

Chapter 9

Road and Resource Management along the Byway

This chapter considers how local policies and regulations as well as ownership might support or inhibit the protection of the primary intrinsic qualities and the contributing resources of the byway corridor and the roadway itself. It highlights tools and methods that are currently in place and identifies additional ways to manage and protect the qualities of the Byway. It describes how existing and new development might be managed in ways that are compatible with the goals of the byway corridor.

Character and Design Considerations

The character of the byway corridor is shaped by the natural landscapes, the land uses, and the built environment that abuts the roadway. There are three primary area types (defined by specific qualities of both the built and natural environment) represented along the byway corridor -- Rural, Suburban and Urban. There is also a sub-area identified as Village/Town Center that is shared by the rural and suburban primary areas.⁷²

Rural

Rural stretches of the Byway are characterized as generally undeveloped or sparsely settled with development at low densities. Village centers within rural areas are typically isolated built up areas. The predominant users are motorists and cyclists. Pedestrian activity is minimal. Examples include much of the road corridor in Newbury and Rowley.



User-group interfaces that influence the physical design of the roadway include auto and bicycle. In rural areas along the Byway, motorists and cyclists typically share the road; that is, the road has neither bike lanes nor shoulders. The operating width of an automobile or light truck (9 feet) and the operating width of a cyclist (4 feet) combined are a minimum of 13 feet, and most of the rural stretches are characterized by 12-foot travel lanes and minimal shoulders (1 foot to 2 feet).

Suburban

Suburban low densities areas are generally where the roadway has a mix of natural and developed edge characteristics. Commercial development is sparse and residential development is low to moderate density. Driveways to individual properties are fairly frequent and affect how roadway users operate. Examples include segments of Route 127 in Beverly and Manchester by the Sea.

Suburban high-density areas are places that are intensively developed with a mix of property types. Residential property frontage is typically less than 200 feet and commercial development, including strip development, is common. Driveways are frequent and affect how roadway users operate. Although pedestrians and cyclists are more common in suburban areas than rural areas and pedestrian and cyclist activity here can be high, most properties are geared to automobile access. Examples include Humphrey Street in Swampscott and Rte. 114 in Salem.



⁷² These area types are defined in the 2006 MassDOT *Project Development and Design Guidebook*.

User-group interfaces that influence the physical design of the roadway include autos, cyclists, and pedestrians.

Village/Town Center

There are two types of town centers: the rural village and the suburban town center. The rural village is an isolated built-up area with storefronts, civic and religious uses, and housing, sometimes oriented around a public open space often called the Town Green. Frequent driveways and intersections are common. Right-of-way constraints are also common. Local pedestrian and cyclist activity can be high given the compact nature of the village. The transition from the rural area to the village can be sudden. Examples include the village centers of Essex and Ipswich.

The suburban town center is a built-up commercial and residential area, with the commercial uses grouped together, usually with a uniform setback. Right-of-way constraints are common. Sidewalks are often present and pedestrian and cyclist activity can be high. On-street parking, frequent driveways, and street and sidewalk activity influence travel speeds making them lower than other suburban areas. An example is downtown Rockport.

Urban

Urban areas include residential and commercial nodes. Urban residential districts are usually characterized by multifamily housing with a similar scale and setback. On-street parking and sidewalks are common, and driveways are often consolidated for buildings or blocks. There is usually a high volume of pedestrian, bicycle, and transit activity in urban residential areas. In the central business district or downtown (commercial nodes), most of the development is commercial or mixed use. The roadway network’s primary function here is to provide access to the businesses. On-street parking as well as off-street parking is common. High levels of pedestrians and bicycles are found and the pedestrian network is well defined and comprehensive. A variety of transit is common. Examples include Salem and Lynn.



Many of the communities along the Byway have roadways that fall into two or more of the above identified categories. Building upon the MassDOT Guidelines, this section of the Corridor Management Plan makes recommendations for the byway corridor based on context and the type of roadway, not by town boundaries.

CONTRIBUTING RESOURCES: LANDSCAPE ELEMENTS

Identifying the key contributing resources of an area type that make the roadway segments unique is essential for developing strategies that address the interface between these built or natural elements and the engineered roadway cross-section. Whether existing elements are a primary design constraint or are part of the general context, it is critical that they be considered at the start of any design process to incorporate them successfully into roadway modifications. While these elements are present in varying degrees, most of the communities have features represented within the following categories of features.



Bearskin Neck, Rockport

Architecture

The contributing architectural elements and their relationship to the roadway and the visitor are important and should be carefully considered when changes to the roadway are necessary. When it is desirable to preserve the existing character of the roadway corridor, projects should work to maintain the original intent and relationship between building facades, front doors, thresholds and stoops. ADA compliance should be developed so historic character and visual integrity are maintained. Work should be coordinated with the state and local historic preservation offices as required.

Bridges and Guardrails

Bridges exist within many communities on the Byway. Maintenance and improvements to those structures are the responsibility of MassDOT. Municipalities should work closely with MassDOT to ensure that maintenance and modifications consider impacts to the Byway.



Plum Island Turnpike, Newbury

Guardrail styles and conditions vary along the byway corridor although there are three basic styles: Rigid (Type F barrier), semi-rigid (W-beam), and flexible (cable). To the extent feasible, the Byway should adopt a singular design vocabulary (style, material, color) for this element, but understand that safety requirements vary, so it is possible that more than one style will need to be identified as a preferred style. To minimize intrusions on the scenic qualities of the corridor, a more transparent or less noticeable guardrail is desired. Communities should be aware of visual elements or resources that contribute significantly to the byway experience but also pose potential safety threats, such as ledge outcroppings, retaining walls or abutments. Establishing the correct level of protection and working closely with MassDOT to maintain the most effective but least intrusive guardrails along the roadway will help preserve or enhance the Byway’s scenic character.

As existing elements (bridges, parapets, guardrails, etc) that are discordant with the byway experience near the end of their useful life, the Byway should look to reconstruction to provide an opportunity to improve the visual quality of the element and enhance views from the roadway.

Walls, Fences and Outcrops

The Byway is enriched by the abundance and variety of wall and fence styles that are visible along the corridor. Special attention should be paid to maintain this diversity as it contributes to the byway story; reflecting settlement patterns, social norms, building techniques and architecture from various periods. Most walls and fences are on private land, thus any regulation is imposed at the local level. Designs (height, form, style) that are incongruent with the general character of the area, can have a negative visual impact. An example of this is chain link fencing alongside period style fencing.



A few segments of the Byway contain ledge faces or outcroppings that ‘engage’ the roadway. Most of these are presently in very low speed locations and are without guardrails or barriers. These natural features contribute to an understanding of the history of the roadway and the challenges of construction along a rugged coastline. Unless proven to be significant safety concerns, the ledge should be considered a contributing resource and preserved through the exploration of options such as narrowing travel lanes, refining horizontal alignments, or modifying posted speed limits.



Stone outcroppings in Rockport

Trees

The Byway is distinctive in the variety, size and location of the trees found both within and outside the road right-of-way. Portions of the corridor are completely enclosed by tree canopy; in some areas naturally occurring, as along Route 127 in Rockport, and in other areas as part of the arranged environment of neighborhood streets. Along other sections of the byway trees are set back or are more compact, providing a frame and a rhythmic structure to the street. In rural areas trees often provide a pleasant backdrop, frame views, and screen others. Byway trees should be protected and maintained; many warrant creative road and sidewalk design and more sensitive pruning for utilities in order to promote good health and longevity. Planting additional street trees should also be considered for many areas along the Byway for their visual, environmental and social benefits.



Views

Views are a defining element of the Byway. Vegetation management is a key strategy for protecting vistas from the roadway, and for creating new ones. Sections of the road that presently afford the traveler open and distant views should be identified, and the vegetation managed to protect the scenic resources. Other segments of the road have lost views due to overgrown side slopes or volunteer growth in neglected fields. Strategic work in these areas could create new or enhance marginal vistas.

Guiding new development is another strategy that should be considered to preserve views. Tools could include restrictions on building heights and locations; view easements, conservation restrictions, and scenic overlay districts. Each byway community should develop a scenic resource inventory as support for local zoning and land use regulations to preserve important views.



Edge Treatments

Roadway edge treatments including shoulders, curbs, and sidewalks are the most prevalent element along the Byway; where the road exists, there is an edge treatment. The edge of the roadway is, and should change along the Byway, based on the area type: rural, suburban, village or town center, or urban. The Byway, however, should seek to develop a consistency of edge treatments within area types. For example, similar edge treatments should be encouraged in rural areas as conditions allow, such as three foot paved shoulders, without curbing. A different edge treatment for village centers may focus on preserving historic development patterns such as flush sidewalks separated by tree ways. All edges should be well defined and maintained and should transition safely from one edge type to another.

DESIGN CONSIDERATIONS

The MassDOT *Project Development and Design Guidebook* provides designers and decision makers with a framework for incorporating context sensitive design and multi-modal elements into transportation improvement projects. The Guidebook provides a structure for identifying and establishing criteria that will lead to appropriate design solutions. A key guiding principle of the *Guidebook* is Context Sensitive Design, which is an interdisciplinary approach that involves all constituents or user groups to develop transportation facilities or improvements that fit the physical setting and also preserve scenic, aesthetic, historic and environmental resources. Context-sensitive solutions that protect the features of the Byway begin with understanding the context (area type) through which the road passes.

In addition to new road design or re-design considerations, there are locations on the Byway that require safety and accessibility improvements as well as physical connections to roadside transportation systems such as sidewalks and bike routes. As these changes are made to the roadway, all communities on the Byway will face certain challenges posed by existing conditions. The previous categories of features all imply that a flexible and sensitive response is necessary when considering both maintenance and modifications to the roadway corridor. Municipalities, using the context sensitive design process outlined in the *Project Development and Design Guidebook*, should seek the best fit and appearance of the necessary improvements without degradation of resources.

The following matrix sets a framework for preserving and enhancing the contributing resources of the byway corridor based on area type. Design recommendations, however, are general and should always be considered in the overall context of the area type, as well as the specific context of the actual neighborhood or space. Private rights, drainage requirements, public safety, maintenance capacity and cost may all impact design decisions. With all of this in mind, byway communities should build partnerships and work together to establish an approach to roadway design and maintenance that creates a cohesive corridor while seeking to maintain and enhance their own distinct identities and individuality.

Table 6: Design Recommendations for Preserving and Enhancing the Byway Corridor

FEATURE	AREA TYPE			
	Rural	Suburban	Village/Town Center	Urban
Architecture	<p>Preserve historic buildings</p> <p>Maintain low density</p> <p>Encourage commercial development to respect historic scale and character</p>	<p>Preserve historic buildings</p> <p>Encourage development that clusters uses and preserves undeveloped land</p> <p>Encourage commercial development to reflect historic scale and character</p>	<p>Preserve historic buildings</p> <p>Use design guidelines to preserve and promote desired character</p> <p>Promote mix of uses</p> <p>Encourage interface between buildings and roadway as appropriate</p> <p>Allow greater density</p>	<p>Preserve historic buildings</p> <p>Encourage street wall close to street</p> <p>Promote mix of uses, styles and materials</p> <p>Use design guidelines to preserve and promote desired character</p> <p>Promote density as appropriate</p>
Bridges & Guardrails	<p>Preserve historic bridges</p> <p>Minimize visual impact of guardrails through use of natural materials and colors</p>	<p>Preserve historic bridges</p> <p>Minimize visual impact of guardrails through use of natural materials and colors</p>	<p>Preserve historic bridges</p> <p>Evaluate need for guardrails in low speed areas and minimize visual impact, consider less intrusive options (reduced speed limit, alternative design elements)</p>	<p>Preserve historic bridges</p> <p>Evaluate need for guardrails in low speed areas and minimize visual impact, consider less intrusive options (reduced speed limit, alternative design elements)</p>
Trees	<p>Preserve woodlands, hedgerows and tree clusters</p>	<p>Preserve woodlands, hedgerows and tree clusters</p> <p>Use vegetative buffers to screen parking lots and other uses with negative visual impacts</p>	<p>Encourage street trees to enhance pedestrian environment</p>	<p>Encourage street trees to enhance pedestrian environment</p>
Edge Treatments: shoulder, curbs, sidewalks	<p>Encourage minimum three foot paved shoulder where feasible</p> <p>Prioritize sheet flow and infiltration over curbs and basins to the extent possible</p> <p>Separate pedestrian and bicycle paths from road corridors</p> <p>Limit size of commercial curb cuts</p>	<p>Encourage minimum three foot paved shoulder where feasible</p> <p>Prioritize sheet flow and infiltration over curbs and basins to the extent possible</p> <p>Where sidewalks are desired provide separation from road corridor through use of tree ways or other design elements</p> <p>Limit the size and number of curb cuts</p>	<p>Take cues from historic patterns</p> <p>Encourage continuous walking environment</p> <p>Provide on street parking</p> <p>Limit the size and number of curb cuts</p>	<p>Encourage raised sidewalks with granite curbs</p> <p>Establish a streetscape</p> <p>Limit the size and number of curb cuts</p>

FEATURE	AREA TYPE			
	Rural	Suburban	Village/Town Center	Urban
Views	<p>Preserve existing scenic views</p> <p>Use vegetative management selectively to develop or enhance scenic views</p> <p>Promote views with pull-offs as appropriate</p>	<p>Preserve existing scenic views</p> <p>Use vegetative management selectively to develop or enhance scenic views</p> <p>Promote views with pull-offs as appropriate</p>	<p>Preserve existing scenic views and view corridors</p>	<p>Preserve existing scenic views and view corridors</p>
Signs	<p>Limit number and size to the extent feasible (except agriculture and horticulture related signs)</p>	<p>Limit number and size to the extent feasible</p> <p>Use design guidelines to promote desired character of commercial development</p>	<p>Use design guidelines to promote desired character</p> <p>Look to consolidate signs as feasible to reduce number of occurrences</p>	<p>Use design guidelines to promote desired character</p> <p>Look to consolidate signs as feasible to reduce number of occurrences</p>

Land Management

The level of protection for land and physical resources along the Byway varies with ownership and by municipality, as many of the management strategies and tools are enacted at the local level. These varying levels of protection account for some of the differences in the physical characteristics of the byway corridor today; they will continue to have an impact on the Byway's intrinsic qualities and the corridor's visual integrity as more development occurs.

LAND OWNERSHIP

The majority of the byway route (80 %) directly abuts land owned by private individuals and businesses, presenting opportunities for both private initiatives and regulatory efforts to protect and enhance the Byway. The balance of the route, comprised of about 20,000 acres of open spaces and historic resources, is owned and managed by a mixture of public, private, and nonprofit organizations. These stewards manage the land and buildings to meet a variety of objectives, including resource protection and preservation, recreation, and visitor attraction.

Public Sector

Federal

The byway route abuts federal lands along 0.2 miles of roadway giving direct access to four thousand acres of federal public land. Federal ownership provides a high level of protection from change in use and offers a promise of stewardship, though the intensity of stewardship provided can be impacted by changes to the economy. Federal ownership includes:

- U.S. Fish and Wildlife Service
- U.S. Coast Guard

State

The byway route directly abuts state-owned lands along 3.4 miles of roadway, giving direct access to over two thousand acres of state public land. State ownership also grants a high level of protection from change in use and assures a level of stewardship in line with the fiscal strength and the political policies of the state. Ownership includes:

- Massachusetts Department of Transportation
- Massachusetts Department of Conservation and Recreation
- Massachusetts Department of Fish and Game
- Massachusetts Superior Court Department
- Salem State University
- North Shore Community College

Municipal

The byway route directly abuts town- and city-owned or controlled land along 9.7 miles of roadway. Over seven thousand acres of municipal land is thus directly accessible from the byway route. The degree of protection offered by municipal ownership varies with use and site specific restrictions. Lands acquired and used for conservation or recreational purposes are protected from a change in use by Article 97 of the Articles of Amendment of the Massachusetts Constitution⁷³. Properties for schools, libraries, and other purposes however are not protected from a change in use. Municipally owned properties range from actively managed and programmed lands to passively managed and restricted lands (for example some water protection parcels). The level of maintenance or stewardship varies substantially with use and between municipalities. Municipally owned properties may be managed by:

⁷³ Article 97 of the Articles of Amendment of the Massachusetts Constitution holds that lands or easements taken or acquired for the purposes of conservation or recreation shall not be used for other purposes or otherwise disposed of except by laws enacted by a two thirds vote of each branch of the general court. Article 97 applies to municipal and state held lands.

- Municipal executives – mayors and select boards
- Local boards and commissions – school, library, historical, conservation, open space, parks and recreation, cemetery, water and sewer
- Municipal departments – schools, library, public works, highway, planning, parks and recreation
- Redevelopment authorities and other quasi-independent agencies

Nonprofit and Private Sector

Conservation Organizations and Nonprofit Institutions

The byway route travels along 5.8 miles of roadway that abut land owned and managed by nonprofit organizations and institutions. The level of protection offered by conservation organizations and nonprofit institutions varies with their mission. Conservation organizations offer a high degree of protection against change of use, as their holdings generally have deeded conservation restrictions. These organizations also typically provide a high quality of stewardship as well. Land holdings by educational and religious organizations are not governed by regulations against a change in use; however, they represent a relatively stable use and an overall positive contribution to the Byway's landscape. Conservation organization and nonprofit institutions along the Byway include:

- Essex County Greenbelt Association
- The Trustees of Reservations
- Massachusetts Audubon Society
- Manchester Essex Conservation Trust
- Local Land trusts
- Historic New England
- Historical societies
- Endicott College
- Private Secondary Schools
- Religious Organizations

MANAGEMENT PARTNERS AND ADVOCATES

The following organizations, whether or not they are landowners of property along the Byway, provide advocacy and support for preservation and promotion of byway related resources. They may be sources of information, technical assistance, or fiscal support.

National Public Agencies and Nonprofit Organizations

- Federal Highway Administration – National Scenic Byways Program
- National Trust for Historic Preservation
- National Park Service
- National Register of Historic Places
- The Trust for Public Land
- The Nature Conservancy
- U.S. Department of Agriculture
- U.S. Fish and Wildlife Service

Statewide Public Agencies and Nonprofit Organizations

- Massachusetts Historical Commission
- Preservation Massachusetts
- Community Preservation Coalition
- Massachusetts Audubon
- The Trustees of Reservations
- Massachusetts Department of Conservation and Recreation
- Massachusetts Department of Fish and Game
- Massachusetts Department of Agricultural Resources
- Massachusetts Office of Coastal Zone Management

Regional Nonprofit Organizations and Advocacy Groups

Essex National Heritage Commission

The Essex National Heritage Commission (Essex Heritage) is the congressionally designated management entity of the Essex National Heritage Area. As a nonprofit organization, Essex Heritage works closely with the National Park Service to pursue a mission to “foster partnerships and educational opportunities that enhance, preserve, and promote the heritage of the Area.”

While Essex Heritage provides an array of programmatic support, technical assistance, and funding through grants to eligible organizations that own property along the Byway, the Commission itself does not have any regulatory powers or own any land outright.

In partnership with local and regional entities, Essex Heritage maintains ten satellite visitor centers throughout the heritage area, including five along the Byway in Lynn, Salem, Gloucester, Ipswich, and Newburyport.

Regional Planning Agencies: MAPC and MVPC

Professional planning services related to transportation, economic development, and resource conservation are provided by two regional planning agencies: Metropolitan Area Planning Council (Lynn, Swampscott, Marblehead, Salem, Beverly, Manchester-by-the-Sea, Gloucester, Rockport, Essex, and Ipswich) and the Merrimack Valley Planning Commission (Rowley, Newbury, and Newburyport).

The Trustees of Reservations

The Trustees of Reservations is a nonprofit membership organization that seeks to preserve, for public use and enjoyment, properties of exceptional scenic, historic, and ecological value in Massachusetts. Throughout Massachusetts The Trustees of Reservations protect over 25,000 acres, ??? along or easily accessible from the Byway.

Historic New England

Founded in 1910, Historic New England is a nonprofit membership organization whose mission is to preserve and present the cultural and architectural heritage of New England dating from the seventeenth century to the present. Its collection of resources includes a range from historic properties to humble necessities, from art and artifacts to gardens and furniture.

Essex County Greenbelt Association

The Essex County Greenbelt Association is a member supported nonprofit land trust that works with local communities and landowners to acquire and protect ecological areas, farmland and scenic vistas. The Association is working toward the creation of "greenbelts" consisting of river, trail, and other natural corridors, coastal systems and visually intact landscapes.

Eight Towns and the Bay Committee (8T&B)

The 8T&B Committee is the Upper North Shore Local Governance Committee (LGC) for the commonwealth’s Massachusetts Bays Program.⁷⁴ Seven of the byway communities are members – Rockport, Gloucester, Essex, Ipswich, Rowley, Newbury, and Newburyport. The committee is comprised of citizen representatives appointed by each community.

The purpose of the 8T&B LGC is to protect coastal waters and watershed quality on the upper North Shore of Massachusetts Bay by raising public awareness about good stewardship of these resources. A Massachusetts Bays Program regional staff member provides technical assistance, including environmental training and consulting, workshops, and grant writing.⁷⁵

The Great Marsh Coalition

The Great Marsh Coalition is an ad-hoc group of organizations and agencies that supports a coordinated approach to education, research, protection, and management to promote preservation, restoration, and stewardship of the Great

⁷⁴ Eight Towns and the Bay web page, 2009.

⁷⁵ The Massachusetts Bays Program (MBP) was launched in 1988 as a result of the settlement fines from a lawsuit against the Commonwealth of Massachusetts for violations of the Clean Water Act in Boston Harbor. Since 1990, MBP has been one of 28 National Estuary Programs in the U.S., and is administered by the Massachusetts Office of Coastal Zone Management.

Marsh. Since 2001, the Coalition has been working on an awareness-raising campaign to build an appreciation and understanding of the Great Marsh among its local communities.⁷⁶

Parker River Clean Water Association

The Parker River Clean Water Association is a community nonprofit organization dedicated to promoting the restoration and protection of the waters and environment of the Parker River and Plum Island Sound watersheds. Byway communities located partially or wholly in the watersheds include Ipswich, Rowley, Newbury, and Newburyport.

Bay Circuit Alliance

The Bay Circuit Trail and Greenway is a plan to create a permanent recreation trail and greenway corridor extending through 34 towns in Eastern Massachusetts and around metropolitan Boston. When completed, the corridor would extend from Kingston Bay (in Kingston and Duxbury, MA) in the south to Plum Island (in Newbury and Newburyport) in the north. Portions of the trail currently parallel the Byway along Route 1A in Ipswich, Rowley, Newbury, and Newburyport. The Bay Circuit Alliance (BCA) members consist of six regional, four statewide, and more than 25 local member organizations whose goal is to see the Bay Circuit Trail become a reality. BCA provides planning and technical assistance to local communities to help establish their portion of the Bay Circuit Trail. BCA also maintains contact with state and federal government representatives and agencies to promote the Bay Circuit Trail concept and consult on corridor-wide trail-related issues.⁷⁷

Coastal Trails Coalition

The Coastal Trails Coalition, Inc. is an all-volunteer, nonprofit organization whose mission is to assist in the development, promotion, and stewardship of the Coastal Trails Network, a 30-mile public system of bicycle and pedestrian trails connecting four communities of northern Essex county including the byway communities of Newbury and Newburyport.

Local Nonprofit Organizations and Advocacy Groups

Local nonprofit and advocacy groups are abundant and include land and preservation trusts, neighborhood associations, historic societies, community beautification committees, garden clubs, arts and cultural organizations, chambers of commerce and business groups and many others. These organizations should be represented in the Byway's advisory coalition, be recipients of regular Byway outreach, and be looked to as resources for local information and for partnering opportunities.

LAND USE PLANNING AND REGULATION

Land uses, landscapes, and the built environment will continue to evolve along the Essex Coastal Scenic Byway in response to private and community needs. The responsibility for assuring these changes do not have a negative impact on the corridor will fall primarily to landowners and local governments. Municipalities are empowered to guide and control development to protect the health and welfare of citizens and the environment. They are responsible for developing effective management tools, including master and strategic plans, and land use regulations. They can also offer incentives or become partners with developers, historic preservationists, or open-space conservationists.

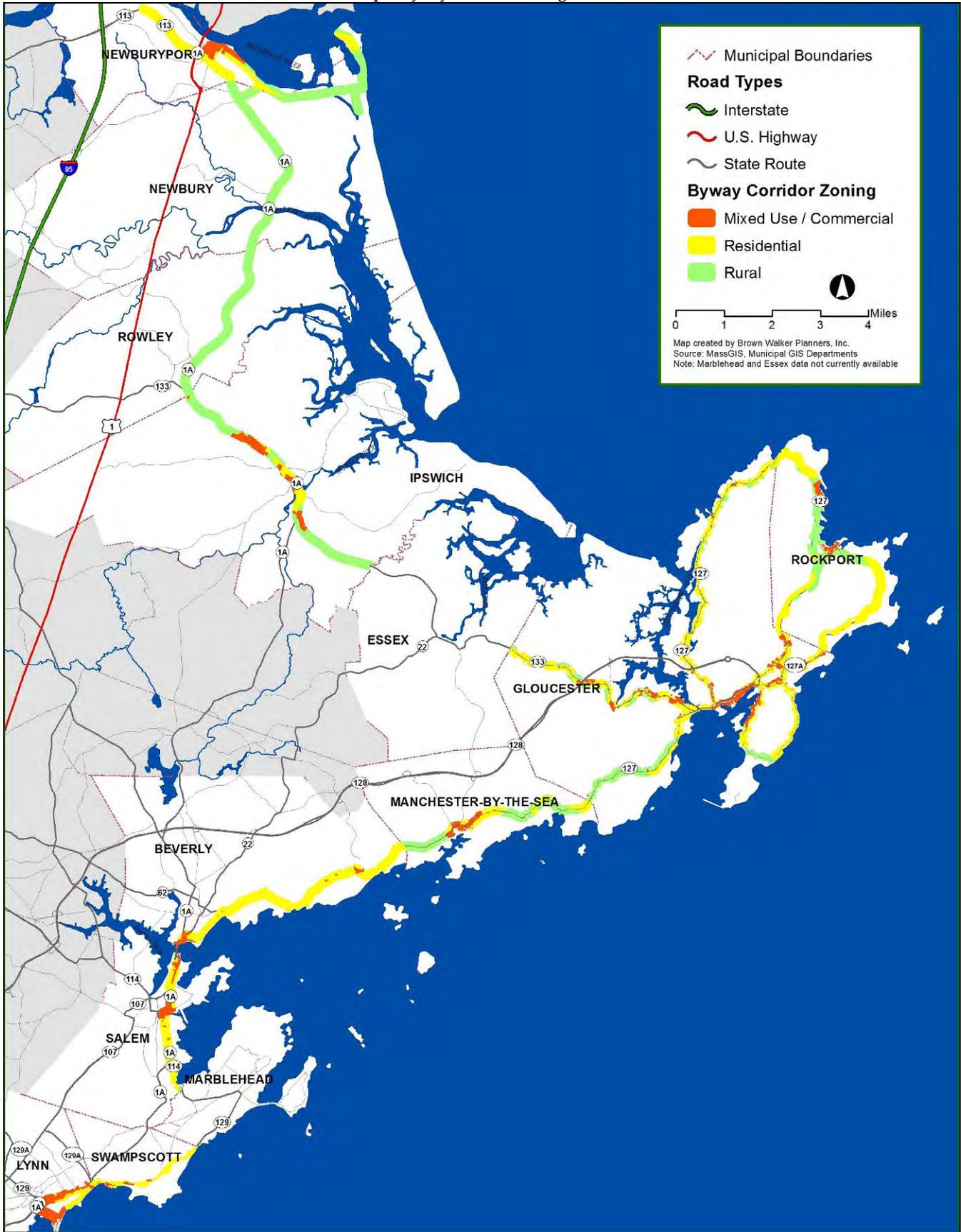
Beyond the local level, regional, state, and federal agencies can provide important technical and fiscal support, but these agencies may have less control over land uses and activities (other than wetlands regulations or on properties that they own). These agencies take part in guiding change by developing policies, funding planning and capital projects, and reviewing and permitting projects within their purview.

A brief description of the existing zoning districts that the Byway passes through in each byway community is provided in the Appendix.

⁷⁶ MA Audubon, Great Marsh Coalition web page, 2009.

⁷⁷ The Bay Circuit Trail and Greenway web page, 2009.

Map 9: Byway Corridor Zoning Areas



Strategies for Balancing Development and Preserving Resources

In addition to preserving and protecting resources, another key objective of a scenic byway corridor management plan is to recommend strategies for enhancing existing development and accommodating appropriate future development, while still preserving the intrinsic qualities of the Byway.

In many communities local regulations have been developed to protect the character of historic commercial areas in the downtown and town centers. The zoning in these areas encourages a mix of uses, small scale commercial businesses and neighborhood oriented services. Commercial areas located along the outskirts of the downtowns and town centers tend to be zoned to support auto-oriented uses and uses that are less compatible with residential uses. In these outlying areas, it would be appropriate to adopt regulations that foster a certain aesthetic character of development that is compatible with the historic and scenic quality of the Byway, rather than controlling uses. Some of the primary areas where this type of regulation would be appropriate include the following local zoning districts:

- Ipswich -- Highway Business Zone
- Salem – Business Highway and Business Wholesale and Automotive
- Gloucester -- Extensive Business District
- Essex – General Zone
- Lynn – Business District, Central Business District, Waterfront Zones⁷⁸

Most of the Byway abuts residential areas that are primarily developed with single and two family dwellings in rural and suburban settings. Continued densification of residential development will naturally impact the character of the byway corridor by reducing the amount of open space and natural areas visible. Generally, communities want residential development that makes a positive contribution to community character and minimizes impacts to the natural, historic, and scenic resources. Improvements to public infrastructure and incentives for preserving historic resources, open spaces and scenic views are some of the tools that are available.

Some byway communities have identified the desire for infill as a way to accommodate new development but recognize that increased density is uncomfortable to many community members. Other communities recognize that existing zoning may be inadequate for, or even discourages, historic preservation, protection of farmland, or redevelopment that would enhance community character and byway resources. The purpose and the function of the zoning districts along the Byway should be reviewed by each community to assure that they are bringing about the changes that are desired by that community and compatible with the goals of the Byway.

REGULATORY TOOLS

Zoning and Land Use Regulations

Special zoning districts instituted or considered by communities along the Byway include an entrance corridor overlay district (Salem) and village center districts.

Several communities have either established or are working on local historic districts, including Marblehead, Salem, Beverly, Manchester-by-the-Sea, Gloucester, Rockport, Rowley, and Newburyport. Some have also indicated an interest in neighborhood conservation districts.⁷⁹

The following are some zoning and land use tools that communities can consider to meet local goals and further protect byway resources:

- **Local Historic Districts** that abut the Byway in eight communities (see Chapter 1) offer the strongest form of protection for the preservation of historic neighborhoods and town centers.⁸⁰ In a local historic district, proposed changes to exterior architectural features visible from a public way are reviewed by a locally appointed Historic District Commission charged with deciding if changes are appropriate and allowed, based on requirements described in a bylaw or an ordinance. Interior features are not reviewed, and a number of exterior features are often exempt (air

⁷⁸ Although a portion of the byway abuts a Heavy Industrial zone, this is currently occupied by Northern Essex Community College.

⁷⁹ Stakeholder interviews by Sue Brown, 2010.

⁸⁰ Massachusetts Historical Commission website: July 20, 2010

conditioning units, storm doors and windows, paint color, and others) depending on how the bylaw or ordinance is written.

- **Village Center Districts** seek to preserve the existing mix of uses in a village and encourage new construction to be compatible with the setbacks and scale of existing structures. Zoning for Village Center Districts should minimize off-street parking in front of buildings, support mixed use, encourage architectural design in harmony with the center's desired character, establish landscaping criteria, and improve the pedestrian environment.
- A **Neighborhood Conservation District (NCD)** is designed to help preserve the visual character of distinctive neighborhoods and unique areas worthy of some level of protection, but which may not be appropriate for, or have support for, protection as local historical districts. An NCD provides a range and flexibility of approach to protecting a neighborhood's general appearance, rather than its historical authenticity, by providing targeted review. Review requirements of a Neighborhood Conservation District are more flexible than for a Local Historic District and could be limited to major construction projects or demolition. Minor changes, such as small additions, vinyl siding or window replacement, could be reviewed in an advisory capacity. Neighborhood Conservation Districts can be administered by a Historical Commission, Planning Board, Historic District Commission, or a special Neighborhood Conservation District.
- **Form Based Codes** represent an alternative to conventional zoning and may be useful in regulating development to achieve a specific urban form. The intent of form based codes is to create a predictable public realm by controlling physical form primarily and use secondarily. Form Based Codes address relationships between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks.⁸¹

Salem's **Entrance Corridor Overlay District** may be a useful model for consideration by other byway communities. The Entrance Corridor Overlay District was established to protect and enhance the major entrance ways into the city. Regulations include the following: restrict number and size of curb cuts, establish location and screening requirements for storage areas and mechanical equipment, require a permit for fencing and restrict height and use of chain link and wire, establish criteria for parking areas of more than 12 spaces that address location and landscaping and shade, require sign review, require site plan review for all development exceeding 2,000 square feet of non-residential use.

Newburyport's **Waterfront West Overlay District** was created with the objective of enhancing the downtown waterfront area as the civic and cultural center of the city. The ordinance requires mixed use development that is compatible in a waterfront downtown area and to protect public access to open space and views to the water. The ordinance requires site plan review, and at least ten percent of all proposed residential dwellings must meet State affordability standards.

There is a high potential for the character of the Byway in Lynn to change substantially through new development along the waterfront (in the WF2 and WF1A zones) where redevelopment of the underutilized waterfront areas would help rejuvenate the downtown area. In order to help facilitate development, the City completed a Waterfront Master Plan and new waterfront zoning ordinance in 2008. The plan calls for mixed use, green space, a boardwalk for public access and quantifies the economic impact development could have on Lynn's tax base, employment rate, and retail, office and housing markets. If fully implemented, the master plan has the potential to create 6 million square feet of residential, retail, office and hotel space. It will create a vibrant new waterfront community, open space, housing, office space, public access and a complete makeover of the southern gateway to the City and the Byway. Lynn's **Waterfront Zoning regulations** apply to any redevelopment that requires site plan review and prohibits certain uses that could detract from the historic and scenic character of the community and Byway (e.g. automobile sales and repair, drive-through windows, storage facilities, and adult entertainment). The new zoning sets a maximum height of 240 feet or 20 stories and institutes a minimum height of 36 feet or three stories to ensure a more productive use of each parcel and create more vitality in the area.

Scenic Roads and Scenic View Protection

The Scenic Roads Act (M.G.L. Ch. 40, Section 15C) includes provisions that allow municipalities to adopt a bylaw or an ordinance to preserve certain characteristics of roads designated as scenic by the community. The purpose of the local statute is to provide an opportunity for Planning Board review of cutting or removal of trees or the alteration of stone walls within the road right-of-way. Ipswich has a scenic roads bylaw. However, none of the byway roads in Ipswich have been designated as local scenic roads. Essex and Newburyport have not adopted a scenic roads ordinance, although they have

⁸¹ <http://www.formbasedcodes.org/definition.html>

designated some local roads as “scenic.” Roadways under state jurisdiction cannot be designated as local scenic roads except by an act of the Massachusetts Legislature.

Scenic road bylaws cannot be used to manage development on private land, so some communities have adopted scenic overlay districts. These regulate the development within a certain distance of a scenic road or within view from a certain location. Regulations apply to activities that might impact the appearance of the scenic attributes, including location, height, density, or massing of buildings.

Metrofutures, MAPC’s regional plan, includes scenic roads protection as part of its Implementation Strategy to protect natural landscapes and emphasizes a regional approach to scenic landscape protection. For example, where a scenic road crosses municipal boundaries, municipalities should collaborate on development of scenic road bylaws or overlay districts. MAPC also suggests considering a joint review process for proposed activities within view of the adjacent municipality.

Design Guidelines or Standards

In Massachusetts, zoning ordinances and by-laws may address aesthetic objectives or the development of the natural, scenic and aesthetic qualities of the community. Typically, aesthetic concerns include the size, height, bulk or appearance of structures, requirements for landscaping and screening, prohibition of noxious uses, and preservation of scenic viewsheds.⁸²

The goal of design guidelines or standards is to preserve or improve the physical characteristics of an area, neighborhood, or municipality by encouraging or requiring new development to meet certain standards. In the case of signs, regulations can also govern existing signs, provided a reasonable time is allowed for compliance.

Design guidelines or standards can be an effective tool for managing the character of the Byway if they are carefully considered in the context of the community. Guidelines may seek to minimize intrusions that the built environment may have on the natural landscape; or to preserve and enhance established characteristics that define a place; or to create changes over time in an area where the built environment portrays an undesirable image of the community.

Parking Requirements

The location and design of surface parking often detracts from the streetscape. Communities may consider adjusting parking requirements to reduce the need for large expanses of paved parking, requiring that parking lots be located behind buildings, or allowing shared parking. Parking lot design can also be improved by requiring shade trees along and within parking areas. In addition to creating a more visually appealing space, adding trees to parking areas lessens the environmental impact of these impervious areas by reducing stormwater runoff, improving air quality, regulating ambient air temperatures, and providing wildlife habitat.

OTHER PRESERVATION AND ENHANCEMENT TOOLS

Public Realm Investments⁸³

Improvements to the public realm can enhance existing development by creating a streetscape that is visually appealing and pedestrian-oriented. Street trees and other vegetation can act as a natural buffer and can help soften the streetscape. Well-maintained sidewalks and street furniture encourage pedestrian activity. Public improvements can also encourage greater investment and improvements by abutting property owners.

Incentives for Private Improvements

Communities can also consider offering incentives for private investment in site improvements or redevelopment of undesirable land uses, including tax-increment financing, and Local Option Property Tax Assessment. Tax increment financing (TIF) allows a municipality to use the increased property taxes that a new real estate development generates to finance costs of the development or public improvements related to the development. The Local Option Property Tax Assessment is a local bylaw or ordinance that rewards historic property homeowners for rehabilitating their properties

⁸² Handbook of Massachusetts Land Use and Planning Law, Mark Bobrowski, 2002, pg. 366.

⁸³ The public realm refers to public space between private land and buildings including sidewalks, streets, squares, parks.

according to appropriate historic standards. Under this bylaw or ordinance, the increased property tax that results from the rehabilitation can be phased in over a period of five years.⁸⁴

Municipalities can also develop non-regulatory guidelines and best management practices for private landowners. Incentives could include financial support from a partnering nonprofit (chamber of commerce or civic improvement organization), technical assistance, and public recognition.

Chapter 61

Owners of forested, agricultural, or recreational land along the Byway may qualify for enrollment in Chapter 61, 61A, or 61B, a state program aimed at preserving natural landscapes. Property owners with land enrolled in these programs receive preferential tax treatment for maintaining their property as open space for the purposes of timber production, agriculture or recreation.

Private Sector Conservation Measures

With limited public funding available for land acquisition, private initiatives should be supported and encouraged. MAPC's regional plan *Metrofuture* highlights private conservation initiatives as one of the Implementation Strategies to support protection of natural landscapes. Conservation restrictions protect land with significant environmental attributes. Conservation restrictions, also called conservation easements, are voluntary, yet binding legal agreements between a landowner and a municipality, state agency, or land trust. While some landowners donate conservation restrictions, others are offered payment and/or other incentives, such as estate tax and federal income tax deductions and property tax relief, to keep parcels in an undeveloped state either in perpetuity or for a specified number of years. The owner typically manages the land in permitted uses, while the holder of the restriction promises to enforce the terms of protection. Conservation restrictions preserve land without public ownership, allow private land to remain on the tax rolls, and, in many instances, allow for public access. In Massachusetts, all conservation restrictions must be submitted according to the written procedures of and be approved by the Secretary of Environmental Affairs.⁸⁵

Other types of property restrictions governed by Massachusetts General Laws include historical preservation restrictions, agricultural preservation restrictions, and watershed preservation restrictions. Historical preservation restrictions are legal agreements to preserve a structure or site of historical significance. They must be approved by the Massachusetts Historical Commission (MHC) and can be held by a local historical commission, a preservation-oriented nonprofit, or by the MHC.

Agricultural preservation restrictions (APRs) apply to lands in active farming or forest use and must be approved by the Commissioner of Food and Agriculture. APRs are often held by land trusts or, if soil requirements are met, by the Massachusetts Department of Agricultural Resources.

Watershed preservation restrictions are used for the purpose of protecting public water supplies and are approved by the Department of Conservation and Recreation.

ACCOMMODATING NEW DEVELOPMENT AND REDEVELOPMENT

Accommodating new development and redevelopment can be an opportunity and a challenge. Some development will enhance the byway traveler's experience because it offers desired services or improves the quality of the built environment. Other development, while inconsequential to byway travelers, may provide the community with employment opportunities, an expanded tax base, or other benefits that could improve residents' quality of life or the municipality's ability to serve the public.

Community and Regional Planning

The desire to accommodate new development or redevelopment within byway communities varies with some communities seeking substantial change, and others seeking ways to limit development to prevent the loss of open space, cultural resources, and community character. Accommodating development should be based on a community's existing and future needs as represented in up- to- date community plans. Byway communities without current plans should undertake public

⁸⁴ Local option property tax -- MGL Chapter 56, Section 5J.

⁸⁵ A conservation restriction, formerly known as a conservation easement, is authorized by Sections 31-33 of Chapter 184 of the General Laws of the Commonwealth of Massachusetts. For more information about conservation restriction approval in Massachusetts, refer to the *Massachusetts Conservation Restriction Handbook*, MA Division of Conservation Services, 2008.

processes to develop a Master Plan and an Open Space and Recreation Plan as first steps in managing change. The Appendix includes a list of the Community Planning Documents relevant to the Byway for each byway community.

Community plans should address the physical as well as functional impacts of change. The physical quality of new development or redevelopment is important for preserving and enhancing the visual characteristics of community, and by extension, the byway corridor. Communities should ensure that zoning, site-plan-review regulations, and design guidelines are in place to help create an attractive and appropriate built environment. Model bylaws and guidelines are abundant, but should be adapted to the unique circumstances and needs of the community to maintain the diversity of landscapes and neighborhoods found along the corridor.

Using regional planning to support community goals is a benefit of the byway program. MAPC's *Metrofuture* (the regional plan for the Greater Boston region) lists regional coordination in a number of its implementation strategies including open space protection, recreation, economic development, and transportation. Since transportation infrastructure and natural resources cross municipal boundaries, any effective planning in these areas must include a regional component. In addition, shared facilities and development of regional resources can help leverage local funding.

Similarly, MVPC's regional planning efforts seek to support community goals. MVPC's *Merrimack Valley Priority Growth Strategy* (2009) includes recommendations to promote coordination and cooperation among communities and encourages communities to take a comprehensive look at development patterns and see the relationships between conservation efforts, transportation improvement priorities and development. *Merrimack Valley Priority Growth Strategy* also fully supports smart growth principles defined below.

Smart Growth Principles

Smart Growth represents a set of planning principles that supports sustainable development: the type of development that encourages healthy and diverse communities and the preservation of natural and cultural resources. MAPC has adopted smart growth principles to guide its planning work.⁸⁶ The Commonwealth of Massachusetts has created a smart growth/smart energy toolkit that provides information on planning, zoning, subdivision, and site design to help communities balance the needs of development and preservation.⁸⁷

The principles of Smart Growth⁸⁸ include:

- **Create range of housing opportunities and choices** to provide quality housing for people of all income levels
- **Create walkable neighborhoods** that include places to live, work, learn, worship and play.
- **Encourage community and stakeholder collaboration** to ensure change responds to a community's own sense of how and where it wants to grow.
- **Foster distinctive, attractive communities with a strong sense of place** based on a shared vision and set standards for development.
- **Make development decisions predictable, fair and cost effective** to engage the private sector.
- **Mix land uses** to create more integrated and vibrant communities.
- **Preserve open space, farmland, natural beauty and critical environmental areas** to bolster local economies, preserving critical environmental areas, and improving our communities' quality of life.
- **Provide a variety of transportation choices** to meet the needs of a diverse community.
- **Strengthen and direct development towards existing communities** to utilize the resources that existing neighborhoods offer, and conserve open space and irreplaceable natural resources on the urban fringe.
- **Take Advantage of Compact Building Design** an alternative to conventional, land consumptive development.

⁸⁶ *Comprehensive Economic Development Strategy* (2009 Annual Update) MAPC

⁸⁷ http://www.mass.gov/envir/smart_growth_toolkit/

⁸⁸ <http://www.smartgrowth.org/about/principles/default.asp?res=1280>