recommendations, and Action Steps	Corridor Management Plan Chapter						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
Goal	<b>Organization:</b> Identify organizational structure(s) and assign responsibilities for achieving these goals.										
Recommendation	<b>Establish a Battle Road Scenic Byway management team.</b>						★	Top	Ongoing	Towns, MMNHP, MAPC, MassDOT	TBD
Action Step	The Corridor Management Plan project partners (Arlington, Lexington, Lincoln, Concord, MMNHP, MAPC, and MassDOT) will form an Interim Steering Committee after Battle Road Scenic Byway Corridor Management Plan is adopted.						★	Top	Complete by September 15, 2011	Towns, MMNHP, MAPC, MassDOT	TBD
Action Step	The Interim Steering Committee will propose the structure, membership, and responsibilities of a permanent Battle Road Scenic Byway management team.						★	Top	Complete by June 30, 2012	Interim Steering Committee	TBD
Action Step	The Interim Steering Committee will propose strategies for involving additional stakeholders such as through an advisory committee and/or ad-hoc committees.						★	Top	Complete by June 30, 2012	Interim Steering Committee	TBD
Action Step	The Interim Steering Committee will create a structure to enable the application for grant funding for the next round of grants through the National Scenic Byways Program.						★	Top	Complete by June 30, 2012	Interim Steering Committee	TBD
Action Step	The Interim Steering Committee will identify the fiscal agent for the Battle Road Scenic Byway.						★	Top	Complete by June 30, 2012	Interim Steering Committee	TBD
Action Step	The Interim Steering Committee will develop a menu of funding sources that can be used to support the Battle Road Scenic Byway, which will be maintained and continue to evolve throughout the implementation of the Corridor Management Plan. This menu of funding sources may include all possible funding sources to help preserve and promote the Byway, including federal, state, and local (government) funding, foundation (nonprofit) support, and private (businesses and individuals) support.						★	Top	Complete by June 30, 2012 / Ongoing	Interim Steering Committee	TBD
Action Step	Establish a Memorandum of Understanding (MOU) between the project partners (Arlington, Lexington, Lincoln, Concord, MMNHP, MAPC, MassDOT) regarding each entity's individual role and Byway management structure.						★	Top	Complete by June 30, 2012	Interim Steering Committee	TBD
Action Step	The Battle Road Scenic Byway management team will consider incorporation as a nonprofit organization.						★	Medium	TBD	BRSB	TBD
Action Step	The Battle Road Scenic Byway will consider whether to hire a Byway Coordinator and/or other dedicated Byway staff.						★	Medium	TBD	BRSB	TBD
Recommendation	<b>Seek designation of additional sections to become part of the Battle Road Scenic Byway.</b>	★						Top	Ongoing	BRSB, Massachusetts Legislature	TBD
Action Step	Extend the Byway from its current starting point on Massachusetts Avenue at Tufts Street in Arlington eastward to the Arlington and Cambridge line at Alewife Brook Parkway, westward to Barrett's Farm at 448 Barrett's Mill Road in Concord, and to include Appleton Street from Massachusetts Avenue to Paul Revere Road and Paul Revere Road to Massachusetts Avenue in Arlington.	★						Top	Underway in 2011 - 2012 Legislative Session, Bill H01779	BRSB, Massachusetts Legislature	TBD

Goal: Organization

	Goals, Recommendations, and Action Steps	Corridor Management Plan Chapter						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
Goal	<b>Organization:</b> Identify organizational structure(s) and assign responsibilities for achieving these goals.										
Action Step	Explore options for officially designating off-road trails and bikeways that provide bicycle and pedestrian access to the Byway as part of the Byway. For example, designate the Minuteman Bikeway until Lexington Center, the Minuteman Connector in West Lexington, the Battle Road Trail, and the Minuteman Extension in Concord.	★						Medium	TBD	BRSB	TBD
Action Step	Consider pursuing designation of Byway "loops" such as a Northern loop along Virginia Road that includes Thoreau's birth site and birth home, and a Southern loop that includes Concord Center, Walden Pond, and Flint's Pond	★						Medium	TBD	BRSB	TBD
Action Step	Once continuity along the Battle Road Scenic Byway in the four towns is improved and well-recognized, consider options for extending the Byway beyond the four towns to other cities and towns.	★						Distant	TBD	BRSB, surrounding municipalities	TBD
Recommendation	<b>Seek federal designation of the Battle Road Scenic Byway as a National Scenic Byway or All-American Road.</b>	★						Top	TBD	BRSB	TBD

Goal: Organization

	Goals, Recommendations, and Action Steps	Corridor Management Plan Chapter						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
Goal	<b>Coordination:</b> Use the Battle Road Scenic Byway to promote regional cooperation and partnerships.										
Recommendation	<b>Ensure that appropriate local boards, committees, departments, organizations, and service providers are involved in projects that the Byway management team undertakes.</b>			★	★	★	★				
Action Step	Coordinate with Departments of Planning and Public Works in each town regarding streetscape improvements			★							
Action Step	Consider implementing a review process for roadway modification projects, to ensure that projects follow context-sensitive roadway design guidelines.			★							
Action Step	Involve relevant Town boards and commissions, such as Historic Districts, Planning, Selectmen, Conservation, and Tourism Committees in developing Byway projects.				★						
Action Step	Consider implementing a review process for development and redevelopment projects abutting and/or visible from the Byway, to ensure these projects follow design, landscaping and any other guidelines related to the Byway.				★						
Action Step	Coordinate Byway projects in Lexington Center with the Lexington Tourism Committee					★					
Action Step	Coordinate Byway projects in Arlington with the Arlington Committee on Tourism and Economic Development					★					
Action Step	Coordinate with Town Cultural Councils					★					
Action Step	Build relationships with local committees dedicated to community beautification such as the Arlington Public Art Committee and the Lexington Conservation Stewards.					★					
Recommendation	<b>Use the Battle Road Scenic Byway designation as a means for increasing cross-community collaboration.</b>	★			★						
Action Step	Use the Battle Road Scenic Byway "umbrella" to broker increased collaboration between cultural institutions along the Byway	★									
Action Step	Establish periodic meetings (at regular intervals, such as bi-annual or quarterly) of the Planning/Redevelopment Boards in the four towns				★						
Action Step	Establish periodic meetings (at regular intervals, such as bi-annual or quarterly) of the Boards of Selectmen in the four towns				★						
Action Step	Establish periodic meetings (at regular intervals, such as bi-annual or quarterly) of the Historic District Commissions or their equivalent in the four towns				★						
Action Step	Facilitate cross-community observation and communication of Historic District Commission (or other local entity that oversees historic districts) meetings in order to develop "best practices" and information sharing among the communities.				★						
Action Step	Establish periodic meetings (at regular intervals, such as bi-annual or quarterly) of the Conservation Commissions in the four towns				★						
Recommendation	<b>Encourage coordination between Byway management team, Hanscom Air Force Base, and Laurence G. Hanscom Field/MassPort.</b>				★						
Action Step	The Towns of Concord, Lincoln, and Lexington should continue their participation in HATS (Hanscom Area Towns Committee).				★						

Goal: Coordination

	Goals, Recommendations, and Action Steps	Corridor Management Plan Chapter						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
Goal	<b>Coordination:</b> Use the Battle Road Scenic Byway to promote regional cooperation and partnerships.										
Action Step	Codify relationship between Hanscom Air Force Base, Hanscom Field (Massport) and MMNHP/the National Park Service to help ensure communication and coordination of aviation and development activities with MMNHP				★						
Action Step	Reinforce the value of each Town's and MMNHP's relationship with Hanscom Air Force Base				★						
Recommendation	<b>Provide comment on development regulations, projects and planning efforts that will impact the Battle Road Scenic Byway.</b>			★	★	★					
Action Step	Support the completion of the Mass. Ave. Corridor Project in Arlington.			★							
Action Step	Implement the MMNHP's master plan and conceptual plan at Route 2A (North Great Road) and Bypass Road (Lincoln) which includes a proposed roundabout.			★							
Action Step	Support MMNHP's plan to close a portion of Old Mass Ave in order to eliminate through traffic.			★							
Action Step	The Planning Board and other relevant land use decision-making entities in each town and MMNHP should solicit comments from the Byway management team on proposed regulatory changes, such as proposed zoning changes, along and within view of the Byway.				★						
Action Step	The Planning Board and other relevant land use decision-making entities in each town and MMNHP should solicit comments from the Byway management team on proposed development and redevelopment along and within view of the Byway.				★						
Action Step	The Byway management team should develop a mutual comment process for projects that require MEPA (Massachusetts Environmental Policy Act) review.				★						
Action Step	Support existing and future community planning efforts that complement Byway goals.				★						
Action Step	Review the reuse concepts outlined in the Hanscom Air Force Base Pre-BRAC Community Advance Planning report in light of Byway goals				★						
Action Step	Review proposed amendments to zoning bylaws to consider impact on the Byway				★						
Action Step	Encourage the Town of Arlington to revise its Demolition Delay Bylaw				★						
Action Step	Support the Lexington Tourism Committee in implementation of the Lexington Battle Green Area Master Plan					★					
Recommendation	<b>Evaluate Battle Road Scenic Byway projects and initiatives within the context of regional, state, and federal projects and initiatives.</b>			★		★	★				
Action Step	Promote long-range and regional transportation solutions by coordinating Byway transportation improvement goals, studies, and projects with regional transportation studies (for example, the Route 128 Corridor Study) and the Boston Metropolitan Planning Organization's long-range regional transportation plan and the Transportation Improvement Program (TIP) process.			★							

Goals: Coordination

	Goals, Recommendations, and Action Steps	Corridor Management Plan Chapter						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
Goal	<b>Coordination:</b> Use the Battle Road Scenic Byway to promote regional cooperation and partnerships. Review recent (2010) economic development bill and advocate for tourism policies that will advance Byway goals					★					
Action Step	Work with the Massachusetts Department of Transportation and the National Scenic Byways Program to further strengthen the State's Scenic Byways Program						★	Medium	Years 1-5	BRSB, MAPC, MARPA, MassDOT, NSBP	
Action Step	Support Federal, State, and Local Legislative initiatives that will help sustain the Byway and advance Byway goals.						★				

Goal: Coordination

	Goals, Recommendations, and Action Steps	Corridor Management Plan Chapter						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
Goal	<b>Stewardship:</b> Use the Byway designation to promote stewardship of the corridor's historic, natural, scenic, cultural, recreational and archaeological resources and intrinsic qualities. Seek funding and develop new programs to support the Byway's resources and visitor attractions.										
Recommendation	<b>Ensure local regulations and development decisions that affect the Battle Road Scenic Byway corridor and its environs protect and enhance the intrinsic qualities of the Byway.</b>	★	★	★	★			Top			
Recommendation	<b>Ensure existing Byway resources are in good repair.</b>	★	★	★	★			Top			
Action Step	Maintain bicycle and pedestrian facilities in close proximity to the Byway.			★							
Action Step	Ensure roads are in good repair, to facilitate bicycling even where no bicycle lane is present.			★							
Action Step	Establish a grant or loan program to encourage façade improvements and the further protection of privately-owned sites which are integral to the story of the Byway.				★						
Action Step	Rehabilitate stone walls and other historic landscape features along the Byway.				★						
Action Step	Identify critical land acquisitions				★						
Action Step	Identify, acquire or support acquisition, and support rehabilitation of threatened historic structures				★						
Action Step	Identify any challenges/land management issues for publicly-owned open spaces				★						
Recommendation	<b>Seek funding for historic preservation and support historic preservation programs.</b>	★	★								
Action Step	Support the Community Preservation Act, as it could provide a potential source of funding for Byway projects	★	★								
Action Step	Advocate for adoption of the Community Preservation Act in Arlington for preservation of historic resources	★	★								
Action Step	Communicate Byway projects and promotion efforts with the National Trust for Historic Preservation and research funding and promotion opportunities offered by the Trust	★	★								
Recommendation	<b>Improve scenic vistas along the Byway.</b>	★	★		★						
Action Step	Implement landscape clearing in select locations (e.g., vista restoration in the Elm Brook area)	★	★								
Action Step	Restore Folly Pond as a historic and scenic feature	★	★								
Action Step	Investigate Scenic Vista Protection Bylaws				★						
Recommendation	<b>Seek opportunities to enhance cultural resources along the Byway.</b>	★	★								
Action Step	Apply for Massachusetts Cultural Council Cultural District designation (in specific areas along the Byway)	★	★								
Recommendation	<b>Use the Battle Road Scenic Byway to engender and increase a sense of civic pride.</b>	★	★				★				
Action Step	Involve the public in implementation of the Battle Road Scenic Byway.						★				

Goal: Stewardship

	Goals, Recommendations, and Action Steps	Corridor Management Plan Chapter						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
Goal	<b>Stewardship:</b> Use the Byway designation to promote stewardship of the corridor's historic, natural, scenic, cultural, recreational and archaeological resources and intrinsic qualities. Seek funding and develop new programs to support the Byway's resources and visitor attractions.										
Action Step	Illustrate how the Battle Road Scenic Byway is the next step in a long history of community involvement in Massachusetts municipal governance.		★								

Goal: Stewardship

	Goals, Recommendations, and Action Steps	Corridor Management Plan Chapter						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
Goal	<b>Education and Awareness:</b> Increase awareness of the Byway's rich history and promote it as an educational resource.										
Recommendation	<b>Develop educational programs and materials.</b>	★									
Action Step	Develop curriculum materials for teachers and schoolchildren about the Byway and its resources.	★									
Action Step	Create educational programs for K-12 school field trips to the Battle Road Scenic Byway.	★									
Action Step	Encourage regional vocational technical high schools to offer courses related to tourism as part of their hospitality curricula.	★									
Action Step	Develop educational programs and materials about Byway resources and history for adults and families.	★									
Recommendation	<b>Promote the value of historic preservation by using the Battle Road Scenic Byway and its resources as examples.</b>	★			★						
Action Step	Raise awareness and build support in the Byway communities for historic preservation			★	★						
Action Step	Advocate for the importance of stewardship and preservation at Byway sites.				★						
Action Step	Work as advocates for a "preservation ethic" and for funding of historic preservation and maintenance at the local, state, and federal level				★						
Action Step	Create programs at regional vocational technical high schools related to Byway promotion and stewardship				★						
Action Step	Host workshops on the economic benefits of Historic Districts				★						
Recommendation	<b>Further develop the Battle Road Scenic Byway Story by supporting resource interpretation.</b>	★									
Action Step	Work with the Drinking Gourd Project to interpret resources and implement projects related to Concord's abolitionist and African-American history.	★									
Action Step	Support research projects that further establish the Byway's abolitionist and African-American history in all four Byway towns.	★									
Action Step	Consider developing the story of the iconic Uncle Sam, who was born in Arlington, and using this story and imagery in Byway promotion efforts.	★									
Action Step	Support a history/storytelling project that will interpret Byway resources, bringing each era of the Byway to life. (Inspiration: The American Girls Collection series of books include fictional characters from different eras of American history.)	★									
Action Step	Partner with post-secondary institutions (community colleges, college, universities, technical institutes) to develop/promote tourism curriculum and to interpret Byway resources	★									

	Goals, Recommendations, and Action Steps	Corridor Management Plan Chapter						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
Goal	Identify: Create a distinct identity for the Battle Road Scenic Byway as a destination.										
Recommendation	Develop a Battle Road Scenic Byway logo and branding scheme that will be used in Byway print and online materials as well as along the corridor itself.					★		Top	Years 1-5	BRSB	
Action Step	Develop a Battle Road Scenic Byway logo (or series of related logos).					★		Top	Years 1-5		
Action Step	Develop guidelines for use of the Byway logo(s) and branding. Consider how the logo(s) and branding can be used in print materials, on the internet, as well as on signs along the Byway. Use the branding scheme to promote the Byway. Encourage users of the brand to follow the guidelines to ensure that the brand is used appropriately.					★		Top	Years 1-5		
Action Step	Sustain the Battle Road Scenic Byway brand by regularly updating print and online communications, as well as ensuring that signs along the Byway are up to date and in good repair.					★		Ongoing	Ongoing		
Recommendation	Develop a Battle Road Scenic Byway signage program.			★				Medium			
Action Step	Research signage programs used for other Byways and National Heritage Areas. For example, the Essex National Heritage Area has a Sign Standards Manual that could serve as a model for the Battle Road Scenic Byway.			★				Medium			
Action Step	Determine how the Battle Road Scenic Byway signage program can complement and draw from existing signage programs, such as the signage program developed by the Lexington Tourism Committee and the signage used in MMNHP.			★				Medium			
Action Step	When applicable, follow signage guidelines developed by the Massachusetts Scenic Byways Program and the National Scenic Byways Program.			★				Medium			
Action Step	Inventory existing signage and demonstrate how a signage program can reduce sign clutter. Document the location and research the history of signs prior to their removal.			★				Medium			
Action Step	Develop graphic standards for the Battle Road Scenic Byway signage program, including use of the Byway logo, use of secondary logos, use of artwork, official typography, and arrow designs for Byway signs.			★				Medium			
Action Step	Create guidelines for different sign types, including guidelines for directional signs, site identification signs, and informational and interpretive signs. Provide a range of options for each sign type so signs may be adapted to the character of the surrounding area.			★				Medium			
Action Step	Provide signs at transit stations, on highway interchanges, along access routes to the Byway, and at key intersections where visitors might enter or leave the Byway, include on trails and bikeways.			★				Medium			
Action Step	Consider striping or symbols along the roadway to make it clear when a traveler is on the Byway, similar to the red line used along the Freedom Trail in Boston, or the bronze horseshoes in Cambridge commemorating William Dawes' midnight ride.			★				Medium			
Action Step	The Byway signage program could include design guidelines for temporary signs, such as street banners for special events.			★				Medium			

Goal: Identity

	Goals, Recommendations, and Action Steps	Corridor Management Plan Chapter						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
Goal	<b>Outreach and Communication:</b> Promote and communicate Byway initiatives to local stakeholders, and market the Byway to regional, state, national, and international audiences.										
Recommendation	<b>Create a Battle Road Scenic Byway website and use the Internet and social media to promote the Byway.</b>					★		Top	Years 1-5		
Action Step	Create a Battle Road Scenic Byway visitor/tourist website that allows users to develop customized itineraries based on their preferred types of accommodations, Byway themes, activities, and tours.					★		Top			
Action Step	Consider a Battle Road Scenic Byway blog as part of the Byway website					★		Top			
Action Step	Ensure that the Battle Road Scenic Byway website utilizes user-friendly software so it can be easily updated by volunteers without advanced knowledge of web editing					★		Top			
Action Step	Ensure that the website is updated regularly, perhaps by hiring a website manager.					★					
Action Step	Encourage timely submission of events (such as reenactments) along the Byway by cultural organizations, committees, and clubs for posting on the Byway website and other websites					★		Top			
Action Step	Promote reenactment activities along the Byway on Byway website					★					
Action Step	Include links to organizations and venues on the Battle Road Scenic Byway website, and encourage them to link back to the Byway website.					★		Top			
Action Step	Ensure that information about the Battle Road Scenic Byway is updated and available on the National Scenic Byways Program website and any other State and Federal Scenic Byways websites and materials					★		Top			
Action Step	Create fan pages, groups, and news feeds to promote the Byway on social networking sites such as Facebook, Twitter, LinkedIn, and Foursquare.					★		Top			
Action Step	Encourage Byway businesses, organizations, and destinations to promote the Byway with a "badge" linking to the Byway website and/or Facebook, Twitter, LinkedIn, Foursquare and other Battle Road Scenic Byway pages/groups on social networking websites.					★		Top			
Recommendation	<b>Work with the tourism and hospitality industry to promote the Byway.</b>					★		High	Years 1-5		
Action Step	Hire a tourism marketing consultant to help synthesize the multiple Byway themes into a coherent action plan to promote and manage Byway tourism.					★					
Action Step	Communicate Byway promotion efforts with area Chambers of Commerce including but not limited to: Arlington Chamber of Commerce, Concord Chamber of Commerce, Lexington Chamber of Commerce, Middlesex West Chamber of Commerce, Greater Boston Chamber of Commerce, Greater Merrimack Chamber of Commerce, and Metrowest Chamber of Commerce.					★					

Goal: Outreach and Communication

	Goals, Recommendations, and Action Steps	Corridor Management Plan Chapter						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
Goal	<b>Outreach and Communication:</b> Promote and communicate Byway initiatives to local stakeholders, and market the Byway to regional, state, national, and international audiences.										
Action Step	Communicate Byway promotion efforts with Convention and Visitors Bureaus including but not limited to the Greater Merrimack Valley Convention and Visitors Bureau, Greater Boston Convention and Visitors Bureau, and regional tourism organizations that may be created as a result of the economic development bill, such as a MetroWest Visitors Bureau.					★					
Action Step	Communicate Byway promotion efforts with the Massachusetts Office of Travel and Tourism.					★					
Action Step	Propose Battle Road Scenic Byway getaway packages to the Massachusetts Office of Travel and Tourism and other organizations that may offer tourism packages.					★					
Action Step	Get involved with the US Travel Association (utilize their research, attend events, connect to national tourism network).					★					
Action Step	Coordinate with Tourism/Travel agencies in Boston.					★					
Action Step	Communicate Byway offerings to area hotels.					★					
Action Step	Work with area hotels, travel agencies, business organizations to create travel packages for the Byway.					★					
Action Step	Train "ambassadors" to promote the Byway to the "visiting friends and relatives market." Can include real estate agents, businesses, hospitality workers, and others					★					
Action Step	Promote ecotourism on the Byway					★					
Recommendation	<b>Promote the local economy by creating incentives to use businesses located along the Battle Road Scenic Byway.</b>					★					
Action Step	Create a Battle Road Scenic Byway visitor card that visitors can have stamped/get points for each time they visit a site on the Byway -- points could be redeemed for discounts at local businesses or visitor sites.					★					
Action Step	Organize a shopping day along the Byway.					★					
Action Step	Promote "shop local" efforts that would bring additional business to the Byway.					★					
Action Step	Use social media/internet-based incentive programs such as Foursquare and Groupon to attract business to the Byway. Foursquare and applications like it allow visitors to "check-in" to the business when they visit, and businesses and visitor attractions can offer specials to those who check-in and/or for repeat visitation.					★					
Action Step	Create a Byway restaurant and shopping guide.					★					
Action Step	Involve local arts and cultural organizations, such as the Lexington Arts and Crafts Society, in Byway promotion and special events					★					
Action Step	Work with local galleries and arts organizations to create arts events such as open studio nights and art walks					★					
Action Step	Consider expanding opportunities for food and beverage sales, including sale of alcohol					★					

Goal: Outreach and Communication

	Goals, Recommendations, and Action Steps	Corridor Management Plan Chapter						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
Goal	<b>Outreach and Communication:</b> Promote and communicate Byway initiatives to local stakeholders, and market the Byway to regional, state, national, and international audiences.										
Action Step	Connect Byway businesses and organizations with local farms to provide food at events and to use in restaurants/café					★					
Action Step	Connect Byway visitors to canoe and kayak rental facilities/businesses					★					
Action Step	Connect Byway visitors to bicycle rental facilities/businesses					★					
Recommendation	<b>Create engaging informational materials to promote the Byway.</b>					★					
Action Step	Develop maps that highlight different destinations and different themes.					★					
Action Step	Include bicycle facilities and places to stay on tourist maps.					★					
Action Step	Ensure that information about the Battle Road Scenic Byway is available through a number of sources and media					★					
Action Step	Highlight what makes each Town along the Byway unique, and what ties them together on the Byway website as well as in promotional materials					★					
Action Step	Include information about farmstands and farmers markets along the Byway in promotional materials					★					
Action Step	Promote farmers markets and other local products markets on the Massachusetts Department of Agriculture's MassGrown website.					★					
Recommendation	<b>Market and advertise the Byway.</b>					★					
Action Step	Develop a Byway marketing plan					★					
Action Step	Promote the Byway at retail centers such as shopping malls					★					
Action Step	Promote the Byway at area farmers' markets					★					
Action Step	Promote/advertise Byway on MBTA trains, buses, subway, and at stations					★					
Action Step	Get involved with travel and trade shows to promote the Byway					★					
Action Step	Promote/advertise Byway through media ad buys on radio and television					★					
Action Step	Promote/advertise Byway through media ad buys in local, regional papers and magazines					★					
Action Step	Promote/advertise Byway at regional colleges and universities					★					

Goal: Outreach and Communication

		Corridor Management						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
<b>Goals, Recommendations, and Action Steps</b>											
Goal		<b>Continuity and Beautification:</b> Improve visual continuity of the Battle Road Scenic Byway, enhance its scenic qualities, and create an uninterrupted visitor experience.									
Recommendation		<b>Develop landscaping guidelines to buffer or screen land uses that do not contribute to the intrinsic qualities of the Byway.</b>									
Action Step		Consider reducing unneeded pavement and other impervious surfaces.			★			Top	Years 1-5		
Action Step		Develop a vegetation management plan			★						
Action Step		Create a buffer around MMNHP in the residentially-zoned areas abutting the park to protect MMNHP from visual intrusion			★						
Recommendation		<b>Develop streetscaping guidelines that address street furniture, lighting, and plantings along the Byway.</b>			★						
Action Step		Review existing streetscaping guidelines and recent improvements in districts such as Arlington Heights and Lexington Center.			★						
Action Step		Develop a "Byway Standard" for tree plantings and grates, benches, trash receptacles, sidewalk treatments, and other features in the public realm. Consistent materials and fixtures, which could include a family of options rather than one single treatment, will help improve the continuity of the Byway.			★						
Action Step		Explore coordinating and regulating modifications utilities make along the Byway (e.g., tree cutting and utility boxes).			★						
Action Step		Consider moving overhead utility lines underground in select locations or along the entire corridor.			★						
Recommendation		<b>Strengthen visual character of Byway through land management and encourage land uses compatible with Byway goals.</b>			★						
Action Step		Identify intrusive structures and land uses. Develop options to reduce intrusive structures and land uses along the Byway.			★						
Action Step		Adopt or amend Site Plan Review Bylaws in each Town for properties abutting and in close proximity to the Byway. Determine appropriate boundaries (define "in close proximity") for requiring Site Plan Review.			★						
Action Step		Support adoption of a Town-Wide Site Plan Review Bylaw in Arlington			★						
Action Step		Investigate historic district buffer mechanisms to ensure surrounding land uses do not detract from the Byway's intrinsic qualities.			★						
Action Step		Encourage studies to determine if Neighborhood Conservation District designation is appropriate in select locations, and support designation of these districts. Neighborhood Conservation Districts are intended to preserve neighborhood character, but with more flexible requirements than a historic district.			★						
Action Step		Encourage studies to determine where Village Center zoning districts could be established, and establish Village Center zoning districts where appropriate.			★						
Action Step		Consider implementing or modifying existing design guidelines or standards to advance Byway goals.			★						
Action Step		Regulate satellite dish antennas.			★						
Action Step		Consider implementing a Battle Road Scenic Byway Overlay district in each town.			★						

Goal: Continuity and Beautification

	Goals, Recommendations, and Action Steps	Corridor Management						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
Goal	<b>Continuity and Beautification:</b> Improve visual continuity of the Battle Road Scenic Byway, enhance its scenic qualities, and create an uninterrupted visitor experience.										
Action Step	Develop strategy for converting empty storefronts into attractive spaces while these storefronts are between/ without tenants					★					
Action Step	Support local storefront improvement initiatives					★					
Recommendation	<b>Encourage consistent enforcement of sign regulations to ensure that on-premises signs comply with all sign controls.</b>				★						
Action Step	Conduct a workshop for building department officials and other compliance officials to discuss best practices for sign application review and enforcement of sign bylaws.				★						

Goal: Continuity and Beautification

	Goals, Recommendations, and Action Steps	Corridor Management						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
Goal	<b>Accessibility:</b> Make the Byway accessible to a diversity of potential visitors, including people of all ages, abilities, incomes, and ethnicities. Ensure that the Byway can be accessed by pedestrians, bicyclists, mass transit riders, and motorists.										
Recommendation	<b>Follow context-sensitive roadway design guidelines to preserve the intrinsic qualities of the Byway, provide access to bicyclists and pedestrians, and improve safety and mobility along the roadway.</b>			★				Top			
Action Step	Review existing roadway design policies including the Highway Design Manual and the Town of Concord's Context-Sensitive Road Design policy and adapt these policies to create context-sensitive roadway design guidelines for the entire Byway.		★								
Action Step	Consider striping bicycle lanes along the length of the Byway from the Arlington/Cambridge line to Lexington Battle Green, as well as in other areas along the Byway when possible. Where constraints exist, consider applying shared lane markings.			★							
Action Step	Consider options for accommodating bicycles on Route 2A without adding pavement or increasing road width. The travel lanes for motor vehicles could be narrowed, creating a travel lane as narrow as 10.5 feet, to create wider shoulders for bicycle travel.			★							
Action Step	Consider reconfiguring the Hanscom Drive intersection with Route 2A in order to eliminate the slip lanes and narrow the intersection to provide well-defined and slower speed turns. Eliminating the slip lanes will significantly improve the safety of drivers turning onto 2A by lowering speeds and eliminating the high speed merge.			★							
Action Step	Improve existing and install new crosswalks on the Byway, following consistent, context-sensitive design standards.			★							
Action Step	Ensure that individual intersection improvement projects follow consistent, context-sensitive design standards.			★							
Action Step	Consider improving bicycle and pedestrian accommodations and amenities for all roadway modification projects, including during roadway resurfacing projects as well as when re-striping.			★							
Action Step	Develop bicycle rack standards for the Byway. Follow design standards developed by MAPC for bicycle racks ensure bicycles can be properly secured with a U-lock and allow the bicycle to be fully supported by the rack with two points of contact.			★							
Action Step	Consider adding bicycle racks at all visitor sites and points of interest, including in parking lots, in Lexington Center, and in Concord Center.			★							
Recommendation	<b>Make the Byway easy and safe to navigate for people with physical disabilities.</b>			★	★						
Action Step	Ensure ADA compliance and follow universal design principles to the extent possible when developing or redeveloping roadways and other transportation infrastructure.		★								
Action Step	Ensure ADA compliance and follow universal design principles to the extent possible when developing or redeveloping the built environment.				★						
Action Step	Encourage visitor sites and other Byway resources to be retrofitted so they are more accessible.				★						

Goal: Accessibility

	Goals, Recommendations, and Action Steps	Corridor Management						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
Goal	<b>Accessibility:</b> Make the Byway accessible to a diversity of potential visitors, including people of all ages, abilities, incomes, and ethnicities. Ensure that the Byway can be accessed by pedestrians, bicyclists, mass transit riders, and motorists.										
Recommendation	<b>Encourage a more diverse audience of visitors to the Byway and ensure that visiting the Byway can be an enjoyable and educational experience for all.</b>					★					
Action Step	Study the affordability of visiting the Byway and its attractions.					★					
Action Step	Support interpretation of multiple Byway themes, as a diversity of themes could attract a greater diversity of visitors.					★					
Action Step	Provide visitor information in multiple languages at select locations.					★					
Action Step	Design facilities so all visitors have the same opportunity to enjoy the Byway experience.					★					
Recommendation	<b>Develop continuous off-road access to the Battle Road Scenic Byway for bicyclists and pedestrians.</b>			★							
Action Step	Work with the West Lexington Greenway Task Force to implement the Minuteman Connector that would the Minuteman Bikeway to the Battle Road Trail adjacent to Route 128.			★							
Action Step	Support the Minuteman Extension project that would extend the Minuteman Bikeway from its current terminus in Bedford to Concord Center. Support the Minuteman Extension project and advocate for the Minuteman Bikeway to be extended west to Concord Center.			★							
Action Step	Support connecting the greenway along Alewife Brook to the Minuteman Bikeway, a project currently under construction by the Department of Conservation and Recreation.			★							
Action Step	Support the proposed trail connecting Thoreau Farm (the birthplace of Henry David Thoreau) on Virginia Road to Battle Road Trail in MMNHP.			★							
Recommendation	<b>Facilitate multimodal access to and along the Byway.</b>			★							
Action Step	Facilitate access to and from Boston and the Byway.			★							
Action Step	Improve access to the Byway from existing and future transit stations			★							
Action Step	Evaluate access to and from available hotels and lodging facilities.			★							
Action Step	Improve access to the Byway for bicyclists.			★							
Action Step	When a bike share program is implemented in the Boston Metro area, work with program coordinators to make bicycles available in close proximity to the Byway.			★							

Goal: Accessibility

	Goals, Recommendations, and Action Steps	Corridor Management						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
Goal	<b>Visitor Experience:</b> Ensure that the Byway is an exciting place to visit that has adequate traveler facilities and is easy and safe to navigate.										
Recommendation	<b>Develop facilities that will enhance the Byway visitor experience.</b>										
Action Step	Complete installation of bicycle racks on buses that provide access to the Byway.			★	★	★					
Action Step	Evaluate existing parking requirements and availability and provide parking facilities for bicycles, cars, and buses that will not detract from the Byway's intrinsic qualities.			★							
Action Step	Consider options for providing shuttles from designated parking locations and/or transit stops, to reduce number of vehicles traveling along the Byway.			★							
Action Step	Create visitor facilities and promote the Byway along the Minute Man Bikeway and other bicycle/pedestrian paths adjacent to the Byway.			★							
Action Step	Include information about bicycle shops on maps and other Byway literature										
Action Step	Investigate potential locations of BRSB visitor center/entrance kiosk in Arlington				★						
Action Step	Investigate potential locations for lodging and other tourist accommodations, and review local regulations and amend as necessary to support accommodations in appropriate locations.				★						
Action Step	Inventory and map existing visitor facilities (restrooms, visitor centers, etc.) to help assess needs.					★					
Action Step	Ensure there are adequate and easily accessible restroom facilities along the Byway.					★					
Action Step	Establish Battle Road Scenic Byway visitor center(s) or kiosk(s) at major Byway entrance points, including at the Arlington town line near Alewife Brook Reservation					★					
Action Step	Establish an Arlington Visitor Center in Arlington					★					
Action Step	Encourage visitor attractions along the Byway to coordinate operating hours and to be open at hours convenient to tourists					★					
Recommendation	<b>Use mobile technologies to promote the Byway and to enhance the visitor experience.</b>					★					
Action Step	Consider the best ways to use ever-evolving mobile technologies to enrich the visitor experience.					★					
Action Step	Develop wayfinding applications ("apps") for internet-enabled cellular phones (smartphones), GPS devices, and other mobile technologies that can be used create custom tours of the Byway, stream audio, video, and imagery to tell the Byway story, and collect visitor data.					★					
Recommendation	<b>Develop municipal staff, board, and committee capacity for tourism planning and management.</b>					★		Medium	Years 5-10		
Action Step	Increase tourism planning expertise of Town Staff, whether through new hiring or additional job roles of existing staff					★					
Action Step	Support the recently-created Town of Arlington Committee on Tourism and Economic Development as it undertakes projects that advance Byway goals.					★					
Action Step	Create a tourism training program for volunteers and staff					★					
Recommendation	<b>Calm traffic and improve safety along the Byway.</b>										
Action Step	Implement traffic calming measures where possible.			★							

Goal: Visitor Experience

	Goals, Recommendations, and Action Steps	Corridor Management						Implementation details:			
		Introduction	Intrinsic Qualities	Transportation	Land Use	Tourism	Implementation Plan	Priority	Timeline	Parties Responsible	Possible Funding Sources
Goal	<b>Visitor Experience:</b> Ensure that the Byway is an exciting place to visit that has adequate traveler facilities and is easy and safe to navigate.										
Action Step	Create a schedule and identify priorities for making intersection improvements along the Byway.			★							
Action Step	Consider providing alternate routes for trucks to manage traffic.			★							
Action Step	Consider lowering speed limits.			★							
Action Step	Install Share the Road signs in appropriate locations.			★							
Action Step	Install pedestrian crossing signs (such as yellow pennants) for street crossings in high volume pedestrian areas.			★							
Action Step	Evaluate pedestrian and bicycle safety along the Byway to ensure complete access is provided throughout the Byway. This includes sidewalks or walkways, and bike lanes or shoulders.			★							
Action Step	Conduct a study to obtain a better understand truck traffic along and in the vicinity of the Byway, including investigations of the volume of trucks and their origin-destination patterns.			★							
Action Step	Conduct a study to identify traffic congestion that might be associated with increased tourism.			★							
Action Step	Consider removing the state highway designation from the portion of the Byway west of I-95 and rerouting Route 2A west of I-95 to Route 2 in order to remove 2A from bisecting MMNHP. Consider renaming the portion of the Byway through MMNHP (and possibly other portions) as "Battle Road."			★							
Action Step	Consider traffic calming measures such as reducing the speed limit on Lexington Street in Concord between Route 2A and Old Bedford Road to allow the road to be more safely shared with bicyclists and pedestrians.			★							
Recommendation	<b>Accommodate tour buses without detracting from the Byway's intrinsic qualities.</b>			★		★					
Action Step	Designate locations for long term tour bus parking, perhaps in Arlington.			★							
Action Step	Consider options for a bus turnaround near Barrett Farm in Concord.			★							
Action Step	Designate pick up/drop off locations for tour buses and trolleys.			★							
Action Step	Develop guided tour or trolley service(s) that cover the entire length of the Byway, which may be an expansion of existing services such as the Liberty Ride, or may be new service(s).					★					

Goal: Visitor Experience



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## PHOTO AND IMAGE CREDITS

Several photos and images in this document were from the following sources:

- Metropolitan Area Planning Council (MAPC)
- National Park Service/Minute Man National Historical Park
- Joel Barrera, MAPC
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Additionally, some images were obtained online or from other sources, including the following:

- Deb Allen and Mark Goldner of the Boston Geology project: photo of Bloody Bluff Fault zone
- America's Byways Resource Center: MAPC graphic interpretation of Byway Sustainability and Byway Benefits
- Commonwealth of Massachusetts: screenshot of M.G.L. Chapter 345 of the Acts of 2006
- Concord Free Public Library: Battle Road in the 1930s
- Concord Museum: 1903 engravings of Amos Doolittle's 1775 prints
- Freedom's Way National Heritage Area: screenshot of website
- Deborah Dietrich-Smith, National Park Service/Olmsted Center for Landscape Preservation, from the *Cultural Landscapes Report for the Battle Road Unit, Minute Man National Historical Park*: Battle Road Improvements 1802-1806
- Google Earth Pro: screenshot of Google Earth Virtual Tour created by MAPC
- Historic New England Archives: Meriam's Corner, late 1800s
- Nancy Grohol, Thoreau Farm Trust: photo of Thoreau Farm
- Minute Man National Historical Park Archives: images from 1925 report by Arthur Shurtleff
- Minute Man National Historical Park Library: views of the corridor from the 1950s
- MIT Lincoln Laboratory: photo of MIT Lincoln Laboratory exterior
- National Archives and Records Administration, Waltham: image from 1960 Boston National Historic Sites Commission Report
- National Park Service/Wayne Chen: photo of British Regulars on the March
- National Park Service/Dennis Dostie: Battle Road Fifes and Drums, Battle Road Minute Men
- National Park Service/Jim Higgins: Minute Man Visitor Center Theater and atrium photos, photo of children marching with costumed interpreter near Hartwell Tavern
- National Park Service/Dwight Meriam: Meriam House
- National Scenic Byways Online/America's Byways® (Maps of National and Massachusetts Byways)
- National Trust for Historic Preservation: screenshot of 11 Most Endangered Places Press Release
- Beverly Pfingsten, Historic Markers Database (hmdb.org) photos of Grapevine Cottage
- Save Our Heritage and Frederic C. Detwiller/New England Landmarks: images of Barrett's Farm, Hangar 24
- Wikipedia user Daderot: Ralph Waldo Emerson House
- Wikipedia user Magicpiano: Captain Benjamin Locke House, Wayside Inn
- Wikipedia user midnightreary: Old Manse
- Wikipedia user John Phelan: Bemis Hall
- Wikipedia user Tim Pierce (TWP): Old Schwamb Mill
- Wikipedia user RhythmicQuietude: Thoreau House Replica near Walden Pond
- Public domain images: photos of Louisa May Alcott, Ralph Waldo Emerson, Nathaniel Hawthorne, Henry David Thoreau, print of Paul Revere at the Hancock-Clarke House, print of Ice Harvesting on Spy Pond in 1854

# APPENDIX A: INTRINSIC RESOURCE INVENTORY

Battle Road Scenic Byway Resource Inventory

TOWN	NAME	Street #	Street	Primary Intrinsic Quality	Historical	Cultural	Natural	Recreational	Scenic	Archaeological	American Revolutionary War	Literary	Technological Innovation	Environmentalism (Nature and Conservation)	Antislavery	Agricultural	1775 Witness House	Philanthropy	Approx. Year built	NRHP	Date Added to NRHP
ARL	Alewife Brook Reservation		Alewife Brook Parkway	R			N	R	S					En					1893	No	N/A
ARL	Butterfield Whittemore House	54	Massachusetts Ave	H	H						Am						W		1695	Yes	3/30/1978
ARL	Capitol Theatre	204	Massachusetts Ave	C	H	C												Ph	1925	Yes	4/18/1985
ARL	Black Horse Tavern Site (BP Gas Station)	295	Massachusetts Ave	C	H						Am								1975	No	N/A
ARL	Spy Pond/ Spy Pond Park		near Wellington and Lombard	N	H	C	N	R	S		Am		Te	En						No	N/A
ARL	The Wayside Inn	393	Massachusetts Ave	H	H						Am						W		1750	Yes	9/27/1985
ARL	Central Fire Station		Corner of Mass Ave and Broadway, near Franklin St. (Octagonal bldg)	S	H				S		x		Te						1926	No	N/A
ARL	Civil War Monument		Corner of Mass Ave and Medford Street near Fire Station	H	H														1889	No	N/A
ARL	Cooper's Tavern Site		Corner of Mass Ave and Medford Street	H	H						Am									No	N/A
ARL	Henry Swan House	418	Massachusetts Ave	H	H						x								1888	Yes	9/27/1985
ARL	Regent Theatre	7	Medford St	C	H	C					x									No	N/A
ARL	Whittemore Park		Intersection of Massachusetts Ave. and Pleasant/ Mystic Street (Route 60)	S				R	S		x									No	N/A

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ARL	Cyrus E. Dallin Art Museum/Jefferson Cutter House		NE Corner of Mystic, Pleasant, and Massachusetts	C	H	C					x									Yes	1 /23 /1992
ARL	Whittemore Marker		Southeast Corner of Whittemore Park (Mass Ave and Route 60)	H	H						Am									No	N/A
ARL	Alan Hovhanness Commemorative Marker		Whittemore Park	C	H	C					x								2009	No	N/A
ARL	Mount Pleasant Cemetery	70	Medford St	H	H	C			S	A	Am							Ph	1843	No	N/A
ARL	Uncle Sam Memorial Statue	8	Mystic Street (approx)	C	H	C			S										1976	No	N/A
ARL	Minuteman Bikeway (Arlington, Lexington)	10	Mystic Street (one of several points)	R	H			R	S		x		Te							No	N/A
ARL	Old Men of Menotomy Wagon Capture Site	630	Massachusetts Ave.	H	H						Am									No	N/A
ARL	Whittemore-Robbins House	670	Massachusetts Ave	H	H	C					x							Ph	1800	No	N/A
ARL	Old Burying Ground	40	Pleasant St (approx)	H	H					A	Am								1736	No	N/A
ARL	Robbins Library	700	Massachusetts Ave	H	H	C					x							Ph		No	N/A
ARL	US Post Office with WPA Murals	10	Court Street	H	H	C													1938	No	N/A
ARL	Winfield-Robbins Memorial Garden	714	Massachusetts Ave (approx)	S	H	C		R	S		x							Ph	1913	No	N/A

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ARL	Robbins Memorial Town Hall	730	Massachusetts Ave	H	H	C					x									No	N/A
ARL	Highrock Church	735	Massachusetts Ave	H	H	C													1841	Yes	6/23/1983
ARL	Philharmonic Society of Arlington					C															
ARL	Arlington Friends of the Drama					C															
ARL	Jason Russell House / George A. Smith Museum / Arlington Historical Society (and Fight at Jason Russell House Site)	7	Jason St	H	H	C					Am			En			W	Ph	1740	Yes	10/9/1974
ARL	Highland Hose House	990	Massachusetts Ave	H	H	C					x									Yes	4/18/1985
ARL	Baptist Society Meeting House	3-5	Brattle St	H	H						x								1790	Yes	4/18/1985
ARL	Arlington Gaslight Company	51	Grove St.	H	H	C					x		Te								
ARL	Brattle Court Pump Station (MDC Pump House)	88	Dudley Street (Brattle Court, address approx)	H	H						x									No	N/A
ARL	Schwamb Mfg. Co.	1165	Massachusetts Ave.	H	H						x		Te							No	N/A
ARL	Gershon Cutter House	1146	Massachusetts Avenue	H	H						x								1835	Yes	11/12/1999
ARL	Captain Benjamin Locke House	21	Appleton St	H	H						Am						W		1720	Yes	7/21/1978
ARL	Idahurst Mansion	53	Appleton St	H	H	C					x								1894	No	N/A
ARL	Addison Hill House	83	Appleton St	H	H	C					x								1850	Yes	9/27/1985

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ARL	Lt. Benjamin Locke Store	11-13	Lowell St	H	H						x								1816	Yes	4/18/1985
ARL	Foot of the Rocks		Triangular Park at approx 1226 Massachusetts Ave and 16 Lowell St	H	H						Am									No	N/A
ARL	Old Schwamb Mill	17	Mill Ln	H	H						x		Te							Yes	10/7/1971
ARL	Mill Brook			N	H		N	R	S				Te	En							
ARL	Cooke's Hollow?																				
ARL	Mystic River?																				
LEX	Robbins Cemetery		Hillside Ave and Mass Ave	H	H					A	x									No	N/A
LEX	Great Meadow (Town of Arlington)		near Arlington border, just north of Minuteman Bikeway	S			N				x									No	N/A
LEX	Wilson Farm: Farmstand and Vista of West Farm	10	Pleasant Street	C	H	C			S		x			En						No	N/A
LEX	West Farm Conservation Area			S	H		N	R													
LEX	Peepers Pond/Adams Pond Area			N																	
LEX	Joyce Miller's Meadow Conservation Area			N																	
LEX	The Stone Building/former East Lexington Library	735	Massachusetts Ave	H	H						x								1833	Yes	4/30/1976

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LEX	Follen Community Church	755	Massachusetts Ave	H	H	C					x	Li							1839	Yes	4/30/1976
LEX	Liberty Ride	33	Marrett Road	C	H	C		R	S		Am	Li								No	N/A
LEX	National Heritage Museum	33	Marrett Road	C	H	C														No	N/A
LEX	Tower Park		between Mass Ave and Minuteman Bikeway near Marrett	S		C		R	S		Am									No	N/A
LEX	Youville Place Assisted Living Facility	10	Pelham Rd	S		C					x							No	N/A	LU	
LEX	John Mason House	1303	Massachusetts Ave	H	H						x							1865	Yes	3/9/1990	
LEX	Sanderson House	1314	Massachusetts Ave	H	H															Yes	4/26/1976
LEX	Munroe Tavern / Museum of the British	1332	Massachusetts Ave	H	H	C					Am						W	1700	Yes	4/26/1976	
LEX	Munroe Cemetery		Mass Ave	H	H					A	x									No	N/A
LEX	Stone Cannon		Muzzev Jr. High	C	H						Am									No	N/A
LEX	Fletcher Triangle Marker		Massachusetts Avenue and Woburn Street	C	H	C					x									No	N/A
LEX	Cary Memorial Hall	1625	Massachusetts Ave	C	H	C					x									No	N/A
LEX	Merriam Shoe Manufactory	7	Oakland St	H	H						x	Te								No	N/A
LEX	Depot Square/Emery Park		Depot Square	S							x									No	N/A
LEX	Cary Memorial Library	1874	Massachusetts Ave	C		C					x									No	N/A

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LEX	Belfry Hill/Belfry Tower		across from Cary Library and next to Hancock School (near Mass Ave and Clarke St.)	H	H			R			Am									No	N/A
LEX	Hancock United Church of Christ	1912	Massachusetts Ave	H	H	C					Am									No	N/A
LEX	Captain Parker Statue (The Lexington Minuteman)		Lexington Battle Green	H	H						Am									No	N/A
LEX	Lexington Visitors Center			C		C					Am									No	N/A
LEX	The USS Lexington Memorial		near Visitor Center	H	H						x									No	N/A
LEX	Buckman Tavern	1	Bedford St	H	H						Am						W		1700	Yes	10/15/1966
LEX	Prince Estabrook Monument		near Visitor Center	H	H						Am									No	N/A
LEX	Minutemen Memorial		near Buckman Tavern	H	H						Am									No	N/A
LEX	Flag pole on Battle Green		center of Lexington Battle Green	C	H															No	N/A
LEX	Line of the Minute Men Boulder		Lexington Battle Green	H	H						Am									No	N/A
LEX	Lexington Battle Green		Massachusetts Ave and Bedford St	S	H	C		R	S		Am									Yes	10/15/1966
LEX	1799 Revolutionary War Monument		Lexington Battle Green	H	H						Am									No	N/A
LEX	First Parish Church	7	Harrington Road	H	H	C					Am									No	N/A

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LEX	Harrington House	1	Harrington Road	H	H						Am						W			No	N/A
LEX	Hancock-Clarke House	35	Hancock St	H	H						Am						W			Yes	7/17/1971
LEX	Parker Meadow		Revere St	S			N	R	S		x									No	N/A
LEX	Old Burying Ground		near Mass Ave and Harrington Rd	H	H					A	Am									No	N/A
LEX	Hastings Park		between Hayden Recreation Center and Mass Ave on Lincoln St	R	C			R	S		x									No	N/A
LEX	British Grave Marker (1 of 6)		MMNHP	C	H						Am									No	N/A
LEX	Minute Man National Historical Park (Lexington, Lincoln, Concord) NRHP Dates: 10/15/1966, 11/29/2002		open space - show in different color /outline	H	H	C	N	R	S	A	Am									Yes	10/15/1966
	Fiske Hill																				
LEX	Ebenezer Fiske House Foundation/Cellar Hole		MMNHP	H	H					A	Am									MMNHP	11/29/2002
LEX	Hayward Well Monument		Old Massachusetts Ave and Wood Street	H	H						Am									MMNHP	11/29/2002
LEX	Bashian Farm Foundation		MMNHP	H	H					A	Am									MMNHP	11/29/2002
LEX	British Grave Marker (2 of 6)		MMNHP	C	H						Am									No	N/A

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LEX	Bluff Monument		Massachusetts Ave. and Old Massachusetts Ave.	H	H						Am									MMNHP	11/29/2002
LEX	Blacksmith Shop Marker		MMNHP	H	H						Am									?	?
LEX	Jacob Whittemore House	21	Marrett Street	H	H						Am						W		prior to 1754	MMNHP	11/29/2002
LEX	Parker's Revenge		MMNHP	H	H						Am									No	N/A
LEX	MIT Lincoln Laboratory	244	Wood St	C	H	C					x		Te							No	N/A
LIN	Minute Man Visitor Center (entrance in Lincoln, building in Lexington)		Massachusetts Avenue	C	H	C					Am									MMNHP	11/29/2002
LIN	Thomas Nelson Jr. House Foundation		Nelson Road	H	H					A	Am									MMNHP	11/29/2002
LIN	British Grave Marker (3 of 6)		MMNHP	C	H						Am									No	N/A
LIN	Josiah Nelson House Foundation		MMNHP	H	H						Am									?	?
LIN	Minute Man Boulder		MMNHP	H	H						Am									No	N/A
LIN	John Nelson House		MMNHP	H	H						Am									?	?
LIN	John Nelson Hop House Foundation		MMNHP	H	H					A	Am									?	?
LIN	Paul Revere Capture Marker		North Great Road, West of Mill St	H	H	C			S		Am									MMNHP	11/29/2002
LIN	Folly Pond		in Hydro	H	H				S		Am									No	N/A

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LIN	British Grave Marker (4 of 6)		MMNHP	C	H						Am									No	N/A
LIN	Captain William Smith House		Virginia Rd/Battle Road Trail	H	H						Am						W		ca. 1693	MMNHP	11/29/2002
LIN	Sgt. Samuel Hartwell House Foundation and Chimney		Virginia Rd/Battle Road Trail	H	H						Am									MMNHP	11/29/2002
LIN	Ephraim Hartwell Tavern		Virginia Rd/Battle Road Trail	H	H						Am						W		ca. 1733	MMNHP	11/29/2002
LIN	Battle Road Trail (Lexington, Lincoln, Concord, built 1996-2001)		shapefile line, clearly label	R	H	C	N	R	S		Am								1996	MMNHP	11/29/2002
LIN	Joseph Mason House Site		On north side of Virginia Road, east of intersection with Old Bedford Rd.	H	H						Am									MMNHP	11/29/2002
LIN	Bloody Angle		Battle Road and Old Bedford Road	C	H	C			S		Am									No	N/A
LIN	British Grave Marker (5 of 6)		MMNHP	C	H						Am									No	N/A
LIN	Vernal Pool Trail		MMNHP near Hartwell Tavern	N			N	R	S		x									No	N/A
LIN	Elm Brook Wetlands Vista		try hydro, wetlands	S			N		S		x									No	N/A
LIN	Elm Brook		hydro line?	N			N		S		x									No	N/A

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LIN	Joshua Brooks Tanyard Site		MMNHP	H	H						Am	Te								MMNHP	11/29/2002
LIN	Joshua Brooks, Jr. House	37	North Great Road	H	H						Am									MMNHP	11/29/2002
LIN	Brooks Village		MMNHP	H	H						Am									No	N/A
LIN	Noah Brooks Tavern	33	North Great Road	H	H						Am									MMNHP	11/29/2002
LIN	Brooks Hill		MMNHP	H	H						Am									No	N/A
LIN	Hanscom Air Force Base (Lexington, Lincoln, Concord)			H	H						x	Te								No	N/A
LIN	Hanscom Field (Lincoln, Concord)			H	H							Te								No	N/A
LIN	Bemis Hall	15	Bedford Rd	C	H	C					x							Ph		No	N/A
LIN	Stone Markers About Minute Men		near Bemis Hall?	H	H						Am									No	N/A
LIN	Flint's Fields		near Bedford Road/across from Bemis Hall	H	H						x									No	N/A
LIN	Matlock Farm/Flint's Farm	39	Lexington Rd	H	H						x									No	N/A
LIN	Lincoln Library	3	Bedford Road	C		C					x	Te						Ph		No	N/A
LIN	First Church and Bell		near Bedford Road/across from Bemis Hall	H	H	C					x									No	N/A
LIN	DeCordova Museum	51	Sandy Pond Road	C		C			S		x							Ph		No	N/A
LIN	Sandy Pond/ Flint's Pond		Flint's Pond	S	H	C	N		S		x									No	N/A

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LIN	Gropius House	68	Baker Bridge Road	H	H	C					x		Te							Yes	5/16/2000
LIN	Walden Pond State Reservation (Lincoln and Concord)		Concord Rd	N	H	C	N	R	S		x	Li		En	DG					No	N/A
LIN	Lincoln Cemetery			H	H																
LIN	Codman Farm	58	Codman Road	H	H				S				Te	En		Ag					
LIN	Codman House	34	Codman Road	H	H																
	Drumlin Farm Wildlife Sanctuary	208	South Great Road	N																	
CON	Job Brooks House	1265	Lexington Road	H	H						Am						W		1740	MMNHP	11/29/2002
CON	Samuel Brooks House	1175	Lexington Road	H	H	C					Am						W		ca. 1692-1728	MMNHP	11/29/2002
CON	Stow-Hardy House (Olive Stow House)	965	Lexington Rd	H	H						Am						W		pre 1775	MMNHP	11/29/2002
CON	Farwell Jones House/Battle Road Farm	955	Lexington Road	H	H	C			S		Am						W		pre 1775	MMNHP	11/29/2002
CON	Palumbo Farm	750	Lexington Road	C	H	C			S		Am									MMNHP	11/29/2002
CON	Meriam's Corner Monument		Old Bedford Rd	H	H						Am									MMNHP	11/29/2002
CON	Daniel Taylor House/Gowing-Clark House	663	Lexington Road	H	H	C			S		Am						W		1720	No	N/A
CON	Gowing-Clark Barn Foundation	663	Lexington Road	H	H	C			S		Am									No	N/A
CON	British Grave Marker (6 of 6)		MMNHP	C	H						Am									No	N/A

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CON	Meriam House	34	Old Bedford Rd	H	H						Am						W		ca. 1705, ca. 1725	MMNHP	11/29/2002
CON	Thoreau Birth Site	215-217	Virginia Rd	C	H	C					x			En						No	N/A
CON	Thoreau Farm (Wheeler-Minot Farmhouse)	341	Virginia Rd	C	H	C					x	Li		En						Yes	3/19/2004
CON	Wheeler-Merriam House	477	Virginia Rd	H	H						x								1692	Yes	11/26/1982
CON	Hangar 24/ Draper Labs	711	Virginia Rd	C	H	C					x		Te							No	N/A
CON	Ephraim Bull House/ Grapevine Cottage	491	Lexington Road	H	H						Am		Te				W		1716	No	N/A
CON	Casey's Plaque and Eliphelet Fox House Foundation		near 455 Lexington Rd	H	H						x				DG					No	N/A
CON	The Wayside House and Barn (Samuel Whitney House)	455	Lexington Rd	C	H	C					Am	Li			DG		W		1714	NHL	7/11/1980
CON	Orchard House	399	Lexington Rd	C	H	C					x	Li			DG		W		1750	Yes	10/15/1966
CON	A. and J. Moore House	343-355	Lexington Rd	H	H						Am						W		1750		
CON	Bake Shop (Green Arbor Tea Room)	255	Lexington Rd	H	H						Am						W		1767		
CON	Benjamin Barron House	245-249	Lexington Road	H	H						Am				DG		W		1716	No	N/A

## Battle Road Scenic Byway Resource Inventory

TOWN	NAME	Street #	Street	Primary Intrinsic Quality	Historical	Cultural	Natural	Recreational	Scenic	Archaeological	American Revolutionary War	Literary	Technological Innovation	Environmentalism (Nature and Conservation)	Antislavery	Agricultural	1775 Witness House	Philanthropy	Approx. Year built	NRHP	Date Added to NRHP
	Wheeler/Hutman/Schurmann House	201	Lexington Rd	H	H						Am						W		1670		
CON	Concord Museum	200	Lexington Road	C	H	C					x									No	N/A
CON	Ralph Waldo Emerson House	28	Cambridge Turnpike	C	H	C					x	Li			DG					Yes	10/15/1966
CON	Widow Heywood House	184-190	Walden Street	H	H						Am						W		1700		
CON	Brown/Beaton House; Fay/Heywood House	105	Lexington Rd	H	H						Am						W		1719		
CON	Reuben Brown House	77	Lexington Rd	H	H						Am						W		1720		
CON	Reuben Brown Saddler's Shop (Fiske House?)	69-71	Lexington Rd	H	H						Am						W		1725		
CON	Jonathan Prescott House	48	Lexington Rd	H	H						Am						W		1720		
CON	Thomas Dane House	47	Lexington Road	H	H						Am						W		1650		
CON	Concord Art Association (John Ball House)	37	Lexington Road	C	H	C					Am				DG		W		1752	No	N/A
CON	Beaton (?)/Davis Store	29	Lexington Rd	H	H						Am						W		1750		
CON	Pellet/Barrett House; E Brown/E Tolman	5-7, 13-15	Lexington Rd	H	H						Am						W		1670		
CON	First Parish Church	20	Lexington Road	C	H	C					Am				DG				1901		
CON	Wright Tavern	8	Lexington Rd	H	H						Am						W		1747	Yes	10/15/1966

## Battle Road Scenic Byway Resource Inventory

TOWN	NAME	Street #	Street	Primary Intrinsic Quality	Historical	Cultural	Natural	Recreational	Scenic	Archaeological	American Revolutionary War	Literary	Technological Innovation	Environmentalism (Nature and Conservation)	Antislavery	Agricultural	1775 Witness House	Philanthropy	Approx. Year built	NRHP	Date Added to NRHP
CON	Old Hill Burying Ground (includes grave of John Jack, first former enslaved person to purchase land in Concord)		Lexington Rd near Monument Sq	H	H					A	x				DG					No	N/A
CON	Mary Rice House (underground railroad)	44	Bedford St.	H	H						x				DG					No	N/A
CON	Sleepy Hollow Cemetery/ Author's Ridge		Bedford St	C	H	C				A	x	Li								Yes	8/19/1998
CON	Garrison and Robbins Field	324	Bedford Rd	H	H						x				DG					No	N/A
	Caesar Robbins House	324	Bedford St.	C	H	C															
CON	Concord Center, Concord Town Hall (historical note: see Drinking Gourd) [NRHP Concord Monument Square-Lexington Road Historic District]		Monument Square and Main Street	C	H	C			S		x				DG					Yes	9/13/1977
CON	Old Jail Site (where Thoreau spent one night)		near Lowell St and Main St	H	H	C					x	Li			DG					No	N/A
CON	Colonial Inn	48	Monument Square	H	H	C					Am						W		1716	No	N/A
CON	Josiah Bartlett's House	35	Lowell Rd	H	H						x				DG					No	N/A

## Battle Road Scenic Byway Resource Inventory

TOWN	NAME	Street #	Street	Primary Intrinsic Quality	Historical	Cultural	Natural	Recreational	Scenic	Archaeological	American Revolutionary War	Literary	Technological Innovation	Environmentalism (Nature and Conservation)	Antislavery	Agricultural	1775 Witness House	Philanthropy	Approx. Year built	NRHP	Date Added to NRHP
CON	Great Meadows National Wildlife Refuge		should be in open space shapefile	N			N	R			x			Eu						No	N/A
CON	Elisha Jones House	242	Monument Street	H	H						Am	Am					W		early 18th cent.	MMNHP	
CON	Old Manse	269	Monument St	C	H	C					Am	Li			DG		W		1770	NHL	10/15/1966
CON	Obelisk Battle Monument at North Bridge		North Bridge	C	H	C					Am								1836	MMNHP	11/29/2002
CON	Grave of British Soldiers at North Bridge																				
CON	North Bridge		Monument St	H	H				S		Am									MMNHP	11/29/2002
CON	Minute Man Statue at North Bridge		North Bridge	C	H	C					Am									MMNHP	11/29/2002
CON	Major John Buttrick House	231	Liberty St	H	H						Am						W		ca. 1715	MMNHP	11/29/2002
CON	John Buttrick Bas-Relief Monument		Estabrook Rd and Liberty St	H	H						Am									MMNHP	11/29/2002
CON	Brown/Dakin House	81	Estabrook Rd	H	H						Am						W		1700		
CON	Stedman Buttrick House (Buttrick Mansion)/ North Bridge Visitors Center	174	Liberty St	S	H				S	A	Am									MMNHP	11/29/2002
CON	Ephraim and Willard Buttrick Foundation	174	Liberty St	H	H					A	Am									MMNHP	11/29/2002

## Battle Road Scenic Byway Resource Inventory

TOWN	NAME	Street #	Street	Primary Intrinsic Quality	Historical	Cultural	Natural	Recreational	Scenic	Archaeological	American Revolutionary War	Literary	Technological Innovation	Environmentalism (Nature and Conservation)	Antislavery	Agricultural	1775 Witness House	Philanthropy	Approx. Year built	NRHP	Date Added to NRHP
CON	Buttrick Garden	174	Liberty St	R	H			R	S											MMNHP	11/29/2002
CON	Muster Field Monument		Liberty St	H	H						Am									MMNHP	11/29/2002
CON	Captain David Brown House Marker		Liberty St	H	H															MMNHP	11/29/2002
CON	Calf Pasture		near confluence of 3 rivers and Lowell Road	H	H					A	x									No	N/A
CON	Egg Rock / Confluence of Sudbury, Assabet, and Concord Rivers (Also - Wild & Scenic Rivers)		the point where the 3 rivers meet	N	H	C	N	R			x			En						No	N/A
CON	Hunt/Hosmer House and Barn	320	Lowell Rd	H	H						Am						W		1701		
CON	Jonathan Hildreth House	8	Barrett's Mill Road	H	H						Am						W		1750		
CON	Abishai Brown House/Tavern	71	Barrett's Mill Road	H	H						Am						W		1719		
CON	Temple/Stone/Munroe House	222	Barrett's Mill Road	H	H						Am						W		1671		
CON	Colonel James Barrett House/ Barrett's Farm	448	Barrett's Mill Road	H	H	C			S		Am				DG		W		1705	Yes	11/15/1973
CON	South Bridge Boat House	496	Main Street	R				R			x									No	N/A
CON	Concord Depot	80-86	Thoreau Street	H	H						x				DG					No	N/A

## Battle Road Scenic Byway Resource Inventory

TOWN	NAME	Street #	Street	Primary Intrinsic Quality	Historical	Cultural	Natural	Recreational	Scenic	Archaeological	American Revolutionary War	Literary	Technological Innovation	Environmentalism (Nature and Conservation)	Antislavery	Agricultural	1775 Witness House	Philanthropy	Approx. Year built	NRHP	Date Added to NRHP
CON	Thoreau-Alcott House	255	Main St	H	H	C					x	Li			DG					Yes	7/12/1976
CON	William Whiting House	169	Main Street	H	H						x				DG					No	N/A
CON	Concord Free Public Library	129	Main Street	C	H	C					x				DG					No	N/A
CON	Concord Visitor Center	58	Main Street	C		C															
CON	Franklin Sanborn's House	49	Sudbury Road	H	H						x				DG					No	N/A
CON	Bigelow/Shadrach Minkins House	19	Sudbury Road	H	H						x				DG					No	N/A
CON	Emerson Umbrella	40	Stow Street	C		C					x									No	N/A
CON	Jay Holden/ Nathaniel Brooks House	45	Hubbard St	H	H						x				DG					No	N/A
CON	Tri-Con Church	54	Walden St	H	H	C					x				DG					No	N/A
CON	Concord Scout House	74	Walden St	C		C					x									No	N/A
CON	Friends of the Performing Arts in Concord	51	Walden Street	C		C					x									No	N/A
CON	First Parish Church (where Harriet Tubman, Frederick Douglass, others spoke)	20	Lexington Road	C	H	C					x	Li			DG					No	N/A

Battle Road Scenic Byway Resource Inventory

TOWN	NAME	Street #	Street	Primary Intrinsic Quality	Historical	Cultural	Natural	Recreational	Scenic	Archaeological	American Revolutionary War	Literary	Technological Innovation	Environmentalism (Nature and Conservation)	Antislavery	Agricultural	1775 Witness House	Philanthropy	Approx. Year built	NRHP	Date Added to NRHP
CON	Brister's Hill		Intersection of Route 2 and Route 126 (Walden St.) - approx	H	H						x	Li			DG					No	N/A
CON	Walden Pond			N	H	C		R	S		x	Li		En						Yes	10/15/1966

## APPENDIX B: LIST OF PROJECT MEETINGS

### Public Forums

June 16, 2009: Public Kickoff Meeting in Lexington  
 December 14, 2009: Community Forum in Concord  
 December 16, 2009: Community Forum in Lincoln  
 January 14, 2010: Community Forum in Lexington  
 October 14, 2010: Public Forum to Review Tourism Recommendations in Arlington  
 October 19, 2010: Public Forum to Review Land Use Recommendations in Lincoln  
 October 21, 2010: Public Forum to Review Transportation Recommendations in Concord  
 November 9, 2010: Public Forum in Lexington  
 March 31, 2011: Final Public Forum, Open House in Minute Man National Historical Park

### Working Group Meetings

April 14, 2009  
 May 12, 2009  
 July 14, 2009  
 August 11, 2009  
 September 15, 2009  
 October 13, 2009  
 November 10, 2009  
 February 9, 2010  
 October 26, 2010  
 January 27, 2011  
 February 8, 2011  
 February 17, 2011  
 March 1, 2011  
 March 17, 2011  
 May 12, 2011

### Meetings to review Intrinsic Resource Inventory

August 5, 2009 in Concord  
 August 11, 2009 in Arlington  
 July 30, 2009 in Lexington  
 July 30, 2009 in Lincoln  
 September 29, 2009 in Minute Man National Historical Park

### Land Use Subcommittee Meetings

August 11, 2009  
 December 8, 2009  
 May 21, 2010 in Lexington  
 May 25, 2010 in Arlington  
 May 25, 2010 in Concord  
 May 25, 2010 in Lincoln

### Tourism Subcommittee

August 11, 2009  
 September 24, 2009  
 October 20, 2009  
 November 17, 2009  
 February 3, 2010

### Roadway/Transportation

August 11, 2009  
 October 27, 2009  
 November 17, 2009  
 January 5, 2010  
 February 23, 2010  
 May 13, 2010

### Other Meetings and Events

October 7, 2010: Attended Lexington Tourism Committee meeting to learn about *Lexington Battle Green Area Master Plan*  
 December 2, 2010: Presentation to Concord Historic Districts Commission  
 November 17, 2010: Presentation to Tufts University *Cars, Culture, and Place* undergraduate anthropology class  
 April 10, 2011: Mobile Workshop at the American Planning Association National Planning Conference  
 March 16, 2010: Attended Essex Heritage Scenic Byway Local Advisory Group meeting  
 September 15, 2010: Attended Essex Heritage Scenic Byway Corridor Advisory Group meeting  
 May 9, 2011: Working Group members testified at Joint Committee on Tourism, Arts and Cultural Development public hearing on proposed Byway extensions at Massachusetts State House  
 May 16, 2011: *Battle Road Scenic Byway Corridor Management Plan* approved by the Town of Lexington Board of Selectmen  
 May 16, 2011: *Battle Road Scenic Byway Corridor Management Plan* approved by the Town of Lincoln Board of Selectmen  
 May 20, 2011: *Battle Road Scenic Byway Corridor Management Plan* approved by Minute Man National Historical Park  
 May 23, 2011: *Battle Road Scenic Byway Corridor Management Plan* approved by the Town of Arlington Board of Selectmen  
 May 23, 2011: *Battle Road Scenic Byway Corridor Management Plan* approved by the Town of Concord Board of Selectmen

## APPENDIX C: PLAN APPROVAL LETTERS FROM PROJECT PARTNERS



National Park Service  
U.S. Department of the Interior

Minute Man  
National Historical Park  
174 Liberty Street  
Concord, MA 01742

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May 20, 2011

David Mohler, Executive Director  
William Palmer, State Scenic Byways Coordinator  
Office of Transportation Planning  
Massachusetts Department of Transportation  
10 Park Plaza, Suite 2150, Boston, MA 02116

Re: Battle Road Scenic Byway Corridor Management Plan Approval

Dear Mr. Mohler and Mr. Palmer,

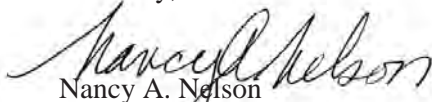
Minute Man National Historical Park wishes to express its full support for the Battle Road Scenic Byway Corridor Management Plan and strongly urges MassDOT and the Federal Highway Administration to accept the submitted Plan.

The purpose of designating and managing the Battle Road as a Scenic Byway is to recognize, protect and enhance the unique historic, scenic, cultural and recreational resources along the byway, including cooperative efforts to preserve the character of the corridor. It will also greatly improve the experience of visitors to the byway. As a member of the Battle Road Scenic Byway Working Group, Minute Man National Historical Park has participated in the development of the Corridor Management Plan prepared by the Metropolitan Area Planning Council (MAPC). Our review of the plan found it to be a valuable document that acts upon recommendations identified by the community representatives and other stakeholders. Numerous public meetings were held to allow full public review of the plan.

Minute Man National Historical Park will be an active participant in implementing the Corridor Management Plan this coming year, and we look forward to working with the towns of Arlington, Lexington, Lincoln and Concord, MAPC and MassDOT to achieve our mutually beneficial goals.

Feel free to contact us if you need additional information. Thank you for your support of the Battle Road Scenic Byway.

Sincerely,



Nancy A. Nelson  
Superintendent

cc: Metropolitan Area Planning Council

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EXPERIENCE YOUR AMERICA™

The National Park Service cares for special places saved by the American people so that all may experience our heritage.

OFFICE OF THE BOARD OF SELECTMEN

CLARISSA ROWE, CHAIR  
KEVIN F. GREELEY, VICE CHAIR  
DIANE M. MAHON  
ANNIE LACOURT  
DANIEL J. DUNN



730 MASSACHUSETTS AVENUE  
TELEPHONE  
781-316-3020  
781-316-3029 FAX

TOWN OF ARLINGTON  
MASSACHUSETTS 02476-4908

May 25, 2011

David Mohler, Executive Director  
William Palmer, State Scenic Byways Coordinator  
Office of Transportation Planning  
Massachusetts Department of Transportation  
10 Park Plaza, Suite 4150  
Boston, MA 02116

Re: Battle Road Scenic Byway Corridor Management Plan Approval

Dear Mr. Mohler and Mr. Palmer,

The Town of Arlington wishes to express its full support for the Battle Road Scenic Byway Corridor Management Plan and strongly urges MassDOT and the Federal Highway Administration to accept the submitted Plan.

As a member of the Battle Road Scenic Byway Working Group, our Town of Arlington has participated in the development of the Corridor Management Plan prepared by the Metropolitan Area Planning Council (MAPC). Our review of the plan found it to be a thorough and thoughtful reflection of the goals and recommendations identified by the community representatives and other stakeholders.

The Plan sets the initial priorities and outlines an implementation work plan. We expect to begin implementing the Corridor Management Plan this coming year, and we look forward to the four towns, The Minuteman National Historical Park, the Metropolitan Area Planning Council, and MassDOT working together.

Thank you for your support of the Battle Road Scenic Byway and let us know if you need any additional information.

Sincerely,

A handwritten signature in cursive script, appearing to read "Clarissa Rowe", written over a horizontal line.

Clarissa Rowe, Chair, Board of Selectmen

cc: Metropolitan Area Planning Council



HANK MANZ, CHAIRMAN  
PETER C.J. KELLEY  
NORMAN P. COHEN  
GEORGE A. BURNELL  
DEBORAH N. MAUGER

## Town of Lexington, Massachusetts

OFFICE OF SELECTMEN

TEL: (781) 862-0500 x208  
FAX: (781) 863-9468

May 20, 2011

David Mohler, Executive Director  
William Palmer, State Scenic Byways Coordinator  
Office of Transportation Planning  
Massachusetts Department of Transportation  
10 Park Plaza, Suite 2150  
Boston, MA 02116

Re: Battle Road Scenic Byway Corridor Management Plan Approval

Dear Mr. Mohler and Mr. Palmer:

The Town of Lexington wishes to express its full support for the Battle Road Scenic Byway Corridor Management Plan and strongly urges MassDOT and the Federal Highway Administration to accept the submitted Plan.

As a member of the Battle Road Scenic Byway Working Group, our town has participated in the development of the Corridor Management Plan prepared by the Metropolitan Area Planning Council (MAPC). Our review of the plan found it to be a thorough and thoughtful reflection of the goals and recommendations identified by the community representatives and other stakeholders.

The Plan sets the initial priorities and outlines an implementation work plan. We expect to begin implementing the Corridor Management Plan this coming year, and we look forward to the four towns, the Minuteman National Historical Park, the Metropolitan Area Planning Council, and MassDOT working together.

Thank you for your support of the Battle Road Scenic Byway and let us know if you need any additional information.

Sincerely,

  
Hank Manz  
Chairman

HM/rc  
cc: Metropolitan Area Planning Council

# TOWN OF LINCOLN

LINCOLN TOWN OFFICES  
PO BOX 6353  
LINCOLN, MA 01773  
Phone 781 259-2600  
FAX 781 259-1677



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## BOARD OF SELECTMEN

Sara A. Mattes, Chairman  
D. Noah Eckhouse  
Peter Braun

May 23, 2011

David Mohler, Executive Director  
William Palmer, State Scenic Byways Coordinator  
Office of Transportation Planning  
Massachusetts Department of Transportation  
10 Park Plaza, Suite 2150  
Boston, MA 02116

Re: Battle Road Scenic Byway Corridor Management Plan Approval

Dear Mr. Mohler and Mr. Palmer,

The Town of Lincoln wishes to express its full support for the Battle Road Scenic Byway Corridor Management Plan and strongly urges MassDOT and the Federal Highway Administration to accept the submitted Plan.

As a member of the Battle Road Scenic Byway Working Group, our Town has participated in the development of the Corridor Management Plan prepared by the Metropolitan Area Planning Council (MAPC). Our review of the plan found it to be a thorough and thoughtful reflection of the goals and recommendations identified by the community representatives and other stakeholders.

The Plan sets the initial priorities and outlines an implementation work plan. We expect to begin implementing the Corridor Management Plan this coming year, and we look forward to the four towns, The Minuteman National Historical Park, the Metropolitan Area Planning Council, and MassDOT working together.

Thank you for your support of the Battle Road Scenic Byway and let us know if you need any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Sara A. Mattes". The signature is fluid and cursive, with the first name "Sara" being more prominent.

Sara A. Mattes, Chairman

Lincoln Board of Selectmen

cc: Metropolitan Area Planning Council



OLD NORTH BRIDGE

## TOWN OF CONCORD

BOARD OF SELECTMEN'S OFFICE  
22 MONUMENT SQUARE - P.O. BOX 535  
CONCORD, MASSACHUSETTS 01742

TELEPHONE (978) 318-3001  
FAX (978) 318-3002

May 25, 2011

David Mohler, Executive Director  
William Palmer, State Scenic Byways Coordinator  
Office of Transportation Planning  
Massachusetts Department of Transportation  
10 Park Plaza, Suite 4150  
Boston, MA 02116

Re: Battle Road Scenic Byway Corridor Management Plan Approval

Dear Mr. Mohler and Mr. Palmer,

The Town of Concord wishes to express its full support for the Battle Road Scenic Byway Corridor Management Plan and strongly urges MassDOT and the Federal Highway Administration to accept the submitted Plan.

As a member of the Battle Road Scenic Byway Working Group, our Town has participated in the development of the Corridor Management Plan prepared by the Metropolitan Area Planning Council (MAPC). Our review of the plan found it to be a thorough and thoughtful reflection of the goals and recommendations identified by the community representatives and other stakeholders.

The Plan sets the initial priorities and outlines an implementation work plan. We expect to begin implementing the Corridor Management Plan this coming year, and we look forward to the four towns, The Minuteman National Historical Park, the Metropolitan Area Planning Council, and MassDOT working together.

Thank you for your support of the Battle Road Scenic Byway and let us know if you need any additional information.

Sincerely,

Stanly E. Black  
for the Board of Selectmen

cc: Metropolitan Area Planning Council



For more information, please contact:  
Metropolitan Area Planning Council  
60 Temple Place, 6<sup>th</sup> Floor  
Boston, Massachusetts 02111  
(617) 451-2770  
[www.mapc.org](http://www.mapc.org)

or visit The Battle Road Scenic Byway website at  
[www.battleroadscenicbyway.org](http://www.battleroadscenicbyway.org)