









ACKNOWLEDGMENTS

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Maps, created by the Merrimack Valley Planning Commission, are provided as individual PDFs and in 11x17 format. The maps that acco0mpany this plan are as follows:

- MAP LU-1. Land Uses
- MAP LU-2. Regional cOntext
- MAP LU-3. Zoning
- MAP LU-4. Zoning Overlays
- MAP ED-1. Economic Development Recommendations
- MAP H-1. Housing Inventory
- MAP H-2. Housing Recommendations
- MAP NR-1. Open Space
- MAP NR-2. Priority Habitat
- MAP NR-3. Soils
- MAP NR-4. Surficial Geology
- MAP NR-5. Water Resources
- MAP T-1. Transportation

1. EXECUTIVE SUMMARY

OVERVIEW

The Town of Newbury's 2023 Master Plan is the result of a multi-year effort, beginning in 2015, that included many people: residents, business and property owners, Town officials and staff, the Merrimack Valley Planning Commission (MVPC), and two consulting firms. The COVID-19 pandemic slowed the pace of the planning process as did the delayed release of information from the 2020 Census.

This plan includes the extensive community input from the initial planning process, begun in 2016, including responses to a town-wide survey, public meetings, and the work of the members of the Master Plan Steering Committee. Data has been updated to the most recent available. Community goals expressed in the early draft are largely intact, with a few modifications in response to new data or the recommendations of other plans that were completed during this period.

This executive summary provides a guide to this 2023 Master Plan document and where to find specific information. For ease of use, the vision and goals are stated in this executive summary and then expanded upon in Chapter 3: Expanded Vision, Goals, and Actions. This executive summary also contains a short discussion of the recommended next steps for the Town in the implementation of the actions identified in this Master Plan.

The chapters in this document, and a short summary of the purpose of each chapter, is as follows:

- CHAPTER 1: EXECUTIVE SUMMARY. Overview of the document and recommendations for the Town's next steps.
- CHAPTER 2: INTRODUCTION. Introduction to the planning process, how the plan will be adopted, and a guide to using the document.
- CHAPTER 3: EXPANDED VISION, GOALS, AND ACTIONS. The vision and supporting goals, with a forward-looking explanation for each set of goals and actions.

The next seven chapters provide an assessment of the existing conditions for each of the master plan elements as defined in Section 81D of Chapter 41 of the Massachusetts General Laws (the enabling legislation for master plans in Massachusetts; see Chapter 2. Introduction for more details.) The existing conditions for each element provide the background and support for the recommended actions. Chapter 3: Expanded Vision, Goals, and Actions focuses on what the Town should do next; Chapters 4-10 focus on where the Town is now and the conditions that require action. These chapters are as follows:

- CHAPTER 4: LAND USE.
- CHAPTER 5: COMMUNITY SERVICES AND FACILITIES.

- CHAPTER 6: ECONOMIC DEVELOPMENT.
- CHAPTER 7: HISTORIC AND CULTURAL RESOURCES.
- CHAPTER 8: HOUSING.
- CHAPTER 9: NATURAL RESOURCES.
- CHAPTER 10: TRANSPORTATION.

The final two chapters are intended to guide the Town over the next ten years (the standard life of a master plan).

- CHAPTER 11: IMPLEMENTATION PLAN. A table of the goals and actions, with identified responsibilities, priority, and potential partners.
- CHAPTER 12: TOOLS AND RESOURCES. Useful information that provides additional details about certain strategies, definitions of terms used in the document, and other resources for taking action on the recommendations of this document.

Finally, this document has many authors and thus many strategies for analyzing existing conditions and supporting recommendations. Where possible, this document has tried to standardize the presentation of material, but not at the expense of losing the original community input.

PURPOSE OF THE PLAN

A master plan has many uses, but its primary purpose is to provide a holistic assessment of the needs of the Town and set those needs into a framework that allows the Town officials and staff to address them in a coordinated manner. Master plans provide useful guidance in managing the municipal budget, both operating and capital, and in directing limited resources to areas where they will have the most impact.

Chapters 4-10 – the master plan elements – overlap in terms of their impact on town actions. For example, it is difficult to talk about preserving the natural resources in Newbury without also understanding the Town's history; it is equally difficult to address the town's economy without thinking about the relationship between housing and jobs. The reader should note the areas of overlap; for the Town, such overlap provides an opportunity to address multiple goals with a series of coordinated actions.

Master plans began as land use plans, and over time, topics that interrelate with the use of land became larger components of community planning. Within the last decade or so, concerns about sustainability; economic, social, and physical resiliency; community health; and other topics that cut across the seven base elements have become interwoven in many master plans. For Newbury, the impacts of sea level rise and stronger and more frequent storms are linked to thinking about infrastructure, housing, and economic development (particularly for Plum Island); the desire to support the town's rural heritage is linked to how land is used for agriculture, open space, housing, and economic development; and the desire to protect the significant natural resources, including the Great Marsh, the Parker River, and forests, fields, and wetlands is linked to questions about the impact of development on water, stormwater, and wastewater.

Decisions about land use are also strongly linked to the municipal budget, which is heavily dependent on property taxes based on the assessed value of properties.

1. EXECUTIVE SUMMARY

VISION AND GOALS

The vision on the next page looks forward to 2035, nineteen years from the year the planning process for this 2023 Master Plan began. The ideal life for a master plan is about ten years: short enough for a focus on immediate actions and long enough to allow for flexibility in implementation and aspiration in the setting of community goals.

The Vision as presented on the next page is an update to the 2006 Vision based on the draft goals and actions developed during the planning process for this update. The vision incorporates community desires for communication, protection of the Town's historic and natural resources (including climate resiliency), support for the different components of Newbury's economy, and a desire to support the community with sustainable options for housing and transportation. These themes will occur again in the goals and actions for each of the seven elements.

PLAN GOALS

Following the vision is a list of goals for each of the seven elements. This section provides a checklist of the goals; Section 3 provides additional information about each goal and the associated specific actions. The goals were primarily developed from public input during the earlier community engagement process in 2015/2016. Some goals and actions were refined when the data was updated in 2022 and 2023. Sections 4-10 identify the source and date of the information used to support the goals and actions.

All goals should be read as supporting the overall vision, and should provide guidance to Town officials and staff as they evaluate future actions.

The goals and actions are repeated in the Implementation Plan with a listing of the responsible boards, committees, departments, and other partners. Where known, the priority for implementation is also given. Priorities may shift over time and in response to the completion of earlier actions, economic trends, and demographics shifts, and other factors that are not within the control of the Town. However, the vision and goals should provide a framework for evaluating Town policies and investments in operating and capital expenditure.

VISION

In 2035, Newbury is a town that:

- Consistently engages the residents of its three villages to build a strong sense
 of community through proactive discussions to enhance the identity of each
 village and the Town as a whole.
- Creates tools and takes action to preserve and enhance its historic and natural resources with tools that address the current and projected impacts of climate change.
- Supports creative economic development that draws on its strengths in agriculture and fishing, its historical and natural resources, and the arts to enhance the vitality of the Town and provides opportunities, including jobs, for its residents.
- Develops zoning for diverse housing options that support residents of all ages and across all income levels while also supporting and protecting the natural environment.
- Supports different modes of transit and strategic opportunities to improve road safety for all users and reduce traffic by increasing mobility options for local trips.

PLAN GOALS (continued)

Land Use LU-1 Use regulatory tools to balance the preservation of natural and historic resources with development which is consistent with the vision for each area of town. LU-2 Undertake capital improvements to address community needs and enhance the appearance and safety of village areas. LU-3 Identify priorities and funding strategies for infrastructure development and conservation measures to foster resilience. LU-4 Foster community engagement within each village area and town-wide to encourage participation and build support for town initiatives. LU-5 Reconsider adopting the Community Preservation Act. Community Services and Facilities CS-1 Develop a plan for a permanent location for the municipal offices. CS-2 Continue programs to support consistent communication with town residents. CS-3 Continue to evaluate the existing water and wastewater facilities to understand whether they are adequate for current needs and potential growth. Update the Town of Newbury Open Space and Recreation Plan. CS-4 CS-5 Ensure high quality internet and cell phone service. Study the feasibility of a compost waste facility at the transfer station. CS-6 Plan for a permanent location for the Council on Aging. CS-7 CS-8 Expand library hours to full funding.

Assess the need for capital improvements and evaluate space usage for Newbury

CS-9.

Elementary.

PLAN GOALS (continued)

Eco	nomic De	velopment							
	ED-1 Establish local leadership on economic development issues.								
	ED-2	Support and retain existing businesses within the town.							
	ED-3	Definitively address and plan for infrastructure needs.							
	ED-4	Establish regulatory policies and procedures that support local businesses.							
	ED-5	Ensure new and existing development is complementary to the physical context of the different geographic areas of the Town.							
	ED-6	Create more opportunities for workers of all income levels to live in Newbury or commute to Newbury.							
Hist	coric and (Cultural Resources							
	HC-1	Increase the awareness of Newbury's unique cultural and historic resources.							
	HC-2	C-2 Continue cataloging historic assets in Newbury and develop priorities for cultural resource preservation.							
	HC-3	Maintain the historic integrity of Newbury's existing villages.							
	HC-4	Preserve the town's historic cemeteries.							
	HC-5	Preserve the town's scenic landscapes and rural character.							
	HC-5	Preserve historical records of the Town of Newbury and its residents.							
Ноц	ısing								
	H-1	Increase the diversity of housing options.							
	H-2	Increase the supply of affordable housing.							
	H-3	Expand water/sewer infrastructure capacity to serve more diverse housing.							
	H-4	Reduce the vulnerability of Newbury's housing stock to climate-related storm damage.							
	H-5	Expand local awareness and support for housing needs.							
	H-6	Encourage housing development which preserves natural and cultural resources.							

PLAN GOALS (continued)

Natural Resources

- NR-1 Protect and ensure the availability and quality of the town's water supply resources.
- NR-2 Protect and enhance inland, estuarine, and coastal water quality.
- NR-3 Protect and enhance critical upland, water resources, and wetland habitats to sustain biodiversity.
- NR-4 Preserve working farms and prime and unique agricultural farmland, farmland of statewide importance and farmland of local importance.
- NR-5 Manage future land development and redevelopment in an environmentally sensitive manner.
- NR-6 Educate Newbury residents and businesses about the Town's natural resources, resource threats, and resource protection tools and techniques.
- NR-7 Implement the relevant recommendations from recent planning efforts.

Transportation

- T-1 Improve the safety of roadways in Newbury.
- T-2 Maintain the quality of Newbury's transportation infrastructure.
- T-3 Enhance safe bicycle and pedestrian circulation.
- T-4 Enhance safe access to Plum Island and Town beaches and waterways for Newbury residents and visitors.

IMMEDIATE NEXT STEPS

UPDATES OF OTHER PLANS

The Town is in the process of updating its Housing Production Plan and Hazard Mitigation Plan. Once completed, those plans should be viewed as part of the 2023 Master Plan and the recommendations of these newer plans should be incorporated as part of the implementation plan for this Master Plan. A third plan, the Open Space and Recreation Plan, should also be updated. This plan is particularly important as it is a required element of some state grants that could be used to support desired acquisition and preservation of natural resources.

MASTER PLAN IMPLEMENTATION COMMITTEE

The Town should also consider appointing a standing Master Plan Implementation Committee (MPIC) which would be responsible for <u>tracking</u> the implementation of this plan. This is an increasingly common practice, and it provides accountability in ensuring that the Town stays on track while also setting up a regular system of communication with residents. Options for such committees include reporting to the Planning Board/Select Board at least twice annually and reporting to the Spring Annual Town Meeting. The MPIC should set up a web page on the Town's website that can be used to track and communicate progress. Joint appointment of members by the Planning Board and the Select Board is a good method of ensuring broad representation across the town and an appropriate mix of skills and experience.

DATA UPDATES

One challenge with the updates to this plan was the lack of recent data. Data from the 2020 US Census was released later than anticipated, and some data has not yet been released. See Chapter 8. Housing for a more in-depth discussion of this challenge.

The data sources for this plan have mostly been identified. Either the Master Plan Implementation Committee (if appointed) or Town staff should update the data in these tables as more recent data becomes available. Tracking the data is a good method of assessing successful implementation; the direction of a trend (for example, an increase in the acres of farmland protected) can indicate that a policy or action is working as planned.

2. INTRODUCTION

WHY PLAN?

Chapter 41, Section 81D of the General Laws of Massachusetts provides the Newbury Planning Board with the authority to develop a master plan for the Town of Newbury:

A planning board established in any city or town under section eighty-one A shall make a master plan of such city or town or such part or parts thereof as said board may deem advisable and from time to time may extend or perfect such plan.

Such plan shall be a statement, through text, maps, illustrations or other forms of communication that is designed to provide a basis for decision making regarding the long-term physical development of the municipality.

Newbury's 2006 Master Plan provided a framework for addressing the challenges confronting an emerging suburban community, such as physical changes that threaten community character and increasing costs associated with providing municipal services driven by new residential growth. A range of issues addressed in the 2006 Master Plan continue to be of concern to the community: maintaining Newbury's rural character and small town "feel"; preserving open space, agricultural lands, and the town's historic development pattern around distinct villages; providing more diverse housing options; and strengthening the tax base needed to support public facilities and services.

Newbury residents generally like Newbury the way it is today and would prefer changes be minimized in the future. There are however numerous aspects of Newbury that are troublesome to many residents and need to be addressed, including the rising cost of living in Newbury (housing costs and increased taxes), the difficulties of doing business in and with the Town, and the difficulty the Town has experienced in building consensus around public facilities capital planning.

Nine years after the 2006 Master Plan was completed, the Town of Newbury undertook an update of that Master Plan in order 1) to analyze and incorporate the demographic changes that have occurred since 2000, 2) evaluate the current economic climate and 3) review the progress in implementing the 2006 Plan's goals in order to provide the basis for decision-making relating to development policy, municipal budgeting and capital planning, and economic development.

PROCESS

This updated 2023 Master Plan was prepared by Town staff, Board members, and volunteers who live or work in Newbury, with assistance from the Merrimac Valley Planning Commission (MVPC) and two consulting firms, Community Opportunities Group, Inc., and Innes Associates Ltd.

The 2023 Master Plan incorporates input and feedback from community members gathered through focus groups, stakeholder interviews, an online survey, and Steering Committee meetings throughout the Master Plan process. Interested residents and business owners in Newbury were also invited to participate in working groups that focused on Housing and Economic Development, as well as to attend a Public Forum on Land Use. The consultants, together with the Master Plan Committee, then organized that information, described the concerns raised by residents, and identified the goals and strategies to remedy those concerns.

In 2015, the Planning Board initiated the process of updating the Town's 2006 Master Plan. A Master Plan Steering Committee was appointed and empowered with the authority to oversee the development of the plan. The committee included interested Newbury residents, members of other Boards and Commissions, and town employees. This Master Plan was largely the effort of these volunteer Committee members who contributed hundreds of hours of their time to ensure that this process was thorough, relevant and useful. Martha Taylor, the Planning Director, provided significant technical and organizational assistance to the Committee during the Master Plan process.

Valuable input was provided by other Town employees, elected officials, residents and other volunteers during Master Plan Steering Committee meetings, public forums, and an extensive survey questionnaire. The Master Plan Committee comprised the six members of the Planning Board in 2015:

John Weis, Chair George Morse
John O'Connell Elizabeth Mitchell

James Robinson Peter Paicos (Associate member)

As well as:

Ron Barrett Stephen Mangion Chuck Bear, Select Board Norm Rehn

Casey Brown Marlene Schroeder
J R Colby, Select Board Charles Stefanidakis

Peter Erickson Dan Streeter Marshall Jespersen, Finance Committee Paige Sullivan

Robin Lawson Martha Taylor, Planning Director Fred Thurlow Geof Walker, Select Board

The Merrimack Valley Planning Commission (MVPC) provided support to the Committee by developing maps, providing technical assistance, and preparing the Transportation and Economic Development chapters, and reviewing the Natural Resources chapter. Special thanks to Jerrard Whitten, Ian Burns, Tony Collins, Cece Gerstenbacher, Anthony Kormornick, Steve Lopez, Mikayla Minor, and Patrick Reed.

2. INTRODUCTION

ADOPTION

[After the public review process and subsequent to the Planning Board's vote, this section will be updated to reflect the final adoption process.]

In Massachusetts, the Planning Board adopts the master plan of the community. However, before the Newbury Planning Board votes on the document, it will be released for public review and comment, both through an online survey and a community meeting. The date of the meeting and the link to the survey will be announced in May 2023. Comments from the meeting and the survey will be collected and added as an Appendix to this 2023 Master Plan. The comments will be reviewed by Town officials and staff as they move forward with implementation of the recommended actions.

PRIORITIES

[After the public review process, this section will be updated with 2023 priorities and a comparison of the demographics of the respondents to the first survey and the 2023 survey.] The comments from the 2023 survey will be added as an appendix.]

HOW TO USE THIS DOCUMENT

Chapter 3. Expanded Vision, Goals, and Actions, provides the complete description of the next steps the Town of Newbury should take to implement this plan. This chapter is future-oriented; in other words, the information in this chapter focuses on what should be done to accomplish the stated goals.

Chapters 4-10 provide the in-depth background information that led to the recommendations in Chapter 3. These are organized by the seven planning elements listed in Section 81D.

Chapter 11. Implementation Plan outlines who is responsible for what by when. In some cases, the priority may not be clear at this stage. This chapter is the working document of the plan and should be reviewed and updated at least annually.

Chapter 12. Tools and Resources provides additional information about specific recommendations that was too detailed to include in other chapters, common planning resources, a discussion of benchmarks the Town could develop, and a Glossary of terms.

[Note: the Glossary will be updated from public comments during the review process.]

OVERVIEW

As described in **Chapter 1. Executive Summary** and **Chapter 2. Introduction**, this chapter provides more detail about the vision and goals defined by this 2023 Master Plan. The most important components of this chapter are the actions associated with each goal. Implementing these actions, over time, should move the Town towards the community vision expressed below.

VISION

In 2035, the Town of Newbury will be 400 years old. A master plan often uses a time horizon of ten years for the implementation of recommended actions. The Town intends to adopt this master plan in 2023, which creates a twelve-year span before the anniversary.

The vision, goals, and strategies of this Master Plan should be achievable within that thirteen-year timeframe. As the Town approaches 2035, it should be in the process of updating this plan to address needs and goals for 2045.

Imagine that you are in 2035 looking over the past twelve years. What does the Town want to accomplish during that time? How will the Town have changed during this period? This vision for Newbury, developed during the initial planning process and refined during the final edits, seeks to answer that question for the whole Town.

VISION

In 2035, Newbury is a town that:

- Consistently engages the residents of its three villages to build a strong sense of community through proactive discussions to enhance the identity of each village and the Town as a whole.
- Creates tools and takes action to preserve and enhance its historic and natural resources with tools that address the current and projected impacts of climate change.
- Supports creative economic development that draws on its strengths in agriculture and fishing, its historical and natural resources, and the arts to enhance the vitality of the Town and provides opportunities, including jobs, for its residents.
- Develops zoning for diverse housing options that support residents of all ages and across all income levels while also supporting and protecting the natural environment.
- Supports different modes of transit and strategic opportunities to improve road safety for all users and reduce traffic by increasing mobility options for local trips.

ELEMENT 1: LAND USE

A vision for future land use in Newbury reflects the community's strong commitment to preserving its natural resources, agricultural heritage, and historic, traditional New England character. At the same time, Newbury values maintaining fiscal sustainability, a high quality of life, and a sense of community.

The 2006 Master Plan articulated two goals for land use which are still applicable today:

- RETAIN THE TOWN'S PHYSICAL CHARACTER. The characteristics of the community that
 are most valued by residents including its agricultural and scenic open landscape,
 historic resources, and attractive villages should be protected through conservation,
 support of agriculture, and focus on development and improvements that enhance the
 villages.
- ENCOURAGE HOUSING AND DEVELOPMENT DIVERSITY. A homogeneous development pattern of large single-family homes on large lots is inconsistent with community character and has contributed to rising rents and home prices which inhibit older residents, young families, and individuals from becoming or remaining a part of the community. Encouraging a broad mix of housing options and facilitating small-scale commercial development that provides amenities and jobs for residents will enhance the quality of life and community sustainability.

A third goal – to maintain a balanced tax base across the different land uses – is simply not a realistic goal for Newbury. It does make sense to attract more business, but with 97% of properties in residential use, the tax base is far from balanced, and unlikely to be so.

Two areas of Newbury have consistently been identified as appropriate sites for higher intensity uses such as commercial, mixed use, and/or multifamily development. Both Route 1 north of Boston Road and the commercial districts near I-95 at Scotland Road and at Central Street have potential for new development or redevelopment that can serve a variety of community needs. Both are well located with respect to transportation infrastructure, with convenient access to regional highways and, in the case of Route 1, proximity to the commuter rail station.

Both Route 1 and the Pearson Plaza area have a variety of existing commercial sites, some of which are underutilized. New development could enhance the value and appearance of these areas, without impacting historic villages or landscapes. Although several new development projects have improved the quality of uses along Route 1, several older uses contribute to a negative, and in some cases, blighted image. This negative image was mentioned by several survey and interview respondents. The Town should encourage the development of vacant land in these areas, as well as the upgrading and reuse of the existing underutilized properties.

Suitable commercial uses might include light industry, offices for professional or health services, or other low-impact uses, as well as small-scale food processing or other operations related to local agriculture. Both areas could also be appropriate for a multifamily or mixed-use development, possibly using Chapter 40R. Establishing and enforcing standards for site plans, architectural design, signage, etc., can help to improve the appearance of these gateways and minimize impact to surrounding residential neighborhoods.

Pearson Plaza has public water but no sewer service, while Route 1 has neither water nor sewer. The lack of water/sewer infrastructure is a deterrent to attracting high quality development to these areas. The Town should explore ways to fund the expansion of public water to serve Route 1 and existing neighborhoods surrounding it. Leading with zoning for higher density uses in these areas might serve as an incentive to attract private funding for infrastructure improvements, by reducing permitting barriers.

BYFIFI D

The Byfield section of Newbury has a well-established land use pattern of low to moderate density neighborhoods surrounding a small center with a mix of commercial, residential, and civic uses. Because it has water supplied from the Byfield Water District as well as relatively good soils for individual as well as combined septic systems, the area in and around Byfield has more capacity than other sections of Newbury to accommodate new development. This area could support a mix of single-family residential development at densities comparable to the existing village context, and perhaps some small-scale multifamily, commercial development, and/or mixed-use residential/retail within or near the village center. A modest expansion of independently owned retail, food service, or other locally oriented amenities could help to anchor the village center.

Streetscape improvements and sidewalks within the village center, and a regional trail connection through the village would help to provide Byfield Village with a more cohesive atmosphere, encouraging healthy mobility and community interaction. Further, increased programming of activities and events in public spaces such as the Library and the Byfield Community Arts Center could help to foster community engagement.

ROUTE 1A CORRIDOR

The Route 1A/High Road corridor, from the Newburyport line at the northern end to the Rowley border at the southern end, serves as the historic spine connecting the Upper Green and Lower Green/Parker River village nodes, including numerous historic houses and farms, scattered businesses, and spurs with modern subdivisions. This corridor is also part of the Essex Coastal Scenic Byway. Although much of this stretch is built out, water provided by the City of Newburyport to roughly half of Route 1A and better soils than in interior sections make this area attractive for development

There may be capacity for limited growth or redevelopment along this route, as well as some priority sites for protection of historic buildings, agriculture, and landscapes. The area is most likely to support single-family housing development, although there may be opportunities for small-scale home-based retail and expansion of existing businesses and/or agricultural or marine-related uses. Any development that does occur needs to be sensitive to the rural, agricultural, and historic character of this scenic roadway.

While the town center at the Upper Green lacks space to accommodate new commercial or residential development, public improvements around the Green such as landscaping and playfield improvements, and recreational programming can help to provide for more active community use. The recently completed Police Station will help to fulfill the some of the space needs for Town functions and has improved the appearance of the gateway and town center. The needs of the other departments and the vacant Town Hall at 25 High Street must also be addressed. Improvement and reconstruction of the sidewalks along the length of Route 1A would enhance pedestrian connectivity throughout the corridor.

The portion of the Route 1A corridor around the Lower Green and Parker River has significant historic resources, as well as car-top and small craft boating access and a small commercial node with both marine-related uses and specialty retail. Improvements to the parks, roadways, parking areas, and public boat launches would help to enhance the image, connecting historic and natural resources to create a focal point for residents and businesses.

The Lower Green and Parker River area of Newbury are the location of the Town's earliest settlement. Although most of the area has been built, out there are a few large parcels, located mostly to the south of the river, for which development could be considered. The historic and cultural value of the structures and open spaces in the Lower Green / Parker River area need to be respected as land use changes are considered in the future.

PLUM ISLAND

Due to the existing density of development and the increasing threat of coastal storms and flooding, the expansion or reconstruction of houses and businesses on Plum Island should follow the regulations in the Plum Island Overlay District (PIOD), as amended to address recommendations from the Town's MUNICIPAL VULNERABILITY PLAN (MVP) and MVP Action Grant study, and other regulations governing development on the island. Expansion of, and improvements to, open space and recreational areas would increase the attractiveness and usage for residents and visitors alike. Resilience planning and improvements such as a freeboarding incentive program to encourage existing houses and businesses to be elevated above projected flood levels could help to reduce the potential for storm damage.¹ Enforcement of existing state and local regulations and coordination between municipal, volunteer, and other government and nonprofit stakeholders on the island is critical to the stewardship and resilience of infrastructure, private property, and natural resources.

Addressing the needs for parking, waste removal, beach management, and pedestrian and bicycle safety can help to balance the impacts of traffic from Island residents, local beachgoers, and tourists. Streetscape and sidewalk improvements leading up through Plum Island Center would also help to define public space and improve the appearance of the center.

INTERIOR AREAS

Newbury has few interior roads connecting Byfield at the western end of Town and Route 1A and Plum Island at the eastern end. The principal connecting routes, Middle Road, Orchard Street, Hay Street, and Boston Road have some low-density development, farms, subdivisions, and open or forested areas. Much of the undeveloped land in the interior of the town is protected open space and/or has environmental conditions present such as wetlands or marsh, which preclude new development. Nevertheless, there are parcels which could potentially be developed, and may attract new construction of primarily single-family residences. The Town should identify unprotected natural resources which might be priorities for conservation and should encourage low impact development practices that reflect the rural character and infrastructure capacity of its remote areas.

¹ See Appendix __, Hull Freeboarding Incentive Program

- LU-1 Use regulatory tools to balance the preservation of natural and historic resources with development which is consistent with the vision for each area of town.
 - LU-1.1 Adopt zoning for highway-oriented commercial areas to allow a mix of multifamily and/or commercial development. Consider using Chapter 40R "Smart Growth" zoning provisions to take advantage of state incentives for transit-oriented development and revitalization of existing developed areas.
 - LU-1.2 Refine zoning for Byfield Village to allow a complementary mix of housing options and village amenities. Consider "Compact Communities" zoning to encourage the development of moderately priced housing compatible with the scale, density, and physical character of the surrounding neighborhood.
 - LU-1.3 Consider freeboarding incentive program or other regulatory changes to increase resiliency on Plum Island. Evaluate best practices and models used in other coastal communities.
 - LU-1.4 Consider a Local Historic District or other regulatory tools for protecting historic character around the Upper and Lower Greens. Evaluate best practices and models used in other communities.
 - LU-1.5 Designate the Town-owned Greens as permanent conservation land and evaluate whether other Town-owned properties are priorities for open space conservation, recreation, or other public use.
 - LU-1.6 Modify zoning to create an incentive to preserve historic buildings, landscapes, and views by allowing four or fewer dwelling units on a lot. Consider the following strategies:
 - Conversion of historic buildings, especially single-family housing, to four or fewer dwelling units.
 - Waivers for minimum lot size, minimum frontage, and/or setback requirements.
 - LU-1.7 Develop policies that provide for uniform enforcement for violations of local and state regulations regarding land use and environmental protection. Identify frequent enforcement issues and review best practices and resources for addressing the most common issues.
 - LU-1.8 Adopt Inclusionary Zoning for conventional subdivisions.

LU-2 Undertake capital improvements to address community needs and enhance the appearance and safety of village areas.

- LU-2.1 Determine and carry out a plan for construction and/or renovation of permanent space for municipal departments.
- LU-2.2 Develop plans for sidewalk, streetscape, and recreation/park improvements in each of the three village areas.
- LU-2.3 Work with MassDOT to investigate streetscape improvements, including for pedestrians and bicyclists, along Route 1A.
- LU-2.3 Support the extension of the regional trail connecting to the Newburyport and Salisbury trails through Byfield, and roadway improvements to enhance bicycle safety on Plum Island Boulevard and Route 1A.
- LU-2.4 Identify funding sources (state, Town, or private funding through betterments or mitigation) to carry out sidewalk, streetscape, bicycle infrastructure, and park improvements.
- LU-2.5 Adopt the principles of "Complete Streets" to guide roadway improvements where appropriate and feasible.
- LU-2.6 Delineate rights-of-way on Plum Island, creating a map and installing signage to ensure they are recognized.

LU-3 Identify priorities and funding strategies for infrastructure development and conservation measures to foster resilience.

- LU-3.1 Support the implementation of the Great Marsh Coastal Adaptation Plan to protect resource areas and Town assets that are vulnerable to coastal storms, sea level rise, flooding, and erosion.
- LU-3.2 Work with the Merrimack Valley Planning Commission to update the 2016 Hazard Mitigation Plan.
- LU-3.3 Continue to work with state, regional, and nonprofit entities to protect historic properties and agriculture.
- LU-3.4 Create an Economic Development Committee charged with making recommendations and leading initiatives to expand the tax base.
- LU-3.5 Establish a committee or partnership among existing groups to evaluate and advocate for funding to protect historic and open space resources.
- LU-3.6 Work with Merrimack Valley Planning Commission (MVPC) to update the Housing Production Plan (formerly the Regional Housing Plan).
- LU-3.7 Fund a study of the costs/benefits of developing water extensions along Route 1A and Route 1 north of Boston Road.
- LU-3.8 Identify properties and areas in town experiencing failing wells and/or septic systems.
- LU-3.9 Further evaluate the need for, and options available to provide additional wastewater treatment to serve existing homes and businesses and possibly new development, especially around the highway commercial areas and Byfield Village.

LU-4 Foster community engagement within each village area and Town-wide to encourage participation and build support for Town initiatives.

- LU-4.1 Organize events and programs using public and community spaces within each of the village areas (indoors and outdoors).
- LU-4.2 Use mapping, signage, programming, and physical improvements to increase Newbury residents' awareness and access to community spaces and recreational assets.
- LU-4.3 Encourage broader participation and leadership through ad hoc or town-appointed committees focused on the needs of each village.
- LU-4.4 Establish an Economic Development Committee to recruit and advocate for the needs of businesses that provide amenities to residents in the villages.
- LU-4.5 Hold public meetings to discuss town-wide municipal needs in various locations throughout town.
- LU-4.6 Use a variety of media including Town website, email, social media, newspapers, phone, cable television, etc., to share information about elections, town meetings, and other local issues.
- LU-4.7 Increase communication/coordination between existing community groups such as public and private schools, Council on Aging, environmental and conservation advocates, Historic New England, Greater Newburyport Chamber of Commerce, the Byfield Community Arts Center, etc., in order to share information about events, resources, volunteer opportunities, and community needs. Create a contact list of Town/ Regional organizations and groups active in Newbury.

LU-5 Reconsider adopting the Community Preservation Act.

- LU-5.1 Establish a committee to gather data and facilitate community meetings.
- LU-5.2 Evaluate the CPA as a potential funding source for open space (including the preservation of agricultural lands), recreation, historic preservation, and affordable housing..

ELEMENT 2: COMMUNITY SERVICES AND FACILITIES

The number one issue in the survey and focus groups was for the Town to improve communication with its residents on issues including overrides, town meeting warrants and budget issues. This became increasingly problematic when the Town offices were moved in 2016 to an office building in Byfield, which unfortunately made it more difficult for residents on the east side of I-95 to easily access Town officials. Now that the new police station has been built and is occupied, plans for a permanent location for the Town offices can move forward.

The COVID-19 pandemic required many meetings to move to virtual format, which allowed people to watch meetings from other locations. In future, hybrid meeting options and posting recorded meetings online may encourage more residents to become informed and involved in Town government.

Other critical concerns

Residents believe that protecting the existing aquifers, wells and other sources of water are a high priority, either to address the issue of failing wells or to accommodate new growth. Town residents also indicated a need to address street, sidewalk, parking and other so called streetscape improvements in the three distinct village areas of Byfield Village, Upper Green and Plum Island Center.

Update on Recommendations from 2006 Master Plan

The major priorities from the 2006 Master Plan regarding community facilities were 1) a new police station, 2) new or expanded Town Offices, 3) an expanded or new Council on Aging and 4) Changes to Town Governance.

Town residents approved a capital exclusion override on the November 2016 state ballot (Question 5) for the design, construction, and original equipping of a new police station and the remodeling, reconstructing, and making extraordinary repairs to Town Hall. The measure passed 2212-2112, with 299 blanks. Town Meeting approved the capital amounts for each at a Special Town Meeting on January 31, 2017 (Article 2). The police station is now complete and occupied. Options for Town Hall are currently under discussion and will be on the May 2023 ballot.

The Fire Department, which was not articulated as a need in 2006, is now a municipally operated department after being served by private fire companies for years.

In 2022, the Council on Aging moved to temporary quarters at 12 Kent Way in the same building as the temporary Town offices. The Center still needs a permanent location.

Change to town governance have included expanding the Select Board (formerly Board of Selectmen) to five members from three members and adding new professional management. New management initiatives include new fiscal procedures for the annual budget process, better internal coordination, and an increased focus on delivering services.

CS-1 Develop a plan for a permanent location for the municipal offices.

Since July 2016, the municipal offices have been housed in temporary rented space at 12 Kent Way in the 95 North Business Center. This location, although convenient to Byfield residents, is 20 to 25 minutes from Plum Island. The Town should evaluate options that are accessible to all residents.

CS-2 Continue programs to support consistent communication with residents.

- CS-2.1 Expand TV access to include live broadcast of more Board, Committee, and Special Project meetings. Require that all Board and Committee meetings be televised. Expand staffing and funding as needed.
- CS-2.2 Consider moving Board and Committee meetings to a hybrid format to allow greater opportunities for resident participation.
- CS-2.3 Ensure that the Town's website is regularly updated with relevant data, studies, minutes and Board and Committee meetings.

CS-3 Continue to evaluate the existing water and wastewater facilities to understand whether they are adequate for current needs and potential growth.

Lack of available water and wastewater disposal facilities and infrastructure continues to be a limiting factor for new development in Newbury. New development utilizes on-site septic systems and wells. Limited infrastructure increases the likelihood that development will occur in a sprawl-like manner, which may result in diminution of community character. Strategies to transfer growth into village centers, or along Route 1 between the Town line and Boston Road, or near I-95 at Central Street require comprehensive solutions.

Denser development which can generate increased tax revenue will not occur without the ability to discharge and treat increased waste. Options to address this need include:

- Extending public wastewater infrastructure from Newburyport, if sufficient capacity exists
- Coordinating development to require the creation of a package treatment plant
- Small scale sewage treatment facilities

Past development of the Upper Green area occurred on lots less than the Town-wide standard of 1 unit per acre. Due to exceptionally poor soils combined with the small lots, there has been an increasing prevalence of septic failures in the area. Provision of a "public sewer solution" should be investigated to address this problem. Options include:

- Extending public wastewater infrastructure from Newburyport
- Coordinating the development of a package treatment plant to serve the area (organizing the neighbors to jointly solve this problem).

Public sewer infrastructure could also support thoughtful additional development in the area which would help to achieve other goals of the Master Plan.

The Town should look to acquire any remaining well locations in Newbury, in particular the known well location off Parker Street. This location could help provide additional water supply capacity to support the development of the Business and Light Industrial Zoned area along Route 1. Other well locations need to be explored that can address current or future well failures or the possible impacts of sea level rise on wells located near the Great Marsh or near the Parker River and its tributaries.

- CS-3.1 Study alternatives to provide sewer service to the Business and Light Industrial District as well as to support denser development in certain residential districts and other commercial districts.
- CS-3.2 Study alternatives to solving the wastewater needs of the Upper Green and Lower Green/Cottage Road Area.
- CS-3.3 Promote opportunities to preserve and protect and expand the public water supply.
- CS-3.4 Explore the possibility of additional water sources to meet increased demand.

Work with the Byfield Water District and the City of Newburyport to prepare for future increased demand for water.

- Continue to explore potential well sites for the Byfield Water District, including potential for an additional well on Larkin Road.
- Identify any other viable well locations in Newbury and consider the acquisition of identified properties, in particular the known well location off Parker Street.
- Study the feasibility of installing a new drinking water supply well in the Route 1/Hanover Street area, which could help provide water supply capacity to support new development.

The Town should keep in close communication with the City of Newburyport as the City seeks to assure its own water supplies in the face of both increased demand and also increased stress from the changing climate.

CS-4 Update the Town of Newbury Open Space and Recreation Plan.

The Town's Open Space and Recreation Plan was most recently updated in 2009 and is out of date and therefore not in compliance with Massachusetts requirements. Some issues and facilities noted in this report that should be analyzed in the Open Space Plan include adding trees to the Upper and Lower Greens, painting the backstop at the Upper Green, and doing a comprehensive needs assessment for the boat launching facilities on the Parker River.

- CS-4.1 Appoint additional members to the Open Space Committee to oversee the update of the Plan.
- CS-4.2 Appropriate funding for consulting services to assist with the update of the Plan.

CS-5 Ensure high quality internet and cell phone service.

An increasing number of Newbury residents work full- or part-time from home. Even before the COVID-19 pandemic, some residents ran businesses from their homes.

CS-5.1 Convene a meeting of local providers and residents along with Town officials to discuss changing technology, residents' needs, and infrastructure coverage.

CS-6 Study the capacity of the transfer station and the feasibility of adding a compost waste facility at the transfer station.

The Town should evaluate the capacity of the Transfer Station to determine whether any upgrades or modifications are needed. TA solar energy generating facility is planned for the landfill site.

Many homes in denser areas of Town such as Byfield, Upper Green and Plum Island have no means of discarding yard waste. The Town should look at creating such a facility.

CS-7 Plan for a permanent location for the Council on Aging.

The Town of Newbury has a little over 2,000 seniors aged 60+ and this population is likely to grow. The move to 12 Kent Way is a positive step in the right direction to providing the types of programs and services the Council on Aging offers to the seniors of the town. The Council on Aging expects to outgrow the temporary space at Kent Way as programs and staff increase to meet the needs of the seniors of Newbury.

The isolation brought on by the Covid-19 pandemic has proven the need for the Council on Aging's support. Staff coordinated volunteers to help seniors in the community with grocery shopping and weekly wellness checks, scheduled Covid-19 vaccine appointments,

and provided transportation to medical appointments (including vaccine clinics). The Council on Aging has returned to being a gathering place for fun and educational programs that help alleviate the stress brought on by isolation (whether it is Covid-related or not). The key to successful aging in a community is to provide the services needed and the space necessary to provide those services. Planning for a larger space soon for the Council on Aging benefits the seniors now as well as those for years to come.

CS-8 Expand library hours to full funding.

The Town's Library, completed in 2000, is open for 36 hours per week between Labor Day to Memorial Day, and drops to 32 hours per week in summer when it closes on Saturdays. These hours of operation are significantly below that of libraries in neighboring towns and do not provide residents with the accessibility they need.

Massachusetts law defines the Minimum Hours Open, which is required for state funding. This metric is based on the size of population; for Newbury, that required minimum number of hours is 25 and must include some evening hours.

Table VGA-1: Comparison of Regional Library Opening Hours

Town	Mon	Tue	Wed	Thu	Fri	Sat	Eve	Wknd	Total Winter/Summer	Population
Georgetown	2-8	10-8	2-8	10-5	10-5	9-1	9	4	40/36	8,470
Groveland	1-8	10-5:30	1-8	10-5:30	10-5	10-2	7	4	40	6,752
Newbury	-	9-5	11-7	9-5	9-5	10-2	2	4	36/32	6,716
Newburyport	9-9	9-9	9-9	9-9	9-5	9-5	16	8	64	18,289
Rowley	9-7	9-7	9-7	9-7	9-2	9-2	8	5	50	6,161
Salisbury	10-6	12-8	10-6	10-8	10-6	10-2	9	4	46	9,236
West Newbury	10-7	10-7	10-7	10-5	10-5	9-1	6	4	45	4,500

The chart above was current as of April 2023, and taken from the hours of operation listed on each library's website. The population for each community is from Table H-1.

CS-9. Assess the need for capital improvements and evaluate space usage for Newbury Elementary.

Newbury Elementary School was last renovated in 2005. The declining enrollment and changes to best practices in K-12 education should be incorporated into an evaluation of future space needs.

ELEMENT 3: ECONOMIC DEVELOPMENT

ED-1 Establish local leadership on economic development issues.

An Economic Development Commission, as recommended below, can focus on some of the goals related to supporting the local business community. A five-year strategy addressing these issues and other policy considerations should be completed within a one-year time frame of appointing members to the EDC. Members can support Town staff with the other two actions under this goal.

- ED-1.1 Consider the creation of an Economic Development Commission (EDC) as a Town board to champion economic development issues, identify and pursue funding opportunities and obtain technical assistance, and represent the Town to regional and state agencies.
 - The EDC should be tasked with addressing barriers to economic development, marketing Newbury as a business destination, and help monitor the health of the community.
 - A five-year strategy addressing these issues and other policy considerations should be completed within a one-year time frame of appointing members to the EDC.
- **ED-1.2** Form partnerships within Town Hall and cultivate relationships with neighboring communities and regional agencies to ensure inclusion of Newbury businesses and resources in regional efforts to promote economic development, workforce training, and affordable housing initiatives in the region.
- ED-1.3 Strengthen the ability of Town officials and local leaders to expedite and promote development proposals that are beneficial to the Town as a whole.

ED-2 Support and retain existing businesses within the town.

- **ED-2.1** Explore collaboration with the Greater Newburyport Chamber of Commerce to support Newbury businesses.
 - Explore co-hosting an event with Newbury businesses focused on networking & improving the ease of doing business in the community
- ED-2.2 Work with the Merrimack Valley Planning Commission as the Regional Economic Development Organization to conduct business outreach to both large and small businesses.
 - Learn how to better support business needs in town, including how to make it easier to start and grow a business in Newbury
- ED-2.3 Ensure Newbury's priorities are incorporated into the regional Comprehensive Economic Development Strategy
 - Use this planning process as an opportunity to learn what is happening in other communities and adapt local approaches to regional challenges
- **ED-2.4** Increase coordination within the business community to identify opportunities for networking, events, cross-promotion, business training, and other resources.
 - Inventory businesses in Newbury (including home-based businesses) and create a database of contact information to allow for ease in the distribution of information to the business community.
 - Identify training opportunities and technical assistance resources offered regionally and distribute information to business owners.
 - Solicit the participation of local businesses in Town events.
 - Create a marketing brochure and business directory to distribute regionally to help promote local businesses.

ED-2.5 Encourage and support home-based businesses.

- Ensure that the permitting and registration requirements and fees are appropriate and not overly restrictive.
- Address the permitting process for home-based businesses in the Zoning Bylaw to expand and support home-based business opportunities. Define which are allowed as-of-right and which uses require a higher level of review.

ED-2.6 Preserve agricultural land and working landscapes.

- Identify and recruit potential participants in the Agricultural Preservation Restriction Program. Administered through the State, the program offers to pay farmland owners the difference between the "fair market value" and the "agricultural value" of their farmland in exchange for a permanent deed restriction which precludes any use of the property that will have a negative impact on its agricultural viability.
- Work with farmland owners to reduce their property tax burden through Chapter 61A of the Massachusetts General Law which allows for a reduction in taxation for working farmlands in excess of 5 acres.
- Identify funding sources to allow the Town to exercise their Right of First Refusal for agricultural lands slated for removal from the Chapter 61A program.

ED-3 Definitively address and plan for infrastructure needs.

- ED-3.1 Fund an infrastructure study to evaluate scenarios for the provision of public water and sewer in Newbury to proactively manage the increased salinity in wells and failure of septic systems and to facilitate more intense development in the Business/Light Industrial District.
- ED-3.2 Address concerns regarding parking management, restroom facilities, waste management, and funding for lifeguards at the Town Beach on Plum Island.
- ED-3.3 Use local leadership including the Select Board and the EDC recommended in ED-1.1 to communicate and inform the voting public regarding infrastructure options and the costs of inaction.
- ED-3.4 Adopt Complete Streets policies to enable eligibility for streetscape improvements.

ED-4 Establish regulatory policies and procedures that support local businesses.

- ED-4.1 Explore how smaller communities support small businesses and work with MVPC to publicize their small business resources to local businesses and entrepreneurs.
- ED-4.2 Develop a permitting guide for prospective businesses, including home-based businesses.
- ED-4.3 Review Town Bylaws to ensure that provisions regarding noise, waste, hours of operation, and other nuisance factors, as well as licensing requirements, are appropriately conceived and governed by reasonable metrics.

ED-5 Ensure new and existing development is complementary to the physical context of the different geographic areas of the town.

- ED-5.1 Consider the adoption of Design Standards and Guidelines to augment Site Plan Review, giving the Town more authority to comment on the design of proposed buildings and lots to ensure they will be complementary (and within the same vernacular as surrounding structures in areas of historic concern).
- ED-5.2 Address issues with "curb appeal" and beautification in the villages by completing Streetscape Master Plans for each area. The recommendations in the Master Plans should be used to inform the Design Guidelines and it may be appropriate to have separate guidelines for the different villages.
- ED-5.3 Devise and adopt a policy to fairly address enforcement issues and make clear that clean and attractive commercial sites are expected as part of the community standard.
- ED-5.4 Develop a specific strategy for the land within the Commercial Highway Zoning District near I-95.

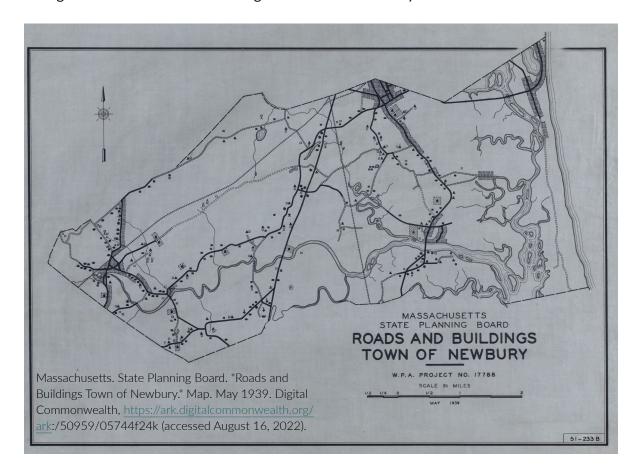
ED-6 Create more opportunities for workers of all income levels to live in or commute to Newbury.

- ED-6.1 Create pathways for new development of all housing types—apartments, (affordable and market rate), condominiums, duplexes, and single-family homes.
 - Identify areas of the town best suited to support additional housing, potentially in line with MBTA communities requirements
 - Work with the Merrimack Valley Planning Commission on the development of a Housing Production Plan that includes achievable goals for the community.
 - Continue to support and promote the development of accessory apartments in new and existing construction.
- ED-6.2 Determine if existing businesses would benefit from having additional transportation options for their workforce—in the form of public or shared-private transportation.

ELEMENT 4: HISTORIC AND CULTURAL RESOURCES

Public meetings, forums, and surveys conducted as part of this Master Plan update have reinforced the concerns raised in the 2006 Master Plan about issues that relate directly and tangentially to historic and cultural resource planning and protection. Most concerns continue to relate to the impact that new development is having on historic resources and the visual landscape of Newbury.

The residents of the Town of Newbury believe strongly in preserving the current physical character of the Town, that of a quiet, semi-rural community with strong ties to its agrarian roots. People expressed concern about the impact that development has on Newbury's cultural assets, including the historical, architectural, and natural resources which contribute to the image of Newbury. Preserving and sharing the historic and cultural assets, including buildings, stone walls, significant trees, agricultural and natural landscapes, and written records, will strengthen the Town's understanding of its collective identity.



HC-1 Increase the awareness of Newbury's unique cultural and historic resources.

The role of history and culture in forming and supporting community identity cannot be overstated. The unique development pattern of a town can be understood both in its built environment and in the people who have lived and worked in a community over time. Historic and cultural resources are also components of an integrated economic development plan. Online maps and calendars help draw people to places and events while physical markers are a constant reminder of the history of the town.

- HC-1.1 Create and install markers to identify the Newbury Historic District.²
- HC-1.2 Develop a voluntary program to install signs with a consistent style and information on historic buildings throughout Newbury.
- HC-1.3 Develop a series of informational markers for key areas of town that showcase history, culture, and natural resources.
- HC-1.4 Create a Newbury trail system for visitors that links history and natural resources in one or more self-guided walks, bicycle rides, and drives throughout the Town.
- HC-1.5 Develop a town-wide cultural calendar that incorporates events from the cultural and nonprofit groups throughout the Town.
- HC-1.6 Plan for the 400th anniversary of the Town in 2035.

² This is the Upper Green and is listed on the State and National Register of Historic Places as Newbury Historic District (The First Parish or Upper Green).

HC-2 Continue cataloging historic assets in Newbury and develop priorities for cultural resource preservation.

Many historic and cultural resources in Newbury have not been adequately documented. Developing a reliable inventory of these assets is the first step in a comprehensive historic preservation program and can help to raise awareness about historic resources in Town, help to identify the assets most suitable for protection, and make property owners eligible for preservation grants and tax incentives for restoration. Once the inventory is complete, new nominations to the State and National Registers of Historic Places will help preserve the documentation and incorporate the assets into future planning processes.

Areas of focus for the inventory include the nine heritage landscapes identified in the Newbury Reconnaissance Report. These are the built environments of Byfield Cemetery, Byfield Village, the Governor's Academy, the Lower Green, and scenic roads and the natural resources of the Common Pasture, Glacial Erratics, the Parker River, and Plum Island. For new State and National Register District Nominations, the primary areas include Byfield Village, Byfield Parish, Governor's Academy, and the Lower Green.

Current concerns include the following:

- BYFIELD VILLAGE. Lack of comprehensive survey and protection for known assets; loss
 of historic structures such as the Larkin Mill.
- BYFIELD CEMETERY. Maintenance for this privately-owned cemetery.
- LOWER GREEN. Limited documentation. Lack of funds to maintain publicly-owned assets.
 Need for preservation restrictions on the Lower Green and Schoolhouse. A committee is studying the possibility to designate the area as a Local Historic District.
 - HC-2.1 Compile a list of resources that are underrepresented, focusing on resources within the nine heritage landscapes.
 - HC-2.2 Document secondary features on residential properties which have already been listed.
 - HC-2.3 Record more complete histories for assets identified as First Period Dwellings.
 - HC-2.4 Prepare and submit new State and National Register District Nominations. Consider 25 Annapolis Way (Bennett Hill) on Plum Island.
 - HC-2.5 Encourage homeowners to put Preservation and/or Conservation restrictions on their properties.

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HC-3 Maintain the historic integrity of Newbury's existing villages.

Newbury's villages are a physical embodiment of shifts in development over time. Each village has a unique identity that contributes to the greater whole of the town. That identity should be respected and enhanced. The neighborhood planning studies discussed in Chapter 4. Land Use should lead to policies and regulations that protect existing historic buildings and structures while allowing for respectful development that is sympathetic to the historic context.

- **HC-3.1** Conduct neighborhood planning studies for each of the villages.
- HC-3.2 Investigate establishing Neighborhood Conservation Districts for the Old Town/ Upper Green, the Lower Green, and Byfield Village.
- HC-3.3 Investigate zoning changes targeted to the unique identity of each village.

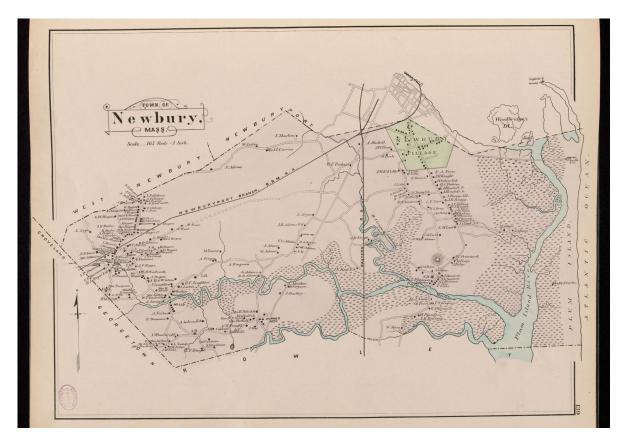
While agricultural landscapes contribute to the history and culture of the Town of Newbury, the protection of such landscapes is in Chapter 9: Natural Resources.



Chamberlain, Samuel. "Old Newbury,
Tristram Coffin
House." Photograph.
1928–1971. Digital
Commonwealth,
https://ark.
digitalcommonwealth.
org/
ark:/50959/2f75ts849
(accessed August 09,
2022).

HC-4 Preserve historic cemeteries in Newbury.

- HC-4.1 Create a Cemetery Committee, perhaps as a subcommittee of the Historical Commission.
- HC-4.2: Develop a comprehensive preservation and management plan for the First Settlers Burial Ground, which is the only publicly owned cemetery.
- HC-4.3: Work with owners of private cemeteries, perhaps through the Newbury Historical Commission, to ensure the preservation of historic markers, monuments, and other resources.
- HC-4.5 Facilitate the development of a "Friends of" volunteer committee to help with fund-raising and clean-up days and coordinate with the Veterans' Agent.



Geo. H. Walker & Co. "Atlas of Essex County, Massachusetts." Map. Boston Mass.: Geo. H. Walker & Co., 1884. Norman B. Leventhal Map & Education Center, https://collections.leventhalmap.org/search/commonwealth:3t948d844 (accessed March 26, 2023). p. 116.

HC-5 Preserve the town's scenic landscapes and rural character.

Contributing components of scenic roadways include stone walls, trees, historic views of landscapes, and historic buildings. Trees within the public right-of-way are within the control of the Town and can be protected either by a Scenic Roads Bylaw to control private development or Town policies to control public actions. Stone walls on designated scenic roads can be protected with those same tools.

HC-5.1 Compile a comprehensive inventory of all roads in Newbury which could be considered scenic.

Compile a comprehensive inventory and companion digital map of all scenic roads and associated landscapes in the community, with a description and photo documentation of each road's special attributes and amenities. The Essex County Landscape Inventory - Newbury Reconnaissance Report, completed in May 2005 as part of the Massachusetts Heritage Landscape Inventory Program, is a starting point for this work.

Consider designating the following as scenic roads: Scotland Road, Boston Road, Central Street, Cottage Road, Green Street, Hay Street, Middle Road, Newman Road, Old Road (Byfield), and Orchard Street.

HC-5.2 Consider adopting a Scenic Roads Bylaw to control the impact of private development and encourage homeowners to protect stone boundary walls.

Consider adopting a Scenic Roads Bylaw pursuant to Massachusetts General Laws, Chapter 40, Section 15C, and designate eligible roads, such as those listed above, as scenic roads. A Scenic Roads Bylaw applies only to activities occurring within the road right-of-way, such as tree cutting and brush removal, road maintenance, and curb cuts. It does not affect the use of adjacent private or public property that is outside of the right-of-way.

- HC-5.3 Develop policies and procedures for road maintenance and reconstruction on scenic roads by the Department of Public Works.
- HC-5.4 Consider adopting a Scenic Overlay District Bylaw to preserve the view of landscapes deemed part of the Town's history and culture. Such a bylaw could also be incorporated into Newbury's Open Space Residential Development (OSRD) Bylaw, that could protect open space and habitat corridors. The adoption of a Scenic Overlay District Bylaw could provide additional design review and guidelines for projects in designated scenic areas.

HC-6 Preserve the historical records of the Town of Newbury and its residents.

Genealogists are interested in the historic town records of the Town of Newbury because of the completeness of the records. The Historical Commission has purchased archival storage materials to assist with preserving items at the Lower Green Schoolhouse. Unfortunately, the integrity of the records is being threatened by the passage of time, lack of secure storage in the Town Hall for the records and limited resources to correctly preserve the documents.

Collaboration is important for town archives, the maps stored in the Library, and preservation materials. The Massachusetts State Historical Records Advisory Board (SCHRAB) provides funding for the preservation of historic documents. The jurisdiction for the preservation of historic records, documents, and artifacts is shared by the Town Clerk, the Newbury Historical Commission, and the Trustees of the Library, who are working on the restoration of documents. The three entities should coordinate their efforts in addressing the actions below.

- HC-6.1 Incorporate a climate-controlled storage space in the new or renovated Town Hall.
- HC-6.2 Apply for grants to preserve maps and historical documents.
- HC-6.3 Develop a plan to electronically scan all historic Town records and make them accessible via the Internet.
- HC-6.4: Create a policy for physical access to documents and materials for researchers.

ELEMENT 5: HOUSING

HOUSING NEEDS

Although home prices have fluctuated over the past decade, the cost of housing in Newbury remains on the high end for the region and the state, substantially outpacing the rate of increase in household incomes. An increasingly smaller portion of Newbury's housing inventory is affordable to people with low- or moderate-incomes. Newbury currently falls 176 units short of meeting the Chapter 40B goal of having ten percent of housing units affordable to households with low- or moderate-incomes. Newbury's Subsidized Housing Inventory (SHI) includes only 94 existing units, or 3.5 percent of its 2,699 year-round housing units in 2010.

In addition to the need for housing that is affordable across a wider band of incomes, the limited range of housing options also presents challenges in sustaining a balanced community. These include not only cost and affordability, but also the size and types of housing. Housing needs change throughout an individuals' life. While single family units are suitable for families with children at the peak of their earning careers, communities need to have a range of options suitable for younger and older households who may prefer to rent or to own housing that is less costly, that requires less maintenance, or is free of barriers for those with impaired mobility.

Younger households are being priced out of Newbury's housing market. This has contributed to a decline in families with school-aged children and a shift toward older demographics. The lack of housing for people of varying ages to stay in Newbury has and will continue to transform the community's demographics and the character of the town itself.

REGIONAL CONTEXT

Newbury's role within an interdependent region influences its land use and market. The town is historically linked with Newburyport, functioning as a suburb of that city. Newburyport has a more diverse, higher density housing stock, which Newbury lacks. Newbury, on the other hand, offers a more rural lifestyle with larger lots. Through the regional school district, Newbury is also intrinsically linked with Salisbury and Rowley. Like Newburyport, Salisbury offers more diverse housing, with recent development of mixed income multifamily housing and more affordable homeownership opportunities.

³ According to the Subsidized Housing Inventory website, the SHI has not been updated to the 2020 Census figures. The base information from the 2020 U.S. Census will not be available until May 2023. See https://www.mass.gov/service-details/subsidized-housing-inventory-shi, last accessed August 11, 2022.

Housing choices are not only local but take into consideration the availability of housing throughout the region that offers the characteristics and prices that households are seeking. The shortage of rental housing or other housing options, and the issue of affordability are concerns across the region as well as within Newbury itself. Low-income households, young adults, and seniors seeking to downsize and remain in their community are priced out of housing, not only in Newbury but in the surrounding region. People employed in Newbury and neighboring communities increasingly commute longer distances to secure housing they can afford.

H-1 Increase the diversity of housing options.

Housing options are necessary to serve the needs of residents of all ages and household composition. Most of Newbury's housing inventory consists of single family houses, many on large lots, as required under zoning for standard subdivisions. Meanwhile demographic trends (an aging population and shrinking household sizes) and changing consumer trends (young adults waiting longer to buy their first homes) suggest a growing demand for alternatives that will enable Newbury residents to stay in the community as their needs change.

- H-1.1 Continue to promote the accessory apartment bylaw.
- H-1.2 Encourage infill development in areas that have public water and/or septic capacity (except for Plum Island).
- H-1.3 Adopt zoning in appropriate locations that allows multifamily housing and/or mixed-use development at a compatible scale and form.
- H-1.4 Identify opportunity sites for adaptive reuse, provide zoning to facilitate reuse/redevelopment with multiple units.
 - Communicate with property owners of identified properties to discover future plans and opportunities.
 - Consider zoning to allow greater flexibility to optimally reuse historic buildings.

H-2 Increase the supply of affordable housing.

Newbury has some of the most expensive housing in the region, which makes it especially challenging for first time buyers to purchase in Newbury, or for long-time residents to stay in the community. High housing cost contributes to a shift away from an economically and demographically balanced community.

- H-2.1 Identify potential sites such as Chapter 61 parcels, Town-owned surplus properties,⁴ and underutilized commercial or institutional properties which may provide opportunities for affordable housing development/redevelopment.
- H-2.2 Seek opportunities to create affordable housing using existing housing stock such as tax title or receivership. (Deed-restrict homes to be affordable to low/moderate income households.)
- H-2.3 Seek development partner(s) to build or rehabilitate affordable units. Partners might include local developers or non-profits such as Habitat for Humanity, Greater Newburyport YWCA, or Harborlight Community Partners. Given their limited resources, nonprofit organizations may have the best opportunity to develop affordable housing with funding support and/or land donated by municipalities. Consider disposing of Town-owned surplus property through an Request for Proposal (RFP) process for affordable housing.
- H-2.4 Approach owners of Newbury's existing affordable housing developments to put in place long-term or permanent deed restrictions to ensure that units remain affordable beyond the term that current subsidies are set to expire.
- H-2.5 Access existing resources to support housing needs of low-income residents through the United States Department of Agriculture (USDA) and regional partnerships. (i.e., neighboring communities, regional nonprofit organizations).
- H-2.6 Coordinate access to housing rehabilitation programs and community services to enable elderly residents to safely age in place in their existing homes.
- H-2.7 Coordinate with USDA, local banks, and regional partners to participate in a first-time homebuyer assistance program.
- H-2.8 Consider inclusionary or incentive zoning tools to create affordable housing.

⁴ Town-owned surplus properties area those that are not needed to support town functions and services.

H-3 Expand water/sewer infrastructure capacity to serve more diverse housing.

Much of the remaining undeveloped land in Newbury has environmental constraints that limit the potential for development, including soil conditions, wetlands, flood zones, and coastal vulnerability. The flexibility offered by OSRD zoning has enabled some development to take advantage of better site planning to accommodate and protect the natural resources. Still the absence of water and/or sewer infrastructure throughout most of the town limits the density that can be built out. Tools such as zoning and Chapter 40B do not address the extraordinary cost of building infrastructure to support higher density housing.

H-3.1 Adopt zoning in select locations that would allow a higher density which could support private investment in infrastructure or the development of alternatives to fulfill water/ wastewater needs.

The MBTA Communities Act, which requires certain communities to adopt zoning to allow multifamily housing (three or more units) as-of-right, is an opportunity for the Town to consider the appropriate locations for such zoning, the types of housing most suitable for Newbury that could support aging in place and young families, and how the zoning could create incentives for private investment in water/wastewater infrastructure.

- H-3.2 Consider developing a Town well to serve existing and future development. This action would require further study to determine the best location and how the water would be treated and distributed. See also Goal CS-3.
- H-3.3 Consider alternatives for wastewater treatment.
- H-3.4 Seek funding for infrastructure improvement through private developers or regional partnerships. Newbury may also be eligible for long term low interest loans for water and waste disposal facilities through the US Department of Agriculture Rural Development program.

H-4 Reduce the vulnerability of Newbury's housing stock to climaterelated storm damage.

The threat of climate-related disaster is an increasing concern that affects Newbury's current housing stock and options for new housing. The Plum Island section of Newbury, which has the greatest residential density, has the greatest exposure to storm-related impacts. While homes on Plum Island are served by public water and sewer, the area is not appropriate for future growth due to the vulnerability to sea level rise and storm damage. In addition, the Town's zoning limits new growth. This vulnerability also presents a financial burden for existing homeowners, due to the increasing cost of flood insurance, the requirement to elevate new homes and make substantial improvements to meet the state building code, and the reluctance of some banks to provide financing for properties in this area.

- H-4.1 Review and implement the relevant recommendations of the Great Marsh Coastal Adaptation Plan and the Town's Hazard Mitigation Plan (currently being updated).
- H-4.2 Assist property owners in accessing Massachusetts Emergency Management Agency (MEMA) and Federal Emergency Management Agency (FEMA) funds for disaster mitigation and for retrofitting structures.
- H-4.3 Consider modifying zoning to add incentives for new construction or significant reconstruction to build at higher elevation in areas prone to coastal flooding.
 - Another option would be a freeboard incentive program to encourage building of new or substantially improved structures at a higher elevation than required by the Building Code.
- H-4.4 Consider a program that allows the Transfer of Development rights from areas exposed to sea level rise to less vulnerable areas.

Such a program would discourage infill development in exposed areas while allowing property owners to sell their right to develop to others.

H-5 Expand local awareness and support for housing needs.

Zoning changes and investments in infrastructure and facilities to support the housing needs of Newbury residents are dependent upon the vote of Town Meeting. Support for these initiatives must be forged through intensive communication and public engagement. Moreover, housing initiatives require ongoing efforts and outreach to stakeholders or partners; the Town has limited staff to coordinate such initiatives.

The successful implementation of this goal leads to public support for the establishment of an organization which can lead housing conversations and actions within Newbury and a funding stream to help the Town support the development of affordable housing.

- H-5.1 Seek support from MVPC, regional organizations and neighboring communities to obtain technical assistance and shared funding opportunities and services.
- H-5.2 Convene a Housing Summit, inviting members of all boards, commissions, departments, as well as the public to discuss housing needs, strategies, and priorities for implementation.
- H-5.3 Establish a Housing Committee or Housing Partnership/Task Force to advocate for initiatives to address housing needs. The charge should include the following:
 - Work in cooperation with other local boards such as the Select Board and Planning Board on housing issues.
 - Advocate locally for affordable housing by providing education to residents and town officials.
 - Serve as representatives of the Town on affordable housing issues to regional agencies and partners.
 - Identify appropriate sites and provide proactive planning for strategic site acquisitions.
 - Obtain technical assistance for planning efforts, grant assistance, monitoring services, zoning implementation.
 - Monitor and pursue funding opportunities.
- H-5.4 Establish an Affordable Housing Trust.
- H-5.5 Develop a funding stream for the Affordable Housing Trust that includes one or more of the following sources: in-lieu fees from inclusionary zoning, general fund distribution, charitable fundraising, or mitigation payments.

Passage of the Community Preservation Act would fund CPA-eligible uses.

H-6 Encourage housing development which preserves natural and cultural resources.

- H-6.1 Identify funding to exercise right of first refusal to purchase land coming out of Chapter 61 A to preserve farmland and provide affordable housing at a scale that supports the preservation of the agricultural land for future agricultural activities.
- H-6.2 Work with conservation groups and land trusts to identify sites for limited development, in which a small amount of development subsidizes the preservation of open space.

ELEMENT 6: NATURAL RESOURCES

The following eight natural resource goals reflect the type of community Newbury residents envision for the present and future and provide the framework within which specific planning strategies and implementation actions are offered. These goals evolved from an extensive planning process consisting of the following four elements:

- A review of existing relevant planning documents (see list on page 194);
- Deliberations among the members of the Master Plan Committee and its Natural Resources Working Group;
- Interviews with knowledgeable town residents, nonprofit organization personnel, and local and state officials;
- A public participation program consisting of a town-wide residents' opinion survey; and
- Input for the Merrimack Valley Planning Commission (MVPC).

Results from this process indicate that preserving the Town's remaining farmland is strongly supported by the public. A majority of Newbury residents who responded to the 2016 Master Plan survey indicated a "great need" to preserve Newbury's farmland and increase efforts to encourage active farming. Residents have consistently expressed their strong support for preserving the Town's agricultural landscapes and working farms and have explored various strategies for achieving this.

The strategies and actions below address community desires to preserve natural resources, including farmland in active use, and areas containing prime agricultural soils, scenic landscapes, and water resources.

NR-1 Protect and ensure the availability and quality of the town's water supply resources.

The Town of Newbury meets its water supply needs from three sources: the Byfield Water District (for the majority of Byfield residents and businesses), the City of Newburyport municipal water system (for Old Town Newbury and Plum Island) and private wells (throughout). Because of this context, the Town should work with all the community's water suppliers to assure that the water supply needs of the Town are met for the future, while balancing the safe yield of the watershed and protecting hydrological and natural resources.

NR-1.1 Establish a Board of Water Commissioners.

Consider establishing a Board of Water Commissioners to oversee and ensure that the water supply needs of the community are met now and into the future. This Board should replace the inactive Old Town Water District and should work with the Byfield Water District, the City of Newburyport, private well owners and other stakeholders. Members could include representatives from the Byfield Water District, Plum Island, Parker River Wildlife Refuge, PIE-River Partnership, and other relevant bodies. Terms can be three-years (staggered).

The Board of Water Commissioners should establish and implement policies guiding the Town's water consumption and water conservation, assure all state and local regulations regarding water supply are met, and support and advise the water supplying entities as needed. Some of the strategies below assume the establishment of this Commission.

NR-1.2 Adopt Massachusetts Water Conservation Standards.

Adopt the 2018 Massachusetts Water Conservation Standards which can be found at: https://www.mass.gov/service-details/details-on-the-2018-massachusetts-water-conservation-standards. This document contains a series of standards and recommendations for actions to conserve water at all levels. For the Town, appropriate actions include the following:

NR-1.3 Implement water conservation and drought management plans.

Undertake a Local Water Resources Management Plan or an Integrated Water Resources Management Plan and a Drought Management Plan (which could itself be part of a larger Emergency Response Plan that draws on the MVPC Multi-Hazard Mitigation Plan Update). See the 2018 Massachusetts Water Conservation Standards for more information.

NR-1.4 Consider adoption of a Water Conservation Bylaw.

Use the Model Water Use Restriction Bylaw provided by the Commonwealth of Massachusetts as a template for a community discussion on adoption, including conservation measures on private wells during droughts and standards for redevelopment or new development. The model bylaw is available here: https://www.mass.gov/service-details/massachusetts-water-conservation-standards-related-policies-and-guidelines.

NR-1.5 Promote enhanced water conservation through education among water suppliers and watershed residents.

Work with partners such as Parker River Clean Water Association, the Massachusetts Rivers Alliance, the Parker-Ipswich-Essex Rivers Partnership and other advocacy and education groups to set and achieve appropriate water conservation goals. The primary goal of municipal water conservation policies, outreach and education should be to reduce overall water use both by enhanced water efficiency inside homes and businesses and also by reduction of non-essential outdoor water use throughout the Town.

NR-1.6 Balance the community's demand for water with safe yield from the Parker River.

Work with the Department of Environmental Protection (DEP) and with water suppliers to consider strategies to remedy the effects of streamflow depletion within the Parker River watershed being caused by water withdrawals. The new permits in All Water Management Act permits, as well as annual usage reports provided to the DEP, should be reviewed and commented on by the Town.

NR-1.7 Work with neighboring towns (Georgetown, Groveland, and West Newbury) to assess and enhance wellhead protection measures in Byfield Water District's primary recharge areas that extend beyond Newbury's border.

These measures could range from stricter zoning requirements to heightened municipal and residential nonpoint source pollution best management practices. MVPC, the regional planning agency serving the four communities, can assist in this effort by providing planning and technical assistance and coordinating discussions.

NR-2 Protect and enhance inland, estuarine, and coastal water quality.

Many of these strategies address non-point source pollution of surface waters. While some of these strategies are primarily the responsibility of Town boards and departments, others will require the active participation of town residents and business owners.

- NR-2.1 Adopt additional measures to reduce non-point source pollution to Newbury's inland and coastal waters by implementing the requirements for compliance with the Municipal Separate Storm and Sewer Systems (MS4) requirements under the National Pollutant Discharge Elimination System (NPDES) and the Clean Water Act (CWA) of 1972.
 - This includes revising bylaws and regulations to minimize stormwater and erosion during construction activities, and prohibiting illicit discharges to MS4 systems. (See Chapter 12. Tools and Resources for more details.)
- NR-2.2 Consider creating a Stormwater Utility as a dedicated revenue source for enforcing and implementing the identified Best Management Practices for stormwater management and preserving water quality.
- NR-2.3 Consider engaging in a watershed-based planning process through the Department of Environmental Protection's non-point source reduction 604b program to organize information about pertinent water resources and aid in the development and implementation of projects which restore water quality and beneficial uses.
- NR-2.4 Link public education efforts recommended in NR-7 to the protection of water quality.

NR-3 Protect and enhance critical upland, water resources, and wetland habitats to sustain biodiversity.

NR-3.1 Prepare and maintain an up-to-date local Open Space and Recreation Plan (OSRP).

Update the 2009 OSRP, consistent with Massachusetts Division of Conservation Services (DCS) guidelines, to reflect and respond to current natural resources opportunities and needs in the community, and to maintain the Town's eligibility for state Self-Help Program grants and federal Land & Water Conservation Fund assistance. The Town's Open Space Plan should be the principal document guiding open space and natural resource protection efforts in the community, and should incorporate by reference other relevant local natural resource plans, such as the plans identified on page 194.

NR-3.2 Maintain the Open Space Committee as a standing committee.

Newbury's Open Space Committee should be both a planning and an implementation committee that: 1) maintains some level of continuity (and institutional memory) from year to year, 2) assumes "ownership" of the Plan to oversee its implementation, 3) charts the Plan's progress on an ongoing basis, and 4) periodically reports to town boards and residents to keep the public informed and ensure that priority activities remain in the spotlight.

NR-3.3 Develop and maintain a list of vulnerable high priority open space parcels within the OSRP.

Map the parcels on this list and update the list and map when the OSRP is updated. Review both list and map between OSRP updates for changes to ownership and protection status. Update the Open Space Inventory from the 2009 OSRP which shows Protected Open Space and Private Parcels of Open Space Interest as of December 2009. Include the maps maintained by the Essex County Greenbelt Association (ECGA). Integrate the mapping of these parcels into Newbury's MIMAP as necessary.

NR-3.4 Begin discussions with owners of high priority parcels about land preservation.

Contact the owners of high priority parcels in advance of a sale offering to determine the owners' future plans, and needs, for the properties. If donation of the land or granting of a permanent easement are not an option, at a minimum the Town, assisted by nonprofit land trusts as appropriate, should

encourage owners to enter into an agreement that provides adequate notice when they decide to sell their property, even for those parcels currently under Chapter 61 agreements. With adequate notice that a property will be sold, the Town can evaluate whether the property serves needs for conservation use, affordable housing, or other municipal priorities. If the property is appropriate, the Town can then gauge the level of local interest and funding capacity for the acquisition, and begin soliciting needed technical and financial assistance from non-profit and government agencies. See Chapter 12. Tools and Resources for useful tools for land preservation.

NR-3.5 Increase the Town's financial capacity to acquire priority open space.

Enhance the Town's ability to acquire and protect high priority open space by:

- Creating a local conservation land fund (or open space bond), and
- Reconsidering the adoption of the Community Preservation Act (CPA).

When open space parcels are offered for sale, communities typically have only a limited period of time in which to make an offer to purchase a site. It is extremely important to create a local land acquisition capacity early and continue to build a reserve before a crisis occurs and a golden opportunity is lost forever. Small but systematic annual appropriations into a land conservation fund or a one-time referendum to borrow acquisition funds and finance the debt with property taxes would provide the Town of Newbury with the capital to purchase threatened parcels.

NR-3.6 Engage outside expertise and funds to purchase priority open space parcels.

Continue to forge strong partnerships with the Essex County Greenbelt Association, The Trustees, Massachusetts Audubon, Massachusetts Division of Fisheries and Wildlife, and other area land trusts to maximize the available resources – technical and financial – for local land preservation. The process of negotiating and executing a preservation plan may require specialized knowledge and the ability to act quickly and may not be within the ability of a municipality to respond in a timely manner.

NR-3.7 Increase protection of wetlands throughout Newbury.

Review the existing local wetlands protection bylaw to ensure that is consistent with best practices for providing uniform protection for all wetlands, both inland and estuarine, in the community.

NR-3.8 Increase protection of wetland buffer areas and vernal pools and their associated species.

The Conservation Commission and trained local volunteers should build on the Town's efforts to expedite the inventorying, state certification and mapping of all vernal pools in the community. At present, the Commonwealth of Massachusetts has certified 34 vernal pools in Newbury, up from 11 in 2006. There are still a large number of potential vernal pools identified by local field reconnaissance and aerial survey. The development pressure in Newbury makes it imperative that Newbury's remaining vernal pools be identified, certified, and mapped as soon as possible so as to steer future development activity away from these critical habitats. A Town-wide Wetland Bylaw and associated regulations would also be helpful in managing activities adjacent to vernal pools. Consider establishing a regular survey of potential vernal pools.

NR-3.9 Inventory and prioritize inland and estuarine wetland habitats.

The Town should work cooperatively with Newbury property owners, marsh researchers (especially Marine Biological Laboratory biologists), state and federal agencies (CZM Wetland Restoration Program, U.S. Fish and Wildlife Service), Essex County Mosquito Control District, and nonprofit environmental groups (MassAudubon, Eight Towns and The Bay) to inventory, prioritize, and restore degraded marsh habitats.

- Prioritize those impaired sites that are already well documented, including tidal flow restrictions described and mapped by the Parker River Clean Water Association and degraded anadromous fish passageways documented by the Division of Marine Fisheries and local Newbury researchers.
- Support efforts to understand and respond to the processes and impacts of long-term marsh degradation, including those relating to pollution (runoff, erosion) and relative sea level rise.
- Engage in group efforts like the Great March Partnership, Great Marsh Revitalization Task Force, and the Eight Towns and the Great Marsh Committee to support collaborative prioritization, project development, and fund procurement for estuarine wetland habitat restoration activities.

- NR-3.10 Preserve and restore habitat, including wildlife corridors, natural stream courses, floodplains, and flow regimes.
 - Prioritize preserving habitat linkages that are still intact.
 - Take advantage of opportunities to restore connectivity through the reestablishment of natural vegetation along previously denuded riparian areas wherever possible.
 - Review the Flood Insurance Rate Maps (FIRMs) from the Federal Emergency Management Agency (FEMA) to ensure that stream corridors and the adjoining lands subject to flooding are strictly regulated against improper development.
 - Create development standards for new construction to maximize the retention of riparian corridors, including those of smaller brooks and streams, in a natural undisturbed state and prevent the disturbance of any natural features within a riparian area that are of particular value to wildlife, such as large trees with nesting cavities. Create zoning or permitting incentives for cluster developments that establish connected wildlife corridors by careful placement of new buildings relative to key connections.
 - Identify and map strategic parcels that connect existing protected habitat for future acquisition by the Town or a land trust.
 - Assist homeowners with resources to help them design and incorporate effective riparian corridor restoration measures. Partners include the Massachusetts Division of Fisheries and Wildlife and local land trusts, such as the Massachusetts Audubon/North Shore and Essex County Greenbelt Association.

NR-4 Preserve working farms and prime and unique agricultural farmland, farmland of statewide importance and farmland of local importance.

Since Newbury's founding, agriculture has been an integral part of the Town's history, culture, and economy, and a defining element of the town landscape and character. Broad swaths of cultivated fields and livestock pasture, flanked by woods and salt marsh, have been a dominant and treasured visual image. However, this image is changing, the result of intensified population growth and development pressure. During the roughly thirty-year period between 1971 and 1999, land use changes recorded by the State show that nearly 350 acres of active farmland disappeared in Newbury, most of it replaced by residential subdivisions. As the demand for Newbury housing intensifies and the market makes open land ever more valuable, more farmland is likely to be lost to development unless there is a concerted, collaborative effort by the Town and its farmers to improve the economic viability of agriculture in the community.

NR-4.1 Coordinate conversations between active farmers near wetlands and surface waters with the Conservation Commission.

Agriculture currently enjoys certain exemptions under the Massachusetts Wetlands Protection Act, and local Conservation Commissions can and do waive fees in some cases. Streamlined communication and cooperation between farmers and town officials can ease regulatory impediments that adversely affect farmers. As an initial step, the Conservation Commission could prepare a concise handout for the farming community that explains the wetland regulations and exemptions that are most likely to apply to them, as well as procedures for working expeditiously and effectively with the Conservation Commission when required.

NR-4.2 Create funding mechanisms for the purchase of agricultural land.

Reconsider adopting the Community Preservation Act and also designate a town fund to be used to purchase inactive agricultural land for shared public access and community-based agriculture, or to partner with a non-profit to do so.

NR-4.3 Facilitate the purchase of development rights to preserve and protect prime farmland, unique farmland, farmland of statewide importance, and farmland of local importance.

As local matching funds permit, the Town should partner with area land trusts and the state's Agricultural Preservation Restriction (APR) Program to facilitate the purchase of development rights to active farms. Farmers whose land is accepted into the state APR Program are able to realize equity from their land without being forced to sell their farms for development purposes. This equity is often reinvested back into the farm by way of the purchase of additional land or modernized equipment, or in the design and installation of agricultural best management practices (BMPs) to better protect water quality and the environment. By providing farmers with money up-front, they can continue to own and work their land while preserving the land from development in perpetuity. The Town should support the purchase of development rights with privately raised funds or municipal funds.

NR-4.4 Support the installation of green energy systems (wind and solar) in designated areas that do not include prime agricultural soils or farmland that is unique or of state or local importance.

Map appropriate areas for large-scale energy systems and review and adjust the existing zoning bylaw to provide incentives for appropriate locations.

NR. 4.5 Support the development of buffer zones between agricultural lands and water resources.

Support and encourage green infrastructure and/or restoration projects along riparian zones which abut agricultural lands to enhance the filtration of agricultural runoff, including fertilizers and animal feces, preventing excess nutrients from entering nearby waterways.

NR-5 Manage future land development and redevelopment in an environmentally sensitive manner.

In order to maintain the Town's treasured scenic and rural character, the Town should establish development standards to guide the location and type of development appropriate for the Town's needs. Future construction should be sympathetic to the existing built and natural environments and responsive to community needs, including the preservation of natural resources. By taking charge of its development (and redevelopment) future now, Newbury will have an opportunity to make a significant difference in the kind of place it becomes tomorrow.

NR-5.1 Actively promote and facilitate the use of open space residential development over conventional subdivision development.

The Town, acting primarily through the Planning Board and Conservation Commission, should continue to actively promote the use of the Open Space Residential Development (OSRD) bylaw as a means to achieve more compact, neighborhood-scale development while preserving vital open space and natural resources. The Town should evaluate whether the bylaw should be revised to allow development incentives to further encourage the use of the bylaw and promote other community goals such as the preservation of wildlife corridors and riparian habitat.

NR-5.2 Encourage the incorporation of "green building" techniques in all municipal, residential, and commercial/industrial development and redevelopment projects.

The Town of Newbury has adopted the Stretch Energy Code.

In 2022, the Commonwealth of Massachusetts added a Specialized Optin Code (see https://www.mass.gov/info-details/stretch-energy-code-development-2022). Town officials should review this code and consider whether adoption of the code would be beneficial for the Town in terms of encouraging new development to support the goals of this 2023 Master Plan for preservation of natural resources.

In addition, the Town should consider establishing pilot programs for gray water use, more efficient on-site waste management systems, and other techniques for reducing water and energy usage. Such pilot programs would require coordination between Inspectional Services and the Board of Health. See 310 Mass. 15.262 and https://www.mass.gov/doc/composting-toilets-greywater/download for more information about gray water systems in Massachusetts.

NR. 5.3 Become designated as a Green Community.

The Town should continue working towards Department of Energy Resources Green Community Designation, which requires a commitment to a 20% reduction in energy usage in five years following designation, and grants access to Green Community competitive grants to fund these energy reductions, including weatherization, HVAC upgrades, and lighting upgrades. The Town should, following designation, identify buildings of highest energy use and pursue this grant program to fund reductions.

NR-6 Educate Newbury residents and businesses about the Town's natural resources, resource threats, and resource protection tools and techniques.

The Town should enhance residents' knowledge of the local water resources, wildlife habitats, and other natural resources (along with the steps they can take to protect these resources) by providing information on an ongoing basis. To reach as broad an audience as possible, several different but complementary approaches are recommended.

NR-6.1 Increase public awareness and understanding of responsible household management practices (septic system maintenance, lawn care, etc.) for improved natural resources stewardship, open space conservation, etc.

Continue to work with Greenscapes North Shore Coalition to access and periodically distribute concise and attractive educational pamphlets and flyers on topics related to residential and commercial Best Management Practices (BMP's), such as:

- Proper use and maintenance of septic systems;
- Low-impact lawn and garden care options (e.g., safe use of lawn/garden chemicals, as well as organic and non-chemical alternatives);
- Water conservation techniques (with special attention to curtailing outside watering during peak demand periods);
- Impervious surface area reduction/minimization;
- Household and automotive waste recycling;
- Establishment of protective buffers along streams, ponds, and wetland areas;
- Use of "green building" techniques in new construction and redevelopment.
- NR 6.2 Restore options for households to dispose of hazardous wastes.

The Board of Health (BOH) has offered household hazardous waste collections but finding appropriate funding sources can be a problem. The Town should consider working with neighboring towns to pool funds and sponsor a joint hazardous waste collection program, perhaps with one set of communities in the spring and the other set in the fall.

NR-6.3 Expand environmental education in the classroom and field.

The Conservation Commission should work with Newbury school personnel to explore opportunities to expand environmental education offerings for local students, both inside and outside of the classroom. Topics for discussion and field discovery might include the nature and value of vernal pools, the Great Marsh, the Great Marsh Area of Critical Environmental Concern, the "Common Pasture," and other important natural resources in and around Newbury.

Solicit advice and assistance in curriculum design, materials, and classroom and field instruction from the Massachusetts Audubon Society/North Shore and other nonprofit environmental groups. Consider working with the Greenscapes North Shore Coalition to administer the "Keeping Water Clean" fifth grade programming which educates fifth graders regarding water quality, the water cycle, wastewater, watershed, and other relevant topics.

NR-6.4 Explore opportunities to host environmental workshops and seminars.

As town resources permit, the Town of Newbury should offer to host public environmental workshops and seminars that seek a North Shore venue. Each year, numerous environmental agencies and organizations sponsor public information forums on topics of relevance to Newbury's natural resources (for example, land preservation, salt marsh restoration, Low Impact Development, etc.) These groups include the Great Marsh Coalition, Massachusetts Audubon, Essex County Greenbelt Association, Eight Towns and the Bay, agencies of the Executive Office of Environmental Affairs, various academic institutions, and others. Holding these educational forums in Newbury would not only provide convenient access to town residents interested in participating but would also invite coverage by the local newspaper and cable T.V. outlets, thereby reaching a broader audience.

NR-6.5 Increase public awareness of environmental success stories.

Newbury town officials and personnel should seek to publicize successful environmental initiatives in the community – not only to keep the public better informed, but also to demonstrate that constructive change is possible even in the face of heightened development pressure and strained municipal budgets. Experience shows that the public is generally more willing to support worthy environmental projects, such as land acquisitions or habitat restorations, if previous such projects have produced tangible public benefits.

NR-7 Implement the relevant recommendations from recent planning efforts.

NR-7.1 Great Marsh Coastal Adaptation Plan

The Great Marsh is a critical resource for the entire region and will become both more valuable and more vulnerable as the impacts from climate change become more evident. The Town of Newbury should adopt the relevant strategies from the Great Marsh Coastal Adaptation Plan (2017) and the Great Marsh Barriers Assessment (2018) and work with partner communities and organizations to preserve and restore the Great Marsh. Actions include the following:

- Maintain a permanent Municipal Vulnerability Task Force to retain Newbury's certification in the State's Municipal Vulnerability Preparedness Program and to work with neighboring communities and the region on climate issues.
- Incorporate climate change projections into all relevant local plans, policies, and regulations, including capital planning.
- Protect and restore barrier beaches through renourishment, revegetation and other best management practices such as identifying appropriate public access across sensitive natural resources.
- Restore degraded salt marsh by supporting efforts to eradicate invasive plant species (including phragmites, pepperweed and others) and to restore healthy vegetation.
- Work with the Merrimack River Beach Alliance, the City of Newburyport, and other governmental and non-governmental partners to support adaptation, restoration, and management efforts on Plum Island.
- Identify and protect upland areas to allow for marsh migration as sea levels rise.
- Support efforts to reestablish subaquatic vegetation such as eel grass and offshore shellfish reefs to buffer the impacts of storms and enhance water quality.
- Restore eroding riverbanks and salt marsh by working with partners and residents to develop and maintain best management practices (such as controlling boat wakes in waterways and restoring eroded river banks with living shorelines).

- Move development away from the coast and from wetlands and prioritize low impact development practices by updating municipal policies, considering "freeboard incentives" for residential and commercial buildings and revising local wetland bylaws. The Town should also update the Newbury Estuarine Management Plan to determine the best vegetated buffer requirements for development adjacent to the marsh.
- Restore natural stream courses, floodplains and flow regimes by removing unnecessary dams and upgrading culverts and other stream crossings as identified in the 2018 Great Marsh Barriers Assessment.
- Work with governmental and non-governmental partners to educate residents of the importance of minimizing the use of fertilizer and chemicals on lawns and gardens, even where the property does not drain directly into the marsh or drain directly into one of the tributary rivers. The over application of fertilizers and chemicals in the Town of Newbury negatively impacts the marsh.
- The Board of Health should continue their education program on septic system maintenance via the town website and brochures.

NR-7.2 2018 Municipal Vulnerability Plan

The following list is a summary of the top five recommendations⁵ to improve resilience (the plan actually includes seven recommendations, extracted below). The plan also contains a list of recommendations⁶ from plans that were current in 2018. Those recommendations should be reviewed to determine whether they are complete, still valid, or no longer relevant.

• GREAT MARSH/COASTAL HABITAT. Restoration to improve resiliency, invasive species control, channel stabilization, erosion/hydrology management (including removal of impediments to stormwater and tidal flow), ditch assessment and remediation, water quality management, and continued protection efforts (including the consideration of thin layer deposition).

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⁵ Horsley Witten Group, Summary of Findings: Newbury Municipal Vulnerability Preparedness Workshop, 2018, pp. 7-8.

⁶ Horsley Witten Group, Summary of Findings: Newbury Municipal Vulnerability Preparedness Workshop, 2018, pp. 20-22.

- POWER SUPPLY. Consider alternative means of power generation and supply in emergencies, including green energy, generators at private service stations, and large generators to support services on Plum Island.
- KEY ACCESS ROADS. Identify state funding and prepare plans to reduce flooding and improve access on emergency evacuation routes and key access roads, including Plum Island Turnpike, Northern Boulevard, Hanover Street, and Pine Island Road. On Plum Island Turnpike, and other roads as applicable, consider raising the bridge and road both to allow water to flow freely below the road and to provide safe dry emergency access. Also, on Plum Island, complete engineering and seek funding for an emergency access route through existing rights-of-way north of Plum Island Center (e.g., 14th and 16th Streets) and improve signage for evacuation routes.
- EMERGENCY PREPAREDNESS. Develop a database or registry of vulnerable populations, and a comprehensive plan for emergencies, such as power outages.
- PLUM ISLAND BARRIER BEACH. Undertake dune nourishment, planting, management, access, stabilization, continued measurement of accretion and erosion, and innovative restoration and stabilization approaches (e.g., sand mining), in cooperation with Newburyport, Salisbury, the Merrimack River Beach Alliance (MRBA) and the Army Corps of Engineers and other federal and state agencies.
- PERMITTING. Work with the state to review regulations and policies that impede ecological protection and restoration of marshes, beaches and dunes.
- LOCAL REGULATIONS AND BYLAWS. Review and improve local zoning bylaws and development regulations, including in particular the Plum Island Overlay District, to be more sensitive to environmental conditions and changes. On Plum Island, encourage Newburyport to collaborate to create consistency across communities with respect to the standards, interpretation and enforcement of the local bylaws and regulations (zoning and wetlands protection).

NR-7.3 2020 State of the Coast Report: North Shore

The primary strategy for Newbury identified in the 2020 State of the Coast Report: North Shore is dune nourishment, although efforts to mitigate ditching in the marshes were also discussed. Other actions, that apply to all communities studied, include the following:⁷

- Expand dune and beach restoration.
- Create living shorelines to protect beaches and marshes.
- Protect salt marshes and migration pathways.
- Protect vulnerable roads.
- Retrofit existing buildings for floodproofing.
- Identify critical infrastructure that should be floodproofed or moved.
- Create opportunities for sustainable economic development for oceanfacing industries.
- Identify and work with grant programs to help buy out owners of properties with significant repetitive flood damage.
- Prioritize the assessment of current armored structures and identify those that require removal, repair, or redesign.
- Update zoning and other local regulations to reduce risk to buildings.
- Create floodable open spaces.
- Redesign flood barriers to incorporate new technologies and approaches.
- Acquire and protect habitat areas and migration corridors.

⁷ Trustees of Reservations, 2020 State of the Coast Report: North Shore, 2020, pages 8-11, 14, 18-21, and 30-31.

3. EXPANDED VISION, GOALS, AND ACTIONS

ELEMENT 7: TRANSPORTATION

T-1 Improve safety of roadways in Newbury.

Through presentations of the Newbury Police Department's intersection crash data to the Master Plan Traffic and Safety Subcommittee and subsequent discussions, seven locations were identified as needing either specific improvement, monitoring of traffic and safety conditions or further study. MVPC transportation staff examined traffic and safety conditions at these seven intersections and the tables below identify specific findings and recommendations to improve the level of safety at these locations.

T-1.1

Location:	Route 1 @ Boston Road
Intersection Type:	Unsignalized (Stop Signs on Boston Road)
#Crashes (2018-2020):	12
Issues:	 Need for left turn lanes on Route 1 approaches to the intersection due to high travel speeds on the roadway.
Recommendations:	 Continue to monitor the left turning volumes, crash rate and crash types at this location. If the number of crashes involving vehicles turning from Route 1 increases, the Town could consider asking MassDOT to install opposing left turn lanes on the Route 1 approaches to the intersection.
	 The Town should also monitor traffic volumes at the intersection to determine if it meets traffic signal warrants.

T-1.2

Location:	Route 1 @ Elm Street		
Intersection Type:	Unsignalized (Stop Sign on Elm Street)		
#Crashes (2018-2020):	4		
Issues:	 Poor visibility for drivers exiting Elm Street due to angle of its approach to Route 1, vertical alignment of Route 1 south of the intersection; High travel speeds on this straight section of Route 1; Heavy traffic volumes on Elm St. during peak travel periods due to the location of Governor's Academy and Triton Regional Middle and High Schools. 		
Recommendations:	 Collect additional traffic volume data on each approach to the intersection; Determine if volumes observed meet warrants for installing traffic signal; If traffic volume warrants are met, initiate project with MassDOT to install a traffic signal and make other intersection improvements. 		

3. EXPANDED VISION, GOALS, AND ACTIONS

T-1.3

Location:	Elm Street @ School Street	
Intersection Type:	Unsignalized (Stop Signs on Elm Street eastbound and School Street southbound)	
#Crashes (2018-2020):	1	
Issues:	 Poor angle of alignment of School Street approach to intersection, and vegetation combine to limit sight distance; Stop line on School Street. Approach located well back from Elm Street; Lack of visible receiving lane on School Street for traffic turning left from Elm Street. 	
Recommendations:	 Conduct traffic study of intersection to determine if realignment of the intersection: Allows for the removal of the existing Stop Sign on the Elm St. eastbound approach; Should include installation of left turn lanes on the Elm St. approaches. Undertake a warrant analysis and assess volumes to determine the need for a roundabout. 	

T-1.4

Location:	Plum Island Boulevard @ Sunset Drive/Old Point Road		
Intersection Type:	Unsignalized (Stop Signs on Sunset Drive and Old Point Road)		
#Crashes (2018-2020):	3		
Issues:	 Poor visibility for drivers attempting to make left turns onto the Plum Island Turnpike or proceeding straight onto Old Point Road from Sunset Drive; Encroachment of parking into right-of-way; Installation of small traffic island and stop sign at this location has been repeatedly damaged. 		
Recommendations:	 Revisit recommendations for improvements at this location contained in MVPC's Plum Island Traffic and Parking Study. This includes consideration of replacing the existing traffic island and stop sign with one of a different design. Consider a roundabout. 		

T-1.5

Location:	Highfield Road @ Middle Road
Intersection Type:	Unsignalized (Stop Signs on Highfield Road)
#Crashes (2018-2020):	4
Issues:	 Poor visibility for motorists exiting Highfield Road approach to Middle Road due to: Vegetation and berm on northwest corner of the intersection; Poor alignment of Middle Road westbound approach to intersection.
Recommendations:	 Investigate feasibility of removing vegetation/lowering berm in right-of-way of both Middle Road and Highfield Road to improve stopping sight distance; Should the above not be sufficient, consider installing 4-way stop sign control at the intersection.

T-1.6

Location:	Route 1 @ Middle Road and Hanover Street
Intersection Type:	Signalized
#Crashes (2018-2020):	4
Issues:	 Southbound motorists on Route 1 coming over the bridge from Newburyport often 'compete' as the roadway narrows from two lanes down to one at the intersection. Route 1 widens on its southbound approach to the intersection leading some drivers to use of the wider shoulder as way to bypass vehicle making a left turn onto Hanover Street.
Recommendations:	 Continue to monitor the left turning volumes, crash rate and crash types at this location. If the number of crashes involving vehicles turning from Route 1 increases, the Town could consider asking MassDOT to install opposing left turn lanes on the Route 1 approaches to the intersection.

3. EXPANDED VISION, GOALS, AND ACTIONS

T-1.7

Location:	Route 1A (High Road) @ Newbury Neck Road & Lane's End
Intersection Type:	Unsignalized (Stop Sign on Newbury Neck Road)
#Crashes (2018-2020):	0
Issues:	 Poor alignment of Newbury Neck Rd. with Rte. 1A; Lanes End approach to intersection not clearly marked or visible; Gravel area in front of residence at 297 High Rd. being used as part of the intersection.
Recommendations:	• In coordination with MassDOT, assess the feasibility of reconstructing/realigning intersection.

T-1.8

Location:	Middle Road @ Boston Road	
Intersection Type:	Unsignalized (Stop Sign on Boston Road approach)	
#Crashes (2018-2020):	0	
Issues:	 Split approaches of Boston Road to Middle Road; Poor sight distance for traffic exiting Boston Road. Improper stop sign controls on both Boston Road approaches to intersection. Utility pole in middle of traffic island. 	
Recommendations:	 Conduct traffic study of the intersection to identify and evaluate options for reconstructing the intersection. Add street sign to identify Boston Road. 	

T-1.9 Improve bicycle and pedestrian facilities in Byfield Village.

These improvements are identified as a priority project for Newbury in the MVPC Active Transportation Plan. These improvements, identified in the Byfield Road Safety Improvement Project, would also provide a safer connection between the Village and Border to Boston Rail Trail. The Town should therefore continue to implement the other designed improvements as identified in the Byfield Road Safety Improvement Project. A Complete Streets review of these proposed improvements could potentially lead to their modification, where needed.

T-2 Maintain the quality of Newbury's transportation infrastructure.

- T-2.1 Continue to support the Pavement Management Program.
 - Expand the program to include sidewalks and other roadway-related infrastructure. Communities across the Commonwealth and beyond are following this approach to realize similar cost savings and management improvements for these infrastructure elements that are being obtained through their pavement management programs.
 - Continue to collect information on the location and condition of roadway catch basins.
- T-2.2 Continue to compare the updated Subdivision Rules and Regulations with the EPA regulations to ensure continued compliance with the MS4 Permit.
- T-2.3 Pursue the construction of an emergency by-pass road from Northern Boulevard to Old Point Road to address the safety of residents of Plum Island. Area legislators were successful in earmarking \$120,000 in the Commonwealth's 2014 Transportation Bond Bill for the construction of this emergency bypass road. This facility would be closed to vehicular traffic at all times other than during these flooding events.
- T-2.4 Replace culverts identified in the Great Marsh Coastal Adaptation Plan. This plan identified several undersized and compromised culverts in the community that should be replaced with structures designed to pass higher flows and meet the Massachusetts Stream Crossing standards. These are:
 - Undersized culverts on Middle Road, Orchard Street and Highfield Road.
 - Problem structures on Elm Street, School Street, and Coleman Road, as funding allows.

3. EXPANDED VISION, GOALS, AND ACTIONS

- T- 2.5 Address roadways subject to flooding as identified in the Great Marsh Coastal Adaptation Plan. The plan identified four roadways in Newbury that are already subject to flooding and will likely be more at risk given the anticipated rise in sea levels in the coming years. The recommendations for these roadways are as follows:
 - Raise elevation of Plum Island Turnpike based on detailed analysis of current and future conditions.
 - Develop a plan to raise Route 1 in low lying areas coupled with causeway "best practices" of increasing drainage under road and removing debris along roadway to increase resiliency of marsh.
 - Develop a plan to raise Newman Road in low lying areas coupled with causeway "best practices" of increasing drainage under road and removing debris along roadway to increase resiliency of marsh.
 - Assess cost and benefit of raising the Hanover Street and constructing a new bridge crossing over Little River.
- T-2.6 Maintain ADA ramps on sidewalks and maintain/repair deteriorating sidewalks throughout town.
- T-2.7 Work with the MBTA to perform a full hydrological study to identify all the constrictions along the Little River and assess the impacts both upstream and downstream if they are removed. Newbury should request that the MBTA pursue modification/replacement of the MBTA bridge over the Little River if this study determines that the widening of the channel under the MBTA Bridge would reduce upstream flooding issues while not adversely impacting downstream locations.

T-3 Enhance safe bicycle and pedestrian circulation.

- T-3.1 Adopt a Complete Streets Bylaw and Implementation Plan, which would allow Newbury to identify important bicycle and pedestrian connections both within town and connecting to neighboring communities, and to determine the appropriate scale of roadway and other improvements that will facilitate safe travel for all modes while recognizing and protecting the community's character.
 - Newbury is one of only four towns in the Merrimack Valley that has not adopted this plan. MassDOT is providing technical assistance and funding to help communities develop Complete Streets policies and associated prioritization plans. Completing these initial tasks will allow Newbury to seek Complete Streets implementation funding to implement infrastructure improvements identified in the prioritization plan.
- T-3.2 Create a Newbury Biking and Pedestrian Facilities Master Plan to include the following components and integrate the recommendations into the Town's Complete Streets Bylaw and Implementation Plan (see T-3.1).
 - Collect and monitor bicycle and pedestrian usage information on popular routes, such as Plum Island Turnpike Bike Lanes, High Road, Border to Boston Trail, Rolfe's Lane.
 - Monitor usage of bicycle parking facilities.
 - Inventory the location and condition of all sidewalks, crosswalks, ADA ramps, roadway shoulders along priority bike routes and other infrastructure.
 - Create an inventory existing and proposed bicycle and pedestrian corridors or facilities.
 - Review existing bicycle and pedestrian access to senior housing, public facilities, recreational areas, as well as commercial and retail areas.
 - Identify locations for needed wayfinding signage to aid non-motorized travel for residents and visitors.
 - Identify locations throughout the community where restrooms and trash receptacles, bicycle racks should be provided.
 - Review ongoing and proposed bicycle and pedestrian initiatives in neighboring communities.
 - Develop a prioritized implementation plan for all bicycle and pedestrian improvements.

3. EXPANDED VISION, GOALS, AND ACTIONS

- Create a process to systematically monitor progress in implementing priority bicycle and pedestrian facility improvements, ensuring that all handicapped accessibility requirements are met.
- Develop design guidelines for roadways in Newbury to better incorporate bicycle and pedestrian needs.
- T-3.3 Develop a program of recommended bicycle and pedestrian improvements for Route 1 and Route 1A in advance of future MassDOT improvements to this area and coordinate those recommendations with MassDOT early in the design process.
- T-3.4 Connect the Upper Green, Old Town, and Byfield Village with bicycle and pedestrian infrastructure.
 - The first priority is connecting roadways that serve the Triton Regional High School on Elm Street.
 - The second priority is a connection from the Upper Green to Byfield via Hanover Street (where sections of sidewalk already exist), Middle Road, Orchard Street and Central Street. This alignment connects the Upper Green to the Newbury Elementary School and offers the provision of a safe, controlled crossing of Route 1 at its signalized intersection with Hanover Street and Middle Road.
 - Incorporate these objectives into the Town's Complete Streets Bylaw and Implementation Plan (see T-3.1).
- T-3.5 Connect the new sidepath from the Clipper City (Phase II) Trailhead to the existing sidewalk on Parker Street, located on the westbound (north) side of Parker Street.
- T-3.6 Work with MassDOT to provide a link between the Newburyport Rail Trail and the Byfield Village endpoint of the Border to Boston Rail Trail.
 - Extend the rail trail northeast along the old railroad right-of-way from Byfield Village to I-95. It would then run north along the west side of the I-95 right-of-way to Scotland Road. From there the trail would run on road into Newburyport to connect with the Newburyport Rail Trail at Parker Street near the commuter rail station.
- T-3.7 Reconstruct the sidewalk on Rolfe's Lane and extend it to the Newburyport city line. Rolfe's Lane provides the only means of direct access to Plum Island from Byfield, Old Town, and the Upper Green via either automobile, walking

or by bicycle. There is currently a bituminous sidewalk in place along the northern/eastbound side of Rolfe's Lane from High Road to the Newbury Village development (0.36 miles).

- Work with the City of Newburyport to extend the sidewalk on Ocean Avenue from Water Street to the Newbury border to connect the sidewalk on Rolfe's Lane to the Parker River National Wildlife Refuge Visitor Center.
- Consider how to use the existing right-of-way, which may be wider than the existing road, to provide improved bicycle facilities.
- T-3.8 Monitor bicycle and pedestrian travel patterns in neighboring communities and remain aware of any proposed or planned roadway, sidewalk or trail projects.
 - As a member of the Coastal Trails Coalition, the Town should continue to evaluate options for integrating its existing and proposed bicycle and pedestrian facilities into the Coalition's growing trail network.
- T-3.9 At Plum Island Center, improve the existing sidewalk, better define the existing crosswalks in the area, and add crosswalks where appropriate.

A crosswalk at the intersection of Plum Island Boulevard and Sunset Drive would link numerous business establishments and several restaurants located on both sides of the roadway, as well as two privately operated public paid parking lots at 24 and 26 Plum Island Boulevard).

- T-3.10 Add bicycle and pedestrian amenities to support investments in sidewalks and bike lanes and support pedestrians and bicyclists at their destinations.
 - Locations for new or repaired bike racks, benches, and trash receptacles include the following: the Central Street Fields, the Byfield Post Office, Newbury Library, Town Hall, Town offices and the Council on Aging at Kent Way, the Newbury Elementary School, Triton Middle School and Triton High School, and the Upper Green.
 - Participate in the Bicycle Parking Program run by the Merrimack Valley Metropolitan Planning Organization (MVMPO), which is part of MVPC. Member communities can receive a discount on the purchase of bicycle racks as part of a statewide joint procurement effort led by the Metropolitan Area Planning Council (MAPC).

3. EXPANDED VISION, GOALS, AND ACTIONS

T-3.11 Provide education about road safety to all users.

- Establish a multifaceted approach in educating residents on the proper use of the transportation network that focuses on key locations, situations and facilities in the community.
- Set up a partnership including the Newbury Police Department, the Triton School System and the Council on Aging to provide regular education about safe walking and bicycling in town.

T-4 Enhance safe access to Plum Island and Town beaches and waterways for Newbury residents and visitors.

In the Newbury Master Plan Survey, 'Protecting water and coastal resources' and 'Ensuring public access to natural resource areas' were two of the most important goals cited by Newbury residents. Providing convenient, environmentally sensitive access to the community's abundant water resources addresses both these goals.

Maintaining public paths to Plum Island beaches is critical for town-wide enjoyment of this natural resource.

Many of the locations of the existing boat access facilities in town are designed to accommodate small craft such as canoes and kayaks, which are often transported without using a trailer. Still, many of these existing or proposed locations have little or no room for the parking of vehicles of any size.

The most well-known of these facilities is the Town Landing Boat Ramp located on High Road at the Parker River. Some residents have expressed concern over the number of boaters using this ramp that park their vehicles on the nearby Lower Green.

- T-4.1 Eliminate parking spaces along Sunset Drive that are contributing to the degradation of the roadway and environment and replace those spaces elsewhere.
 - Use the recommendations from the 2013 Traffic and Parking Study (MVPC) and the Plum Island Public Access Plan (2006) for more options for public parking.

3. EXPANDED VISION, GOALS, AND ACTIONS

- T-4.2 Identify, delineate, and maintain public rights-of-way to the beaches on Plum Island.
 - Use the Plum Island Public Access Plan from the Department of Conservation and Recreation to identify public access points that have been lost or are in danger of being encroached upon.
- T-4.3 Install bicycle and pedestrian amenities on Plum Island. Locations for bike racks, trash receptacles, benches, and other amenities include Plum Island Center, PITA Hall, and important beach access points.
- T-4.4 Review parking availability at boating access points and identify ways to support access.
- T-4.5 Develop and maintain a Community Water Trails Map that includes information on the location and use of the facilities to improve the use of existing boat access locations.

4. LAND USE

OVERVIEW

Newbury is defined by its historic rural character, agriculture, coastal environment, and natural resources, all qualities which are highly valued by residents. Due to environmental and soil conditions, the amount of protected open space, lack of infrastructure, and regulatory constraints, it is unlikely that the town will experience large-scale change in the future. However, small-scale incremental change driven by real estate market trends, land use decisions on the part of individual property owners, and natural events such as coastal storms and flooding will likely have an impact on the character and quality of life in the community. The following land use plan offers a review of existing conditions, changes since 2006, and current issues. This information supports the forward-looking information and recommendations in **Chapter 3. Expanded Vision, Goals, and Actions**.

Newbury is located in the northeastern corner of Massachusetts along the Atlantic Coast, approximately 37 miles north of Boston, 12 miles east of Haverhill and 10 miles south of Seabrook, NH. A rural/suburban community, the town's regional identity is most closely associated with the communities which abut the Great Marsh, as well as with the communities within the Merrimack River Valley, of which Newbury is a part. The neighboring city of Newburyport, which was originally part of Newbury, has historically served as the economic center, or "downtown," to which Newbury is a suburb.

Once dominant, agricultural activity has diminished over the past few decades. Some large tracts of rolling open land have been developed for residential subdivisions while others have been permanently preserved as open space. As a result, Newbury still has significant areas of protected open and forested land, marshes, wetlands, and undevelopable land, as well as remaining farmland. These open spaces are valued greatly by the citizens of Newbury. The Town of Newbury retains three distinct villages, each of which maintains a unique identity. These villages are geographically separated by expansive tracts of wetlands and protected open space - including the Great Marsh, which lies between Old Town and Plum Island, and the Martin Burns and William Forward Wildlife Management Areas separating Old Town and Byfield - which limit development and connectivity between the areas surrounding each village.

• OLD TOWN/UPPER AND LOWER GREENS. Located along Route 1A, which runs north/south through the eastern end of town, Old Town retains a character and development pattern which is typical of a historic New England community. It is anchored by two classic village greens known as the Upper and Lower Greens. The Upper Green is surrounded by historic residential structures, municipal buildings and a few businesses, while the Lower Green near the Parker River is surrounded primarily by historic structures. The 1940s and 50s saw dense residential development in the area between Graham Avenue and the Newburyport Line (so called Montgomery Park, which was laid out in 1898), while the 1950s saw expansion along Parker and Hanover Streets. Subsequently, suburban residential development has continued to

- radiate outward from the core. A historic pattern of development including residences, farms, public uses, and scattered businesses extends along Route 1A/High Road from the Upper Green near the border with Newburyport south to the Rowley border.
- BYFIELD VILLAGE. Centered around the intersection of Central Street and Main Street in the southwestern corner of town, Byfield Village is another relatively dense cluster of residences, small service-oriented businesses, and municipal facilities. The village developed due to the availability of waterpower from the Parker River, and the mills built to harness the same. In a fashion similar to the Upper Green area of Old Town, development since World War II has moved away from the village center along main roads and within new suburban subdivisions.
- PLUM ISLAND. This densely populated area in the northeastern corner of the town comprises a barrier island which is divided among the towns of Newbury, Rowley, Ipswich, and the City of Newburyport. Developed areas of the island fall within Newbury and Newburyport. The only vehicular access to the Island is through Newbury via a causeway and drawbridge over the Plum Island River. The village of Plum Island reflects its character as a former vacation area with small lot sizes, a few small businesses, and many modest "summer camp" style houses. However, many of these camps have been winterized or replaced with year-round structures, and, with provision of sewer and water, there is now a trend toward large and more expensive buildings, in spite of increasing vulnerability to flood and storm damage and restrictive development regulations under the Plum Island Overlay District, which were imposed in conjunction with the installation of water and sewer lines.

Despite the significant growth the town has experienced since World War II, Newbury has been able to retain the flavor of a small New England town. Several of the oldest residential structures in the state are located in Newbury, and many of the older residential properties of Newbury are New England architectural styles that have a classic, historic appeal and contribute to the rural charm of the town. The villages and surrounding agricultural and scenic open landscapes are also highly valued by its residents. More recent development has tended toward larger single-family houses and townhouses, some taking advantage of the Open Space Residential Development (OSRD) zoning provisions which allow homes to be clustered on smaller lots with an area set aside to be preserved as undisturbed open space or for recreational or agricultural uses.

LAND USE

The overwhelming majority of Newbury's land area is open space. Table LU-1 estimates the proportion of land occupied by various uses or conditions based on aerial photography. (This methodology of classifying land use does not take property boundaries into account, but only the area that is in actual use.) Of a total of approximately 16,500 acres, developed uses comprise only 12% of the town, including nearly 1,500 acres of residential development, and approximately 500 acres associated with institutional, transportation, utility uses, recreation, and commercial development. Agriculture comprises an additional 7% of the town's land area. The remaining land area, approximately 80% of the town, is undeveloped and in a natural state -- either wetlands/marsh, water, or forested or open land.

Developed Uses.

As seen in Map LU-1. Land Uses, residential development is located throughout the town, in varying concentrations in and around the villages, and along connecting roadways and smaller streets emanating from them. While the areas of land use shown in Table LU-1 above are determined through aerial photography, assessor's data accounts for all of the land in town by parcel. According to assessor's data, over 2,700 privately-owned parcels of land totaling approximately 3,416 acres are occupied by residential structures. Town-wide, the average size of residential properties is 1.25 acres, although actual lot sizes in areas such as Plum Island, Byfield Village, and the area around the Upper Green are much smaller than one acre.

Commercial and industrial development is very limited, and is located mostly along the northern end of Route 1 towards the Route 1 traffic circle on the Newburyport/Newbury boundary, along Central Street at the I-95 interchange, in Byfield Village, on Plum Island, on the north end of the Upper Green, and on Route 1A at Parker River. According to the Assessor there are an estimated 75 developed commercial properties totaling just over 400 acres.

Open space.

A substantial portion of Newbury lies within the Great Marsh, an expanse of salt marsh and barrier beaches designated as an Area of Critical Environmental Concern (ACEC) that extends along the coast of the North Shore from Newbury to Gloucester, including Rowley, Ipswich, and Essex. Much of the Great Marsh within Newbury is protected open space. The Parker River National Wildlife Refuge, owned by the U. S. Fish and Wildlife Service, encompasses nearly 2,300 acres of open space, including a large part of Plum Island and vast areas of salt marsh. The state-owned William Forward Wildlife Management Area covers approximately 1,300 acres of salt marsh and 700 acres of upland along the upper tributaries of the Parker

River (some of which extends into Rowley). Other state-owned preserves are the 1,555 acre Martin H. Burns Wildlife Management Area, which covers much of the central part of the town between Routes 1 and 95, and the Crane Pond Wildlife Management Area, which covers a total of 2,576 acres in Newbury, West Newbury, Georgetown, and Groveland. In all, there are over 6,800 acres of publicly-owned conservation lands in Newbury.

In addition, Newbury has over 2,200 acres of privately-owned open land. Some land is held by private conservation organizations, such as The Trustees (Old Town Hill, 531 acres), the Essex County Greenbelt Association (numerous holdings), and Historic New England (3 properties in Newbury, including the 230 acre Spencer-Pierce-Little Farm). About 1,200 acres are classified under Chapter 61, Chapter 61A and Chapter 61B, which offer short-term protection for the land to be preserved in exchange for reduced property tax rates as long as the parcels remain in agricultural, forestry, or recreational use. Should the property owners leave the program to sell the properties, the town has first right of refusal to purchase the land. Finally, there are over 1,000 acres of privately-owned undeveloped land, some of which may be developable.

Changes since 2007.

Development activity has slowed over the past ten years compared with the decade preceding the 2006 Master Plan. Whereas the town had been issuing an average of 20-30 building permits per year for new residential construction between 1995 and 2004 (including 66 units at Caldwell Farm permitted in 2004), the average fell to 14 units per year between 2005 and 2014. The 2006 Master Plan projected a growth rate of 34.7 new households per year (comparable to the rate of growth between 1980 and 2000), resulting in approximately 693 new residential units between 2000 and 2020. According to building permit records, the town only added 296 units between 2000 and 2014. The reason for the slow-down in development is likely a combination of the recent economic recession which dampened home sales, and the diminishing availability of easily developable sites without significant environmental constraints and resulting high site development costs.

Recent residential developments have included Caldwell Farm, Colby Village, Scotland Woods, Marsh Meadow, and Wilshire Road (off of Rolfe's Lane), all of which were OSRD subdivisions which allowed construction of condominium units or single family houses on lots smaller than required by zoning in exchange for preservation of at least 50% of the upland as open space. Some smaller conventional subdivisions were also built, as well as a substantial number of lots created along public roads, thereby not needing subdivision approval. Three adaptive reuse projects have converted historic structures in village areas to residential use. The first in the Upper Green area, created three residential condominium units in the former Woodbridge School, along with a freestanding single family house. The second involved conversion of the

4. LAND USE

former Yellow School in Byfield into a single family house. The third was conversion of the United Methodist Church in Byfield into four residential condominiums.

Since 2010, the Planning Board has also reviewed and approved seven proposals for major commercial development. The majority of new development has occurred on Newburyport Turnpike (Route 1) in the Business and Light Industrial District. Proposals have allowed for low intensity uses such as offices, studios, and self-storage, which are suitable given the lack of infrastructure serving this area.

Since 2006, there have also been tracts of land preserved as open space. The Essex County Greenbelt Association and the National Fish and Wildlife Refuge have both increased land holdings, and developments using the Open Space Residential Design provisions of the Zoning bylaw have resulted in land set aside for conservation.

INFRASTRUCTURF

Newbury has direct access to I-95 which runs north/south through the western end of town, with interchanges at Scotland Road and Central Street in Byfield. Route 1 bisects the town, also running north/south from the rotary on the Newburyport border. Route 1A runs north/south on the eastern end of the town, forming a spine connecting Newbury's historic Lower and Upper greens. Small town roads provide limited east/west access between the three villages. Expansion of the town's road network is constrained by substantial salt marsh wetlands and protected open space.

Some of the more densely populated areas in Newbury are served by public water, including Plum Island, much of Byfield, and parts of Old Town, including the area around the Upper Green and along Route 1A, terminating just past the intersection with Old Pine Island Road. Plum Island is served by public sewer, while Most of the rest of the town has private septic systems. Many areas have septic limitations due to wetness or bedrock. The areas least impacted by septic limitations are around Byfield Village and most of the land on either side of the length of Route 1A.

ENVIRONMENTAL CONSTRAINTS

Much of the existing open space has severe development constraints. As can be seen in Map NR-5 Water Resources, there are extensive areas of wetlands/marsh and flood zone on Plum Island, along the Parker River and its tributaries covering much of the area east of Route 1, and extending toward Byfield Village. Most areas of town have soils with severe septic limitations, including hardpan, bedrock, slope, and wetness. The sections of town least impacted by numerous environmental limitations are along Route 1A and the area surrounding Byfield Village. These conditions do not necessarily inhibit development, but can substantially increase the cost, resulting in a slower buildout for commercial or residential development, and more expensive houses. Public water and/or sewer could significantly change the equation, making it more economical to develop a range of uses.

Table LU-1: Land Uses in Newbury

	Acres	%
Developed Land Uses	2,011	12.2%
Residential	1,492	9.0
Commercial	93	0.6
Recreation/Marina	137	0.8
Public/Transportation/Waste Disposal	289	1.8
Undeveloped Land Uses	14,487	87.8%
Agriculture/Extraction	1,134	6.9
Water	1,010	6.1
Wetland	6,944	42.1
Forest/Open Land	5,400	32.3

Source: MVPC, based on 2005 MassGIS Land Use and 2014 aerial photography

REGULATORY FRAMEWORK

The Town of Newbury regulates development through zoning and subdivision regulations and a handful of other land use controls. Land use is also affected by state, health, and environmental regulations.

70NING

Most of the town (97 percent) is covered by one general zoning district, Residential/Agricultural. This district allows single family residences with a minimum lot size of 40,000 square feet per unit (roughly one acre), along with two-family residences and a limited range of small-scale commercial uses (home occupations and agricultural activities including retail sales of locally grown agricultural and farm products by right, and professional offices, recreational uses, and certain institutional uses by special permit.) Both Plum Island and Parker River have overlay districts that are more restrictive than the Residential/Agricultural district. Accessory apartments are allowed in all districts where residential use is permitted.

For larger residential subdivisions (more than four units), the town's Open Space Residential Development (OSRD) provision enables site planning flexibility without increasing overall density of residential subdivisions. The OSRD Bylaw requires the preservation of at least 50 percent of the upland as open space. Density bonuses may be awarded for developments that provide additional open space and/or affordable units, or preserve historic structures. Submission of OSRD applications is required for eligible subdivisions, but applicants still have the option of development under the conventional subdivision process.

While a limited mix of residential and commercial uses is allowed throughout most of the town, there are three small zoning districts which explicitly allow a mix of commercial and residential uses. These include village zoning districts adjacent to the Upper Green and in Byfield Village, both of which allow for multi-family residential development of up to four units by special permit, along with commercial uses, and include limited design guidelines. The Residential Limited Business district includes just one site on Orchard Street where an automotive repair shop is located. None of these districts allows industrial uses. Mixed use structures with both residential and commercial space are permitted in several districts, including the Byfield Village and Upper Green Business Districts and most of the commercial districts.

Newbury also has several commercial and light industrial zoning districts. Most of the commercially zoned land is located in the vicinity of major highway junctions, allowing a wide range of commercial and light industrial uses and excluding residential development. The largest is the Business and Light Industrial District which includes 276 acres along Route 1

from the Newburyport line to Boston Road. The Commercial Highway district includes parcels around the junctions of I-95 and Scotland Road (on the border with Newburyport), and I-95 and Central Street (near Byfield Village, including Pearson Plaza). The Commercial Highway A District is on Kent Way, also near the junction of I-95 and Central Street, and includes Newbury's largest office complex, the 95 North Business Center.

Near Byfield Village and the Central Street commercial districts, the Light Industrial Byfield district (divided from Commercial Highway A by the Parker River) lies behind Main Street but lacks road frontage. This district allows just a limited range of light industrial uses and residences. Finally, the Parker River Marine district incorporates existing marine businesses and associated residential uses on either side of High Road/Route 1A along the south side of the Parker River.

In addition to the underlying zoning districts, there are five overlay districts, intended to protect public water supplies and sensitive natural resource areas, and provide locations for adult entertainment and wireless communications.

STATE REGULATIONS

Several state regulations protect natural resource areas through development restrictions, oversight, and/or coordination with federal and local entities. The Massachusetts Department of Environmental Protection administers laws pertaining to wetlands, waterways, coastal resources, drinking water, and wastewater treatment. Executive orders 193 (Agricultural Land), 149 (Flood Plain Management), and 181 (Barrier Beaches) also govern development activity in specific resource areas. The Massachusetts Environmental Policy Act (MEPA) requires state agencies to study the environmental consequences of their actions, including permitting and financial assistance, taking measures to avoid, minimize, and mitigate damage to the environment. The Massachusetts Office of Coastal Zone Management also provides helpful resources in navigating regulations.

CHANGES SINCE 2006

The 2006 Master Plan recommended several zoning revisions to emphasize the unique conditions and character of different areas of town, and address the need for greater housing diversity. A number of these recommendations have since been adopted, including village zoning in Byfield and at the Upper Green, tailored commercial districts at the Parker River and on Route 1, a Right to Farm Bylaw, and a provision for accessory dwelling units throughout most of the town. Zoning changes have combined commercial and industrial districts to create the Business and Light Industrial District along Route 1, required increased review of commercial projects and development throughout town, and increased clarity, particularly through establishment of a Table of Use Regulations. Newbury also adopted a Stormwater Management Bylaw requiring that development activities incorporate Low Impact Design (LID) practices to minimize runoff characteristics, provide groundwater recharge, reduce flooding, and maintain the integrity of streams, channels and aquatic and wildlife habitats.

A transit-oriented mixed use development that would have created market rate multifamily condominium units combined with affordable housing units and retail space was defeated at Town Meeting in 2008. Unfortunately, that property is currently not available for this type of project, as a solar farm with a 20-year lease has been constructed on a large portion of the land.

Other significant zoning/land use recommendations from the 2006 Master Plan which have not been implemented include regulations to preserve the historic character of the area surrounding the Lower Green, and Inclusionary Zoning in the lower density areas of town that would serve to create dispersed affordable housing units and provide a disincentive to build large subdivisions in areas that lack infrastructure and services to support new growth.

LAND USE ISSUES

Given the extensive development constraints throughout the town, opportunities for new development or other land use changes are very limited. Change will continue to occur incrementally, and on a small scale commensurate with the capacity of local infrastructure, the market and availability of funding to support development, and local and state regulations. By recognizing distinct needs and challenges, the community can more effectively guide future land use to maintain fiscal and social sustainability and environmental resilience.

GROWTH POTENTIAL

The 2006 Master Plan estimated that about 20% of the town's land area or approximately 2,425 acres, could potentially be developed, yielding 2,480 residential lots and 2.6 million square feet of commercial space. The analysis was prepared by the Merrimac Valley Planning Commission in 2002 under a statewide planning initiative, using GIS data to determine the buildable area and the Town's zoning requirements to determine potential land use and density. This methodology did not consider site-specific factors such as soil suitability and the area that would be dedicated to roadways in new subdivisions, nor the potential for redevelopment of existing structures. Nevertheless, the analysis still provides a reasonable indication of the volume of potential development that could occur in the long term, given the right market conditions and technological advances and/or upgrades to infrastructure to overcome environmental constraints.

The 2002 Buildout Analysis evaluated the areas which are already developed, those which are permanently protected, and those which have regulatory constraints (i.e., wetlands or flood plains) that inhibit development, as well as lands which are potentially developable but environmentally sensitive. Areas which have none of these constraints may present desirable sites for new development. The section of town with the fewest constraints and therefore the most likely to accommodate changes in land use is Byfield.

While the Buildout Analysis estimates long term potential for development under current regulations, the pace of development in the short term is governed by several factors that are outside of regulatory control. Over the past 10 years, the pace of growth has slowed, as the availability of prime developable land has diminished. Nevertheless, Newbury still has approximately 2,000 acres of Chapter 61 lands and other farmlands and open space which could potentially be developed if the properties were to come on the market and the Town decides not to exercise its right of first refusal. It is difficult to estimate which properties might come out of Chapter 61 in the future, although speculatively speaking, smaller, less commercially oriented farms may have a greater likelihood of coming onto the market. Other properties located along High Road, not in Chapter 61, may also be developed. Larger residential lots may present opportunities for subdivision, particularly along Route 1A/High Road. As noted in the 2006 Master Plan, it is possible that this could result in the loss of historic homes, which might be demolished to provide access to the rear of long, narrow lots, as well as fragmentation of the streetscape.

DEVELOPMENT NEEDS

Limited new development in Newbury can help to address several community needs. More diverse housing types, such as modestly priced single family houses, mixed-use, rental, or condominium units would augment housing options and increase the availability of housing that is within reach for the local workforce, younger households, and seniors who wish to downsize and remain in the community. Commercial development can help to diversify the tax base (particularly if infrastructure is upgraded to attract commercial users with larger tax receipts), as well as to provide employment opportunities, services, and amenities for Town residents. Several focus group participants and many of those who took the survey identified a desire for independent local businesses in one or more of the villages that would foster social interaction among community-members. Despite the clear need for these types of uses, market constraints, land costs, and lack of infrastructure have inhibited these types of development.

Finally, the development of new public facilities and/or renovation of existing facilities to house Town departments and services, and the expansion of trails and recreational infrastructure will help to sustain the quality of life and support the needs of residents and businesses. In July 2016, the Town rented private office space to accommodate the Town offices. The Police Department took over the Town hall until the Police Department was able to occupy their new quarters in 2022. Addressing the long-term needs of the municipal offices to allow staff to continue to support the community is a recommendation of this Master Plan.

RESILIENCE

Storms, flooding, and other effects of climate change have the potential to substantially impact Newbury's land use over the next decade and beyond. "Resilience" is defined as the ability to survive disruption and to anticipate, adapt, and flourish in the face of change. The Ipswich River Watershed Association and the National Wildlife Federation led a regional study, the Great Marsh Coastal Adaptation Plan, which identifies risks from coastal storms, sea level rise, inland flooding, and erosion. A large portion of the town is vulnerable to flooding. Of the town's developed areas, most of Plum Island is at high risk due to coastal storms and/or sea level rise.

Resilience planning considers how the town can best prepare to withstand storms or other disaster events, minimizing damage to property and infrastructure. The Town's Municipal Vulnerability Plan (2018) and the Merrimack Valley Regional Multi-Hazard Mitigation Plan (completed in 2016 and currently being updated) identifies the town's vulnerability to various types of disasters, and provides strategies to prevent or minimize damage from such events.

The Town should consider land use policies and investments in infrastructure and natural resource conservation to avert risk and facilitate efficient recovery.

INFRASTRUCTURE CONSTRAINTS

While more diverse housing and commercial development would help to meet community needs and potentially increase Town tax revenues, the lack of water and sewer infrastructure are a major disincentive to attracting such development. Plum Island is serviced by water and sewer infrastructure provided by the City of Newburyport, but regulatory restrictions including the Plum Island Overlay District and an agreement with the Mass DEP prohibits any increase in residential or commercial development on the Island. Byfield Village and parts of Old Town have public water but no sewer service, while Route 1, which is consistently identified as the preferable location for new commercial or mixed use development, has neither. The need for water and sewer infrastructure is also a concern for existing residents and businesses in Newbury, as a changing environment results in increasing failure of private wells and septic systems in some areas of town.

PUBLIC ENGAGEMENT

Within the framework of Town government, land use decisions are dependent on the support of residents who must vote to adopt regulations or to appropriate funding for capital improvements and other community resources. Many participants in the 2016 survey and focus groups indicated that a lack of information and concerns about scale, design, and fiscal sustainability may have contributed to the failure of these previous land use initiatives to pass. An inclusive process of gathering and sharing information and building consensus is necessary to generate support for land use initiatives, especially where Town meeting approval is required.

5. COMMUNITY SERVICES AND FACILITIES

This chapter is about the services the Town provides to the entire Newbury community, including residents, employers, employees, and property owners. The center of town government is the Town Hall, and Newbury's Town Hall has been empty since July 2016 when the departments moved to temporary quarters at 12 Kent Way in Byfield. Addressing permanent housing for municipal offices is critical for the efficient maintenance of services to residents of Newbury.

This chapter describes the different departments, the services they provide, and the projected needs for each Town department. The work of some departments is more visible than others: people tend to be more familiar with certain departments: police, fire, and schools, the library, and the Council on Aging, to name a few.

Less visible is the daily operations of a town, which include the administrative departments and those with responsibility for maintaining and improving town facilities, including the Town's physical infrastructure of roads, culverts and bridges, and Town-owned recreation facilities and open space.

SCHOOLS

Newbury is part of the Triton Regional School District, which also includes the Towns of Salisbury, and Rowley. The District includes three elementary schools (one in each member town), one regional middle school, and a regional high school.

- NEWBURY ELEMENTARY SCHOOL. In 1998, Newbury Elementary School had an enrollment of 827 students, which was the highest enrollment on record. From that one-year high enrollment, the overall student town-wide enrollment at Newbury Elementary School and the Middle/High School for Newbury residents has been on a slow and steady decline. In the 25 years since that historic high, the enrollment at Newbury Elementary School has dropped by roughly 52%, mirroring the decline in the school-aged population living in town.
- TRITON REGIONAL HIGH AND MIDDLE SCHOOL. The Triton Middle and High School complex is located at 112 Elm Street in Byfield and consists of a multi-level brick building originally constructed in 1971. An addition was recently completed and most of the interior of the original building was renovated in 2000-2001. The buildings include several educational amenities, including a gymnasium, auditorium, art rooms, photography lab, science rooms, computer labs, shop areas including woodworking, a media center, and a library. The District completed major renovations to the stadium facility, including installation of a new multipurpose synthetic turf field, a new 400 meter running track, a 2,450 SF amenities building, a 1,500-person grandstand with press-box, and upgrades to the existing athletic lighting in 2016. A recent facilities assessment has identified significant needs for building improvements and repairs, and the District has submitted a Statement of Interest (SOI) to the Massachusetts School Building Authority (MSBA) to outline the deficiencies. Any project is more likely to be an update/renovation, and not new or added construction as enrollment is not an issue.
- WHITTIER REGIONAL VOCATIONAL TECHNICAL HIGH SCHOOL. Newbury is part of the Whittier Tech Regional School District. Whittier offers 19 vocational career areas designed to provide the necessary training and skills for personal and work force success. As of October 1, 2022. 16 students from Newbury were attending Whittier. Newbury's FY2024 contribution is \$253,173, which is 1.93% of the total contribution from the 11 member communities.

FUTURE ENROLLMENT

Current projections prepared for the District anticipate continued decreases in enrollments for Newbury Elementary School, Triton Middle, and for Triton High School. However, with recent census data and the fact that Kindergarten enrollments have trended higher in the last couple years, the earlier projections for enrollment decreases appear to have been inflated, and the decreases have slowed. It would appear then, that there are no immediate expansion needs of either the Newbury Elementary School or the Triton complex based on enrollment increases.

In addition to the enrollment figures above there are other data of interest. Although 64 students have opted out of the Triton system this current school year, 103 have opted in. This number has fluctuated over recent years, but on the whole, there have been more students who choose to come into the schools than those who are choosing to leave to other public schools through School Choice. On the other hand, the number of school-age students in private schools has increased from 104 students in 2015 to 109 for Newbury residents.

PUBLIC SAFETY

Public Safety encompasses police, fire, and emergency medical response. All town Public Safety Departments are municipal departments under the management of the Town of Newbury. The Fire Department also includes the Ambulance service, which is managed by the Ambulance Enterprise Fund.

POLICE

The Newbury Police Department maintains a roster of eleven full-time officers, two reserve officers, three full time Emergency Communications Dispatchers, five part-time Emergency Communications Dispatchers, and a part-time Administrative Assistant who also acts as the Department Chaplain.

In 2022, the Newbury Police Department logged 21,255 calls, an increase of approximately 700 calls from the previous year. Calls vary widely, however the majority of officer-initiated activity came in the form of building checks and traffic stops and radar assignments. In 2022, the Newbury Police Department issued 141 criminal complaints (arrests and criminal summons combined).

The Newbury Police Department understands the need for community engagement and makes every effort possible to interact with the community before crimes occur. The Department is home of a number of community initiatives: Department Chaplain, House Check Program, Cognitive Impairment Resident Registry Program, Mental Health / ASD Resident Information Program, Car Seat Checks & Installations, and monthly "Coffee with a Cop" at the Newbury Council on Aging. Additionally, the Newbury Police Department partners with several local stakeholders and law enforcement agencies, with the goal to improve overall service to the residents and prevent crime in Newbury. Those partnerships include: Access to a Leahy Behavioral Health Clinician, School Resource Officer within the Newbury-based Triton schools, partnership with the Domestic Violence High Risk Team (DVHRT) and the Essex County Outreach Collaborative, membership on the Internet Crimes Against Children (ICAC) Task Force, Northeaster Massachusetts Law Enforcement Council (NEMLEC), and the New England High Intensity Drug Trafficking Area (HIDTA).

The Newbury Police Department offers general communication with the community through the Department website (www.newburypolice.org), via Facebook and through the OnSolve CodeRed Reverse 9-1-1 Program. Residents can sign up to receive CodeRED notifications through the website.

The Newbury Police Chief also acts as the Towns Emergency Management Director.

Animal Control

Animals are very special to the Town of Newbury and our Animal Control Services reflect the value that we have for those animals. In Fiscal Year 2022, the Newbury Communication Center handled approximately 205 animal complaint and animal control related calls.

In addition to responding to community requests, the Animal Control Officer assists the Town by educating the public about the dogs on beach laws and assists in the protection of plovers during nesting season. Newbury Animal Control also conducts all kennel and barn inspections and manages rabies control throughout the Town. The public accesses animal control services by calling the Newbury Communications Center.

Harbormaster Program

During Fiscal Year 2022, the Newbury Harbormaster Department had its ninth successful full boating season under the umbrella of the Newbury Police Department. The Assistant Harbormasters and Harbormaster Helpers strive to maintain the friendly atmosphere that has always been present at our Town Landing and on the water. In addition to Harbormaster duties, the Assistant Harbormasters support the Town's Shellfish Constable by monitoring the clam flats when they are closed.

Newbury Harbormaster continue to have a positive working relationship with the U.S. Coast Guard and neighboring Harbormasters. The Harbormaster Program is paid for out of a revolving fund, in which revenues raised from permitting fees are used to fund the seasonal operation.

During the 2022 boating season, Newbury Harbormaster issued 795 waterways stickers, which is approximately a 4% increase over the 2021 boating season.

Shellfish Constable

The Shellfish Constable reports to the Town Administrator and their responsibilities relate to both the Police Department and Health Department/Board of Health. These responsibilities include regular patrols of Town waterways, testing for pollution and "Red Tides," clam flat management, and working with state and federal agencies. The Shellfish Constable may also assist the Harbormaster as needed.

5. COMMUNITY SERVICES AND FACILITIES

FIRE PROTECTION AND EMERGENCY MEDICAL RESPONSE

The Town of Newbury Municipal Fire Department is a combination full-time and call fire department with two stations, the Byfield (Central Street) Station in the western half of town and the Newbury (Morgan Avenue) Station in the eastern half. The Fire Department has five career employees, including the Fire Chief, and about forty call/per diem firefighters. The Byfield Station, which is located at 44 Central Street, is a newer station, built in 2005, and is typically staffed Monday - Friday during the day with two career Firefighter/Paramedics. The Newbury Station, located at 3 Morgan Avenue in the Old Town section of Newbury, is staffed 7 days/week, 24 hours/day with two career Firefighter/EMTs on weekdays and two per diem Firefighter/EMTs nights and weekends. All shifts are complimented by call Firefighters and EMTs as available. In 2022, the Town of Newbury Fire Department responded to 1,510 emergency and service calls and issued 334 burning permits.

During the fall Special Town Meeting in October 2017, the Town Meeting residents voted to accept the provisions of Massachusetts General Laws Chapter 48, Section 42. By passage of this article, the Board of Fire Engineers (BOFE) was replaced by the position of a Fire Chief, who manages the Town of Newbury Fire Department budget, staffing, and planning.

The Town of Newbury Fire Department averaged just over the industry goal of arriving within 6 minutes of the first alarm at 90 percent of building fires in 2022. Having the Morgan Avenue Station staffed 24/7 has improved the Fire Department's response times.

In 2015-2016 the Fire Department established the position of Fire Prevention Officer to work with the Building Commissioner in overseeing building construction and enforcement of fire codes in town. The Department also established the position of Town Certified Fire Mechanic to oversee maintenance of apparatus. The Fire Department has worked in conjunction with the Police Department to create the Newbury Communications Center, a combined dispatch center for all emergency services in town.

Prior to the establishment of the Newbury Fire Department, fire protection in Newbury was provided by two separate fire companies, Fire Protection Company #1 in Byfield and Fire Protection Company #2 in Old Town. The Town provided funding for personnel, but the Companies purchased their own equipment and apparatus. The Town of Newbury Fire Department was created by a vote of the residents in 2010. It combined the two private companies into one municipal fire Department to continue to provide fire and emergency services to the Town of Newbury, In 2015, the Town purchased its first engine, followed by an engine and aerial ladder in 2020. The Department has formalized its officer positions, hiring process, training structure, and professionalism to meet the standards of the industry. The Town now purchases all fire apparatus and equipment for the Fire Department.

NEWBURY TOWN LIBRARY

Founded in 1926, the Newbury Town Library (NTL) maintains a schedule of 36 open hours/ week, and 32 hours/week summer hours. This is an increase of 4 hours/week since FY18 and works toward meeting one of the goals of the 2017 Long Range Plan to increase our open hours by 8 more hours/week. The NTL provides services to more than 7,000 residents and town employees in Newbury, Byfield, and Plum Island, as well as many neighboring communities. A member of the Merrimack Valley Library Consortium (MVLC) since 1987, the NTL has increased access to cutting edge technology as well as important staff trainings. The Library is the cultural, educational, and social hub of Newbury; a place to learn, share, create, converse, play, study, read, relax and explore.

The mission of the Newbury Town Library is to provide free and open access to materials, services, and new technologies supporting life-long learning, as well as to encourage and enable the pursuit of knowledge and the satisfaction of curiosity in our community. This mission has dramatically expanded to include a new digital demand, both staff-side and patron-side. Our community requires a new and ever-changing digital skillset. Digital usership was on the rise pre-COVID, but it exploded during the pandemic. Library staff met this need by implementing new technologies, streamlining workflows, and reducing barriers to materials and services. While these initiatives are digital in nature, they are not touch-free. They require staff to train, support, troubleshoot, and assist patrons, whether online, on the phone, or in person. Thanks to an increase in the Newbury Town Library's FY23 budget, one 28/30 hour/week entry level position has been added to the library's roster.

Per our new FY23 Long Range Plan, the NTL is succeeding in offering many more programs to more audiences. In FY22, the library collection included 104,167 items, including 60,207 print materials and 43,960 digital holdings. The collection includes books, eBooks, DVDs, audiobooks, eAudiobooks, video, CDS, periodicals and ePeriodicals for adults, children and teens, as well as other electronic content such as online classes, online movies, and online language learning. We also have a growing Library of Things collection that includes pickleball paddle sets, gardening kit, radon detector, film and slide scanner, Wi-Fi hotspots, and much more.

A few call-outs of note: The StoryWalk on library grounds continues to be popular among patrons and is changed out with a new story a few times per year. New this year are the Seed Library, as well as the Local History Outdoor Escape Room, which offers a fun way to learn about some of Newbury's interesting history. Thanks to a donation from NAID (Newburyport Area Industrial Development), the NTL is working with a contract archivist to help us are get materials in the NTL's Lois M. Anderson Community Room properly documented, digitized, preserved, and making them more accessible to the public. The NTL has allocated a significant

portion of its Friends programming funds to go toward holding quarterly genealogy programs, and has purchased subscriptions for *Preservation* and *American Ancestry* magazines.

PUBLIC WORKS

The duties and responsibilities of the Newbury Department of Public Works (DPW) are many and varied. The Department has a staff of nine, which includes the Director, a Working Foreman, one mechanic, four equipment operator/driver/laborers, one laborer, and one administrative assistant. The Department maintains 55.5 miles of public road as well as Newbury's parks, recreational fields, and town-owned buildings. During the growing season, the Department mows approximately 25 acres of grass weekly. It also mows all the roadway edges twice a season to keep vegetation off the roads and maintain visibility for motor vehicles.

The Department is responsible for maintaining the Town's stormwater management system, including 420 catch basins. Maintenance of the catch basins includes cleaning out the basins annually and fixing or replacing on average 20 catch basins a year. In addition, the Department sweeps all the roads every spring and carries out additional sweeping on individual roads throughout the year when needed.

In 2015 the Town implemented a pavement management program. Since then, the Department has paved approximately 87 percent of the Town's roads. Before the DPW paves a road, catch basins and drainage systems are checked and any necessary repairs are made. The Department, along with the Town's Stormwater Management Committee, has implemented a new mobile stormwater app, developed by the Merrimack Valley Planning Commission, which maps all the catch basins, manholes, and outfalls digitally using GPS. The app enables the Department to keep track electronically of when catch basins need cleaning and/or repair and what outfall they are linked to. The app is one of the tools the Town is using to ensure compliance with the requirements of the EPA's National Pollution Discharge Elimination System (NPDES) General Permit for Massachusetts.

The DPW has several critical pieces of large equipment. The fleet for the Department is made up of four six-wheel dump trucks ranging in gross vehicle weight from 36,000 to 50,000. All four trucks are equipped with front plows and sanders and three of the trucks are equipped with wing plows. The Department also has two front-end loaders, a rubber-tired excavator, and two smaller one-ton dump trucks and a utility body pickup truck. The Town also has a 2019 bucket truck that is used for tree removal as well as for the removal of hanging limbs. The Department has two zero-turn mowers and a 40 hp John Deere tractor for mowing the recreational fields, snow blowing sidewalks, and roadside mowing. The Department mechanic maintains all the DPW equipment as well as all department vehicles.

The Department is also responsible for snow removal and deicing. Depending on the size and nature of a storm, the Department may employ up to ten outside contractors for help with snow removal. In addition to plowing the roads, the Department plows the parking lots and shovels the stairs and walkways for all town-owned buildings, including Newbury Elementary School.

SOLID WASTE

Newbury's Solid Waste facility (known as the Newbury Transfer Station), located on Boston Road, was completed in 2005. The facility, which is now operated by the G. Mello Disposal Corporation, is a residential drop off center and transfer station with a design capacity of 50 tons of Municipal Solid Waster (MSW) per day and adequate collection area for a full range of recyclables. The transfer station operates three days per week and processes an average of 150 tons of municipal solid waste per month or approximately 12.5 tons per day. The capacity of the Transfer Station is adequate for both current and projected demand, according to the 20-year solid waste master plan developed in 2001 by Camp Dresser and McKee of Cambridge, MA which formed the basis for the design of the Station. The Town should evaluate the capacity of the Transfer Station in 2023 to determine whether any upgrades or modifications are needed.

The current Transfer Station replaced a landfill on the same parcel of land which has been discontinued and capped. The Town is constructing a solar energy generation facility on the landfill site.

RECREATION

The Town of Newbury owns and maintains several recreation facilities, including areas available for both active recreation (ball fields) and passive recreation (beaches, boating and open lands, etc.). Other public and private organizations broaden available options for both passive and active recreation with their significant facilities.

ACTIVE RECREATION

The Town of Newbury owns and manages a limited supply of active recreation facilities. The 2000 Open Space and Recreation Plan⁸ examined the current facilities for active recreation available to town residents and the needs for the immediate future. One goal was to meet the demand for active recreation facilities, with an objective of adding athletic fields. The town took a step toward that objective when it purchased two properties specifically for playing fields in 2001.

The first property, now known as Central Street Recreational Area (81 Central Street), has four full-size, multi-sport fields and two smaller fields. In Fall 2021, the Town added a regulation multi-purpose court, which currently hosts pickleball through a collaboration with the COA. The field house is operational with bathroom facilities during posted times. Fitness classes are also conducted in this space. A series of hiking trails at the northern part of the property connects the Parker River to the Triton Middle/High School complex. The Recreation Committee is developing a Master Plan for this property.

The second property is five acres on Kent Way that abuts the Martha Pearson ball field and the Newbury Library on Lunt Street in Byfield. Funds are not yet available to add more ball fields to this property.

The Triton Regional School District owns and manages their recreation facilities, including fields located around the Middle and High School complex. The Turf field may be used by the public for a fee, although such use is limited. Private facilities owned by the Governor's Academy are also available for limited public use by Newbury organizations. Table CF-1 provides an inventory of these public and semi-public facilities.

⁸ The 2000 OSRP was updated in 2009.

Table CF-1: Primary Resources for Active Recreation

Name	Location	Activities Available	
Town Facilities			
Manter Fields	Central Street	5 multi use fields , field house and nature trail	
Newbury Elementary School	Hanover Street	1 small soccer field, 1 softball field, basketball court, playground.	
Kent Way / Lunt Street Complex	Lunt and Kent Street	1 little league field (expansion for 2 additional little league fields).	
Upper Green	Central Street	1 Little League/T Ball/softball field; Pond and other passive recreation uses	
Lower Green	High Road	Multi use field; historic school house	
Other Facilities with Limited Public Access			
Triton Regional School District Campus	112 Elm Street	4 multi-use fields, 1 little league, 1 Babe Ruth, 2 softball fields, 3 tennis courts, indoor basketball, playground.	
Governor Dummer Academy	1 Elm Street	Multiple fields for soccer, lacrosse, football, baseball, indoor hockey, indoor field house.	
Olde Newbury Golf Club	Route 1	9-hold golf course open to the public Monday through Thursday.	

Sources: Newbury Open Space Plan; Newbury Master Plan Committee

Table CF-2: Primary Resources for Passive Recreation

Name	Newbury Acres/ Total Acres	Activities
Parker River National Wildlife Refuge (USFWS)	2,015/ 4,662	Bird watching, beaches, hiking, bicycling, non-motorized boating.
Old Town Hill Reservation (The Trustees)	497	Bird and wildlife watching, hiking.
William Forward Wildlife Management Area (DFWELE)	1,294/ 1,707	Hiking, hunting
Martin Burns Wildlife Management Area (DFWELE)	1,462	Hiking, hunting
Crane Pond Wildlife Management Area (DFWELE)	292/ 2,123	Hiking, hunting
Spencer-Pierce-Little Farm (Historic New England)	234	Small animal farm/ Olde fashioned baseball
Great Meadow Farm (Town)	99	Hiking
Newbury Beach (Town)	7.3	Beaches
Total Acreage in Newbury	5,900	

Sources: Newbury Open Space Plan

5. COMMUNITY SERVICES AND FACILITIES

Three different entities in Town holds jurisdiction over these resources. The Recreation Committee manages 81 Central Street and the property on Kent Way. The Select board oversees the Upper and Lower Greens and the Martha Pearson ball field. Two Town-owned ballfields behind Newbury Elementary School are managed by the school principal. Current appropriations to the Recreation Committee are limited to activities related to the care and maintenance and activities of the Central Street property and Kent way parcel. Appropriations can not be used to provide summer recreation program at the Newbury Elementary School.

PASSIVE RECREATION

Newbury residents have access to a wide variety of passive recreation resources. In general, passive recreation refers to activities that do not require specialized facilities or improvements. Residents can take advantage of Newbury's proximity to the ocean, Plum Island Sound, and the Parker River as well as the various protected natural lands in town which offer hunting, hiking and birdwatching.

As is shown in Table CF-2, a vast majority of the passive recreation land in Newbury is owned and managed by national and state agencies as well as private land trusts. The US Fish and Wildlife Service manages the Parker River National Wildlife Refuge, which includes the southern portion of Plum Island, except for Sandy Point State Reservation at the southern tip of the Island. This resource provides a broad variety of recreation opportunities, including kayaking, canoeing, hiking, and biking. It is one of the most popular bird watching locations in Massachusetts. Newbury contains portions of three separate wildlife management areas. These areas are managed by the Massachusetts Division of Fisheries and Wildlife and provide opportunities for hunting, hiking, and other passive recreation activities. The Trustees (formerly The Trustees) maintains the Old Town Hill Reservation, as well as other open lands in Town. Other substantial parcels of protected open lands are owned by the Town of Newbury, the Essex County Greenbelt Association, and Historic New England (formerly SPNEA). New parcels of open space have been protected over the last decade using the Open Space Residential Development (OSRD) Bylaw, which encourages the protection of usable open space in exchange for partial relief from zoning regulations.

Beaches are available to town residents on Plum Island. All residents of Newbury can purchase an annual sticker for the "resident only" parking available at the lot at Plum Island Center and along Northern Boulevard. Access to the Parker River National Wildlife Refuge is available for a reasonable fee, with a substantial discount for seniors. Other public access is available on Plum Island, and recent work by the Town's Conservation Commission and Plum Island residents has more clearly marked pedestrian access paths from Northern Boulevard to the beach.

The Town owns and operates a boat ramp for Newbury residents on the Parker River at the Route 1A bridge, with facilities for temporary docking. The Harbormaster offers a ramp permit, and the parking area requires a resident sticker. The pond north of the ramp is losing its battle with the phragmites; both sediment and phragmites need to be removed. A study of the parking area, with the potential for overflow parking nearby, could be combined with a comprehensive analysis of the ramp's current and future uses. Upgrades to the dock and ramp have been completed.

In addition to this Town owned facility, the Parker River and the Basin at Plum Island provide considerable area for boat moorings. Several commercial facilities (docks and ramps) exist on the Parker River, which offer additional access for a fee. Informal access points are available for "portable" watercraft (e.g., canoes, kayaks, and paddleboards), such as the Parker River at Middle Road, the Plum Island River at the Plum Island Turnpike, the Central Street Playing Field and on Pine Island. The popularity of boating, both motorized and non-motorized, continues to increase on the Parker River.

The Town also owns other properties such as the Landing Place of the First Settlers at Cottage Road, a small 1-acre property on Main Street behind the Post Office in Byfield, and Father Sears Park on Sunset Boulevard on Plum Island. Most users of these parks are abutters and local neighborhood residents.

COUNCIL ON AGING

The Council on Aging is the municipal agency that serves a variety of roles to ensure assistance to seniors through information, support services, and numerous activities that encourage and enable seniors to remain independent, living in and participating in the community.9 Approximately 2,000 seniors receive a bi-monthly newsletter that includes information on upcoming activities (including luncheons, educational and exercise programs, and other social gatherings and events), up-to-date health information (including Covid updates), transportation, and social service programs that are available. The Council on Aging also provides advocacy and outreach services to individuals that need assistance to maintain their health, safety, and independence.

The Council on Aging moved its operation to 12 Kent Way, Suite 100 in June of 2022. This new location, which is temporary, provides private office space for the staff. The Outreach Coordinator has private interactions with seniors to discuss their needs and to assist with referring them to resources in the community. Offices that afford privacy are necessary to comply with HIPAA regulations.

⁹ Executive Office of Elder Affairs

5. COMMUNITY SERVICES AND FACILITIES

The move to Kent Way provides more accessible parking for our seniors. The Kent Way parking lot has abundant parking which includes handicapped spots directly across from the handicapped-accessible (push-button) entry door into the building. An unlocked push-button entry door into the Council on Aging space allows seniors to enter to without needing staff to open the door. There is also push-button access into the restrooms in the lobby area of the Kent Way space. This parking and entry arrangement is more accessible than the previous space at Newbury Elementary School, which had fewer accessible spaces and a less convenient entry.

The Kent Way space is more than double the square footage of the Newbury Elementary School space. The additional space allows the staff to provide concurrent programs as well as the ability to offer these programs without the interruptions of the overhead announcements, fire drill evacuations, and shared restroom facilities of the school. Staff also have enough room to be able to provide programs within this space, instead of having to borrow space from other locations throughout town (such as the Central Street Field House and the Byfield Community Arts Center building). The Council on Aging will maintain the space at the Newbury Elementary School to offer additional programs, but main operations will take place at 12 Kent Way.

The Council on Aging informs residents of the events a primarily through its newsletter, which is distributed to individuals, but also posted online on the town's website. Staff created a Facebook page (to replace the dormant page that is not currently being used) to increase the public awareness of the Council on Aging and what it offers. As the Covid-19 pandemic has been winding down, the number of participants in programs has increased as has the number of new people being served.

Current staff consists of six people. The operating budget for the department has more than doubled in just two years with new staff and more programs. Many of the programs the Council on Aging offers include food offerings (such as luncheons, snacks during programs, or dinners at the evening programs). This alleviates not only the often stress-filled task of preparing a meal but also allows for socialization with others during meals. The increased budget also allows for additional Van Driver hours to assist our seniors to attend programs and get them to other places they need to go, such as medical appointments.

Additional facilities to support senior mental and physical health include a safe outdoor space for programs, including community gardens and outdoor seating and dining. While the Recreation Committee has provided space for a temporary outdoor pickleball court at 81 Central Street, future needs include a permanent pickleball court. An ideal option would include an indoor pickleball court when the weather not ideal for using the outdoor one.

INFRASTRUCTURE

WATER

Residents and businesses are serviced by a combination of sources, including the Byfield Water District, the City of Newburyport and private, on-site wells.

- OLD TOWN. This area is located primarily in the Parker River and Plum Island Sound Water Basin. Although many Old Town residents utilize private drinking water wells located on their properties, Newbury's current Police building and Newbury Elementary School are connected to Newburyport's public water supply, along with properties along Rolfe's Lane, Hanover and Parker Streets and along sections of High Road from the Town line south to the Department of Public Works. The City of Newburyport presently services approximately 470 residential accounts and 24 business accounts in Newbury. The Newburyport Water Department provides water from two surface water supplies, one located in Newburyport and one in West Newbury. Fay Spofford & Thorndike (now Stantec), the City's consultant, has estimated that the water demand in Newbury will increase by 14% by 2020. The MGL Act of 1972 (Chapter 808) established the Old Town Water District (OTWD) and its Board as the governing body over the water rights in Old Town. The Board is comprised of current and former elected officials but has not met for some time.
- PLUM ISLAND. This area is located exclusively in the Merrimack Water Shed Basin.
 Approximately 760 occupied lots on Plum Island in Newbury are connected to the
 Newburyport public water supply as a result of a Massachusetts Department of
 Environmental Protection consent order. Due to the Plum Island Overlay District (PIOD)
 zoning regulations and other growth restrictions placed on the Island, limited additional
 growth is anticipated with the result that only a few new buildings can be constructed.
- BYFIELD. The Byfield service area is located in the Parker River Watershed. This area is primarily serviced by a private water company, the Byfield Water District (BWD). The BWD provides water from two wells located within the Parker River Watershed: a rock well located on Forest Street, and a gravel-packed well located on Larkin Road. The water distribution system extends down Orchard Street to Marsh Meadow Lane and ends approximately 1.4 miles from Rte.1 at the southerly portion of the Business and Light Industrial (BLI) District. The Byfield water distribution system is also connected to the Rowley and Georgetown water systems for emergency purposes. According to the Byfield Water District, a daily average of 190,000 gallons per day (gpd) is pumped from the two Byfield wells. Under the

Water Management Act, all permitted withdrawals are able to withdraw up to 100,000 gpd over their permitted volume. This means that the BWD can withdraw up to 290,000 gpd and stay in compliance with the permit. According to the Commonwealth's Water Management Act (WMA) the Byfield Water District currently holds a registration to withdraw 0.17 million gallons per day (mgd) from the Parker River watershed.

WASTEWATER

Wastewater is handled town wide by individual on-site septic systems, with the following exceptions:

- OLD TOWN. A small portion of Rolfe's Lane, the Newbury Elementary School and the former Town Hall, the Police Station, and the Fire Station are connected to the Newburyport Sewer System; two commercial lots immediately south of the Newburyport Traffic Circle on Route 1 have sewer available to them.
- PLUM ISLAND. For years, this area was served by private onsite septic systems. Due to noncompliance issues with the State's Title 5 Regulations, Plum Island is now served by an island-wide wastewater collection system that transports wastewater to the Newburyport Wastewater Treatment Plant. The system was severely tested and, in some areas, seriously compromised during the winter of 2015 due to faulty construction. Since then, the City of Newburyport has settled a suit with the firm responsible for the project and recently received an award of nearly \$6 million to redress the issues
- BYFIELD. All private residences and businesses in Byfield use on-site septic systems.
 The two new residential developments on Elm Street, Caldwell Farm and Colby Village,
 utilize common on-site septic systems, as does the Triton Middle School and High
 School facility. The Governor's Academy operates an on-site wastewater treatment
 system which discharges directly into the Mill River.

Water and sewer infrastructure remain as limiting factors for efforts to develop high quality industrial and commercial uses along Route 1. The Business and Light Industrial District located on both sides of Route 1 north of Boston Road is the Town's largest commercial and industrial district and has the most potential for new development. The Town amended its zoning for this District in the hope of attracting development. In response, seven new projects have been developed over the past few years. The new projects include a large-scale ground-mounted solar installation, a yoga studio, an Early Childhood Learning center, a commercial building containing service and light industrial uses, a high-quality self-storage facility, and the headquarters and storage yard for a site contracting business. If water and sewer utilities were present, this zoning district might attract other, more capital intense projects.

While homes on Plum Island and along the Plum Island Turnpike have been connected to the Newburyport Wastewater System, the remainder of the town is almost completely dependent upon individual on-site septic systems for wastewater disposal. This is expected to be the case for the foreseeable future. If not properly maintained, septic systems pose a significant risk to public health and the environment by discharging inadequately treated effluent. This effluent contains pathogens (harmful bacteria, protozoa, and viruses), nutrients, household chemicals, and other contaminants. To minimize this risk, the Board of Health provides information to educate septic system owners of the proper use and maintenance of their systems, including periodic inspections and pump-outs every three years. Brochures are available on the Board of Health's webpage, are periodically made available at Town Hall and at the Newbury Library, and mailed to all homeowners with a tax bill. These initiatives should be continued, along with, possibly, instructional videos and workshops for licensed installers.

STORMWATER

Newbury's future stormwater management costs are likely to increase over time because of both MS4 requirements and the impact of climate change on precipitation events. The Town should explore the feasibility of establishing a stormwater utility or other dedicated funding mechanism to ensure a reliable revenue stream for maintaining the municipal storm drainage system and for carrying out an effective municipal stormwater management program. Future stormwater discharge permits will require periodic water quality testing of storm drain discharges (both outfall pipes and major drainage swales/ditches) in order to gauge the program's success in mitigating polluted stormwater discharges, especially discharges into impaired, threatened, or highly sensitive receiving waters.

For some communities, increasing the property tax burden to cover these added costs has proved undesirable or untenable, and the communities have opted to establish a local (or regional) Stormwater Utility to raise the needed revenue. The revenue for a stormwater utility is typically derived from a fee assessed to each property based on the property's total impervious surface area. For residential property owners, the average annual fee is generally modest (\$25 - \$50). For large commercial and industrial properties, which often contribute significantly more stormwater runoff due to larger building footprints and paved parking and loading surfaces, the fee is proportionately higher. Abatement incentives can be offered for properties that incorporate proven on-site stormwater reduction strategies, such as pervious pavement, "green" roofs, rain gardens, or rain barrels.

The Stormwater Management Committee's website is a good resource for information about stormwater pollution.

5. COMMUNITY SERVICES AND FACILITIES

UTILITIES

ELECTRICITY

National Grid, a publicly regulated utility, provides electricity directly to Newbury customers. National Grid owns electric transmission lines, poles, and facilities in Newbury. Its network provides service to almost all areas of the Town. The company has two substations in Newbury located on Forest Street and Highfield Road. Service in Newbury is variable, with some areas suffering frequent outages due to antiquated and poorly maintained equipment.

In 2017 the Town issued a Request for Proposals seeking a solar energy developer to install, operate, and maintain a solar photovoltaic energy system at the Town Landfill at 75 Boston Road. The Town accepted a proposal for a 582.4 kW solar energy generating facility to be constructed at the site. This project is being developed under the State's SMART (Solar Massachusetts Renewable Target) Program. It has received local approvals from the Planning Board and the Conservation Commission and construction is anticipated to start in the summer of 2023. In addition to this solar project on Town-owned property, two ground-mounted solar facilities have been constructed on privately-owned property, one off of Middle Road and one off of Main Street.

NATURAL GAS

Keyspan Energy, a publicly regulated utility, supplies natural gas to a small area in the northeast corner of town and to the northern portion of High Road, almost to Plummer's Lane. Most of Newbury does not have the housing density necessary to make the extension of natural gas infrastructure feasible.

As natural gas infrastructure is limited in Newbury, most residents use other options to heat their homes. However, since the year 2000 the number of homes using Utility Gas has increased from 317 to 449 (41%) and bottled gas from 259 homes to 387 (49%). During the same period, the number of homes using fuel oil or kerosene decreased from 1,627 to 1,408 (16%).

TELECOMMUNICATIONS

Telecommunications infrastructure includes traditional land-based telephone service, cable television and internet access. Verizon and Comcast provide service to Newbury residents and businesses. Although these services are important to all citizens, internet and phone service are critical to businesses that are home occupations and to the growing part of the workforce that works either full or part time from home.

Verizon offers traditional phone service and high-speed internet access via its DSL technology (digital subscriber line). In early 2023 Verizon began to implement a gradual conversion of its network in Newbury to its new fiber optic-based technology, named FiOS, and now offers several high-speed internet packages to its customers.

Comcast (Xfinity) provides local telephone, cable television and high-speed internet service throughout Newbury and asserts that its network reaches 100% of Newbury and maintains a subscription rate of over 85%.

Since these services are critical to the small business and work-from-home populations in Newbury, the Town should meet with Verizon and Comcast representatives to ensure that future service is adequate.

Mobile Phone Infrastructure

The use of cellular or mobile phone service, using a network of radio transmission towers, has grown substantially since the 2006 Master Plan was completed. Several mobile phone companies provide service to residents and businesses of Newbury. However, coverage from many of the providers is inconsistent and can be unreliable with numerous "dead spots" through Town. Cell towers have been erected on Scotland Road, along Route 1 between Middle Road and Boston Road, and along Route 1 just south of the Parker River. Other cell towers, which are located near the Newburyport line, support cell service in the northern part of Newbury.

As with Internet Service above, reliable cell phone service is critical to the various contractors and service providers in Newbury as well as for the increasing numbers of those working from home. In 2019 the Planning Board began a review of the Town's cell service and wireless communications by-law and hired a consultant to conduct a review of the adequacy of existing cell coverage in Town and to review the Town's existing Wireless Communications by-law against the requirements of current federal law and FCC regulations. Areas of weak coverage were identified, along with locations of potential cell sites which could improve coverage. The Town adopted an updated Wireless Communications Facilities by-law at the Annual Town Meeting in April 2022.

6. ECONOMIC DEVELOPMENT

OVERVIEW

Settled as an agricultural community in 1635 under the leadership of Reverend Thomas Parker, Reverend James Noyes, and Nicholas Noyes, the Newbury Plantation has evolved over the centuries as a location for many different types of economic enterprise. The Dummer-Spencer mill, the first water-powered mill in Newbury, was built within a year of the settlement of the town. As early as 1650, shipbuilding activities had begun to occur within the community. This was followed by the commencement of limestone quarrying in 1697, the construction of the Cart Creek Sawmill in 1708, the 1735 construction of the Wheeler-Tenney Snuff Mill (believed to be the oldest mill on the Parker River), and the founding of Dummer Academy in 1763 (the oldest continuously operating boarding school in the country, now called the Governor's Academy).

Newburyport split away from the Town of Newbury in 1764, separating the town from what was, and continues to be, its economic center. (The Town of West Newbury later split away from the original settlement of Newbury in 1819.) Subsequent economic activities in Newbury included the establishment of the Byfield Woolen Factory in 1794, and the beginning of the production of shoes in 1845. By 1857, the railroad reached Newbury from Boston, opening up tourism opportunities on Plum Island, which were further enabled by the commencement of flight activities at the Plum Island Airport in 1926. By the early 1900's, the railroad also ushered in a return to the community's agricultural roots which have largely remained intact.¹¹

Agricultural activities, including the production of vegetable crops, English and salt hay, animal grazing, and farm stands, are widespread throughout Newbury, and the maritime heritage is also still prevalent with a number of businesses and residents engaged in shell-fishing, shucking, boat storage, and marine vessel construction, repair, and maintenance. Further, with the completion of I-95 in 1959 and the reestablishment of MBTA commuter rail service at the Newburyport commuter rail platform in 1998, Newbury is well connected to a number of employment centers in the region, including greater Boston, the Merrimack Valley, and the New Hampshire-Maine seacoast.

Currently, much of Newbury's local economy is concentrated in the service sector. Services include professional, scientific, management, administrative, and waste management services; education, health care, and social assistance; arts, entertainment, and recreation; accommodation and food services; and "other services." These businesses represent over 81% of all businesses in Newbury and

¹⁰ Currier, J. (1902). History of Newbury, Mass. (1635-1902). Boston, Massachusetts: Damrell & Upham.

¹¹ Hellman, P. (2006). Historical Gazetteer of the United States (p. 512). Routledge.

92% of all workers.¹² Most of the jobs in Newbury come from the Trade, Transportation, and Utilities industry (627) and the Education and Health Services industry (581).

The largest individual employers are the Freedom Fertility Pharmacy, The Governor's Academy, Salter Transportation , and the Triton Regional Schools. Although not fully represented in data provided by the Massachusetts Executive Office of Labor and Workforce Development, the agriculture and shell fishing industries also make significant contributions to the employment base, as is shown in the 52 commercial shellfish licenses registered in the town and over 306,522 pounds of catch, with an exvessel value of \$487,154, coming in to Newbury.¹³

LOCATIONS OF ECONOMIC ACTIVITY

Newbury's limited commercial activity is largely concentrated along major thoroughfares and in historic village centers:

- BYFIELD VILLAGE. Commercial activity in Byfield Village is on the west side of I-95 and is anchored by the Newbury Town Library, the US Post Office, the Main Street Mini Mart and several other retail and service-oriented businesses, the Byfield Community Arts Center, and the Byfield Gospel Hall. Adjacent to Byfield Village is the Old Byfield Office Park which houses the Town offices, the Council on Aging, Freedom Fertility (Newbury's largest employer) as well as a self-storage facility.
- CENTRAL STREET, NEAR I-95. Pearson's Plaza is on the east side of I-95, still within Byfield. This plaza includes a variety of restaurant, office, retail, and contractor uses.
- US ROUTE 1 FROM BOSTON ROAD TO NEWBURYPORT LINE. The Town's largest commercial and light industrial area is located in the northern part of town and hosts a mix of service-oriented businesses and light industrial and commercial uses.
- UPPER GREEN/HIGH ROAD. There is a small concentration of businesses and municipal uses at the Upper Green which include the Town Hall (currently vacant), the new police station, the fire station, The Newbury Butchery, the Newbury office of the Newburyport Bank, and a gas station.
- ROUTE 1A:. Tendercrop Farm and the Spencer-Pierce-Little Farm, owned by Historic New England are located in a cluster of local farms along High Road/Route 1A between the Upper and Lower Greens.
- PLUM ISLAND. Several restaurants and retail shops are located along Plum Island Boulevard, as well as a paid parking lot. A boutique hotel is located south of Plum Island Center, and there is one restaurant on Northern Boulevard, north of Plum Island Center. Scattered throughout the island are smaller, home-based businesses.
- PARKER RIVER BRIDGE. A small commercial area containing mostly marine-related uses and boutique retail straddles the Parker River.

¹² Massachusetts Executive Office of Labor and Workforce Development, ES-202, 2021.

¹³ Massachusetts Division of Marine Fisheries and Urban Harbors Institute, *Massachusetts Commercial Fishing Port Profiles*, 2021, p.4. (Based on 2018 data).

 SCOTLAND ROAD, NEAR I-95. Employers and businesses here include the State Police barracks, Salter Transportation, Newbury Golf Center & Ice Cream, Colby Farm, and Lalobarun Ranch.

Other economic activity, home-based businesses, the Adelynrood Retreat and Conference Center, the tourist attractions of properties owned by Historic New England, short-term rentals, such as AirBNB, and the Ould Newbury Golf Club, are in scattered locations throughout the town.

EXISTING ECONOMIC CONDITIONS

COVID-19 PANDEMIC

Since the original drafting of the Newbury Master Plan update in 2016 and 17, the COVID-19 Pandemic dramatically altered the economic development landscape for Newbury, the Merrimack Valley, the Commonwealth of Massachusetts, and the nation as a whole. This plan has been updated with new data post COVID-19, and these facts and figures should be understood within a larger context of how COVID-19 impacted the regional economy.

As was seen throughout Essex Country and the State, the COVID-19 pandemic had a disproportionate impact on certain industries, demographics, and communities. The Merrimack Valley is no different. The Valley's tourism, leisure, and hospitality industries took the greatest hit. Although the Merrimack Valley has a slightly smaller concentration of these industries when compared to the rest of the Commonwealth, these businesses still have a sizable impact on the region's economy. Communities in the Merrimack Valley that rely on tax income from tourism and hospitality were at a greater threat for negative fiscal impacts. The economic fallout associated with COVID-19 revealed several areas of concern for the Merrimack Valley communities—including labor force participation, cost of living increases, access to broadband and digital resources, and changes to the housing market. As was seen nationwide, the region's non-white and non-college educated workers were most adversely affected.

Although faced with several economic challenges as a result of the pandemic, Newbury is one of a few communities in the region that does not bear the brunt of the economic fallout. Its relatively high median income protected most residents from significant financial impacts, and the types of industry located in town did not face substantial losses when compared to other communities that are more tourism focused. Although the town has not yet returned to its pre-pandemic unemployment levels, the current unemployment rate of 4.2% is close to the state average and considered in a healthy range.

The main area of concern for the town post-COVID-19 will be its labor force. Pre-pandemic this was already a long-term concern, but not immediate. The pandemic has changed the immediacy of this concern and made the issue front of mind for employers. Pre-pandemic in both the Merrimack Valley and statewide, the labor force was in a decline due to the approaching retirement of many baby-boomers and the demographic shifts of increasing deaths and decreasing births. These trends signaled a long-term concern for the area's labor force, but COVID-19 expedited these demographic shifts. International immigration, which the State relied on for an increase in population and labor, had been decreasing since 2016 and then plummeted as a result of COVID-19. Many baby-boomers retired early, and the health effects of COVID-19 hastened the shift of deaths outpacing births in the Commonwealth.

Although the labor shortage is a major concern, the shift in remote work and outmigration from cities as a result of COVID-19 could stand to benefit Newbury and similar towns. There is opportunity to capture residents who no longer need to live near an office in the immediate Boston area, many of whom are now looking to live outside the city. Pre-COVID-19, Newbury was in the upper bracket for telework capable workers in the Merrimack Valley region, with over 40% able to work from home in 2017. Post COVID-19, Massachusetts has one of the highest rates in the country of remote workers at almost 24%.

With labor shortages across the region and state, employers are thinking more critically about where they are located relative to available workers. Lack of housing options and public transportations while control workers will be the control of t

Table ED 1: Eaber 1 orce and 3005			
	Civilian Labor Force	Number of Jobs	Jobs per Worker
Georgetown	4,863	3,123	0.64
Groveland	4,113	1,175	0.29
Newbury	3,838	1,838	0.47
Newburyport	10,299	12,190	1.18
Rowley	3,598	3,053	0.84
Salisbury	5,893	3,180	0.54
West Newbury	2,569	685	0.27
Essex County	423,797	319,243	0.75

Source: MA Executive Office of Labor and Workforce Development, Labor Force Data and ES-202, 2021.

¹⁴ 2018 U.S. Bureau of Labor Statistics Occupational Employment Statistics, 2017 LEHD Origin-Destination Employment Statistics

¹⁵ U.S. Census Bureau, 2021 American Community Survey press release, "The Number of People Primarily Working From Home Tripled Between 2019 and 2021." September 15, 2022.

WORK FORCE AND UNEMPLOYMENT

Newbury's civilian labor force aged 16 or older has 3,838 members. As shown in Table ED-1, the need to commute is largely driven by the relatively low jobs-to-workers ratio in Newbury and many of the surrounding communities, with Newbury having just 0.47 jobs per person in the workforce. Newburyport provides the largest share of jobs in the region and also has the largest population and workforce.

Despite the relative scarcity of local jobs, the Newbury workforce has historically enjoyed lower than average rates of unemployment when compared to Essex County and the United States overall (Figure ED-1). This is particularly notable given that unemployment rates in Essex County tend to run higher than the state average and have periodically been higher than the national average. As was experienced in many communities, Newbury's unemployment rate spiked during the COVID-19 Pandemic and has been slow to return to the pre-pandemic rates. Some level of unemployment is necessary to provide an adequate supply of workers for new jobs created, and the current rate of 4.2 percent is considered within a "healthy" range.¹⁶

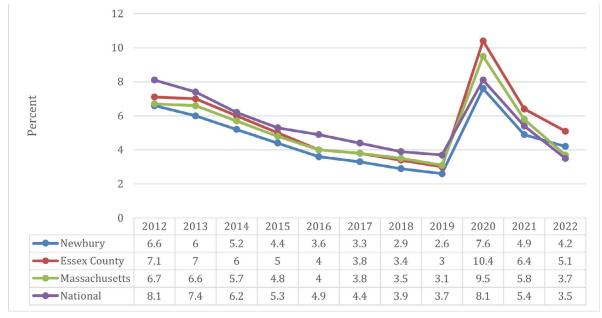


Figure ED-1: Unemployment (2012-2022)

Source: MVPC, March 10, 2023

¹⁶ Note: a "healthy" unemployment range is typically considered to be between 4 and 6 percent.

EDUCATIONAL ATTAINMENT

Contributing to Newbury's relatively low unemployment rate is the high levels of educational attainment among its workforce. Eighty percent of residents have attended college and over half hold a bachelor's degree or higher, while 22 percent have completed graduate or professional degrees (Figure ED-2). Less than 2 percent of residents lack a high school or equivalency. Newbury residents are more educated than residents of Essex County or Massachusetts.

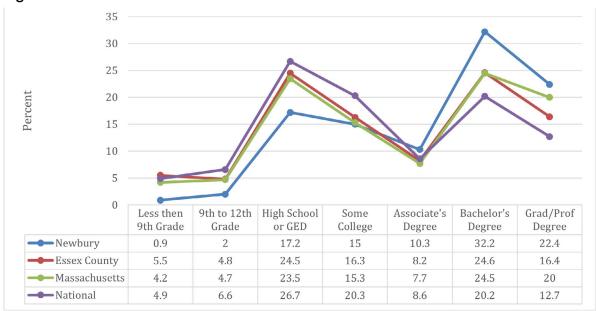


Figure ED-2: Educational Attainment

Source: MVPC, March 10, 2023

INCOME

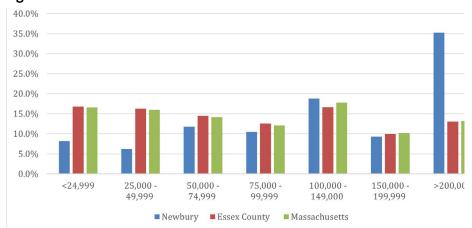
As expected in areas with low unemployment and high educational attainment, incomes in Newbury and surrounding communities are much higher than the state and county medians. For the immediate region, Newbury's median household income is comparable to its wealthy neighbors, but at \$36,901 higher than the state median and \$39,061 higher than Essex County's median, Newbury's incomes are considerably higher than average (Table ED-2). Figure ED-3 shows the distribution of median household incomes. Sixty-three percent of households in Newbury have median incomes in excess of \$100,000 while fewer than nine percent earn less than \$25,000.¹⁷ Newbury has a significantly lower share of households earning less than \$25,000 and significantly higher share of households making over two-hundred-thousand dollars a year when compared to the rest of Essex County and the State. The largest share of Newbury households earns over \$200,000 (35%).

Table ED-2: Income and Wages

	Com	parison of Median	Household Inco	omes	
Newbury	\$121,286	Rowley	\$118,851	Groveland	\$111,056
Essex County	\$82,225	Newburyport	\$111,740	Georgetown	\$122,600
Massachusetts	\$84,385	West Newbury	\$111,652	Salisbury	\$81,223

Source: 2020 ACS, S1901.

Figure ED-3: Household Income Distribution



Source: MVPC, March 2023

¹⁷ American Community Survey, Five Year Estimates (2020), S1901

OCCUPATIONS

The majority of Newbury residents are employed in management, business, arts, and science occupations (Table ED-3). The concentration of residents employed in this occupational sector is significantly higher than in Essex County or Massachusetts. Further, although the labor force in Newbury has contracted by 381 members since 2010, employment in management, business, arts, and science occupations has grown by 37.4 percent during the same time period. The next largest occupational sector, sales, and office occupations, has a lower concentration than the state and county averages. These occupations are becoming less common in Newbury as the workforce employed in this sector declined by 18.7 percent between 2010 and 2020.

Table ED-3: Occupations of Residents

	Employed Civilian Labor Force	Management, Business, Arts, and Sciences	Service Occupations	Sales and Office	Natural Resources, Construction, & Maintenance	Transportation, Production, and Material Moving
Newbury						
2010	3,510	50.4%	9.5%	20.9%	9.9%	9.3%
2020	3,891	62.4%	5.3%	15.3%	10.0%	6.9%
% change	10.9%	37.4%	-38%	-18.7%	11.7%	-17.5%
Essex County 2020	409,549	43.6%	17.6%	20.6%	7.0%	11.2%
Massachusetts 2020	3,615,725	48.0%	16.8%	19.4%	6.6%	9.2%

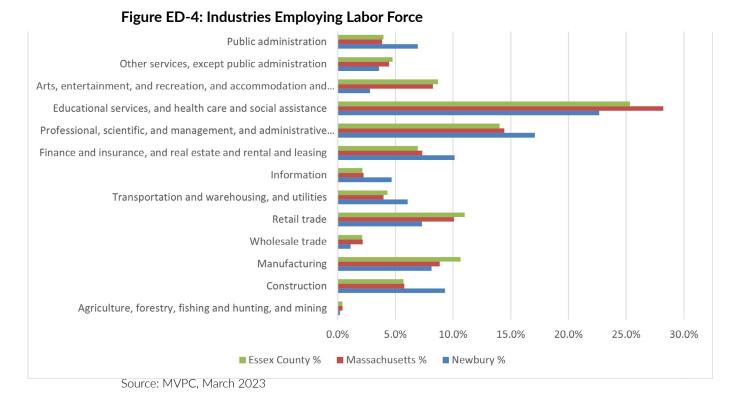
Source: ACS 2010, 2020 5-Year Estimates Subject Tables, S2406.

¹⁸ Source: ACS 2010, 2020 5-Year Estimates Subject Tables, S2406.

EMPLOYMENT BASE

About half of the Newbury labor force is employed in service-based industries, including scientific, professional, management, administrative, education, health care and social assistance, arts and recreation, and accommodation and food services. As common as service industry employment is in Newbury, the share of employment in these industries is still higher across Essex County and Massachusetts (Figure ED-4). A higher proportion of Newbury's workforce is employed in the finance, insurance, real estate, and information industries as well as the construction industry than in Essex County and Massachusetts. These industries tend to provide relatively high wages commensurate with the cost of housing in Newbury.

Since 2000, the number of Newbury residents employed in public administration has declined by more than half. Those working in wholesale trade, retail trade, manufacturing, information, and transportation and warehousing substantially declined over this period.¹⁹ On the other hand, those employed in the finance, insurance, real estate, education, accommodations and hospitality, and agriculture increased over this time.



¹⁹ American Community Survey, Five Year Estimates (2020), DP03

Education is the predominant industry in Newbury, based on number of employees, while several smaller business clusters are prevalent in the town (Table ED-5). The Governor's Academy is one of the largest private employers with a workforce of 200 full time employees. The Triton Regional School district is the largest employer, with over 250 employees. The state and local police and fire department are also large employers, and in fact, seven of the twelve largest employers in Newbury are public agencies.

Although not in the list of top employers, also notable are the clusters of food, recreation, and tourism related businesses. A few local farms contribute to the agrotourism industry, and horse farms and riding schools add to the rural recreation opportunities. Several food-based businesses can be found throughout Newbury, with clusters on Plum Island, near Byfield center, and by the Upper Green. Home based businesses comprise much of the artisan industry, including soaps, ceramics, and photography.

Freedom Fertility Pharmacy, is the nation's largest fertility pharmacy and is affiliated with Cigna. It contributes to the employment base for the health and human service industry. Although there are several restaurants in Newbury, the Plum Island Beachcoma is the largest employer in the local restaurant industry. Finally, Salter Transportation, Inc. provides transportation services for educational facilities.

Table ED-4: Business Jobs and Wages in Newbury

Industry	Establishments in 2021	Workers in 2021	Average Weekly Wages 2021	Average Newbury Wages as % of State
Total, All Private Sector Industries	193	1,374	\$1,087	N/A
Construction	29	97	\$1,310	66%
Manufacturing	6	27	\$2,208	115%
Trade (Wholesale & Retail)	34	516	\$1,689	105%
Finance, Insurance, Real Estate	15	36	\$1,276	36%
Professional and Technical Services	27	72	\$1,565	48%
Administrative and Waste Services	16	56	\$895	77%
Educational Services	23	246	\$1,202	82%
Health Care and Social Assistance	17	46	\$796	64%
Arts, Entertainment, and Recreation	6	39	\$410	43%
Accommodation and Food Services	9	104	\$494	84%
Other Services (ex. Pub Admin)	16	56	\$892	97%

Source: MA Department of Economic Research, Employment and Wages, ES-202.

6. ECONOMIC DEVELOPMENT

Table ED-5: Largest Employers in Newbury

Company name	Address	Number of employees
Triton Regional School District	Elm St # 112	250-500
The Governor's Academy	Elm St. #1	100-249
Salter Transportation Inc	Scotland Rd	100-249
Amada America	19 Central St	50-99
Newbury Animal Hospital	Hanover St	20-49
Newbury Fire Dept	Central St	20-49
Newbury Police Dept	7 Morgan Ave.	20-49
Newburyport Shutter & Mill-work	Newburyport Tpke # 2	20-49
Plum Island Beachcoma	Plum Island Blvd	20-49
State Police	Scotland Rd	20-49
Town of Newbury	12 Kent Way	20-49

Source: Department of Economic Research, Executive Office of Labor and Workforce Development; refined with data from the Town of Newbury and Triton Regional School District.

Note: Employment numbers are listed as Full-Time Equivalent (FTE) employees, which may cause seasonal employers or large part-time employers to not be listed.

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The Sunset Club, Plum Island Beachcoma

TAX BASE

Very little of Newbury's tax base is generated by commercial, industrial, or personal property (CIP) values, putting the burden of the local tax levy primarily on residential properties. During the past seven years, the total assessed valuation has continually increased. The proportion of residential tax burden versus CIP burden has remained relatively steady at approximately 96 percent residential and 4 percent CIP for the past ten years (Table ED-6).

Newbury has a significant quantity of agricultural land. Assessor's data indicates that there are 75 properties totaling approximately 1,296 acres protected under Chapter 61A (agricultural land), and 19 properties totaling about 314 acres protected under Chapter 61B (recreational land). These include some properties described as having a mix of residential, agricultural, or recreational uses. The total assessed value of Chapter 61 land is approximately \$1.45M

Newbury, with a flat tax rate, has some of the lowest commercial tax rates in the region and is considerably lower than the average CIP tax rates for Essex County and the state. However, it should be noted that Newbury's close proximity to New Hampshire can place the Town at a disadvantage if tax rates are the only consideration a business is using when making location decisions. Although having a low tax rate may be one factor businesses use when determining location, it is not always the predominate decision making factor. Businesses are just as often influenced by the availability of a qualified workforce, services, and infrastructure.

Table ED-6: Property Valuations in Newbury 2015-2022

Fiscal Year	Residential Value	Commercial Value	Industrial Value	Personal Property Value	
2015	1,198,778,991	35,976,380	2,738,900	16,875,074	
2016	1,258,765,516	36,913,000	2,948,600	17,335,961	
2017	1,364,127,901	39,346,549	3,092,100	18,812,296	
2018	1,405,556,594	41,173,456	3,097,200	21,375,174	
2019	1,495,845,223	43,927,191	3,136,500	21,806,002	
2020	1,524,655,578	45,013,711	3,194,700	24,999,972	
2021	1,612,998,253	46,219,520	3,209,000	25,928,604	
2022	1,822,760,398	50,819,943	3,493,000	36,086,986	

Source: Massachusetts Department of Revenue (2022)

16.00 14.08 14.47 14.62 13.01 14.00 12.01 11.14 12.00 9.73 10.00 8.00 6.00 4.00 2.00 0.00

Figure ED-5: Average Commercial Tax Rates

Source: MVPC, March 2023

Table ED-6 (continued)

Total Assessed Value	R/O* as % of Total Value	CIP** as % of Total Value
1,254,369,345	95.57	4.43
1,315,963,077	95.65	4.35
1,425,378,846	95.70	4.30
1,471,202,424	95.54	4.46
1,564,714,916	95.60	4.40
1,597,863,961	95.42	4.58
1,688,355,377	95.54	4.46
1,913,160,327	95.27	4.73

^{*}R/O - Residential/Open Space Classification;

^{**}CIP - Commercial, Industrial, Personal Property Classification

Property tax revenues are augmented by a variety of other funding sources to support the municipal budget. One important source of funding is state aid. During the past ten years, state aid to Newbury has fallen slightly, from \$1,373,110 in FY 2013 to \$1,159,991 in FY 2023. This state aide, however, is up from a low of \$800,273 in FY 2015. In addition, Newbury benefits from Chapter 70 funding to the Triton Regional School District, which totaled \$8,973,621 in FY 2023.

At the same time, state, county, and transportation assessments have increased slightly at \$146,648 in FY2015 to \$156,471 in FY23. In FY 2023, the most recent year for which reports are available, state aid made up 4.5 percent of the local budget, while the remainder of the budget was provided for by the tax levy, local receipts, and other revenue sources (Figure ED-6).

Compared to neighboring communities, Newbury's CIP values make up the second lowest percentage of the tax levy, with only West Newbury having a smaller commercial base. Newbury's tax base supports the largest share of the town's budget compared with surrounding communities and is significantly higher than state average. Nevertheless, despite the dependence on the tax base to support municipal budgets, Newbury has the second lowest average single family tax bill in the region, with only Salisbury's being lower (Table ED-7).

COMMERCIAL DEVELOPMENT PIPELINE

Since 2010, the Planning Board has reviewed and approved eleven proposals for major commercial development . The majority of new development has occurred in the Business and Light Industrial District on and near Newburyport Turnpike (Route 1), but approvals have also been granted for commercial development on Scotland Road, in Byfield, and on Plum Island. The proposals have allowed for the redevelopment of 90 Hanover Street for use by North Reading Transportation for office space and school bus storage and maintenance, new construction at 101 Newburyport Turnpike by ERA Equipment for various business uses, redevelopment of a mixed use property at 67-69 Newburyport Turnpike for use by Harmony Natural Learning Center, redevelopment at 108 Newburyport Turnpike for use by T.W. Excavating for staff offices and equipment storage, new development at 76 Newburyport Turnpike to house Roots to Wings Yoga & Healing, new development and partial redevelopment at 131 Newburyport Turnpike by Stowaway Storage Newbury for use as a self-storage facility, a ground-mounted solar photovoltaic array installed by Borrego Solar Systems at 136/140R Main Street, development of property at 131, 133, and 151 Scotland Road by Newbury Golf Center for use as a driving range, pro shop, and ice cream stand, new development at 84 Boston Road by K & R for use as their headquarters and for construction equipment storage,

Source: MA Division of Local Services; City and Town Municipal Finance Snapshots

Figure ED-6: Municipal Budget Sources

Source: MVPC, March 2023

Table ED-7: Regional and State Tax Base Highlights

Municipality	Total Assessed Value	R/O % of Total Value	CIP % of Total Value	Tax Levy as % of Total Receipts	FY22 Average Single Family Tax Bill
Georgetown	1,473,917,934	90.3	9.7	67.94	\$7,545
Groveland	1,147,095,764	93.4	6.6	83.68	\$7,383
Newbury	1,822,760,398	95.3	4.7	80.98	\$6,217
Newburyport	4,652,574,162	87.9	12.1	76.64	\$8,430
Rowley	1,097,340,250	86.2	13.8	81.46	\$7,753
Salisbury	1,795,667,709	82.3	17.7	72.51	\$5,100
West Newbury	1,115,586,363	97.1	2.9	77.44	\$8,754
Massachusetts	-	81.92	18.08	-	\$6,719

Source: Massachusetts Department of Revenue, Division of Local Services, "Reports relating to Property Tax Data and Statistics" (2022-2023)

redevelopment of 3 Newburyport Turnpike by Bavaro Family Realty Two, LLC, for retail and residential uses, and redevelopment of property at 2 and 8R Old Point Road on Plum Island by the Cottages Commercial LLC into a restaurant. In addition, the Select Board issued a Special Permit for a ground mounted solar photovoltaic array located at 8 Middle Road and Highfield Road installed by Borrego Solar Systems.

ECONOMIC FORECASTS

The Executive Office of Labor and Workforce Development provide forecasts for industrial and occupational trends, predicting where job growth and decline will occur. Newbury is located within the Lower Merrimack Valley Workforce Investment Area, which includes the following communities: Amesbury, Andover, Boxford, Georgetown, Groveland, Haverhill, Lawrence, Merrimac, Methuen, Newbury, Newburyport, North Andover, Rowley, Salisbury, and West Newbury.

LONG TERM INDUSTRIAL TRENDS

Long term industry trends are projected out over a ten-year time period. Table ED-8 shows the projection for industries that are projected to grow in employment by more 20 percent, as well as industries that are expected to decline in the Lower Merrimack Valley Workforce Investment Area. As health care and social assistance related industries provide a substantial share of employment, the projected growth is encouraging. In addition, growth is also anticipated in high wage professional, scientific and technical service jobs.

LONG TERM OCCUPATIONAL TRENDS

As indicated by industrial trends, health care and social assistance occupations provide the largest share of employment within the Lower Merrimack Valley and have among the highest growth rates projected both in terms of number of new jobs and percent change. In addition to health care and social assistance, nursing, ambulatory health services, and hospitals are likewise expected to grow. Growth is also anticipated in the retail trade sector along with food services and drinking establishments. While these jobs are typically low wage, they tend to be entry level and transitional employment for younger workers, a needed segment of the local economy both in terms of employment opportunity as well as amenities for residents.

As shown in Table ED-8 manufacturing and warehousing are projected to decline in employment. To combat loss of manufacturing, the Merrimack Valley Workforce Investment Board is placing significant focus on attracting advanced manufacturing and workforce

training to meet the labor needs of existing advanced manufacturing businesses – primarily those engaged in "green" technology and life sciences.²⁰ As most advanced manufacturing jobs require an Associate degree for entry level employment, making connections between the educational infrastructure, retraining displaced adult workers, and promoting manufacturing as a viable occupation to younger generations to replace retiring skilled workers is necessary to sustaining a manufacturing presence in the region.²¹

JOB OPENINGS

Related to industrial and occupational growth, are job opening forecasts. Job openings are split between growth positions, which are newly created positions and are indicative of expanding fields, and replacement positions, which are existing positions that need to be filled with new staff. New positions vary widely in terms of wages as well as education and training they require. Health care shows the greatest anticipated expansion as indicated by the creation of new jobs. The region is also expected to see growth in relatively low-wage food service positions. The growth of jobs offering such low wages presents difficulties in an area with relatively high housing costs.

IMPLICATIONS FOR NEWBURY

With Newbury's aging population, it will be beneficial to cultivate the growing health care and social assistance industries. When considering areas for commercial development in Newbury, the town could identify easily accessible locations for the public to use these services. Ensuring existing zoning code allows for long-term care facilities and other social services in these accessible areas will make it easier for prospective businesses in these industries to move to town. Workforce training programs for employees that staff these businesses are available throughout the region and could make it easy for a future business to find staff—the challenge for Newbury will be ensuring this staff can find housing in the community or transportation to get to the community.

With an established base of food and drinking establishments, Newbury is well positioned to take advantage of the anticipated growth of this industry across the region. Capitalizing on its natural resources as a coastal and rural community, the town could be a destination for restaurants and other food establishments. The local agricultural industry could provide a base for farm-to-table style establishments, and the coastal attractions on and near Plum Island create a prime area for restaurants and drinking establishments to attract tourists.

²⁰ Merrimack Valley Workforce Investment Board. Strategic Plan 2011-2016. Revised October 2013.

²¹ Ibid.

6. ECONOMIC DEVELOPMENT

Table ED-8: Long Term Industry Projections for Lower Merrimack Valley

	Employn	nent	Percent
Title	2020	2030	Change
Expanding			
Wholesale Trade	4,970	5,683	14.35%
Merchant Wholesalers, Durable Goods	2,508	2,827	12.72%
Merchant Wholesalers, Nondurable Goods	2,034	2,424	19.17%
Wholesale Electronic Markets and Agents and Brokers	428	432	0.93%
Retail Trade	11,520	12,611	9.47%
Building Material and Garden Equipment and Supplies Dealers	614	672	9.45%
Food and Beverage Stores	4,913	5,150	4.82%
Health and Personal Care Stores	1,159	1,233	6.38%
Sporting Goods, Hobby, Book, and Music Stores	162	181	11.73%
General Merchandise Stores	1,281	1,628	27.09%
Miscellaneous Store Retailers	551	995	80.58%
Transportation and Warehousing	2,058	3,439	67.10%
Truck Transportation	581	664	14.29%
Transit and Ground Passenger Transportation	469	737	57.14%
Support Activities for Transportation	215	259	20.47%
Warehousing and Storage	665	1,028	54.59%
Information	1,557	2,194	40.91%
Publishing Industries (except Internet)	761	981	28.91%
Telecommunications	411	705	71.53%
Real Estate and Rental and Leasing	1,583	1,854	17.12%
Real Estate	1,084	1,318	21.59%
Professional, Scientific, and Technical Services	8,739	9,571	9.52%
Administrative and Support and Waste Management and Remediation Services	7,692	12,457	61.95%
Administrative and Support Services	6,861	11,618	69.33%
Waste Management and Remediation Service	831	839	0.96%

	Employm	nent	Percent
Title	2020	2030	Change
Educational Services	13,035	14,956	14.74%
Health Care and Social Assistance	26,895	31,870	18.50%
Ambulatory Health Care Services	8,412	10,739	27.66%
Hospitals	5,040	5,384	6.83%
Social Assistance	8,359	10,730	28.36%
Arts, Entertainment, and Recreation	1,366	2,117	54.98%
Performing Arts, Spectator Sports, and Related Industries	153	214	39.87%
Amusement, Gambling, and Recreation Industries	1,167	1,823	56.21%
Accommodation and Food Services	9,070	13,039	43.76%
Accommodation, including Hotels and Motels	367	865	135.69%
Food Services and Drinking Places	8,703	12,174	39.88%
Other Services (except Government)	3,733	5,602	50.07%
Repair and Maintenance	801	1,041	29.96%
Personal and Laundry Services	1,678	2,338	39.33%
Religious, Grantmaking, Civic, Professional, and Similar Organizations	1,079	1,821	68.77%
Private Households	175	402	129.71%
Decreasing			
Motor Vehicle and Parts Dealers	1,221	1,199	-1.80%
Gasoline Stations	525	431	-17.90%
Clothing and Clothing Accessories Stores	491	473	-3.67%
Nonstore Retailers	394	385	-2.28%
Finance and Insurance	3,524	3,393	-3.72%
Credit Intermediation and Related Activities	1,587	1,556	-1.95%
Insurance Carriers and Related Activities	1,368	1,276	-6.73%
Management of Companies and Enterprises	3,581	2,804	-21.70%
Nursing and Residential Care Facilities	5,084	5,017	-1.32%
Total All Industries	171,455	213,149	

Source: MVPC, March 2023

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Table ED-10: Projected Most Job Openings in the Lower Merrimack Valley

	Employ	yment	Annual	Annual	Mean Annual
Occupation	2020	2030	Change	Openings	Wage
Home Health and Personal Care Aides	7,255	9,676	242	1,263	\$35,588
Fast Food and Counter Workers	3,480	4,547	107	920	\$31,420
Cashiers	2,871	2,947	8	534	\$31,462
General and Operations Managers	4,117	5,080	96	473	\$140,633
Retail Salespersons	2,354	2,800	45	402	\$37,460
Janitors and Cleaners, Except Maids and Housekeeping Cleaner	2,028	2,817	79	400	\$41,115
Laborers and Freight, Stock, and Material Movers, Hand	2,089	2,600	51	358	\$39,815
Waiters and Waitresses	1,275	1,743	47	338	\$37,682
Customer Service Representatives	2,031	2,246	22	290	\$47,475
Cooks, Restaurant	1,021	1,759	74	275	\$37,088
Miscellaneous Assemblers and Fabricators	1,840	2,254	41	265	\$40,313
Office Clerks, General	2,048	2,237	19	263	\$45,160
Stockers and Order Fillers	1,246	1,576	33	251	\$38,252
Software Developers and Software Quality Assurance Analysts	2,209	2,700	49	226	***
Electrical, Electronic, and Electromechanical Assemblers, Ex	1,931	2,095	16	226	\$51,639
Landscaping and Groundskeeping Workers	1,036	1,598	56	226	\$42,893
Packers and Packagers, Hand	1,332	1,567	24	224	\$33,481

Source: MA Department of Economic Research, Long Term Occupational Projections

ECONOMIC RESOURCES

MERRIMACK VALLEY WORKFORGE INVESTMENT BOARD

Located in Lawrence, the Merrimack Valley Workforce Investment Board (MVWIB) provides a variety of services in the Merrimack Valley to both employers and job seekers as well as coordinating between local, regional, and federal agencies focused on economic development. Services offered to employers include posting jobs and assistance screening prospective employees, funding via the Work Opportunity Tax Credit or Workforce Training Fund, hiring incentives through their On-the-Job Training Program, and assistance with transition planning. Services offered to job seekers include resume assistance, career counseling, job matching, veteran's services, information and referral for additional resources, workshops, job shadowing, and youth employment services. The majority of programs are offered through the Valley Works Career Center, located in Lawrence.

Although the MVWIB is focused on employment and employers in a number of industries, among the primary goals outlined in their Strategic Plan is to, "Continue to focus our regional workforce development job pipeline on advanced manufacturing, entry to low and mid-level health care, green technology and other emerging industries..."²² As healthcare provider Freedom Fertility Pharmacy is located within Newbury, it is possible there may be further expansion of health care providers within the Town. The absence of public water and sewer in areas most accessible to the regional highway network may limit the possibility of advanced manufacturing within the Town and the MVWIB may be of more benefit to residents who are job seekers than employers.

WORKFORCE TRAINING

In addition to the job training services offered by the MVWIB, local schools play a significant role in preparing students to enter the workforce. Newbury is host to the Newbury Elementary School, Triton Regional Middle School, Triton Regional High School, and the Governor's Academy. Vocational training is provided by the Whittier Regional Technical High School, which is located in Haverhill. The Triton Regional School District is a regional district that educates students from Newbury, Rowley, and Salisbury. The school district has an informal arrangement with the Northern Essex Community College to provide for dual enrollment enabling students to augment Advanced Placement courses at their Newburyport satellite

²² Merrimack Valley Workforce Investment Board. Strategic Plan 2011-2016. Revised October 2013.

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campus, while the Whittier Technical High School provides vocational training. The Governor's Academy is a preparatory school with a student population of just over 400 students who come from 21 states, and 14% from international countries.

In addition to the Northern Essex Community College, which has campuses in Haverhill and Lawrence, there are also the North Shore Community College, located in Danvers, Lynn, and Middleton, and the Middlesex Community College in Lowell. The community colleges offer a variety of two-year technical and liberal arts degree programs and serve as transition schools to four-year colleges and universities. Four-year colleges and universities in the area include Merrimack College in North Andover, Cambridge College in Lawrence, the University of Massachusetts at Lowell, and Salem State University.

CHAMBER OF COMMERCE

Newbury businesses are eligible to join the Greater Newburyport Chamber of Commerce and Industry. The Chamber currently has 750 members, offering networking, training, a business directory, community and online exposure, and serves as an interface between the general public, visitors, and state, local, and regional officials. Within the Chamber leadership there are committees focusing on a range of interests, including finance, industrial development, non-profits, special events, and a resident's advisory council, among others.

PUBLIC BOARDS, COMMISSIONS, AND STAFF

Newbury is already served by some staff, boards, and commissions that may help with future economic development. The Town's AgriCultural Council, Fish Commissioners, and Harbormaster will be key stakeholders for cultivating a growing agrotourism industry and fishing industry.

FORMATIVE ISSUES

Economic development is increasingly a priority for communities seeking to offset rising costs for municipal services without increasing the tax burden on local residents. Newbury faces challenges with respect to economic development ranging from a lack of town staff capacity and local resident support, environmental constraints, regulatory barriers, and limited infrastructure. The community's high quality of life and relative affluence also offer some opportunities.

Table ED-11 Opportunities and Challenges in Newbury

	Opportunities		Challenges
•	Well-educated workforce	•	Limited public water and sewer
•	High quality of life attracts residents who work from home	•	Most zoning changes require a 2/3 majority vote at Town Meeting
	Accessible to I-95 and Route 1	•	Resource protection concerns
•	Working landscapes, beaches, rivers, and natural areas provide for recreational opportunities	•	Weak market for office space and non-competitive for industrial uses that require sewer and water
•	Historic, agricultural, and natural assets may be leveraged to increase tourism	•	Small population limits the ability of the Town to support retail businesses
•	Village commercial areas are quaint with unique charm and character	•	The Town does little to coordinate or support economic development
•	High incomes yield larger amounts of disposable income	•	Currently no efforts to brand or market Newbury as a destination
•	Right to Farm Bylaw	•	Lack of housing options for lower wage workers
		•	Poor interior roadway connectivity
		•	Very few design review controls to ensure complimentary development

ENVIRONMENTAL AND INFRASTRUCTURE CONSTRAINTS

Fifty-four percent of the 16,256 acres that are zoned to allow for some level of business use (including the Residential/Agriculture district) in Newbury are covered by wetlands. These areas are further restricted by buffer zones around wetlands mandated by the State's Wetlands Protection Act, creating an impediment to development as any building in the buffer zone must be approved by the Conservation Commission. Further, ledge is common in Newbury as are soils that are insufficient to support septic systems.

Wells are needed in most parts of town to provide on-site water. Although public water is available in some areas of Newbury, there is no public sewer system beyond Plum Island and the area immediately surrounding the former Town Hall.

All these factors can present challenges for new development. The lack of sewer and limited-service area for public water severely hinders economic development as the on-site provision of water and waste sanitation can be cost prohibitive or non-viable due to soil conditions or ability to meet demand. These constraints discourage many types of businesses from choosing to locate in Newbury when other "shovel ready" sites fully served by infrastructure in the region already exist. This leaves the Town with few options for attracting new businesses beyond those that have limited demand for water and waste management (e.g. typically storage businesses such as self-storage, construction equipment storage, landscape supply storage, etc.).

LOCAL SUPPORT FOR FCONOMIC DEVELOPMENT

Newbury is not presently served by staff, boards, commissions, or civic/business groups dedicated to developing and advancing economic development policy within the Town. With more focused leadership on economic development issues, the Town would better be able to attract, support, and retain businesses. For example, the business community could benefit from coordination of marketing and promotion, microloan or gap financing programs, code compliance help, interior or exterior design and building maintenance, job training or business skills courses, or other technical assistance and advocacy. Although there are businesses that thrive in Newbury, the lack of available support can limit opportunities for many – particularly new businesses or small businesses. Without leadership, the Town rarely participates in or is represented at discussions with regional and state economic development agencies, resulting in lost opportunities to use available resources or obtain funding from alternative sources.

Further, while many zoning changes impacting economic development have been well supported in the last ten years, such as the reorganization of the Zoning Bylaw, the creation

of the Business and Light Industrial District, alterations to Site Plan review requirements, and amendments to the Table of Uses to expand the number of allowed uses and eliminate special permit requirements for a number of key commercial uses, other zoning changes such as the proposed amendments related to the Little River Development in 2008 were not successful. Building support for zoning initiatives that facilitate economic development and create incentives for the installation of critical infrastructure will be essential in creating future opportunities.

OPPORTUNITY AREAS FOR DEVELOPMENT AND DESIGN PRIORITIES.

Despite the town's constraints, there are some opportunity areas where limited commercial development or redevelopment might occur. Route 1, Scotland Road near I-95, Central Street near I-95, and to a lesser extent the Byfield Village Business District and the Upper Green Business District, have been identified as areas where further economic development could potentially be supported. In large part these areas are already zoned for commercial use, should buildable sites become available. However, there are few protections within the Zoning Bylaw to ensure that future commercial development would be complementary to the character of the Town. Beyond site plan review or licensing and permitting processes, the Town does not have the regulatory authority to comment on building design and scale, site maintenance, or other aesthetic issues prior to construction, which can result in undesirable outcomes. Further, more oversight could help to ensure that existing businesses maintain clean and attractive sites as a minimum standard of operation.

DESIRED ECONOMIC OPPORTUNITIES

While there are limits on the types and scale of commercial development that are appropriate or feasible within Newbury, many residents in interviews and focus groups have expressed desire for additional small-scale convenience retail in the villages, providing businesses that support and preserve Newbury's natural and cultural resources, and places for community gathering. The ability to support such retail is somewhat limited due to the relatively low population and traffic flow, however these challenges could potentially be offset or mitigated by the relatively high purchasing power of Newbury's residents. Should a new retail business wish to locate in Newbury, some flexibility in zoning may be needed to achieve a reasonable density and parking facilities on an appropriate site.

In order to encourage businesses that support and preserve Newbury's natural and cultural resources, more work could be done to promote Newbury as a regional recreational and tourism destination and to support those businesses already engaged in these market segments.

6. ECONOMIC DEVELOPMENT

CONCLUSIONS

- Although Newbury's labor force is generally well-educated and high earning, the labor force is shrinking while the median age of residents is increasing. This shift indicates an influx of retirees which has implications for the future needs of the Town.
- Trends in Newbury's business community and employment/occupational forecasts indicate growth will continue in health care and educational services, while declines in manufacturing and transportation are also likely to continue. There are opportunities for additional growth within food service, arts, entertainment, and recreation, should the Town decide to support that type of growth.
- "Traditional" economic opportunities are limited by physical and environmental constraints as well as a deficiency in infrastructure. Supporting the existing businesscommunity including those involving working landscapes (farms, hay fields, shell fishing flats, etc.), agrotourism, historic and natural features, as well as the provision of services will be critical to Newbury's future.
- Industries with high growth projections in the region and existing large industries in Newbury (such as agriculture and shell-fishing, which are an integral part of the local economy for the resident workforce) provide employment opportunities at varying wage levels. Housing for residents at a variety of income levels will be needed to maintain employment levels for existing and future businesses.

6. ECONOMIC DEVELOPMENT

7. HISTORIC AND CULTURAL RESOURCES

OVERVIEW

In 1633, Thomas Parker and James Noyes, both nonconformist ministers, with a like-minded group of British subjects, decided to emigrate to the Massachusetts Bay Colony, with the sanction of the Council of New England at Whitehall. At the same time, Richard and Stephen Dummer, Richard Saltonstall, and Henry Sewall and others in Wiltshire had organized a company to establish a stock-raising plantation in the Massachusetts Bay Colony because of the high prices in England for horses, cattle, sheep, and hogs. These men persuaded Parker and his group to join them. Most of these emigrants arrived at Ipswich (then Agawam) and spent the winter of 1634 there before moving farther north. The Massachusetts Bay Colony was then extending its inhabited frontier as far as possible.

In May of 1635, this small group of immigrants rowed shallops to the mouth of the Parker River (then Quascacunquen) and landed on the north shore about a few hundred yards east of the present Parker River bridge, a spot now marked by a commemorative boulder. All was wilderness about them, and the settlers spent the first summer clearing land, building shelters, raising crops, and gathering the natural bounty of fish and berries for the winter. Each man was allotted land for a house, with a planting lot and salt meadow, the size depending on the amount of money the individual or family had invested in the venture. Mr. Dummer and his group had the largest acreage, more than a thousand acres, upriver near the falls for their stock raising. Mr. Dummer was granted the right to erect a sawmill on the Newbury falls and was given fifty acres of woodland to supply the mill. He was allowed to grind corn if he would grind "all the grain the residents might bring him." Later there were two mills in this area, one of which continued operation into the 1980s.

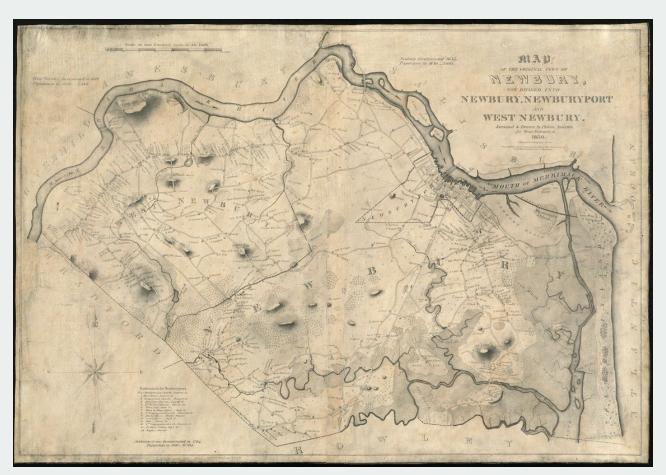
As the population increased, settlers moved away from the banks of the Parker River toward the Upper Green. The church, a town government seat, a school, and a tavern were the necessities of the colony. Each man was assessed for the support of the meeting house. Newbury was first governed by a committee of all the freemen, with a clerk who kept careful records. Later "prudential men, no more than seven" called Selectmen executed the town business and reported to town meetings. As early as 1648, a meeting of freeman of Newbury voted to hold the meeting for choosing town officials the first Monday in March, and in 1681 it was voted that the general town meeting would be held the first Tuesday in March. Fines were imposed for absence from town meetings.

Newbury originally extended from the Parker River to the Merrimack River, and from Plum Island to the town of Bradford. Plum Island, a nine-mile-long sandy barrier beach forming the eastern boundary of the town, was from the beginning a great natural asset to the town, an abundant source of salt hay and pasture for horses and cattle during the winter. In 1639, the town petitioned the General Court to be allowed sole use of Plum Island, but the Court divided the use of the island among Ipswich, Newbury, and Rowley. In 1739, the General Court enacted a conservation measure, forbidding the use of Plum Island as pasture, because grazing destroyed the grass roots, causing increased erosion.

In the beginning the town was one parish called the First Parish of Newbury. In 1702, the residents of the Falls area built a meeting house because they were so far from the First Parish church. Thus began the parish of Byfield (for a short time called "Rowlbury"), extending for two miles in all directions from the Falls. This portion of Newbury was set off in 1706 as a separate parish for "so long as they maintain an Orthodox minister among them." It was, and still is, a part of the town of Newbury.

The early settlers were largely engaged in agriculture and stock-raising. As the town grew and spread along the Merrimack River, the residents built wharves and docks where domestic and foreign trade flourished. These "waterside people" felt that they were wholly different from the husbandmen of Newbury and petitioned the General Court to be set apart as a separate town. Newbury officials opposed the change, but after extensive litigation and financial adjustment the town of Newburyport was incorporated in 1764. The residents of the western portion of Newbury also built a meeting house in order to be closer to their house of worship, and consequently asked to be excused from taxes to support the First Parish meeting house. Thus, the West Parish was born, and in 1819 this Parish was incorporated as a separate town of West Newbury (first called "Parsons," and changed to West Newbury in 1820).

Excerpt from Images from the Past: 1635-1985 Newbury, Massachusetts, League of Women Voters



Anderson, Philander. "Map of the original town of Newbury, now divided into Newbury, Newburyport and West Newbury." Map. Boston: Moses Pettingell, 1831. Norman B. Leventhal Map & Education Center, https://collections.leventhalmap.org/search/commonwealth:cj82ks49q (accessed August 09, 2022).

HISTORIC PRESERVATION PLANNING IN NEWBURY

Historic preservation refers to the recognition and preservation of the historical, cultural, and physical characteristics of a community. Fostering an understanding and appreciation for the historic events, landmarks, and buildings is an important step in maintaining a sense of community identity and pride. Historic preservation actively promotes the protection of historic structures, districts, landscapes, and other resources as a means of preserving the elements of a community's character, which enhances the quality of life for local residents. Historic preservation efforts help to maintain what is unique about a community, through the use of financial incentives, grant programs, technical assistance, design review, advocacy and other planning and regulatory tools.

Newbury and its residents have long realized the importance of preserving important historic and cultural assets. Efforts to document the history of Newbury were initiated by the Sons and Daughters of the First Settlers of Newbury and the Museum of Old Newbury (formerly known as the Old Newbury Historical Society) early in the 20th Century. Historic New England (formerly known as the Society for the Preservation of New England Antiquities or SPNEA) worked with the Newbury Historical Commission in the 1960s and 1970s to develop an inventory of the Town's historic structures and other resources. In recent years, a number of planning initiatives, including the 1980 and 2006 Newbury Master Plans, Preserving Newbury (1991) and the 2005 Newbury Reconnaissance Report (part of the Massachusetts Heritage Landscape Inventory Program and sponsored by the Massachusetts department of Conservation and Recreation (DCR) and the Essex National Heritage Commission) highlighted the importance of continuing preservation efforts. The most recent MHC Reconnaissance Survey Town Report: Newbury was produced in 1985 by the Massachusetts Historical Commission.

A comprehensive community preservation program generally encompasses a three-step process: resource identification, evaluation, and protection. The first step is the identification of historic resources, including structures, landmarks and areas which exist in the community. Next, critical evaluation determines which resources are worthy for consideration as National Register Districts or as individual properties in the National Register of Historic Places. Finally, various tools and planning approaches can protect the most important assets.

In 2014 the Town adopted one such tool, a **DEMOLITION DELAY BYLAW**, known as the "Preservation of Historically Significant Structures," which was drafted by the Newbury Historical Commission. This Bylaw was enacted for the purpose of preserving and protecting significant structures which constitute or reflect distinctive features of the architectural, cultural, economic, political, agricultural, or social history of the town and to temporarily forestall the detrimental effect of demolition on the Town's historic assets.

LOCAL HISTORIC PRESERVATION AND CULTURAL ORGANIZATIONS

Several organizations have a significant role in increasing the awareness of historic and cultural resources in Newbury. Each also has a slightly different role in the preservation of cultural resources. Some of these organizations host events which raise awareness about these resources; some are geared towards preserving historic records and documents; while others play a larger role in the ownership, management, and restoration of historic and cultural assets. These groups include:

- NEWBURY HISTORICAL COMMISSION. As an official agent of the Town of Newbury, it is responsible for community-wide historic preservation planning. The Commission compiles historic property surveys for Newbury and raises awareness of local historic resources, and the need to protect them. The Newbury Historical Commission has implemented a program of storing the historic records, photos, and memorabilia (artifacts) of the Town at the Lower Green Schoolhouse and maintains the schoolhouse itself. The Newbury Historical Commission also administers the Demolition Delay Bylaw for the Town by reviewing all requests for demolition permits.
- HISTORIC NEW ENGLAND (FORMERLY SPNEA). As the oldest, largest, and most comprehensive regional preservation organization in the country, Historic New England offers preservation advice and assistance, conducts educational programs, maintains archives, and publishes its own magazine, Historic New England. The organization helped to coordinate the first survey of historic homes and assets of Newbury in the 1970s. The organization also owns and maintains four historic properties in Newbury which are available for public viewing, including:
 - The Coffin House at 14 High Road
 - The Swett-IIsley House at 4 High Road
 - The Dole-Little House at 289 High Road; and
 - Spencer-Pierce-Little House on Little's Lane
- THE SONS AND DAUGHTERS OF THE FIRST SETTLERS OF NEWBURY. Founded in 1927, the organization is a genealogical society intent on the preservation of the history of Olde Newbury and its pioneer families. The organization possesses a small library of historic and research publications housed in the Reference Section of the Newburyport Public Library, publishes a newsletter, and hosts an annual meeting on genealogy.

- THE MUSEUM OF OLD NEWBURY. Formerly known as the Historical Society of Old Newbury and dating back to 1877, this group was organized for the purpose of the study and remembrance of Newbury's history, which includes current day Newbury (including Old Town, Byfield and Plum Island), Newburyport, and West Newbury. The Society's holdings are housed at the Cushing House on High Street in Newburyport, and contain a collection of artifacts, area maps, photographs, and genealogical references representative of the area's past.
- ESSEX NATIONAL HERITAGE COMMISSION. The Essex National Heritage Commission (ENHC), located in Salem, is the non-profit management organization for the Essex National Heritage Area (ENHA). The Commission's mission is to promote and preserve the historic, cultural and natural resources of the ENHA. The Commission develops public/private partnerships that support the hundreds of heritage organizations and sites in the ENHA's thirty-four communities, including Newbury. The Commission was also responsible for developing a management plan for the 90-mile-long Essex Coastal Scenic Byway, which links 14 coastal communities from Lynn to Salisbury, including Newbury, and features scenic views, period architecture, historical sites, and recreational opportunities.
- BYFIELD COMMUNITY ARTS CENTER. The Byfield Community Arts Center (BCAC) is a community-based non-profit organization founded in 2006 that supports creativity and appreciation for the visual and performing arts in Newbury. The BCAC is housed in a former grange hall, also known as Byfield Town Hall, built in 1898, located at 7 Central Street in Byfield. It hosts coffee houses, theater productions, and art classes and provides a meeting and gathering space for local groups ranging from the Boy Scouts to fundraising organizations. The building is owned by the Town of Newbury and has undergone some deferred maintenance work over the past few years, including a new roof and window replacement.
- AMERICAN HAND FIRE ENGINE SOCIETY, HAND TUB MUSEUM. The Hand Tub Museum, located on Morgan Avenue, contains a great collection of 19th century firefighting tools, documents, hand-tub and 1840s man-powered fire engines. It is open on weekends.
- NEWBURY CULTURAL COUNCIL. The Newbury Cultural Council is the local participant in the Local Cultural Council grant program. The Local Cultural Council Program, administered at the state level by the Massachusetts Cultural Council, provides state funds to cities and towns to re-grant at a local level. The eight local members of the Newbury Cultural Council, who are appointed by the Select Board, meet annually to review grant applications and decide how to distribute the available funding to projects in the arts, humanities and interpretive sciences. In FY2023 the Council received and allocation of \$5,600 from the Mass Cultural Council to support 16 projects.

 ECCF CREATIVE COUNTY INITIATIVE. The Essex County Community Foundation supports creative efforts throughout Essex County, including a website (https://www.creativecounty.org/) that brings together a blog and information about events and local artists.

The heritage and image of Newbury is closely linked with the high quality of its natural resources. Chapter 9: Natural Resources describes these groups.

INVENTORY OF HISTORIC AND CULTURAL ASSETS

The historic and cultural assets of Newbury were first inventoried in the 1960s and 1970s as part of a wider survey conducted by Historic New England (formerly SPNEA), with local help by the Newbury Historical Commission. These surveys provide the bulk of the documented data regarding historic and cultural resources in Newbury.

MACRIS DATABASE

As of 2022, the Massachusetts Cultural Resource Information System (MACRIS) contains information on more than 170 cultural resources in Newbury. The MACRIS database draws information on Newbury from two sources: the statewide historic properties inventory and the files of properties listed on the State Register of Historic Places. The MACRIS database includes a variety of cultural and historic resources including several structures at the Governor's Academy, over 30 structures on Main Street in Byfield, numerous elements of the Plum Island Airfield, the Common Pasture, Objects (which include Milestones), a National Historic District in the Upper Green area containing over 40 properties, the First Parish Church and Parsonage, and numerous other bridges and buildings throughout Town. Route 1A is considered a historical asset via Essex Coastal Scenic Byway Designation.

This list is a simple catalogue of documented historic resources. Inclusion on this list does not provide these resources with any protection or subject them to any type of property restriction. The Newbury Historical Commission is currently reviewing the MACRIS database and plans on updating the existing list of historic resources in Newbury with additional resources that have been recently documented as existing within the town.

STATE REGISTER OF HISTORIC PLACES

There are nine individual properties listed on the State Register of Historic Places in Newbury. The Newbury Historic District, which includes 40 properties, is also listed with a district designation. The State Register includes all properties that are listed on the National Register of Historic Places, located in designated local historic districts, or for which preservation restrictions (i.e., preservation easements) have been executed (see Table C-1 on page 153).

Inclusion on the list does not guarantee these assets any significant protection. Listed properties are protected from the adverse effects of state-funded activities, projects, and permitting only. Designation does not, in itself, subject the owner to design review or any other restriction on the use of the property. However, designated properties may be eligible for a limited amount of grant funds made available by the Mass Historic Commission.

NATIONAL REGISTER OF HISTORIC PLACES

There are five (5) individual properties in Newbury that are listed on the National Register of Historic Places as well as one area designations (which include up to 40 more structures). The National Register of Historic Places is the official federal list of districts, sites, buildings, structures, and objects that have been determined significant in American history, architecture, archaeology, engineering and culture. These resources, which may be of local, state or national significance, are worthy of preservation and consideration in planning and development decisions. These resources must meet the criteria established by the National Park Service (https://www.nps.gov/orgs/1739/secretary-standards-treatment-historic-properties.htm).

Inclusion on this list also does not guarantee these assets any significant protection. The primary purpose of National Register is to recognize the value of the nation's historic and prehistoric resources and only ensures that the actions of the Federal government do not adversely affect those resources. Specifically, listed properties are protected from state and federal actions, as well as projects that require state or federal licenses or permits. The National Register is also an important education and information tool that raises awareness about these resources. However, inclusion on this list does trigger review under the Newbury Demotion Delay Bylaw.

TOWN-OWNED CULTURAL AND HISTORIC ASSETS

While there is a long history of identifying cultural and historic assets in Newbury, there are clearly many more historic and cultural resources in Town than just the 147 resources listed on the MACRIS database and the 40 to 50 resources documented on the State and Federal

Registers. According to the property data maintained by the Newbury Assessor's Office, there are 340 buildings in Newbury which are at least 100 years old. This simple count does not include other resources, such as many of the known archaeological, natural, and other cultural resources found in Newbury.

The Town of Newbury, and its agents, currently own and maintain several historic and cultural resources. While most of these resources are not protected by preservation easements or other preservation mechanisms, the public sector will play a large role in directing the future of these assets. Important resources include:

- FIRST SETTLERS BURYING GROUND. In the late 1920s, the Town confirmed its ownership of this cemetery, which is located on High Road just north of the Lower Green. Mrs. Jane Dole Moore worked with the Ilsley family and the Board of Selectman to have the Town gain possession of the cemetery and right-of-way. The site was documented and cleaned out by members of the Newbury 375th Committee. As its name suggests the First Settlers Burying Ground contains the graves of many of Newbury's original settlers and memorial markers commemorating others. The Town elected three Trustees of the First Settlers Burying Ground to investigate strategies to ensure long term maintenance and improvement of the cemetery.
- LOWER GREEN SCHOOLHOUSE. Located on High Road on the Lower Green, the structure was built in 1877 and was operated as a schoolhouse until 1910. It was then turned into a DPW storage facility. The site was restored by the Town in 1975, as part of the Town's efforts to celebrate the bicentennial of the United States. The Newbury Historical Commission has maintained the schoolhouse since then as an historic property and welcomes visitors from all over the world. The building requires additional renovation work in order to maintain is historic elements. Funds from the Historical Commission's gift fund were used to restore and frame the 1853 map of the United States which is back in the Schoolhouse.
- WITCHSTONE. The Historical Commission now holds a Preservation Restriction for the Witchstone, also known as the Father Stone, at 15 Coleman Road.

The Newbury Reconnaissance Report described nine priority heritage landscapes that are the focus of the Reconnaissance work in Newbury. The report recommended additional intensive survey work to be completed, which would further document the physical characteristics and the historical development in these areas. The 2006 Master Plan included a short description of these areas, and a brief analysis of the preservation issues facing these areas. Of the nine areas, three are primarily built areas and include the following:

- BYFIELD CEMETERY. Located on Elm Street at the Georgetown border, the area is also referred to as the Old Burial Ground.
- BYFIELD VILLAGE. Encompassing the area surrounding the intersection of Main Street
 and Central Street in the western portion of Newbury, the area functions as a civic
 center for the Byfield area today but previously was the industrial core of the area due
 to its location at the headwaters of the Parker River. Resources in the area include
 The Pearson's Snuff Mill (private residence), 18th century mill buildings, 19th century
 workers housing and other historic structures.
- GOVERNOR'S ACADEMY. The oldest continuously operating independent day and boarding school in the United States, the Governor's Academy (formerly known as Governor Dummer Academy) has been an important Newbury institution since 1763. Located in the southern part of Newbury at the intersection of Middle Road and Elm Street, the campus encompasses several historic properties and important landscape areas.
- LOWER GREEN. Located at the intersection of High Road and Newman Road, this area
 was the original town center. The area around the Green contains several historic
 buildings including the Dole-Little House (1715), the Seddon Tavern (1778), the Lower
 Green School House (1877), and the First Settlers Burial Ground (1635), which, as noted
 above, is now under the stewardship of the Trustees of the First Settlers Burial Ground.
- SCENIC VISTAS. According to town residents, Newbury's scenic roads and associated landscapes are an important contributor to the community's character, rural ambiance, and quality of life. Newbury's mixed landscape of low-relief salt marsh and gently undulating upland gives rise to many outstanding vistas of wetlands, woodlands, and farms. Particularly noteworthy are the broad open vistas across the Great Marsh along Routes 1 and 1A, and the Common Pasture visible from I-95 and Scotland Street. Preserving these scenic vistas, as well as the Town's remaining rural character, is considered a high priority by Town residents.
- SCENIC BYWAYS. Many of the town's roads, laid out well before current roadway standards were adopted, are narrow and winding, are bordered by stone walls and trees with broad canopies arching over the pavement, and offer gently curving designs, bordering and overarching trees, and vistas of historic homes, farm fields, woods, and salt marsh. These historic and scenic characteristics should be taken into consideration when addressing the town's modern transportation needs. Since the 2006 Master Plan, the Essex Coastal Scenic Byway, which runs through 14 cities and towns from Lynn to Salisbury, was designated a state scenic byway. This scenic byway, with identifying signage, passes through Newbury along High Road from Rowley to Newburyport.

Table C-1: Newbury Properties on the State Register of Historic Places

Name	Address	MHC#	Listed	Notes
Tristram Coffin House*	16 High Rd	236	1976	Mass Historic Landmark, Individual National Register Property, Preservation Restriction
Spencer - Pierce Little House*	Little's Ln	305	1968	Part of Newbury Historic District (National Register District)
Spencer - Pierce Little Barn*	Little's Ln	306	1977	Part of First Period Buildings Thematic Resource Area and Newbury Historic District
Hale - Boynton House*	Middle Road	165	1983	Part of First Period Buildings Thematic Resource Area
James Noyes House*	7 Parker Rd	301	1990	Preservation Restriction
Abraham				
Adams House	8 Pearson Dr	302	1990	Preservation Restriction
Ferry House	286 High Rd	303	1976	Preservation Restriction
Short House	39 High Rd	215	1976	Part of First Period Buildings Thematic Resource Area
Seddon Tavern	Lower Newbury Green	304	1986	Preservation Restriction
First Period Buildings of Eastern Ma	iss*			
Abraham Adams House		A	1990	Regional National Register Part of First Period Buildings Thematic Resource Area
John Noyes House		А	1990	Regional National Register Part of First Period Buildings Thematic Resource Area
Newbury Historic District*				
40 properties on High Road, Green, Hanover St		В	1976	National Register District (40 properties)

 $^{{}^*\!\}mathsf{Also}$ on the National Register of Historic Places.

Table C-2: Massachusetts Cultural Resource Information System: Town of Newbury Resources (09/2022)

Inv. No.	Property Name	Address	Year	Style
NEW.A	First Period Buildings of Eastern Massachusetts			
NEW.B	Newbury Historic District			
NEW.C	Byfield Center			
NEW.D	Governor Dummer Academy			
NEW.E	Byfield Snuff Company Sawmill			
NEW.F	Plum Island Community Airfield			
NEW.G	Common Pasture			
NEW.1		Moody St	1830	No style
NEW.2		Moody St	1830	Greek Revival
NEW.3	Plum Island Airfield - Cockpit Cafe	24 Plum Island Tpke	1935	No style
NEW.4	Plum Island Airfield - Workshop	48 Plum Island Tpke		No style
NEW.5		56 Plum Island Tpke	1900	Not researched
NEW.10		138 Main St	1850	Greek Revival
NEW.11		137 Main St	1850	No style; Victorian Eclectic
NEW.12		130 Main St	1850	No style
NEW.13		124-126 Main St	1850	Greek Revival
NEW.16		125 Main St	1850	Greek Revival
NEW.17		121 Main St	1850	Greek Revival
NEW.18		113 Main St	1850	Greek Revival
NEW.19		106 Main St	1850	Greek Revival; No style
NEW.20		109 Main St	1830	Federal; Greek Revival
NEW.22		103 Main St	1830	Federal; Greek Revival; No style
NEW.23		101 Main St	1870	Victorian Eclectic
NEW.24		95 Main St	1830	Federal; Greek Revival
NEW.25		93 Main St	1830	Federal; Greek Revival
NEW.30		89 Main St	1850	Victorian Eclectic
NEW.31		64 Main St	1850	Greek Revival; Victorian Eclectic
NEW.32		1 Church St	1850	Victorian Eclectic
NEW.33		9 Church St	1850	Greek Revival; Victorian Eclectic
NEW.34		62 Main St	1840	Greek Revival

Inv. No.	Property Name	Address	Year	Style
NEW.35		75 Main St	1870	Victorian Eclectic
NEW.36	Gospel Hall	1 Central St	1850	Greek Revival
NEW.37		63 Main St	1850	Greek Revival
NEW.38		59 Main St	1870	Victorian Eclectic
NEW.39	U.S. Post office - Byfield Center Branch	53 Main St	1870	Victorian Eclectic
NEW.40	Friendly Market	51 Main St	1840	Greek Revival; No style
NEW.41		4 Forest St	1850	Federal; No style
NEW.42		25 Forest St	1775	Colonial
NEW.43	Goodrich, Oliver House	7 Forest St	1725	Colonial
NEW.44		47 Main St	1830	Federal; Greek Revival
NEW.45		45 Main St	1850	Greek Revival
NEW.46		49 Main St	1810	Federal; No style
NEW.50		54 Main St	1830	Greek Revival
NEW.51	Mobile Gas Station	52 Main St	1850	Greek Revival
NEW.55	Pearson House	50 Main St	1750	Colonial
NEW.56	Riverview Farm	48 Main St	1775	Colonial
NEW.57		8 Central St	1845	Victorian Eclectic
NEW.58		Central St	1830	Greek Revival
NEW.59		15 Central St	1850	Greek Revival; No style
NEW.65		46 Main St	1850	Greek Revival; Italianate
NEW.66		35 Main St	1830	Federal; Greek Revival
NEW.67	Pearson, Benjamin House	42R Main St	1710	Colonial
NEW.70	Pearson Tavern	36 Main St	1725	Colonial
NEW.100	Moody, William H. House	61 Central St	1750	Colonial
NEW.101		168 Orchard St	1750	Colonial
NEW.120		Elm St		Not researched
NEW.150		Elm St	1750	Georgian
NEW.151		Elm St	1775	Colonial
NEW.155	Governor Dummer Academy House	Elm St	1800	Federal
NEW.156	Governor Dummer Academy House	Elm St	1750	Georgian
NEW.157	Governor Dummer Academy Faculty Housing	Elm St	1700	Colonial

Inv. No.	Property Name	Address	Year	Style
NEW.158	Governor Dummer Academy Faculty Housing	Elm St	1930	Colonial Revival
NEW.160	Governor Dummer Academy Building	Elm St	1775	Georgian
NEW.161	Governor Dummer Academy Chapel	Elm St	1800	Federal
NEW.162	Governor Dummer Academy Office Building	Elm St	1935	Colonial Revival
NEW.163	Governor Dummer Academy House	Elm St	1750	Colonial
NEW.164	Governor Dummer Academy Building	Middle Rd	1830	Federal; Greek Revival
NEW.165	Hale - Boynton House	Middle St	1764	Georgian
NEW.166		Scotland Rd	1775	Georgian
NEW.175		123 Orchard St	1750	Colonial
NEW.180		Middle Rd	1750	Georgian
NEW.185		123 Middle Rd	1750	Georgian
NEW.186	Byfield Snuff Company Mill #1	Larkin Rd	1804	No style
NEW.187	Byfield Snuff Company Mill #2	Lower Main St	1830	No style
NEW.188	Byfield Snuff Company Sawmill	20 River St	1860	No style
NEW.201		1 High Rd	1810	Federal
NEW.202	Toppan, Dr. Peter House	5 High Rd	1697	Colonial; First Period
NEW.203		7 High Rd	1850	Greek Revival; Italianate
NEW.204		9 High Rd	1890	Queen Anne
NEW.205	Toppan, Abraham House	11 High Rd	1915	Colonial Revival
NEW.206		19 High Rd	1890	Victorian Eclectic
NEW.207	Withington, Rev. Leonard House	21 High Rd	1843	Greek Revival
NEW.208	Newbury Town Hall and Police Station	25 High Rd	1904	Colonial Revival
NEW.209	Ould Newbury Associates, Inc.	27 High Rd	1950	Colonial Revival
NEW.210	Ould Newbury Associates, Inc.	29 High Rd	1950	No style
NEW.211		31 High Rd	1925	Craftsman
NEW.212	Woodbridge Grammar School	33 High Rd	1898	Colonial Revival
NEW.213	Adams, H. S. House	35 High Rd	1870	Victorian Eclectic
NEW.214	Little, N. House	37 High Rd	1825	Colonial; Greek Revival
NEW.215	Short House	39 High Rd	1725	Georgian
NEW.216	Tucker, Rev. John House	36 High Rd	1746	Colonial

Inv. No.	Property Name	Address	Year	Style
NEW.217	First Parish Church of Newbury Parsonage	1 Hanover St	1872	Greek Revival
NEW.218	Atkinson - Little House	5 Hanover St	1652	Colonial
NEW.219	Little, G. House	26 Green St	1785	Georgian
NEW.220		24 Green St	1950	Colonial Revival
NEW.221	Burke House	20 Green St	1900	Colonial Revival
NEW.222		18 Green St	1950	Colonial Revival; No style
NEW.223	Little Barn	16 Green St	1850	Colonial Revival
NEW.224	Little House	14 Green St	1850	Colonial Revival; Greek Revival
NEW.225	Pettingill, Nicholas Blacksmith Shop	12 Green St	1767	Colonial; Colonial Revival
NEW.226	Little, Dea. N. House	8 Green St	1825	Federal; Greek Revival
NEW.227		6 Green St	1935	Colonial Revival
NEW.228		4 Green St	1935	Colonial Revival
NEW.229		2 Green St	1935	Colonial Revival
NEW.230	Citgo Gas Station	34 High Rd	1940	Colonial Revival
NEW.231	Sewall, Henry House	30 High Rd	1678	Georgian
NEW.232	Lunt, C. House	28 High Rd	1870	Second Empire
NEW.233	Knight, Hale House	22 High Rd	1880	Italianate
NEW.234	First Parish Church of Newbury	20 High Rd	1869	Italianate
NEW.235	Dame, Luther House	18 High Rd	1876	Italianate; Second Empire
NEW.236	Coffin, Tristram House	16 High Rd	1678	Colonial; First Period
NEW.237		12 High Rd	1940	Colonial Revival
NEW.238		10 High Rd	1940	Colonial Revival
NEW.239		8 High Rd	1711	Colonial
NEW.240	Swett, Stephen - Ilsley House	4-6 High Rd	1670	Colonial; First Period
NEW.241	Newman House	1 Newman Rd	1800	Georgian
NEW.300		High Rd	1700	Colonial
NEW.301	Noyes, James House	7 Parker Rd	1675	First Period
NEW.302	Adams, Abraham House	8 Pearson Dr	1704	First Period
NEW.303	Ferry House	270 High Rd		Not researched
NEW.304	Seddon Tavern	7 Newbury Lower Green	1940	Colonial Revival
NEW.305	Spencer - Peirce - Little House	5 Little's Ln	1670	First Period; Georgian
NEW.306	Spencer - Peirce - Little Barn	5 Little's Ln	1670	No style

Inv. No.	Property Name	Address	Year	Style
NEW.307	Byfield Elementary School	11 Lunt St	1901	Colonial Revival
NEW.308	Perkins, Benjamin Creasy House	85 High Rd	1865	Second Empire
NEW.309		24-26 Rolfe's Ln		Not researched
NEW.310		28 Rolfe's Ln		Not researched
NEW.311	Coffin, W. House	Scotland Rd	1872	Not researched
NEW.312	Thurlow, S. House and Farm	50 Scotland Rd	1872	Not researched
NEW.800	Newbury First Parish Burying Ground	High St	1700	
NEW.801	Old Byfield Parish Cemetery	84R Warren St		
NEW.900	Bay Road Milestone, Old	Elm St	1708	
NEW.901	Bay Road Milestone, Old	Middle Rd	1720	
NEW.902	Bay Road Milestone, Old	Boston Rd	1720	
NEW.903	Bay Road Milestone, Old	Green St	1720	
NEW.904	Eastern Railroad Bridge	B & M Railroad	1892	
NEW.905	Eastern Railroad Bridge	B & M Railroad	1891	
NEW.906	Larkin Road Bridge over Parker River	Larkin Rd	1984	
NEW.907	State Street Bridge over B & M Railroad	Newburyport Tpke	1937	
NEW.908	Wilkinson, Donald Bridge	Plum Island Tpke	1973	
NEW.909	Hanover Street Bridge over Little River	Hanover St	1911	
NEW.910	Parker River Bridge - High Road Bridge	High Rd	1930	
NEW.911	Thorlay - Thurlow Bridge	Middle Rd	1858	
NEW.912	Kents Island Road Bridge over B & M Railroad	Kents Island Rd	1911	
NEW.913	White's Bridge	Newman Rd	1961	
NEW.914	Plum Island Airfield - Asphalt Runway	24 Plum Island Tpke	1935	
NEW.915	Plum Island Airfield - Grass Landing Strip	24 Plum Island Tpke	1945	
NEW.916	Plum Island Airfield - Signal Beacon Base	24 Plum Island Tpke	1926	
NEW.917	Plum Island Airfield - Sign Standard	24 Plum Island Tpke	1935	
NEW.918	Plum Island Airfield - Hangar Pads and Taxi Strips	24 Plum Island Tpke	1940	

Inv. No.	Property Name	Address	Year	Style
NEW.919	Plum Island Airfield - T Hangar Pads - Taxi Strips	24 Plum Island Tpke	1965	
NEW.920	Plum Island Airfield - Wind Sock	24 Plum Island Tpke		
NEW.921	Plum Island Airfield - Aerodrome Site	24 Plum Island Tpke	1910	
NEW.922	Newbury World War II Memorial	High Rd	1950	
NEW.923	Newbury Soldiers and Sailors Monument	High Rd	1910	
NEW.924	Newbury Settler's Monument	High Rd	1905	
NEW.925	Newbury Revolutionary War Scroll	High Rd	1900	
NEW.926	Old Newburyport Turnpike Bridge over Mill River	Old Newburyport Tpke		
NEW.927	Herrick Land - South Pasture	Scotland Rd	1635	
NEW.928	Herrick Land - South Pasture	Scotland Rd	1635	
NEW.929	South Pasture	Scotland Rd	1635	
NEW.930		Scotland Rd	1635	
NEW.931		Scotland Rd	1635	
NEW.932	South Pasture	Scotland Rd	1635	
NEW.933	South Pasture	Scotland Rd	1635	
NEW.934	South Pasture	70 Scotland Rd	1635	
NEW.935		Scotland Rd	1635	
NEW.936		Scotland Rd	1635	
NEW.937		Scotland Rd	1635	
NEW.938	South Pasture	Scotland Rd	1635	
NEW.939		20 Scotland Rd	1635	

8. HOUSING

OVERVIEW

Newbury's housing supply since has changed little since the **2006 Master Plan**. Newbury continues to be primarily a single-family residential community with a rural development pattern around traditional New England villages in Old Town and Byfield, and a beachfront settlement on Plum Island. In 2008, a slow-down in the housing market corresponded with an economic recession that impacted the region and the nation. The rate of new residential construction between 2017 and 2020 was very slow compared with the decade that preceded the **2006 Master Plan**. The COVID-19 had the opposite effect, driving higher housing prices and new starts. Five new subdivisions were permitted between 2020 and 2022. These used the Town's OSRD bylaw, which allows for smaller lot sizes and attached units, while conserving surrounding open space.

Slow housing growth and a demographic shift toward smaller, older households has reversed the trend of population growth that peaked in 2000. The relatively high housing cost in Newbury and limited availability of rental housing or "starter units" puts Newbury out of reach for most first-time homebuyers and younger families, and households with low and moderate incomes struggle with affordability. The lack of moderately priced condominiums, multifamily, or senior housing may also impact the ability of Newbury residents to remain in the community as they age.

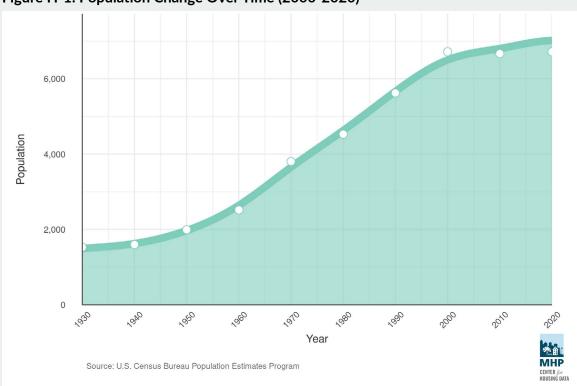


Figure H-1: Population Change Over Time (2000-2020)

A NOTE ON DATA SOURCES

The release of much of the 2020 census data was delayed by the COVID-19 pandemic. The US Census released Census tables H1 (number of housing units and occupancy status) and Census tables P1-P5 (total population and population by race and ethnicity) in 2021 because of the requirements for this data in redistricting.

The remaining data related to household and population is scheduled for release in May 2023. Some tables in this chapter rely on the American Community Survey (ACS) for the five-year period from 2016-2020. The ACS data is an estimate, which means that the total population and total number of households for 2020 will not match up precisely to the breakdowns of that data in the ACS. The ACS data projects higher populations than the 2020 Census. The pandemic may also have affected the collection of data; for more information, see the link in the footnote below.²³ When reviewing this data, readers should understand that the margin of error is likely to be high; sample sizes were lower during the period the data was collected for both the decennial Census and the ACS. It may take several years before there is sufficient data to understand changes during the 2020-2022 period and subsequent trends.

ACS data for the five-year period from 2017-2021 is also available, but the earlier data is used to provide information that is as relevant as possible to the 2020 Census. The tables from Mass Housing Partnership (MHP)'s DataTown resource also rely on the 2016-2020 ACS. The tables below indicate the source of each data set.

The delayed release of information has an impact on data provided from state agencies as well. This note is from the website of the Massachusetts Department of Housing and Community Development (DHCD):

The Subsidized Housing Inventory (SHI) has not yet been updated to reflect 2020 Census figures. The 2020 Census Redistricting Data (Public Law 94-171) Summary File that has been released by the U.S. Census Bureau does not include data on vacant "seasonal, occasional, or recreational use" units used by DHCD to determine Census "year-round housing units" for the SHI. The SHI will therefore continue to reflect the 2010 Census Year-Round Housing unit figures until such data is released. As of April 27, 2022, the Census Bureau has provided a release schedule for future data sets that will include this data in May of 2023.²⁴

https://www.census.gov/newsroom/blogs/random-samplings/2021/10/pandemic-impact-on-2020-acs-1-year-data. html, last accessed 10/02/2022.

²⁴ https://www.mass.gov/service-details/subsidized-housing-inventory-shi; accessed 09/15/2022 and 05/23/2023.

DEMOGRAPHIC PROFILE

Newbury's population grew substantially between 1990 and 2000 then declined slightly between 2000 and 2010. However, the population then increased between 2010 and 2020, for a net change of zero percent between 2000 and 2020.

Newbury's population is comparable in size to neighboring communities, with the exception of Newburyport, which is considerably larger.

Among neighboring communities, the populations of Salisbury and Georgetown grew the most between 2000 and 2020, followed by Groveland and Rowley. West Newbury grew slightly faster than Newburyport. Table H-1 provides data from both the US Census and the 2016-2020 ACS; the ACS estimates indicate a trend for growth in the number of households but a decline in the size of households. This is consistent with the aging population shown in Table H-2. When the more detailed 2020 Census data is released in 2023, the Town may find it useful to compare the ACS estimates with the census data.

The Metropolitan Area Planning Commission, which created population forecasts from 2010 to 2030, used scenario-based planning, shown in Tables H-1 and H-2. The "Status Quo" scenario projects that recent development trends continue into the future, while the "Strong Region" scenario anticipates that local, regional, and state-wide policy changes and investments will result in a higher level of growth. The Merrimack Valley Planning Commission projected population trends from 2000-2040 in the Merrimack Valley Regional Housing Plan (2018). These are provided in Figure H-2.

However, the data from the 2020 Census suggests that these sources may have overestimated the decline, perhaps (as shown in Table H-1) by assuming a higher rate of household creation and lower average family size as the population ages. Certainly the 2016-2020 ACS estimates a larger average household size than shown in the MAPC Status Quo scenario. Pressure from housing prices, which are historically high, may have contributed to keeping family sizes larger.

Newbury is experiencing a pronounced shift in age demographics. In 1990, the town had a relatively balanced age distribution. The young adult population shrank by 2000, even as the population grew in all other age cohorts. In 2020, adults 65 years and over were 21% of the population and adults between 35 and 64 were 46% of the population. Figures H-3 and H-4 show the change in age distribution from 2000 to 2020, and the comparison between Newbury and the Commonwealth of Massachusetts during the same time periods. In 2000, Newbury had more people in the peak earning years of 35-59. In 2020, Newbury has far more people in the later years of work and the early years of retirement. Such a distribution suggests a potential need for more services as people age and a change in the housing typology required for seniors to age within their community.

Table H-1: Population and Household Trends, Newbury and Region

							West
	Newbury	Georgetown	Groveland	Newburyport	Rowley	Salisbury	Newbury
Population							
2000	6,717	7,377	6,038	17,189	5,500	7,827	4,149
2010	6,666	8,183	6,459	17,416	5,856	8,283	4,235
2020 Projected (MAPC)	6,407	8,664	6,726	17,146	6,135	8,496	4,115
2020 Actual (Census)	6,716	8,470	6,752	18,289	6,161	9,236	4,500
% change 2000-2020	0%	15%	12%	6%	12%	18%	8%
Households							
2000	2,514	2,566	2,058	7,519	1,958	3,082	1,392
2010	2,594	2,937	2,346	7,622	2,155	3,441	1,508
2020 Projected (MAPC)	2,813	3,435	2,740	7,873	2,503	3,769	1,612
2020 Estimated (ACS)	2,640	3,322	2,460	7,419	2,269	3,922	1,720
% change 2000-2020	5%	29%	20%	-1%	16%	27%	24%
Household Size							
2000	2.66	2.87	2.93	2.24	2.77	2.53	2.98
2010	2.58	2.84	2.77	2.33	2.66	2.47	2.90
2020 Projected (MAPC)	2.28	2.52	2.45	2.18	2.45	2.25	2.55
2020 Estimated (ACS)	2.63	2.62	2.77	2.41	2.79	2.40	2.72
% change 2000-2020	-1%	-9%	-5%	8%	1%	-5%	-9%

Source: Population: US Census 2000 and 2010, 2020 PL 94-171. Households: US Census 2000 and 2010 and ACS 2016-2020, DP05; MAPC Projections 2020 (Status Quo).

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Figure H-2: Projected Regional Population Growth (2000-2040)

TABLE 2: POPULATION GROWTH & PROJECTIONS FOR MERRIMACK VALLEY: 2000-2040

Community	2000	2010	2020	2030	2040
AMESBURY	16,450	16,283	16,852	17,391	17,800
ANDOVER	31,247	33,201	35,029	36,503	37,724
BOXFORD	7,921	7,965	7,907	7,697	7,400
GEORGETOWN	7,377	8,183	8,848	9,178	9,442
GROVELAND	6,038	6,459	6,731	6,786	6,781
HAVERHILL	58,969	60,879	65,090	67,340	69,095
LAWRENCE	72,043	76,377	83,789	86,562	88,691
MERRIMAC	6,138	6,338	6,596	6,623	6,587
METHUEN	43,789	47,255	52,711	56,453	59,900
NEWBURY	6,717	6,666	6,673	6,708	6,680
NEWBURYPORT	17,189	17,416	17,993	18,407	18,673
NORTH ANDOVER	27,202	28,352	30,048	31,159	32,045
ROWLEY	5,500	5,856	6,241	6,463	6,638
SALISBURY	7,827	8,283	8,843	9,016	9,115
WEST NEWBURY	4,149	4,235	4,271	4,325	4,341
Merrimack Valley TOTAL	318,556	333,748	357,622	370,611	380,912

Source: UMass Donahue, MassDOT and MAPC, 2018

Source: MVPC, Merrimack Regional Housing Plan, 2018, p. 10.

Table H-2: Population Projections by Age Cohort in Newbury

Age Groups	1990	2000	2010	2020 (ACS)
0-4	422	450	293	268
5-19	1,146	1,489	1,344	1,262
20-34	1,103	839	682	809
35-64	2,324	3,218	3,423	3,295
65 +	628	721	924	1,472
Total	5,623	6,717	6,666	7,106

Age Groups	2020 (Status Quo Scenario)	2030 (Status Quo Scenario)	2020 SR (Strong Region Scenario)	2030 SR (Strong Region Scenario)
0-4	176	167	175	173
5-19	974	735	966	723
20-34	676	547	710	582
35-64	2,912	2,320	2,914	2,322
65 +	1,668	2,341	1,682	2,372
Total	6,407	6,109	6,446	6,171

Source: US Census 1990-2010, MAPC Status Quo Scenario: 2020-2030, ACS 2016-2020 DP05

While methodologies differ, population projections are typically based on historic rates of fertility, mortality, regional migration, and sometimes other socio-economic or market factors. Such projections have greater accuracy in the short term; farther into the future more unforeseen developments will influence population growth, thus increasing the uncertainty of projections based on historic trends.

The original projections for negative population growth from 2010 to 2030 were likely influenced by the slow-down in Newbury's housing market during the economic recession from 2006-2012. Housing prices have continued to increase (see HOUSING MARKET TRENDS, below), but additional influences on housing include the following:

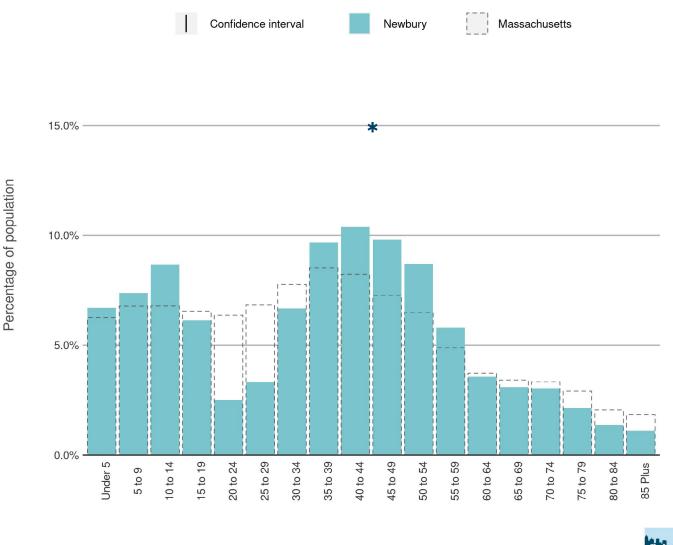
- The need for starter homes for young families.
- The need for housing stock suitable for seniors who wish to age in place in their communities.
- A shift to working from home part- or full-time for some professions.
- An increase in the number of people wanting to move away from more urbanized areas during the pandemic.
- Supply chain issues and an inflationary environment that began with the COVID-19 pandemic and have not fully resolved.
- Increasing interest rates combined with housing prices that are still historically high.

Over the ten-year life of a comprehensive master plan, the economic cycles will shift. However, the current projections for an increase in seniors suggest a disconnect between the current housing stock and the needs of a population aging within the community. Diversifying the types of housing stock available can address the needs of the young working population and seniors alike.

Figure H-5, from DataTown, hosted by the Mass Housing Partnership, shows the steady decline of school-age children in Newbury since 2003.

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Figure H-3: 2000 Age Distribution: Newbury vs. Commonwealth of Massachusetts



Source: U.S. Census Bureau: Decennial Census 1990-2010 & American Community Survey, 2016-2020 5-year estimates. Table S0101: Age and Sex

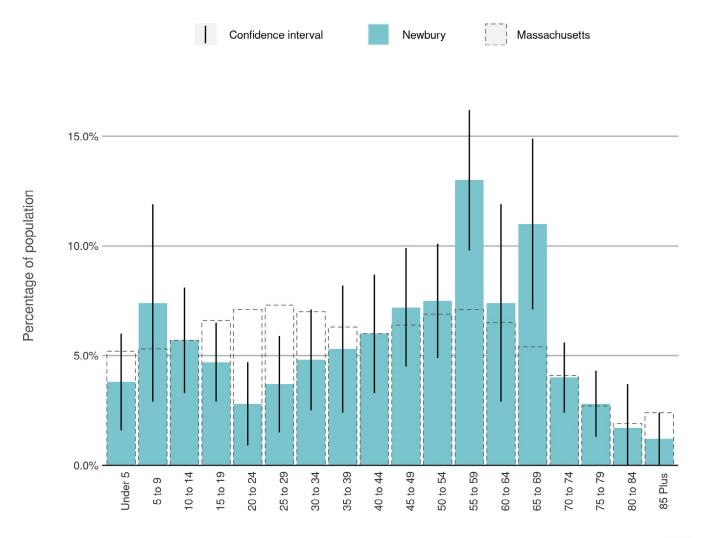


Source: MHP Datatown, last accessed October 2, 2022

* From the Datatown website: Margins of error and confidence intervals for estimates

Estimates based on survey data have a degree of uncertainty, quantified by the margin of error. The U.S. Census Bureau uses a margin of error based on a 90% confidence interval for their American Community Survey estimates. This means the true value will fall within the displayed range with 90% likelihood. Small communities have small sample sizes, and this leads to relatively larger margins of error and confidence intervals.

Figure H-4: 2020 Age Distribution: Newbury vs. Commonwealth of Massachusetts



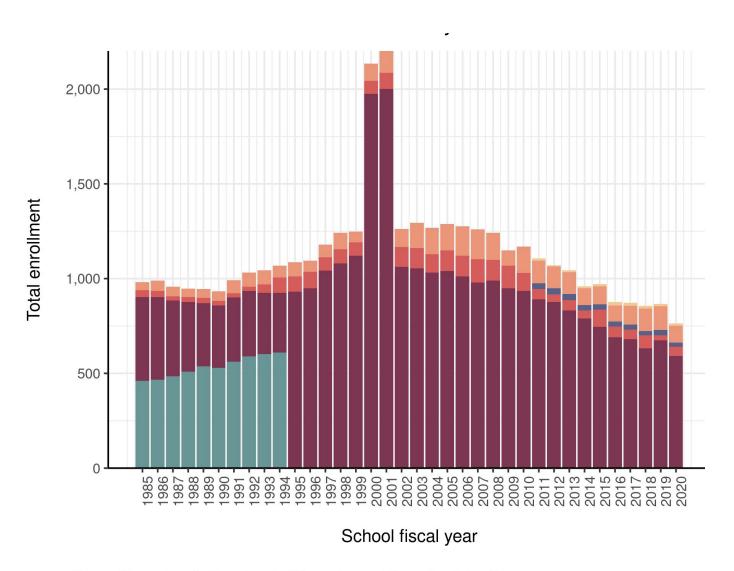
Source: U.S. Census Bureau: Decennial Census 1990-2010 & American Community Survey, 2016-2020 5-year estimates. Table S0101: Age and Sex



Source: MHP Datatown, last accessed October 2, 2022

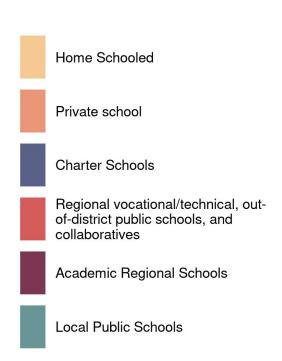
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Figure H-5: School-Age Children by Enrollment Type (1985-2020): Newbury



Source: Massachusetts Department of Elementary and Secondary Education

Source: MHP Datatown, last accessed October 2, 2022





REGIONAL HOUSING COMPARISON

HOUSEHOLD SIZE

Newbury and neighboring communities (except for Newburyport) are comparably small, with Newbury having an estimated 2,640 households in 2020. Newbury's estimated average household size is a little above the average for Essex County but slightly smaller than Rowley, Groveland, and West Newbury. Newbury also has fewer nonfamily households than neighboring communities (besides Rowley and West Newbury), the majority of whom are individuals living alone. The proportion of households with children fell from 38 percent in 2000 to an estimated 31 percent in 2020, while the proportion of households with seniors over the age of 65 increased from 22 percent in 2000 to 41 percent in 2020.²⁵

Newbury's median age is relatively high compared to the State and Essex County, and is the second-highest of the nearby communities (only West Newbury is higher). Between 2000 and 2020, Newbury's median age rose from 39.5 to 48.7 years, while the median age remained level around 39 to 40 years in Essex County and statewide. (See Table H-4.)

INVENTORY

Newbury's housing inventory is comparable in size, tenure, and other characteristics to nearby communities in northern Essex County. While Newburyport has the largest and most diverse housing inventory, other towns in the region, like Newbury, have predominantly owner-occupied single-family housing. Newbury has the highest median home value among neighboring towns, and a relatively small supply of affordable housing. (See Table H-5.) Based on the 2020 Census data, Newbury and Salisbury have the lowest occupancy rate, but seasonal housing and the margin-of-error problems mentioned at the beginning of this chapter may also affect these numbers.

Newbury has the lowest tax rate of all the surrounding communities, and the second lowest average single family tax bill, next to Salisbury (see Table H-7). However, Newbury's median family income is the highest of the neighboring communities, and its median household income is the third-highest. Only West Newbury and Georgetown have higher median household incomes. Interestingly, Newbury's median nonfamily income is lower than all the comparison towns except Amesbury and West Newbury and its median senior household income is the

²⁵ US Census 2000 and ACS 2016-2020.

²⁶ US Census 2000 and ACS 2016-2020.

Table H-4: Household Composition in Newbury and the Region

	seriola composition	,		
	Households	Average Household Size	Families	Nonfamily Households
Amesbury	7,404	2.32	4,926	2,478
Georgetown	3,322	2.62	2,440	882
Groveland	2,460	2.77	1,787	673
Newbury	2,640	2.63	2,040	600
Newburyport	7,419	2.41	4,788	2,631
Rowley	2,269	2.79	1,898	371
Salisbury	3,922	2.40	2,307	1,615
West Newbury	1,720	2.72	1,460	260
Essex County	297,254	2.59	197,950	99,304
Massachusetts	2,646,980	2.50	1,673,992	972,988

	Individuals Living Alone	With Children under 18	With Seniors over 65	Median Age
Amesbury	2,179	2,393	2,069	44.5
Georgetown	717	1,153	1,057	43.5
Groveland	535	862	870	41.8
Newbury	431	828	1,094	48.7
Newburyport	2,112	2,041	2,582	45.9
Rowley	311	636	749	47.4
Salisbury	1,081	854	1,490	47.0
West Newbury	212	482	692	49.5
Essex County	81,402	92,239	96,945	40.9
Massachusetts	751,536	690,194	703,118	39.6

Source: ACS 2016-2020, DP02, DP05, and S1903

third highest among the towns. (Table H-6.) Nonfamily households may be a smaller subset of the total households. The sample size is small, and, as noted on page 166, this may have an impact on the accuracy of the count.

REGIONAL NEEDS

Merrimack Valley Regional Housing Plan

In 2018, the Merrimack Valley Planning Commission developed a regional housing plan that incorporated all the communities within the Merrimack Valley. MVPC, along with their consultant JM Goldson, also worked with individual towns to develop a Housing Production Plan for each community. The regional plan introduced five key takeaways that address housing needs in all fifteen communities:²⁷

- There needs to be support for people over the age of 65 to age in place and age in community.
- Every community in our region needs more rental housing, of all types and for all incomes.
- Each community would benefit from a greater diversity of housing, including multifamily, congregate, transitional, permanent, supportive and accessible housing for disabled individuals.
- Housing rehabilitation programs are important for older housing stock.
- Every community in our region needs more affordable homeownership opportunities.

MVPC analyzed regional needs for affordable housing, noting that while the region as a whole had total affordable units of almost 11% of its total housing units, individual communities were not meeting the goal of having at least 10% of the year-round housing stock on the state's Subsidized Housing Inventory (SHI).²⁸ Newbury has the third lowest number of units on the SHI with 3.5%; only Groveland and West Newbury are lower. (See Table H-5B.) In 2018, this was a deficit of 176 units; when the rest of the housing data for the 2020 Census is released in 2023, this number may shift.

²⁷ MVPC, Merrimack Valley Regional Housing Plan, 2018. p. 3.

²⁸ MVPC, Merrimack Valley Regional Housing Plan, 2018. p. 25.

Table H-5A (upper) and 5B (lower): Housing Characteristics in Newbury and Region

5A: With 2020 Census Data

	Total housing units	Occupied Units	Vacant Units	% Occupied
Amesbury	7,889	7,476	416	95%
Georgetown	3,159	3,090	69	98%
Groveland	2,596	2,519	77	97%
Newbury	3,072	2,697	375	88%
Newburyport	8,615	7,971	644	93%
Rowley	2,405	2,328	77	97%
Salisbury	5,305	4,206	1,099	79%
West Newbury	1,740	1,672	68	96%
Essex County	327,185	309,030	18,155	94%
Massachusetts	2,998,537	2,749,225	249,312	92%

Source: US Census 2020 PL 94-171

See note on page 176 about vacant units.

5B: With 2016-2020 ACS Data

	Total housing units	Owner- occupied Units	Detached Single Family Homes	Seasonally Occupied Homes	Median Value	% Affordable (SHI)*
Amesbury	7,674	5,015	3,898	*	\$351,400	7.2%
Georgetown	3,394	2,585	2,590	*	\$461,400	11.7%
Groveland	2,472	2,207	1,948	*	\$409,600	3.3%
Newbury	3,047	2,403	2,417	*	\$557,300	3.5%
Newburyport	8,153	5,573	4,057	*	\$608,300	7.6%
Rowley	2,439	1,901	1,795	*	\$498,600	4.2%
Salisbury	5,074	3,187	2,874	*	\$369,000	8.9%
West Newbury	1,834	1,612	1,706	*	\$585,900	2.2%
Essex County	313,956	189,708	159,095	*	\$436,600	
Massachusetts	2,913,009	1,654,892	1,516,717	*	\$398,800	

Source: ACS 2016-2020, DP04, DHCD SHI

MBTA Communities Multifamily Zoning Act

In 2021, Section 3A²⁹ was added to Massachusetts General Laws, Chapter 40A, which is the legislation that enables zoning in the Commonwealth of Massachusetts. This new law requires communities that have access to MBTA public transit to ensure that they allow multifamily housing (three or more dwelling units) as of right. The legislation affects 175 cities and towns; some may already be in compliance with the new legislation, while others will have to modify their zoning to meet the new requirements.

The Department of Housing and Community Development (DHCD) has created a set of Guidelines for determining how the new requirements apply to each community. The Guidelines identify a number of measurements the community must consider: minimum land area for the zoning district or districts, the amount of developable land within a half-mile of a transit station (the "station area"), the percent of the district that must be located within the station area, and the minimum unit capacity that the district must allow by zoning. The unit capacity is based on the number of housing units calculated in the 2020 Decennial Census.

Newbury is classified as an **Adjacent small town**, because of its proximity to the Newburyport commuter rail station. While DHCD has identified 69 acres as developable station area, it does not require that Newbury locate its multifamily zoning district within those 69 acres. Newbury has also not been assigned a minimum land area. Finally, Newbury's multifamily district(s) would need to have a minimum unit capacity of 154 dwelling units. This means that the district(s) must allow at least that number of units as of right; the state does not require the town to build these units.

²⁹ https://www.mass.gov/info-details/multi-family-zoning-requirement-for-mbta-communities

Table H-6: Median Household Incomes

	Median Household Income	Median Family Income	Median Nonfamily Income	Income Senior Households
Amesbury	\$81,027	\$106,536	\$44,757	\$52,974
Georgetown	\$122,600	\$138,472	\$58,438	\$58,810
Groveland	\$111,056	\$128,582	\$65,598	\$67,072
Newbury	\$121,286	\$167,813	\$52,019	\$78,958
Newburyport	\$110,740	\$139,539	\$73,365	\$67,622
Rowley	\$118,851	\$122,929	\$72,813	\$79,646
Salisbury	\$81,223	\$161,071	\$67,045	\$102,222
West Newbury	\$151,500	\$102,807	\$43,744	\$52,546
Essex County	\$82,225	\$106,526	\$48,876	\$52,973
Massachusetts	\$84,385			

Source: ACS 2016-2020, S1903

Note: Household income refers to the income of all people living within a single household, whether related or not. Family income is the income of a family, i.e. a group of related people living in a single household. Nonfamily income is the income of a household with only unrelated members, and could include, for example, roommates or a single persons living alone.

Table H-7: Residential Tax Burden, Newbury and Surroundings Towns (2022)

	Residential	Average Single	Family	DOR Income	Average Tax Bill as a % of	
Municipality	Tax Rate	Home value	Tax Bill	Per Capita	Income	Rank
Amesbury	\$17.69	\$454,107	\$8,033	\$41,297	19.45%	73
Georgetown	\$14.08	\$535,847	\$7,545	\$52,365	14.41%	86
Groveland	\$14.47	\$510,212	\$7,383	\$42,413	17.41%	93
Newbury	\$9.73	\$638,959	\$6,217	\$73,077	8.51%	148
Newburyport	\$12.01	\$701,897	\$8,430	\$70,373	11.98%	64
Rowley	\$14.62	\$530,291	\$7,753	\$48,107	16.12%	81
Salisbury	\$11.14	\$457,841	\$5,100	\$31,292	16.30%	213
West Newbury	\$13.01	\$672,868	\$8,754	\$70,872	12.35%	59

Source: MA Department of Revenue, Division of Local Services

Note: Rank is out of 351 communities; the higher the rank, the higher the tax burden.

HOUSING IN NEWBURY

HOUSING TYPOLOGY

The 2020 Census counted 3,072 housing units, of which 2,697 (88 percent) were occupied. The unoccupied (vacant) units may be seasonal or temporarily vacant given the timing of the census (April 2020) relative to the tourist season and the COVID-19 pandemic shutdowns.

Although Newbury has a notable stock of historic residential properties dating from 1636, the majority date from the mid-20th Century or later. The decades in which the greatest amount of growth occurred were the 1950s and the 1980s. While the characteristics of Newbury's historic housing stock are more fully described in Chapter 7: Historic and Cultural Resources, the decade of construction, particularly for houses built in the 20th Century or later, provides an indication of the condition of the structures and the quality of materials that may have been used in construction. For example, lead paint, which was banned for residential use in 1978, is not a concern for houses constructed after 1980, but may be present in structures built prior to this time.

An average of 11 units per year have been constructed during the past ten years (2002-2021), with 114 units permitted during that period³⁰ (not counting condo conversions). Most new houses are single family, with only four townhouses constructed since 2002, and no units in three-family structures. The number of units produced annually varies, with a high of 20 units in 2014 and a low of four units in 2020. Only one unit was produced in 2022.

Residential developments included Caldwell Farm, Colby Village, Scotland Woods, and Orchard Street, each of which were OSRD subdivisions which created condominium units or single-family houses with a portion of the lot preserved as open space. A handful of smaller conventional subdivisions also exist. Adaptive reuse of the former Woodbridge School resulted in the creation of three apartments and a single-family house as a condominium development, while a similar adaptive reuse project created four condominium units in the former Methodist Church in Byfield.

³⁰ US Census Building Permit Data, Newbury Assessor's Database

Newbury Confidence interval Massachusetts Mobile homes and other units 10 or more units 5 - 9 units 3 - 4 units Two-family Single family, attached Single Family, detached 20% 40% 60% 0% 80% Percentage of housing stock

Figure H-6: Housing Units (Building Type): Newbury vs. Commonwealth of Massachusetts

Source: U.S. Census Bureau American Community Survey, 2016-2020 5-year estimates. Table S2504: Physical Housing Characteristics MHP
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Source: MHP Datatown, last accessed October 2, 2022

Note: The US Census defines "Attached and Detached Single-Family Housing Units" as follows: Single-family structures include fully detached, semi-detached (semi-attached, side-by-side), row houses, duplexes, quadruplexes, and townhouses. In order for attached units to be classified as single-family structures, each unit must:

- Be separated by a ground-to roof wall,
- Have a separate heating system,
- Have individual meters for public utilities, and
- Have no units located above or below.
- If each unit within the building does not meet the conditions above, the building is considered multifamily.

The US Census does not define "Two-family."

https://www.census.gov/construction/chars/definitions/index.html

8. HOUSING

Most of Newbury's residential units are single family houses. Approximately ten years ago Newbury passed an Accessory Apartment Bylaw, which aims to address the housing needs of seniors to enable them to age in place with space for family members or caregivers, or to provide supplemental income and maintenance support. The bylaw regulates accessory apartments in relation to the principal domicile, and a later revision of the bylaw allows accessory apartments to be in detached structures, either pre-existing or new construction. The number of units produced under this bylaw is unknown.

The total number of housing units counted in the Decennial US Census grew by just over nine percent between 2000 and 2020 gaining an average of just under 13 new units per year. Unfortunately, the estimates of seasonal housing are not yet available, so the current balance of owner-occupied to seasonal rental units is unknown.

Group Quarters

The 2020 Census counted 101 Newbury residents living in group quarters. Governor's Academy, a boarding school for grades 9-12 located in Newbury, accounts for this group quarters population.

Newbury | Confidence interval | Massachusetts | Massachusetts

Figure H-7: Housing Stock (Year Built): Newbury vs. Commonwealth of Massachusetts

Source: U.S. Census Bureau American Community Survey, 2016-2020 5-year estimates. Table S2504: Physical Housing Characteristics Source: MHP Datatown, last accessed October 2, 2022

Table H-9 Housing Occupancy, 2000, 2010, and 2020

Table 11 7 Housing Geoupaney, 2000, 2010, and 2020					
	2000	2010	2020	Change 2000-2020	% Change
Total Housing Units	2,816	2,936	3,072	256	9.1%
Occupied Housing Units	2,514	2,594	2,697	183	7.3%
Owner-Occupied	2,025	2,150	*		
Renter-Occupied	489	444	*		
Vacant Housing Units	302	342	375	73	24.2%
Vacant Housing Units - For seasonal, recreational, or occasional use	202	237	*		
Vacancy Rate Rental	3.0%	6.8%	*		
Vacancy Rate Ownership					

Source: US Census 2000, 2010 QT-H1, and 2020 PL 94-171

See note on page 176 about vacant units. * = data was unavailable at the time this draft was written.

HOUSING TRENDS

Most communities have a range of housing that includes some smaller, modest houses, condominiums, or apartments which have traditionally sold or been rented at relatively lower cost than the typical single-family home for that community. The availability of modestly priced housing depends on market conditions, which in many communities is increasingly scarce. As shown in Housing Typology, above, Newbury's housing stock is primarily single-family homes and most were built before 1990.

Housing costs in Newbury are on the high end, compared both with Essex County and the State. Housing prices have fluctuated over the past fifteen years, reflecting overall housing market conditions in the region. Median sales prices for single family houses peaked at \$480,000 in 2006 and declined over subsequent years to \$353,500 in 2011. Since 2011, prices have edged upward again, with a median price of \$557,300 in 2020. As a snapshot of current market conditions, the asking price for homes on the market in October 2022, ranged from \$698,000 to \$2.975 million³¹ (compared to the average assessed value of a single-family home of \$638,959 in 2022). Of the 17 properties listed for sale at the beginning of the month, three were for land only. Five were on Plum Island or Plum Island Turnpike (probably reflecting an attempt to sell at the end of the summer season) and five more were new houses built as part of new subdivisions. The least expensive house was built in the 1700s.

Newbury has a very small supply of rental housing on the market. On the same date in October 2022, only five properties were available for rent. The least expensive was a cottage on Plum Island; three others were also located on Plum Island, with the highest rent at \$4,200 per month. The only rental available that was not on Plum Island was a two-bedroom unit for \$3,450 per month.³²

While sales and advertised rent prices reflect the cost for people seeking housing today, ACS estimates median housing values and median rent based on a sample of all units in the community. The 2016-2020 ACS estimate for median gross monthly rent in Newbury was \$773, which includes affordable units along with market rate units.³³ (See Table H-10.) However, this was based only on 138 units of rental housing (of which ninety-four are on the Subsidized Housing Inventory list). It is also unclear how the seasonal rental market affects this average, as prices on Plum Island drop in the off-season.

³¹ Zillow.com, October 2, 2022

³² Ibid.

Table H-10: Change in Median Housing Costs and Median Income

	2000	2020	Change 2000-2020	% Change
Median Value Single Family Owner-Occupied Units	\$269,300	\$557,300	\$288,000	107%
Median Gross Rent	\$697	\$773	\$76	11%
Median Household Income	\$74,836	\$121,286	\$46,450	62%

Source: Census 2000 DP-3, ACS 2016-2020 DP03 and DP04

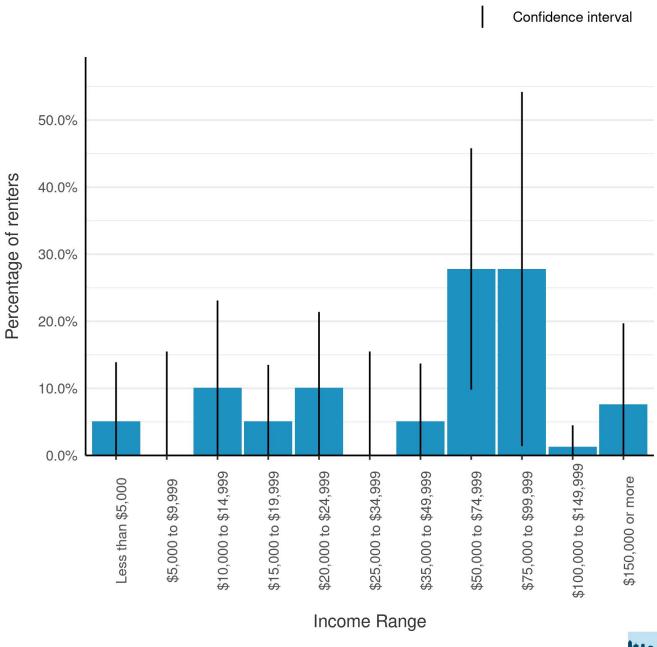
Table H-11: Average Single Family Tax Bills, 2005-2020

	Newbury	Rank	State
2005	\$3,523	124	\$3,588
2010	\$4,390	114	\$4,390
2015	\$4,854	137	\$5,214
2020	\$5,876	130	\$6,177
Change 2005-2020	67%		72%
2022*	\$6,217	148	\$6,719

Source: MA Department of Revenue Division of Local Services Databank

Note: See Table H-7 for a comparison of Newbury and its neighbors for FY2022.

Figure H-8: Households by Income: Renters (left) and Owners (right)



Source: U.S. Census Bureau American Community Survey, 2016-2020 5-year estimates. Table S2503: Financial Characteristics

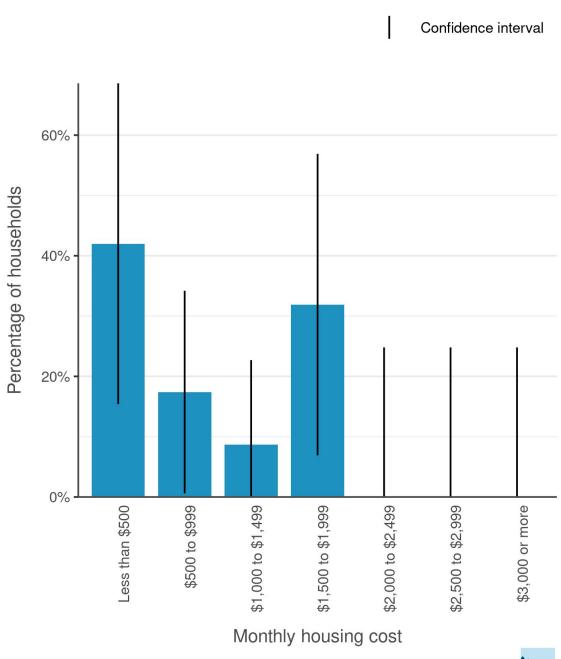


Confidence interval 50.0% Percentage of owners 40.0% 30.0% 20.0% 10.0% 0.0% \$100,000 to \$149,999 \$10,000 to \$14,999 \$15,000 to \$19,999 \$20,000 to \$24,999 \$25,000 to \$34,999 \$35,000 to \$49,999 \$50,000 to \$74,999 \$75,000 to \$99,999 \$150,000 or more Less than \$5,000 \$5,000 to \$9,999 Income Range





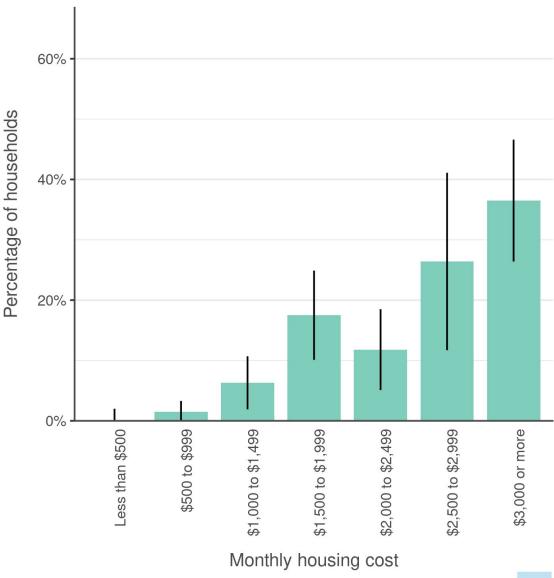
Figure H-9: Monthly Housing Costs: Renters (left) and Owners (right)



Source: U.S. Census Bureau American Community Survey, 2016-2020 5-year estimates. Table DP04: Selected Housing Characteristics

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Confidence interval



Source: U.S. Census Bureau American Community Survey, 2016-2020 5-year estimates. Table DP04: Selected Housing Characteristics



Housing prices in Newbury have risen considerably faster over the past decade than household incomes. According to ACS (2016-2020), the median value for single families in Newbury is approximately 107 percent higher than the median value estimated in the 2016-2020 ACS; rents increased by a similar rate. In contrast, the median household income rose over the same period by 62 percent.

Costs have also increased for those who own houses and are not seeking new housing, including property tax, insurance, and utilities. Newbury's average single family tax bill increased by 67 percent between 2005 and 2020, which was less than the percent change in the average tax bill statewide, which was an increase of 72 percent over the same period. In 2020, Newbury placed 130 out of 337 communities ranked statewide in terms of highest tax bill (see Table H-11). In 2022, Newbury dropped to 148 out of 351 communities (see Tables H-7 and H-11).

Housing Affordability

Median household incomes in Newbury and surrounding communities are relatively high compared with Essex County and the state overall. Median income for families in Newbury is more than double the median for nonfamily households, the majority of whom are individuals living alone, often on a fixed income. Seniors living in Newbury are relatively affluent compared with seniors elsewhere in the region or the state.

Figures H-8, H-9, and H-10 provide a general understanding of housing affordability based on the 2016-2020 ACS and organized by renter households and owner households. Owner households are more likely to be cost-burdened (spending over 30% of income on housing) than renters. The seasonal nature of some of the rental properties and the affordable rental units may have an impact on these numbers. Figure H-8 shows concentration of renters by household income which indicates two main groups; one in the mid-range income levels and one at the lower end. The upper group corresponds with the median income for senior households shown in Table H-8; the lower end is less than the median nonfamily income shown in the same table.

According to ACS, Newbury lacks young adult households (headed by people under the age of 25), who have a median income of \$44,222, statewide.³⁴

³⁴ ACS 2016-2020 estimates that young adults between the ages of 20-24 comprise 2.8 percent of the town's population, yet found zero households headed by adults under age 25.

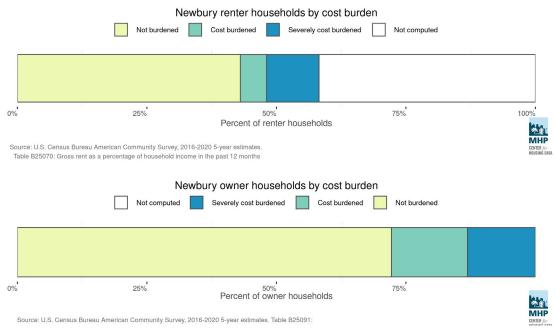


Figure H-10: Monthly Housing Costs: Renters (left) and Owners (right)

Source: MHP Datatown, last accessed October 2, 2022

In 2022, the United States Department of Housing and Urban Development established the area median family income (AMI) of the Boston-Cambridge-Quincy, MA-NH HUD Metro Fair Market Rent (FMR) Area as \$140,200. Newbury is included in this area, so the median income is applied to the income limits for affordable housing. Income limits are defined as extremely low (30% of AMI or less), very low (50-60% of AMI) and low (80% of AMI) and are further defined by family size (1 to 8 people).³⁵ For a family of four, the extremely low limit is an annual income of \$42,050, the very low limit is \$70,100, and the low limit is \$111,850. These income limits are used to define eligibility for certain affordable housing programs and identify households that may be cost burdened.

³⁵ https://www.huduser.gov/portal/datasets/il/il2022/2022summary.odn, last accessed October 2, 2022.

By comparison, in 2020, the AMI for the region was \$119,000 and a four-person household had a median income of \$63,950 at 50% AMI and a median income of \$96,250 at 80% AMI.

Table H-8 shows that the estimated 2020 median household income in Newbury was \$121,286. In 2020, HUD calculated the Fair Market Rent for a two-bedroom unit at \$2,311 and a three-bedroom unit at \$2,880.³⁶ As a comparison, this is less than the monthly rents for the few units available for rent in October 2022. Year-round renters include younger people who are starting their own households; people who work at lower-wage jobs, including services, healthcare, restaurant, and retail; and seniors, some of whom are on fixed incomes.

Housing for For People with Disabilities

The 2016-2020 ACS estimates that 498 households in Newbury include people with disabilities, who comprise seven percent of the town's population.³⁷ Disabilities are defined as including hearing or vision impairment, cognitive or ambulatory difficulty, and difficulty with self-care or independent living. The majority of those with disabilities are seniors over the age of 65, of whom 23 percent have some disability. Anticipated growth in the older population may present challenges for seniors being able to age in the community, as Newbury's predominantly single-family housing stock provides few options for reducing accessibility barriers or maintenance requirements.

Table H-13: Disability Status

	Total Population	With a Disability	% with Disability
Total Civilian Non-institutionalized Population	7,102	498	7%
Under 18 years	1,489	35	2%
18 to 64 years	4,141	121	3%
65 years and over	1,472	342	23%

Source: ACS 2016-2020, S1810

https://www.huduser.gov/portal/datasets/fmr/fmrs/FY2020_code/2020summary.odn, last accessed October 2, 2022

³⁷ ACS 2016-2020, S1810

Homelessness

The issue of homelessness has become more pronounced in the North Shore Region as housing costs have increased relative to household incomes and the supply of housing throughout the region – particularly rental housing – does not meet the level of need. In addition to those who may be in shelters or unsheltered, the populations that can be considered to be homeless include those who live in unstable housing situations, such as doubling up with other families, or residing in hotels or temporary (seasonal) rentals. The Newburyport YWCA coordinates an annual count of homelessness in the region which includes Newburyport, Amesbury, Salisbury, Newbury, and Rowley and as well as various agencies serving the homeless population, including schools that administer the McKinney-Vento program for homeless students. This count is part of a national homelessness count coordinated by the US Department of Housing and Urban Development (HUD) and includes all the homeless population residing in the region's shelters and on the streets. The numbers of homeless identified in the count has increased as the volunteer capacity and cooperation of partner organizations and agencies has grown. In 2022, the YWCA counted 361 homeless individuals and family members throughout the region, including 213 children.³⁸

³⁸https://www.newburyportnews.com/opinion/homelessness-among-children-seniors-is-increasing/article_40f4fb38-98c9-11ec-8bf8-eb8920766e41.html, last accessed 09/16/2022.

2018-2022 Housing Production Plan

Because the data from the 2020 Census has not yet been fully released, the remainder of this chapter on housing affordability draws from Newbury's 2018-2022 Housing Production Plan (HPP), part of the broader regional efforts sponsored by MVPC and produced in partnership with JM Goldson, mentioned earlier in this chapter. This data provides a more complete picture of the housing needs prior to the impacts of the COVID-19 pandemic.

Key findings from the plan are as follows:39

- Newbury is growing, but at a slower rate than the region overall. Projections indicate a population decline in the coming years. However, if average household size continues to decline, the effect of the population decrease on housing demand may be minimized [...].
- The composition of Newbury's households is also changing with fewer households with children and more single person households, many of which are older adults over age 65 years. Projections anticipate a significantly greater percentage of older adults and fewer children in the coming years. The growing number of single-person households and older adults may indicate a greater need for more housing options such as multi-family apartments, condominiums, and supportive housing options and less need for single-family houses in the community.
- The region as a whole is becoming more racially diverse, but Newbury remains racially homogeneous. A greater diversity of housing stock in Newbury may help to boost racial and ethnic diversity. Because racial and ethnic minorities generally have less wealth and lower income than white, non-Hispanic/Latino populations and multifamily and rental units can provide less expensive housing options, communities with lower stock of these types of units often also have less racial and ethnic population diversity.
- Newbury's population has slightly lower disability rates than the region, and while it is more common for older adults to have disabilities in general, Newbury has a slightly lower proportion of its older population reporting disabilities than in the region. However, there is still an estimated 31 percent (about 388) of older adults age 65 years and over with disabilities. Persons with disabilities, whether physical, mental, or

³⁹ MVPC and JM Goldson, Town of Newbury Housing Production Plan 2018-2022, 2018, p. 10.

- emotional, can have special housing needs including accessible units and supportive services.
- Newbury's households have significantly higher median income than households in the region, with renters having lower income than owners, as is typical, but higher median renter income than the region. Newbury's households also have higher income across all age cohorts than in the region overall.
- About 80 percent of Newbury's households own and 20 percent rent their home, which is a much higher estimated percentage of owner households than in the region overall (63 percent).

The housing stock has not changed significantly since this report was written. According to the FY2023 parcel data provided from the Assessors' office, 35 residential units have been built since 2018, all of which were single-family homes. The majority of these were built in 2018 and 2019; the number of units built per year dropped to the single digits in 2020, 2021, and 2022. Only one house was built in 2022, per the records.

The continued production of single-family homes only addresses part of the needs in the housing market and does not contribute either to starter homes for younger people or housing suitable for people with disabilities or those aging in place. However, Newbury does have a combination of environmental and infrastructure constraints on further development, noted in the HPP. Wetlands and floodplains provide challenges to locating buildings on a site-by-site basis and the lack of water and sewer infrastructure in some areas of town mean that additional development in those areas will need to rely on private wells and septic systems.

None of these issues are insurmountable, and creative ways of considering development at different scales and typologies can help the Town address its housing needs for people at different ages and income levels.

Subsidized Housing Inventory

Under a Massachusetts law that went into effect in 1969, all communities are encouraged to provide housing that is restricted to remain affordable to lower income households. These units are governed by a deed restriction that lasts for many years, if not in perpetuity. Only a low- or moderate-income household is eligible to purchase or rent a deed restricted unit. When less than ten percent of a community's housing consists of deed restricted affordable units, M.G.L. c. 40B, Sections 20-23 ("Chapter 40B") authorizes the Zoning Board of Appeals to grant a comprehensive permit to qualified affordable housing developers. The ten percent threshold minimum is based on the total number of housing units suitable for year-round occupancy reported in the most recent decennial census.

For Newbury, this currently means that 270 units out of a total of 2,699 should be affordable (2010 U.S. Census). This number will be updated in 2023 after the relevant data from the US Census is available. A comprehensive permit is a type of unified, streamlined permit: a single permit that replaces many of the approvals otherwise required from separate city or town permitting authorities. Chapter 40B supersedes zoning and other local regulations (but not including wetlands, floodplain, and Title 5 regulations) that make it too expensive to build low- and moderate-income housing. By consolidating the approval powers of multiple town boards, the state legislature hoped to provide more low-income housing options in suburbs and small towns. Under Chapter 40B, the Zoning Board of Appeals (ZBA) may approve, conditionally approve, or deny a comprehensive permit, but in communities that do not meet the ten percent minimum a developer may appeal a local ZBA decision to the state Housing Appeals Committee (HAC) if it believes that the decision has not statutory basis or if conditions that it imposes renders the proposed development to be economically infeasible. Although comprehensive permits may still be granted after a town achieves the ten percent minimum, the HAC no longer has authority to overturn a local board's decision.

The Massachusetts Department of Housing and Community Development (DHCD) maintains a list of the deed-restricted affordable units in each city and town. Known as the Chapter 40B Subsidized Housing Inventory (SHI),⁴⁰ the list determines whether a community meets the ten percent minimum. It also is used to track expiring use restrictions, i.e., when non-perpetual affordable housing deed restrictions will lapse.

⁴⁰ "Subsidized" does not always mean the project receives direct financial assistance, such as a low-interest loan or grants from public agencies. A mixed-income development may be "privately" subsidized by a density bonus because the additional income from market-rate sales or rents helps to offset the cost of the affordable units. Regardless of whether the subsidy is public or private, affordable units eligible for the Subsidized Housing Inventory must be protected by a long-term deed restriction and be offered for sale or rent through a fair and open process that complies with the federal Fair Housing Act of 1968, as amended.

Table H-12 reports Newbury's SHI as of October 2015. Newbury has a total of 97 units in three senior housing developments, comprising 3.48 percent of its total year-round housing units in 2010, and three units in group homes.

Byfield Elderly Housing, Inc., a corporation established by a group of local residents, constructed housing at two sites which include a combined total of 40 affordable units and six market rate units. Because it is a rental development, DHCD counts all 46 of the units toward the town's SHI. The affordability restrictions for the Oak Ridge and Quaker Hill developments are set to expire in 2020. Built in the late 1970s, the subsidizing agency was the US Department of Agriculture (USDA). USDA intends to continue funding the rental subsidy for these units regardless of the deed restriction expiring. However, in order for these units to continue counting on the Town's SHI, it may be necessary for the development or the Town to arrange an extension of the long-term deed restriction, thereby reflecting the intention for the units to remain affordable. The Town's other affordable housing development, Newbury Village at Rolfe's Lane, has a similar ratio of affordable and market rate units.

Table H-12: Subsidized Housing Inventory Properties in Newbury

			-	
Housing Development	Owner	Туре	Affordability Expires	Units
Oak Ridge/Quaker Hill	115 Main Street	Rental	12/01/2030	46
Newbury Village	Rolfe's Lane	Rental	11/20/2046	48
DDS Group Homes	Confidential		N/A	3

Source: DHCD (see note under Table H-4.

9. NATURAL RESOURCES

OVERVIEW

During the Town of Newbury's initial process for updating the 2006 Master Plan in 2016, the residents of Newbury voiced their solid support for preserving the town's rich natural resources. Within Newbury's 24 square miles is an intricate tapestry of scenic vistas, woods and wetlands, farms, and ecological communities that define the town's present landscape and serve as a vital link to its proud agrarian and coastal past. Included are large tracts of undeveloped land containing some of the most significant and fragile natural resources found anywhere on the North Shore or in the Commonwealth: the Parker River National Wildlife Refuge. the Great Marsh, Plum Island (a barrier island) and its beaches, state wildlife management areas, and the "Common Pasture," to name a few. However, there are also numerous smaller areas - many less well known and on private property - that are also critically important to the Town's community character and the health of its natural systems. Preserving and protecting these vital resource areas in the face of pressure from development and the increasing impacts of climate change and sea level rise presents a large number of challenges to the Town and its residents, now and in the future. The various management strategies and action recommendations presented in this Plan are offered to help Newbury meet these challenges.

NEWBURY'S NATURAL RESOURCES: THEIR CHARACTERISTICS AND CHALLENGES

The following is an overview of Newbury's diverse natural resources and some of the key threats they face, including incremental habitat loss and fragmentation by residential development, water quality impairments from nonpoint source pollution, water resource availability, coastal erosion, flooding and other impacts resulting from climate change and sea level rise. The discussion is not intended to be comprehensive or exhaustive, but rather to provide some basic background information and a context for the natural resource goals and management strategies that follow.

More detailed descriptions and discussions of the Town's natural resources and their threats may be found in other local and state planning documents. These include: Open Space and Recreation Plan for Newbury, Massachusetts (2009) and Newbury Estuarine Management Plan (2005), both available through the Newbury Planning Board; Parker River Watershed Action Plan 2006-2010 (June 2005), available from the Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA); the Merrimack Valley Region Multi-Hazard Mitigation Plan Update (2016, MVPC), the Great Marsh Coastal Adaptation Plan (2017), National Wildlife Federation Northeast Regional Office, Montpelier, VT, available at www.nwf.org/greatmarshadaptation, the Municipal Vulnerability Plan (2018), the

MVP Action Grant study: Plum Island: Fiscal Implications of Sea Level Rise, and the State of the Coast: Future Climate-Driven Risks—and Their Solutions—on Massachusetts' North Shore (2020, Trustees of Reservations).

As noted in Chapter 7: Historical and Cultural Resources, the Newbury Reconnaissance Report: Essex County Landscape Inventory (Massachusetts Heritage Landscape Inventory Program, Massachusetts Department of Conservation and Recreation and Essex Natural Heritage Commission, 2005), described nine priority heritage landscapes that are the focus of the reconnaissance work in Newbury. Of the nine areas, five are primarily built areas and include Byfield cemetery, Byfield village, the Governor's Academy, the Lower Green, and roads that could quality as scenic roads. The four others are primarily open space or natural resources.

The natural resources are as follows:

- COMMON PASTURE. The area along Scotland Road near the Newburyport line has long been identified as an important regional landscape. Several active farms occupy this area. It is also an important habitat for migratory birds and other wildlife.
- GLACIAL ERRATICS. Glacially deposited rock formations, residual from the last ice age, are found throughout town and include Great Rock at the border of Newbury and West Newbury, Devil's Pulpit, Gerrish's Rock, and Bummers Rock.
- PARKER RIVER. The River, which originates at the confluence of two unnamed brooks located in the wetlands near Main Street in West Boxford, runs through Newbury from West to East, entering the Atlantic Ocean at the Plum Island Sound. The river and the landscape surrounding the river and its banks are among the most beautiful and environmentally diverse areas of Newbury. These areas, which encompass historic mill sites and dams, salt marshes, and other important sites, including the site of the landing of the First Settlers at the end of what is now Cottage Road, represent critical elements of the cultural identity and character of Newbury. The Parker River is also one of Newbury's most important recreational assets and is heavily used for by clammers for access to the clam flats and boaters (both motorized and non-motorized) during the spring, summer, and fall months.
- PLUM ISLAND. Plum Island is a long barrier beach, which begins in Newburyport, runs through Newbury and Rowley, and ends in Ipswich. Plum Island includes both a densely populated residential area and undeveloped land, part of which is federally-owned and part of which is state-owned. While Plum Island was originally developed as a summer vacation area in the early 20th century, the northern portion of the Island has seen a large increase in the number of year-round residents and replacement of summer cottages with permanent homes, particularly since municipal water and sewer were installed in 2007. The remainder of Plum Island is the Parker River National Wildlife Refuge and its associated natural assets and Sandy Point State Reservation, which is part of Ipswich.

TOPOGRAPHY, GEOLOGY AND SOILS

As shown in Map NR-4. Surficial Geology, Newbury is a low-lying coastal town with a flat to gently rolling terrain ranging from sea level to 168 feet above mean sea level (Old Town Hill). It is bordered on the east by the Atlantic Ocean, Plum Island's barrier beach, and sand dunes, followed by expansive salt marshes interlaced with tidal creeks. It is bordered on the west by gently undulating forested upland and numerous river and stream corridors.

Despite its generally modest elevation range, the Town's surficial geology is quite varied, and consists of dense till or bedrock primarily in the northern, central, and western parts of town; fine-grained deposits in the north central and southwestern parts of town; floodplain alluvium along much of the Parker River, its tributaries, and Plum Island Sound; and sand and gravel deposits along High Road, on Plum Island, and in scattered locations west of High Road. (See Map NR-4. Surficial Geology).

The soils in Newbury are also quite varied and range from very poorly drained "mucky" soils that formed in low-lying wet organic deposits in the eastern part of town to excessively well-drained loams that formed in steeper deposits of glacial till and outwash.

Based on their suitability characteristics for various land uses, as described by the U.S. Soil Conservation Service (Soil Survey of Essex County, Massachusetts - Northern Part, 1981), most of Newbury soils pose moderate to severe limitations for septic system use. (See Map NR-3. Soils). This does not mean that it is illegal, or even inappropriate, to construct septic systems in these soils. Although the SCS Soil Survey broadly characterizes the soil types in Newbury as poorly draining and generally ill-suited to support septic systems, empirical evidence has shown that there are localized pockets of soil in Town that can safely accommodate building construction and septic systems. However, perc tests on sites proposed for development, used to evaluate whether soils can support septic systems, are indicating that more areas in Newbury have limited capacity to support septic systems.

WATER SUPPLY SOURCES

Newbury's water supply needs are met by three sources: the Byfield Water District (for Byfield), the City of Newburyport municipal water system (for Old Town Newbury and Plum Island), and private wells (throughout).

The Byfield Water District (https://www.byfieldwaterdistrict.org/), governed by a Board of Water Commissioners, serves the Byfield area of Newbury (see Map NR-5. Water Resources) via two groundwater wells: one located on Larkin Road near Interstate 95 and one on Forest Street. The Larkin Road well is an 8-inch gravel pack well with a pumping capacity of 149 gallons per minute (gpm). The Forest Street well, installed in 1998, is a deep bedrock well with a capacity of 264 gpm. With its larger capacity and high water quality, the Forest Street well currently supplies most of the District's drinking water, pumping an average of 190,000 gallons per day (gpd). The Byfield water system is also connected to the water systems in the Towns of Georgetown and Rowley for emergency use.

The Byfield Water District and many private residential wells are located in the Parker River watershed. The Parker River is considered one of the most highly stressed rivers in the Commonwealth, according to the Massachusetts Water Resource Commission. From time to time, over recent years, the Parker River basin has suffered from severe low flow, primarily in the vicinity of the Town of Georgetown's water withdrawal sites. Lack of recharge in the upper-watershed (Boxford/Georgetown) causes stretches of the river to run dry, thus limiting water to downstream supplies. Similar low flow issues have occurred at the Byfield Water District's withdrawal points. Byfield Water District's water withdrawals are governed by the Massachusetts Department of Environmental Protection's Sustainable Water Management Initiative, part of the state's Water Management Act. The 2015 permit (#9P2-3-16-205.01) allowed an annual daily withdrawal volume of 0.17 million gallons per day. This permits expired on February 28, 2019.

Currently, the Byfield Water District reports that the two Byfield groundwater sources are sufficient to meet the District's water supply demand except during certain peak periods in summer and fall, when outdoor water use restrictions must be imposed. Over the years, the District has commissioned test well explorations in search of additional water sources, and it is exploring the possibility of an additional well on Larkin Road. In the future, the Town and Byfield Water District may need to explore regional water supply solutions outside of the Parker River basin.

A portion of the Old Town area of Newbury purchases its water from the City of Newburyport. The City presently services residential accounts and business accounts in Old Town, including service to Newbury's entire municipal office complex on High Road. n 2007, Newburyport

9. NATURAL RESOURCES

extended water and sewer service to Plum Island, and currently services all of Plum Island, providing water to the households and businesses within Newbury on Plum Island.

The remaining developed areas of Newbury not served by either the Byfield Water District or the City of Newburyport rely on individual on-site wells for their water supply needs. The Massachusetts Department of Environmental Protection (DEP) conducted a study in 2018 to determine the impact of all of the water withdrawals in the Parker basin, both public withdrawals and private wells. The results of this study may draw more attention to the impact of private wells both hydrologically and ecologically, which may result in expanded regulations in the future.

SURFACE WATER RESOURCES

PARKER RIVER AND WATERSHED

The Town of Newbury is located primarily in the Parker River watershed (a small portion of the town is in the Merrimack River watershed). The Parker River is approximately 23 miles long and its watershed covers approximately 82 square miles in Essex County. Municipalities located partially or wholly in the Parker River watershed include Boxford, Georgetown, Groveland, Ipswich, Newbury, Newburyport, North Andover, Rowley, and West Newbury.

The Parker River and its tributaries are the dominant surface water resource in Newbury (see Map NR-5. Water Resources). The mainstem of the Parker River flows generally easterly into and through Newbury from its headwaters in the towns of Boxford, Georgetown, Groveland, and West Newbury, eventually emptying into Plum Island Sound. The river is fresh water upstream from the Central Street Dam and brackish in the roughly 9-mile tidal reach below the dam. The Parker River's final three miles lie within the state (Executive Office of Energy and Environmental Affairs (EEA))-designated Great Marsh Area of Critical Environmental Concern (ACEC), (originally called the Parker River/Essex Bay ACEC), a 34-square mile multitown area of physical beauty and biological richness.

Water quantity metrics (median annual 7-day low flow, median annual 30-day low flow and median of annual low pulse duration)⁴¹ indicate the Parker River is potentially the most stressed river in Massachusetts based on the stream flow data collected at the Byfield USGS Gauge (MWRC 2001). The Parker River mainstem experiences chronic seasonal low flows, affecting the provisions of water to the public as well as having negative impacts on local fish and wildlife populations. In the summer and fall, high household demand for water – particularly for outdoor uses such as lawn watering – coincides with the Parker River's natural low flow period, leading to extreme flow stress on the river. Low flow in the Parker River throughout the watershed continues to be problematic and is becoming an annual no flow period through July, August and September. As witnessed during the recent and prolonged droughts of 2016 and 2022, climate change is causing even more stress on water supply sources.

Because all water is interconnected underground, reducing the impact of nonessential outdoor water use from private wells during droughts is as important reducing the impact from the public water supply. Nearby North Shore towns, including Ipswich, Hamilton, Wenham, and Topsfield, have incorporated language into their water use restriction bylaws holding private well users to the same water conservation requirements as public water users. While the

⁴¹ A flood pulse is the periodic inundation and drought in a river system. Source: https://en.wikipedia.org/wiki/ Flood pulse concept, last accessed May 24, 2023.

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bylaw grants authority to impose restrictions, the details of the restrictions are often specified separately in drought management plans.

As noted previously, DEP's Water Management Act permits for the Parker Watershed water suppliers expired in February 28, 2019. The State expressed concerns about the Byfield Water District's current exceedances over its allocated amount in the 2015 permit, which may lead to future enforcement actions if not addressed.

When considering water resource management and quality, is it also necessary to consider tributary inputs into the primary river. Two major tributaries of the Parker River in Newbury are the Little River and the Mill River.

LITTLE RIVER

The Little River is roughly seven miles long and flows southward through Newburyport, entering the Parker River above Route 1A and the Newbury Town Landing. About four miles of the Little River is tidal and includes a three-mile reach within the ACEC. Dominant land uses within the Little River subwatershed include expansive forest and farmland (including the "Common Pasture"); the Newburyport Industrial Park and commercial retail properties; an inactive landfill (Newburyport); a closed, capped, and lined landfill (Newbury); and extensive salt marsh. Important natural resources in the watershed include biologically rich upland, wetland, and riverine habitats that support diverse plant and wildlife species, including several rare and threatened species. Water quality studies of the Little River by the Massachusetts Audubon Society and the Merrimack Valley Planning Commission in the 1990s showed the Little River to be a significant contributor of fecal coliform bacteria to the Lower Parker River and Plum Island Sound. Suspected sources of this pollution, which contribute to the closure of the area's shellfish beds, include agricultural and urban runoff, inadequately functioning septic systems, and leaky sewers in the Newburyport Industrial Park.

MILL RIVER

The Mill River originates in the Georgetown-Rowley State Forest and flows northeasterly through Rowley, joining the Parker River in Newbury at Oyster Point about a mile east of The Governor's Academy. The lower reach of the Mill River forms the boundary between Newbury and Rowley. At 8,200 acres, the Mill River subwatershed is the largest of the Parker River's subwatersheds and provides important spawning habitat for several anadromous fish species including blueback herring and rainbow smelt. This tributary flows primarily through forested land, but also abuts several farms, residential areas, and a golf course; activities which can contribute to water quality degradation through stormwater and other nonpoint source pollutants. Much like the Little River, the Mill River is home to numerous plant and wildlife species which attract enthusiasts to its shores, supporting ecological and recreational enjoyment.

WATER QUALITY

The Parker River Clean Water Association (PRCWA) collects water quality data along the Parker River and its tributaries, including four sites in Newbury:

- PR10: Parker River at Central Street (Byfield)
- PR11: Parker River at Newbury Town Landing
- LR12: Little River at Hanover Street
- MR17: Mill River at Route 1/Elm Street (South Byfield)

Water quality monitoring data collected by PRCWA in 2017⁴² shows the Mill River had significantly higher nutrient (nitrogen and phosphorus) concentrations than other Parker River locations. The origins of these pollutants are not known but are not considered to be entirely naturally occurring and therefore likely derive from stormwater runoff and other nonpoint sources of pollution.

Development activity in the Parker River watershed is clearly having adverse impacts on the river system, including impairment of water quality, changes to the natural flow regime, and stress on the availability of water for residential and business use. With increased development comes greater impervious surface area, less rainfall infiltration, higher peak runoff rates, and lower base flows in the river. In spite of these impacts, the Parker River remains a vital natural resource of uncommon beauty and biological diversity, supporting an abundance of fish, shellfish, and wildlife populations. Protecting the river's streambanks, natural stream flows, water quality, and general ecosystem health in the face of these pressures requires vigilance and the implementation of effective management strategies by Newbury, its neighboring watershed communities, and partnering organizations.

The greatest collective threat to Newbury's inland estuarine, and coastal water resources is from nonpoint source pollution. By definition, nonpoint source pollution derives from a wide range of diffuse sources including runoff of nutrients, chemicals, and other toxins from roads, lawns and gardens, farms, parking lots, golf courses, and other developed areas. It also includes insufficiently treated sewage effluent from septic systems. Unchecked, nonpoint source pollution can significantly impair rivers, streams, ponds, wetlands, aquifers, and coastal waters through the introduction of a "witch's brew" of contaminants (sediment, nutrients, bacteria, and toxic substances among others) which support the accelerated growth of weeds and algae. Because it is diffuse and is often the accumulated result of many small actions whose origins are difficult to trace, nonpoint source pollution is usually best controlled through

⁴² http://parker-river.org/; last accessed December 13, 2022.

several strategies applied in combination, namely through the implementation of buffers and other best management practices which absorb nonpoint source pollution loads prior to their introduction into the watershed.

WETLAND RESOURCES

In addition to its rivers and streams, Newbury has a rich variety and distribution of both fresh water and salt water wetlands (see Map NR-5. Water Resources). Together, these wetland resources provide outstanding habitat for a wide variety of species of plants, birds, fish, shellfish, and other wildlife.

The fresh water wetlands comprise 1,675 acres, or 10% of the Town. Fresh water wetlands are most prevalent along the freshwater portion of the Parker River system but also occur in scattered upland locations away from the river. The wetlands provide essential functions, including flood control, pollution attenuation, and sustaining streamflows during periods of drought. They also are core habitat for plant and wildlife species, including beaver, otter, and other fur-bearing mammals. Additional habitat, in dispersed locations, include vernal pools, 34 of which are state-certified. These small, temporary, isolated wetlands (represented by colored triangles on the map) provide critical habitat and breeding grounds for a variety of sensitive vertebrate and invertebrate wildlife species, including the rare wood frog and mole salamander which breed exclusively in vernal pools.

Newbury's salt marsh is perhaps the Town's most prominent and visually stunning landscape feature. The marsh comprises over 5,200 acres, or almost one-third of the total area of Town. Part of the vast 25,500-acre Great Marsh ecosystem that extends 17 miles from Cape Ann to the New Hampshire border, the Newbury salt marsh is a transition zone between the land and sea and serves many important ecological and physical functions. These include habitat for multiple marine and estuarine species, filtering of runoff pollutants from upland areas, mitigation of coastal storm surges and of shoreland erosion. The tidal wetlands serve as vital nursery and spawning areas for many fish and shellfish species, including striped bass, winter flounder, and the commercially important soft-shell clam. In addition, they provide prime breeding, migration, and winter habitats for a wide array of bird and waterfowl species, including the Least Bittern, Piping Plover, and American Black Duck. In November 2004, in recognition of its high ecological value to birds, the Great Marsh was designated a "Site of Regional Importance" in the Western Hemisphere Shorebird Reserve Network. The MassAudubon Society has described the Great Marsh as one of the most important coastal ecosystems in northeastern North America.

A significant part of Newbury's tidal wetlands lies within the federally protected Parker River National Wildlife Refuge. Established in 1942 and managed by the U.S. Fish and Wildlife

Service, the Refuge contains 4,662 acres of tidal marsh, fresh water impoundments, bogs, and sandy dunes. The Refuge is one of the few barrier beach-dune-salt marsh complexes remaining in the Northeast. The Refuge is home to over 800 species of plants and animals and is considered one of the top ten bird watching sanctuaries in the United States.

For a comprehensive discussion of the natural resource features and values of the Great Marsh ecosystem in Newbury, consult the Newbury Estuarine Management Plan (2005) and the Great Marsh Coastal Adaptation Plan (2017).

VERNAL POOLS

Vernal pools are an important but vulnerable wetland resource in Newbury. Unlike perennial wetlands, vernal pools are small, seasonal water bodies that occur in isolated basins which are usually wet during the spring and early summer and dry up as the summer progresses. Vernal pools typically lack fish populations, making them ideal breeding habitat for many amphibian species. The wood frog (Rana sylvatica) and all species of mole salamanders (genus Ambystoma) that occur in Massachusetts breed exclusively in vernal pools. Areas in the immediate vicinity of these pools also provide these species with feeding, shelter, and overwintering sites.

Local volunteers inventory vernal pools, and biologists from the Massachusetts Natural Heritage and Endangered Species Program (NHESP) review and certify these pools. The Massachusetts Wetlands Protection Act (WPA) protects Certified Vernal Pools for their wildlife habitat value, provided they are large enough to constitute "Areas Subject to Flooding" (as defined by the WPA). However, the State Wetlands Act coverage does not extend protection to smaller Certified Vernal Pools or those that have not yet been inventoried. The protection of Newbury's vernal pool habitat is essential for the continued survival of wildlife species that depend on this unique wetland type.

In 2001, Newbury established a local wetlands bylaw limited to coastal resources on the Plum Island Barrier Beach. While the WPA provides significant protection for wetlands in Massachusetts, it does not cover certain important resources such as isolated wetlands, buffer zones, vernal pools, and historic and archaeological resources. A growing number of communities have chosen to supplement this Act with local wetlands regulations that provide additional protection, as well as greater control over the review of projects proposed in or near wetlands. See Chapter 12: Tools and Resources for components of local wetlands regulations.

COASTAL RESOURCES

A defining feature of the Newbury landscape is over five miles of coastal beach on Plum Island. This barrier island is not only an important recreational resource, but aids significantly in storm attenuation, preventing damage and associated coastal flooding on the mainland. The coastal barrier beach and dune system is a dynamic resource, subject directly to the forces of the Atlantic Ocean. In recent history, significant changes to the coastal beach have occurred, namely the rapidly evolving migration and dispersal of barrier island sediments due to natural longshore drift expedited by sea level rise and increases in storm frequency and intensity. The northern 1.8 miles of beach is fully developed with homes and businesses, whihe are subject to damage from coastal floods. The remainder of the beach in Newbury is within the Parker River National Wildlife Refuge where the barrier beach is allowed to function without manmade constraints.

Erosion of dunes and beaches has been a problem for many years but has become more important recently due to expansion of existing oceanfront homes and construction of large year-round residences. In 2002, the Town was compelled by Massachusetts Department of Environmental Protection (DEP) to improve the quality of water available to residents, which was in many areas contaminated due to saltwater intrusion and the proximity of wells to septic systems. Municipal water and sewer service was extended to Plum Island from the City of Newburyport.

Despite zoning controls in the Plum Island Overlay District (PIOD) and guidance from a Plum Island Barrier Beach Wetland Bylaw, the Island became a more desirable year-round community and homes were expanded and improved. Significant beach erosion began impacting the beach north of Plum Island Center. A 2008 storm resulted in the loss of a dwelling and damage to many others. The Town, along with the City of Newburyport and other partners, took part in a beach nourishment project using dredged Merrimack River sediment pumped directly on the beach along an area from the Center northward. About the time the nourishment project was completed, the beach south of the Center began experiencing significant erosion. A "soft" solution of coir bags with sand from off-island was deployed in the affected areas. In 2013, a series of long-duration winter "nor'easters" battered the beach from the Center south, resulting in the destruction of six houses and raising concern about the proximity of erosion to water/sewer system infrastructure.

Without any regulatory path to allow stabilization of dunes along Annapolis and Fordham Ways, homeowners paid for a revetment that has been somewhat effective so far in protecting this specific area from further storm damage, but requires significant maintenance and additional material at frequent intervals and may shift the damage to adjacent properties.

Many believed the source of this beach erosion was the deteriorated jetties at the mouth of the Merrimack River which allowed for a strong south to north flow, trapping sediment in the Merrimack. In 2014, jetty repairs were completed. Slow accretion is underway south of the Center, but a number of homes remain in a compromised position. The gyre effect from the jetty repair may have contributed to the current erosion occurring on Reservation Terrace in Newburyport.

Several nourishment and stabilization efforts have been conducted to combat this erosion in recent years, including the ongoing dredging of the Merrimack River by the United States Army Corp of Engineers, with the intention to place 250,000 cubic yards of sediment onto the island. However, the estimated lifespan of this beach fill is only 3-4 years. The Department of Conservation and Recreation's 2021 Regional Sediment Management study, acknowledges that while beach nourishment is a short-term solution "unless steps are taken to disrupt the erosive forces on the shoreline (i.e., structural improvements), the shoreline is likely to continue to erode at a rate of 30-70 feet per year." The study further notes current concerns surrounding the jetty system at the mouth of the Merrimack River, stating that while the unraveling of the south jetty would reduce erosive pressure on Reservation Terrace, it would likely result in increased erosion to the east facing coastal beach, as was experienced during the last period of jetty disrepair prior to 2013. To combat this, the study recommends creating a weir (20-30 meters in length) by lowering a portion of the southern jetty to allow flow to pass over in a controlled manner. To further reduce the chance of unintended erosion along the coastal beach, it is recommended that stone removed from the formation of the weir could be used as a jetty spur to better control the passage of water and sand.

In addition to the bylaws and studies mentioned above, a PLUM ISLAND BEACH MANAGEMENT PLAN and associated Order of Conditions offers guidance for activities to stabilize the beach. The Merrimack River Beach Alliance, a group including municipal officials from Newbury, Newburyport, and Salisbury, state legislators, MA DCR, ACOE, other interested stakeholders, and interested residents, meets regularly to consider issues related to the barrier beach, plan remedial action, and develop funding to carry out those plans.

THE GREAT MARSH

The Great Marsh is a critical component of coastal resiliency for the entire region. Specialized planning efforts for the Great Marsh are described in the discussion of the 2017 Great Marsh Coastal Adaptation Plan, strating on page 214.

FOREST RESOURCES

In addition to its extensive wetland system, Newbury has abundant forested upland (see Map LU-1. Land Uses). Much of this forest is protected as state, municipal, or nonprofit conservation land. The largest of these conservation holdings, containing mixed forest and wetlands, are two state Wildlife Management Areas (1,462-acre Martin Burns WMA and 1,294-acre William Forward WMA) and the 497-acre Old Town Hill Reservation, owned and managed by the Trustees. Numerous smaller forest areas exist in scattered upland locations, some as private property woodlots.

According to the state's 2003 land use figures for Newbury, over 5,600 acres (or 33% of the Town) was forested at that time. This represented a decline of about 550 acres (9.8%) since 1971. Most of this forest loss was due to new residential development.

Newbury's forests absorb and store carbon, absorb and filter ground water, slow water flows and provide habitat and shelter for a broad array of plants and animals, including larger mammals such as White-tail deer and fox, and a wide variety of species of woodland birds, such as Indigo Bunting and Wood Thrush. Future development and encroachment into priority woodland habitats could threaten the local viability of specific wildlife populations. Of particular concern is the potential fragmentation of existing migration corridors that currently provide safe passage for wildlife and that serve as vital links to essential food, water sources and breeding grounds. Protecting these vegetated corridors from human development and influence should be a priority focus of the Town's future planning and land preservation initiatives.

AGRICULTURAL RESOURCES

Town residents consider Newbury's agricultural land to be one of the Town's most important and community-defining natural resource assets. As of 2016, 1,137.17 of Newbury's 16,530 acres (approximately 6.9%) were considered as agricultural use, a loss of 401 acres or 26% since 1999. 53.67 of the acres devoted to agriculture are considered cultivated, 293.35 acres are pasture/grassland, 329.05 acres are forested, 3.26 acres are water or shore, 9.94 acres are developed open space, 12.9 acres are shrub or bare land, 428.88 are wetlands and 6.12 acres are impervious. Much of this agricultural land is concentrated along Green Street, High Road (Route 1A), Scotland Road, Middle Road, and Orchard Street. (See Map LU-1. Land Uses).

THE COMMON PASTURE

The Common Pasture dates to Newbury's original settlement in 1635 when the land was held in common and used for raising and grazing livestock, even by landless residents who made a living livestock farming. Early farms in the Common Pasture included Capt. Richard Coffin's Farm and Samuel Thurlow's Farm. The pasture now supports three viable working farms.

The Common Pasture contains some of the finest moist grassland remaining in the eastern half of Massachusetts. It is a floodplain wet meadow system accepting sheet flow in the springtime and during large storms. It produces smaller channelized water flow the rest of the year. Wet meadow is the least common type of wetland in the Commonwealth. The Common Pasture has been recognized as habitat to rare animal species such as American Bittern, Northern Harrier, Spotted Turtle, Blue Spotted Salamander, and Barn Owl and rare plant species, such as Long's Bullrush and Hemlock Parsley. A long history of grazing and hay production have contributed to the longevity of these species by maintaining the proper environment for them to thrive. While the Essex County Greenbelt Association and the Town of Newbury have acquired some parcels in the Common Pasture, a number of key parcels in the common Common Pasture have yet to be protected. Soils are heavy, moist, and fertile with very few rocks.

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ORCHARD STREET/MIDDLE ROAD

The Orchard Street/Middle Road area contain several key agricultural parcels currently in private ownership and susceptible to development. Some parcels abut the Martin H. Burns Wildlife Management Area and Great Meadow. Other conservation areas in this area include the William Forward WCE, the Orchard Street Conservation Area, and land owned by the Byfield Water District.

The medium sized parcels on Orchard Street also support several small farms and agricultural activities in Newbury.

HIGH ROAD/GREEN STREET

This area includes agricultural parcels, but only some are protected. Soils are generally moist and fertile with ledge and some stones. These sandy areas can be affected by drought and contain fairly fertile well-drained soils.

PROTECTED OPEN SPACE AND PRIORITY HABITATS

As part of the master planning process, information from various local and state data sources was assembled to identify the location and extent of existing protected open space and priority habitats in Newbury. Shown in the accompanying two maps (Map NR-1. Open Space and Map NR-2. Priority Habitats), this information can be used to help identify and prioritize areas of special natural resource significance for future preservation efforts.

Map NR-1. Open Space identifies currently protected open space in Newbury, categorized by ownership type (federal, state, municipal, private, etc.), acreage, and percent of Town covered. The Priority Habitats Map shows areas of special natural resource significance. The latter map was constructed by superimposing (aggregating) a series of 15 different natural resource datasets. Using five color gradations ranging from light green to dark green, areas having varying natural resource values were identified. Those areas shown in darkest green combine the greatest number of natural resource features, and thus may warrant special consideration for protection if not already preserved.

Map NR-2. Priority Habitats also depicts additional resource areas that knowledgeable Town residents have identified through direct observation as being especially important from a natural or cultural resource perspective. These areas are categorized under the three headings of wildlife resources, wetland and water resources, and scenic and cultural resources, and are shown as broad polygons on the map. Areas where the polygons intersect contain multiple resource values. It should be noted that the boundaries of these resource areas are not intended to be precise, but merely indicative of general locations of special resource significance.

The Essex County Greenbelt Association also maintains priority maps for land preservation.

HABITAT AND WILDLIFE CORRIDORS

In addition to their great natural beauty and recreational value, Newbury's riparian corridors (rivers, streams, and adjacent lands), including the Parker River and its tributary streams, provide diverse habitat for numerous flora and fauna. This includes a number of what are ordinarily considered "upland" species as well as wetland species. For example, many upland animals need ready access to rivers and streams for foraging and drinking, particularly in winter when ponds and other water sources may be frozen over. Streamside vegetation (whether living, decaying, or dead) plays a key role in the health and function of riparian areas as wildlife habitat. Vegetation offers essential shade, shelter, and food for many species, including fish and other aquatic organisms. It also helps to regulate stream flow and water quality by stabilizing stream banks, preventing erosion, and filtering runoff pollutants.

Another important characteristic of naturally vegetated riparian areas is their ability to connect different areas. Undeveloped lands along Newbury's river and stream corridors provide vital connective lifelines that enable wildlife movement necessary to sustain healthy and genetically diverse wildlife populations. Loss of these connective corridors results in habitat fragmentation and genetic bottlenecks, a major cause of wildlife decline and even extinction. For example, many species of reptiles, amphibians, and mammals need to be able to migrate freely to new habitat for successful feeding and breeding. This allows for the continuous exchange of genetic material between species populations, a critical factor in maintaining species' resilience to disease and environmental changes. It is key, therefore, to maintain undeveloped and naturally vegetated corridors between habitats of a sufficient width to enable animals to travel safely from one habitat to another. Allowing habitats to become isolated "islands" surrounded by development will cause them to lose much of their ecological value even though the habitats themselves may not be directly impacted.

The best way to protect wildlife habitat functions and species diversity within Newbury's riparian areas is to maintain these areas in an undisturbed, interconnected, naturally vegetated condition. Numerous studies have shown the value of natural vegetation over manicured lawns, cropland, and other actively "managed" landscapes for wildlife diversity and productivity. These studies have also found that, in general, significantly larger streamside forest buffer widths are needed for wildlife habitat purposes than for water quality purposes. While the Massachusetts Rivers Protection Act (administered by the local Conservation Commission) establishes a 200-foot wide protective buffer along perennial stream courses, in fact, 300 feet is the generally accepted minimum width needed to provide adequate habitat and migration corridors for many wildlife species. For example, surveys of songbird use of riparian areas recommend that riparian forests be at least 100 meters (330 feet) wide to provide nesting habitat for neotropical migrants, such as the Indigo Bunting, Northern Oriole, and Wood Thrush.

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Previously disturbed riparian areas that remain in a degraded condition may present opportunities for restoring important wildlife habitat functions. For example, any work that removes pavement or lawn near the water's edge and replaces them with a vegetated buffer of native trees and shrubs is likely to benefit fish and wildlife by filtering polluted runoff and by providing shade, cover, and food sources.

In general, the farther away a building site or other land disturbance is from a stream bank, the smaller the adverse impact on wildlife habitat and movement. Where some alteration within a riparian area is unavoidable, it should be designed and implemented in a manner that minimizes any loss of function within the site itself as well as any loss of connectivity with adjacent vegetated lands.

IMPACTS ON NATURAL RESOURCES FROM THE CHANGING CLIMATE

The Town of Newbury faces a unique combination of threats exacerbated by climate change and sea level rise, and thus will need numerous and diverse strategies to address these challenges. The Town's diverse and interconnected habitats – a coastal barrier beach linked by a marsh system to a riverine environment that flows through or is adjacent to farms, fields, and forests – creates microcosms of conditions that have unique challenges and opportunities.

The Commonwealth of Massachusetts maintains a clearinghouse of data, open to all, that provides projections for climate change and resources to address the anticipated impacts (https://resilientma.mass.gov/). The climate change dashboard allows users to filter results by both Town and watershed, and to establish target decades to evaluate how change happens over time. This database is evolving, and information that is on the site now was not available during the earlier iteration of the planning process for this 2023 Master Plan.

Most projections indicate that the New England climate will become warmer and wetter, but the pattern of precipitation will shift so that there will be more frequent and more intense storms, but in different seasons. Such a shift has a huge impact on the natural environment, with periods of drought causing stress for wildlife and vegetation. Warming temperatures are already allowing invasive pests to move further north; the spread of the Emerald Ash Borer is an example of the devastation one pest can have on a single species.

The Newbury community values its agricultural heritage and working farms; the predicted shift in weather patterns will have an impact on farming practices. The shift in patterns of precipitation will affect the timing of planting and harvests while a higher average temperature will have an impact on the growth of crops. Livestock, like humans, are stressed by hot weather, and, over time, the number of heat waves during the summer months is expected to increase. Drought is more likely in the summer months, and as noted above, the Parker River and groundwater supplies are already stressed by periods of drought.

Climate change will have an impact on the entire town, but sea level rise will have a greater impact on some parts of Newbury than on others. Plum Island and the Great Marsh are most at risk from rising seas and even more vulnerable when the probability of more frequent intense storms is included. In addition to the reports discussed below, NOAA has an online map of sea level rise that allows users to evaluate different scenarios (https://coast.noaa.gov/slr/#.) The Town of Newbury and City of Newburyport are collaborating on a planning process for Plum Island to identify specific areas of vulnerability. That effort is documented here: https://www.plumislandsealevelrise.com/. The Great Marsh is the subject of a regional planning process, available here: https://www.nwf.org/greatmarshadaptation.

LOCAL AND REGIONAL PARTNERS FOR PROTECTING NATURAL RESOURCES

Newbury is fortunate in having so many local partners active in protecting and preserving natural resources. Some of these partners include the following organizations:

- Essex County Greenbelt Association
- Essex National Heritage Commission
- Governor's Academy
- Great Marsh Coalition
- Historic New England
- Ipswich River Watershed Association
- Massachusetts Audubon Society
- Massachusetts Department of Conservation and Recreation
- Massachusetts Office of Coastal Zone Management
- Parker River Clean Water Association
- Parker River National Wildlife Refuge
- Plum Island Long Term Ecological Research Project
- The Trustees (formerly The Trustees)

9. NATURAL RESOURCES

The Town of Newbury and others in the region have been proactive about quantifying the risks of climate change and sea level rise and identifying the vulnerabilities of assets in the town to both conditions. This chapter summarizes the contents of the planning processes that address the Town's vulnerabilities to climate changes. Information and recommendations that have an impact on Town services, such as stormwater management, is included in Chapter 5. Community Services and Facilities.

2016 MERRIMACK VALLEY REGION: MULTI-HAZARD MITIGATION PLAN UPDATE

The Merrimack Valley Planning Commission (MVPC) developed this regional assessment of community vulnerabilities to natural hazards and non-natural hazards. The planning team identified risks and assets by community and provided mitigation action plans for each community along with a regional action plan. In 2023, MVPC began an update to this plan, which will include the production of individual plans for each community.

Some of the assessments and recommendations are more relevant to Chapter 5. Community Services and Facilities and will be addressed there. In terms of natural resources, the plan notes that the Parker, Little, and Mill Rivers are accompanied by adjacent flood hazard zones. The plan notes that the combination of riverine flooding and high ocean tides can be "truly devastating." In addition to Plum Island and the Plum Island Turnpike, the report documents fifteen other areas of special concern for flood hazards.

Participants identified coastal and inland flooding as the most significant risk, with Winter storms and Nor'easters also in the high-risk category. Other natural hazards include hurricanes, drought, and wildfires/brush fires (moderate), and tornadoes, earthquakes, and landslides (low).⁴⁴ During the new planning process, all hazards will be considered in the context of climate change, and additional hazards which are impacted by climate change, including sea level rise and invasive species, have been added to the plan.

2017 GREAT MARSH COASTAL ADAPTATION PLAN

In 2017, several organizations worked together to produce the Great Marsh Coastal Adaptation Plan, including the lead organizations: the National Wildlife Federation and the Ipswich River Watershed Association. The report includes an assessment of vulnerabilities

⁴³ MVPC, Merrimack Valley Region: Multi-Hazard Mitigation Plan Update, 2016, p. 187.

⁴⁴ Ibid., p. 194.

and strategies and recommendations for six towns: Essex, Ipswich, Newbury, Newburyport, Rowley, and Salisbury. Each town provided representatives from staff, elected officials, and local organizations as members for a community-specific task force.

In Newbury, the Great Marsh is 30% of the land mass in Newbury, compared to residential at 14% and agriculture at 10%.⁴⁵

The report contains a detailed assessment of vulnerabilities in Newbury, which is summarized below:

- Flooding from the coast, Parker River, Little River, and tidal creeks
- Erosion, especially on Plum Island which protects the interior of Newbury
- High exposure to sea level rise and storm surge.
- High risk for winter storms, including Nor'easters.
- Threats to economic development, including agriculture, soft-shell clam landings, and tourism (primarily to Plum Island and Parker River National Wildlife Refuge, which includes the Great Marsh).
- Threats to community facilities, including the sewage pumping station on Plum Island, the basement of Town Hall, the Plum Island Airport, roads, rail lines, bridges, dams, and the power grid (including Seabrook Station Nuclear Power Plant.

The report also identified areas of special concern that would have a negative impact from flooding:

- Plum Island Turnpike
- Plumbush Downs
- Plum Island sewage pumping station
- The approach to the Newbury Elementary School (an emergency shelter) along Hanover Street at the Little River
- Newburyport Turnpike/Route 1
- The Lord Timothy Dexter Industrial Green and the Newburyport MBTA Train Station (although in Newburyport, the barriers to the flow of water are in Newbury)

⁴⁵ Schottland, Taj, Melissa G. Merriam, Christopher Hilke, Kristen Grubbs, and Wayne Castonguay. 2017. *Great Marsh Coastal Adaptation Plan*. National Wildlife Federation Northeast Regional Office, Montpelier, VT., p. 55.

9. NATURAL RESOURCES

- Plum Island
- Low-lying houses along the bayside of Plum Island
- The Great Marsh, including habitat
- The Governor's Academy, including Middle Road
- The Plum Island Airport
- The Massachusetts Bay Transportation Authority (MBTA) Newburyport Train Line

Other components of Newbury's community that are located in the coastal-hazard zones include the following:

- Populations that are vulnerable due to age, disability, household tenancy, income, unemployment, or education.
- Employers and their employees
- Private properties

The report estimated that the loss due to building loss and business disruption due to a 10-year storm could be as much as \$28.9 million.⁴⁶ A 10-year storm has a 10% chance of occurring in any given year.

A follow-up plan is the Great Marsh Barriers Assessment (February 2018) which can be found at www.pie-rivers.org/barriers.

2018 MUNICIPAL VULNERABILITY PREPAREDNESS WORKSHOP

In 2018, Horsley Witten Group, Inc. assisted the Town of Newbury with the creation of a Municipal Vulnerability Plan. This program, developed and sponsored by the Massachusetts Executive Office of Energy and Environmental Affairs (EEA), helps communities identify and address areas of vulnerability to climate change with response to societal, infrastructural, and environmental components. Participants in the workshop identified four hazards of greatest concern: sea level rise, severe storms, extreme temperatures and drought, and inland and coastal flooding.⁴⁷ As a result of this planning exercise, the Town is now designated as an MVP Certified Community and is eligible for funding through the EEA's MVP Action Grant program.

⁴⁶ Ibid., p. 72.

⁴⁷ Town of Newbury and Horsley Witten Group, *Newbury Municipal Vulnerability Preparedness Workshop Summary of Findings*, 2018, p. 5.

For natural resources, the participants also identified two key natural resources that are at risk from these hazards: the Great Marsh and coastal habitat and the Plum Island Barrier Beach. Negative impacts from climate change include increased coastal flooding from both heavy rains and storm surge, continued beach and dune erosion, and the health of the salt marshes.⁴⁸ Other identified hazards, including inland flooding and drought, will also have a negative impact on Newbury's natural resources.

Natural resources also reduce the negative impacts from climate change. As noted in the report, local farms provide a local food supply and opportunities for community interaction while Plum Island, the salt marshes, and other protected land reduce the impact from flooding. All three also provide valuable habitat for wildlife.⁴⁹

2020 STATE OF THE COAST REPORT: NORTH SHORE

This report is part of a series by The Trustees, with the sponsorship of Breckinridge Capital Advisors, is preparing for the entire length of the Massachusetts coast. The Trustees released State of the Coast: Future Climate-Driven Risks—and Their Solutions—on Massachusetts' North Shore in 2020. In addition to a general discussion of the impacts of sea level rise and increase precipitation on coastal resources such as barrier beaches (Plum Island) and salt marshes (the Great Marsh), the report provides a town-by-town assessment of the North Shore communities.

For Newbury, the report identifies four main impacts:50

- Erosion on the developed portion of Newbury Beach, north of Parker River National Wildlife Sanctuary, threatens ocean-front neighborhoods, with up to 4.6 feet of beach already lost per year.
- Marsh loss: By 2050, the town's low marsh may increase by 61% as high marsh transitions to low marsh.
- Habitat concerns: By 2050, about 115 (18%) of the town's 637 acres of estuarine beach/ tidal flats could become open water.

⁴⁸ Ibid., p. 6.

⁴⁹ Ibid., p. 7.

⁵⁰ Trustees of Reservations, State of the Coast: Future Climate-Driven Risks—and Their Solutions—on Massachusetts' North Shore, 202, p. 14.

9. NATURAL RESOURCES

 Developed coast: Daily tidal flooding of Newman Road and Pine Island Road may occur in 2050. Ten-year storm flooding of roads and buildings on Plum Island, Northern Boulevard, and Plum Island Turnpike is likely in 2050, with some daily tidal flooding.

Other impacts include the following:51

- Property damage: A 10-year storm in Newbury may flood more than 609 buildings (14.6%) in 2050 [CIT. 3]. Chronic daily tidal flooding could impact 44 buildings (1.1%) in 2050.
- Road flooding: Daily high tides may flood almost 1.7 miles (1.9%) of roads in 2050. An
 estimated 18.5 miles (20.5%) of roadway could flood in the event of a 100-year storm
 in 2050.

Newburyport's Wastewater treatment plant, which serves part of Newbury, is also threatened by salt water infiltration which can corrode the equipment and lead to a potential release of untreated water, causing public health risks.⁵²

The report includes a link to online resources, including maps showing existing flooding risk and projected risk for 2030 and 2050 (https://www.onthecoast.thetrustees.org/).

2021 EXPLORING THE FISCAL IMPLICATIONS OF SEA LEVEL RISE: PLUM ISLAND

The Town of Newbury and City of Newburyport worked with a consultant team that included the Horsley Witten Group, Camoin 310, and the Consensus Building Institute to develop an understanding of the economic and fiscal implications of addressing the impacts of sea level rise on Plum Island. This is a scenario-based planning process that uses 2030, 2050, and 2070 as the target years for assessing impacts. (These base years are standard points of reference for most communities assessing their vulnerability to sea level rise). The website includes a list of resources, including regional planning efforts, that are valuable for Newbury residents seeking more information. (https://www.plumislandsealevelrise.com/)

⁵¹ Ibid.

⁵² Ibid., p. 13.

THE ROLE OF DEVELOPMENT

The town does not have to place a moratorium on development in order to preserve and protect its natural resources. In fact, development, when done appropriately, can help with preservation by clustering buildings to protect wildlife corridors, restoring riparian edges, integrating green building techniques and alternative energy sources, and developing or renovating buildings that are energy- and water-efficient.

Important tools include, but are not limited to the following: zoning and other bylaws; continuing to adopt Massachusetts regulations for building codes, stormwater management, wastewater management; identifying critical land for protection and transfer of development rights; and working with the many partners in the region.

10. TRANSPORTATION

OVERVIEW

Virtually all Newbury residents rely on the local and regional transportation network in carrying out their daily activities. They use it to drive or take the train to their jobs, travel to medical appointments, to make shopping and social trips, and for the delivery of goods and services.

Newbury's transportation infrastructure has also served as a foundational element for how the town has developed and grown and continues to have an important influence on where development can occur today (roadway frontage requirements, parking requirements, etc.). Historically, the construction of Route 1A, then Route 1, the institution of train service, and, more recently, the construction of Interstate 95 and resumption of train service in the late 1990s have all played critical roles in both connecting Newbury to the outside world and impacting how and where residential and commercial growth has occurred within the community.

In performing the above and other functions, the transportation network can either greatly enhance or adversely impact residents' quality of life. The public's concept and expectation of what the transportation network should provide has changed markedly in recent years. It is no longer enough that roadways in suburban and rural communities simply be in good condition and with minimal traffic congestion . These roads must also be safe, provide accommodations to persons who wish to walk or ride bicycles, and address community preferences for the balance between congestion and maintaining historic roadway patterns. As the population ages, there is a growing belief that the transportation network should provide mobility to those who cannot or choose not to drive, through such options as shared vehicle providers like Uber and Lyft, demand response van services, local buses, commuter bus service and trains.

Recognizing this changing landscape, MassDOT has taken steps to provide this new kind of transportation network in the Commonwealth. In 2010 it adopted the Healthy Transportation Initiative, which mandates that the Department and communities consider applying a 'Complete Streets' approach (see Page T-23) to improving its roadways and bridges and offering more mode choices to residents when making their trips to reduce Greenhouse Gas emissions made by single occupancy vehicles on our highways.

This chapter of Newbury's 2023 Master Plan recognizes and addresses both the traditional elements and roles of the transportation network (e.g., condition of bridges and roads, traffic volumes, availability of transit services, etc.) and identifies opportunities for the community to improve transportation modes that are growing in importance such as walking, bicycling and even boating.

The first section examines the existing transportation network and infrastructure in the community while following sections, based on the Town's Transportation Goals, discuss important components of the network in more detail and contain recommended strategies for further action. The issues discussed in this Element, the Transportation Goals and recommended Strategies were developed by the Newbury Master Plan Transportation subcommittee using available data, the results of the Master Plan Survey, the 2006 Master Plan and discussions between MVPC Transportation Staff and Town officials as part of the development of the Merrimack Valley Metropolitan Planning Organization's MVision2050 Metropolitan Transportation Plan (MTP).

EXISTING TRANSPORTATION FACILITY INVENTORY

ROADWAYS

The MassDOT 2022 Road Inventory File shows that there are 69.72 centerline miles of roadway in Newbury. MassDOT maintains 16.42 miles of these roads, including I-95, Route 1 and Route 1A. The Town of Newbury maintains 53.30 miles of roadway.

Federal Aid Roadways

Of the 69.72 centerline miles of roadway in Newbury, 31.99 or 46% are classified as federal aideligible. As noted above, MassDOT is responsible for maintaining 16.42 centerline miles of these federal aid roadways while the Town maintains the remaining 15.57.

Federal aid roadways are eligible to receive federal transportation funds when they are maintained (e.g., resurfacing/ econstruction) or improved (e.g., widening, intersection reconstruction). Federal aid improvement projects to state owned and maintained roadways such as I-95, Route 1 and Route 1A are typically initiated by MassDOT. Federal aid improvement projects for eligible locally maintained roadways such as Parker Street or Elm Street are typically initiated by the community, which is also responsible for designing the project, securing the needed rights-of-way and obtaining all permits. If federal or state aid supports a project, MassDOT typically advertises the project for construction and oversee its completion.

Table T-1: Federal Aid Roadways in Newbury

Boston Road	Newburyport Turnpike (Route 1)*
Central Street	Newman Road
Coleman Road	Northern Boulevard
Elm Street	Parker Street
Hanover Street	Plum Island Turnpike
Hay Street	Plum Island Boulevard
High Road (Route 1A)*	Rolfe's Lane
I-95*	School Street
Main Street	Scotland Road
Moody Street	
*Under MassDOT jurisdiction	

Source: MVPC, March 2023.

TRAFFIC VOLUMES

The roads with the highest motor vehicle volumes in Town are I-95, Route 1, Scotland Road, Plum Island Turnpike, Route 1A and Central Street. Traffic counts taken for the 10-year period from 2012 through 2021 show that the number of vehicles traveling these roads has remained relatively consistent (see Table T-2 on the following page).

I-95 is the most heavily traveled roadway in Newbury with traffic volumes on Fridays in August south of Scotland Road approaching 100,000 vehicles per day. Scotland Road east of I-95, Route 1 near the Newburyport City Line, and Plum Island Turnpike all carry just under 11,000 vehicles per day during the summer. Central Street and Route 1A (High Road) both carry just under 7,000 vehicles per day in the summer.

The above volumes are nowhere near the capacity of these roadways and there is little or no congestion on them during peak travel periods.

ESSEX COASTAL SCENIC BYWAY

Route 1A, Rolfe's Lane, the Plum Island Turnpike, Plum Island Boulevard and Northern Boulevard are all part of the 90-mile Essex Coastal Scenic Byway that runs through 14 communities from Lynn to Salisbury.

This Byway features scenic views, period architecture, historic sites and recreational opportunities. It was established both to preserve the area's intrinsic qualities and to spur investment in its infrastructure, attractions, and amenities. Newbury hosts a bikeable segment of the Byway referred to as the Plum Island Turnpike, which provides access to The Parker River National Wildlife Visitors Center (located both in Newbury and Newburyport) and the Mass Audubon Society's Joppa Flats Education Center in Newburyport.

The Essex National Heritage Commission has developed an Essex Coastal Scenic Byway Management Plan that is intended to guide community and regional leaders in their efforts to implement tourism-based economic development. Through this Plan, the Commission installed five directional signs in Newbury in 2016 to help visitors navigate the Byway.

10. TRANSPORTATION



Table T-2: Newbury Traffic Counts (2012-2021)

Tubic 1 2: News	Table 1-2: Newbury Tramic Counts (2012-2021)							
Road	Location	2012	2013	2014	2015			
Rt 1/Nbpt Tpk	N of Elm St	10,046-Jul			10,375-Jul			
1A/High Rd	Nbpt. Line			6,959-Aug				
1A/High Rd	S of Rolfe Ln		6,806-Aug					
1A/High Rd	Rowley Line							
Boston Rd.	E of Hay St.			549-May				
Central St.	W of I-95				6,471-Oct			
Central St.	E of I-95		6,591-Aug					
Elm St	E of Coleman Rd			3,234-Aug				
Elm St	W of Rt 1							
Elm St	Georgetown TL							
Hanover St	E of Rt 1							
Hanover St	W of Rt 1A							
Hay St	E of Boston Rd			685-May				
Highfield Rd	S of Scotland Rd							
*Interstate 95	S of Scotland Rd		83,922 Aug	84,327 Aug	78,361 Aug			
Main St.	N of Courtney St			1,406-Nov				
Main St	S of Hickory Ln	1,532-Sep						
Main St	W Newbury Line		1,726-Aug					
Main St	S of Central St				3,574-Oct			
Middle St	W of Rt 1							
Moody St	W Newbury Line			1,013-May				
Northern Blvd	N of Plum Is Tpk							
Orchard St.	N of Central St		1,501-Aug					
Parker St	W of Rt 1A			5,392-Aug				
Plum Is Tpk	PI River Bridge				9,554-Aug			
Plum Is Tpk	W of Sunset Dr	5,594-Oct	10,959-Aug					
Rolfe Lane	E of Anchor Way							
School St	N of Elm St	3,004-Aug						
Scotland Rd	E of I-95				10,834-Aug			
Scotland Rd	W Newbury Line	3,278-Sep						

Source: MVPC, March 2023.

2016	2017	2018	2019	2020	2021
10,943-Aug	10,282-Aug	10,170-Aug	10,065-Aug		
		7,235-May			
3,606-Jul					
	3,620-May				
	3,020 Iviay	4,044-May			
3,345-Aug		1,0 11 1110			
, 3	3,428-May				
	-		859-Aug		
			97,509-Aug	79,902-Aug	77,996-Aug
2,158-Aug					
F F 2 2 A					
5,523-Aug					
			9,062-Aug	10,832-Jun	10,602-Aug
6,280-Aug				·	
_	5,081-May				

10. TRANSPORTATION

BRIDGES

FEDERAL AID ELIGIBLE

MassDOT has identified 23 bridges and culverts in Newbury. Fifteen of these bridges are eligible to receive federal aid. Bridges with spans (i.e., the distance between bridge abutments) of 20 feet or more are identified in Table T-3 to the right.

MassDOT's 2020 National Bridge Inspection Standards (NBIS) Master List does not classify any of the 15 federal aid-eligible bridges as structurally deficient. As such, no immediate corrective actions are required.

SMALL BRIDGES AND CULVERTS

MassDOT has identified nine small bridges or culverts in Newbury (see Table T-3 at right). These are structures with a span of less than 20 feet and are not eligible to be repaired or replaced using federal bridge funds. It should be noted that this list does not include all such structures in town.

Table T-3: Federal Aid Bridges in Newbury

Facility/Over	Facility/Over
Central Street Bridge over I-95	Middle Road Bridge over Parker River
Hanover Street Bridge over the Little River	Newman Road Bridge over Little River
Hay Street over Little River	Plum Island Turnpike Bridge over Plum Island River
I-95 Northbound Bridge over Parker River	Route 1 Bridge over MBTA Railroad
I-95 Southbound Bridge over Parker River	Route 1 Bridge over Little River
I-95 Northbound Bridge over Scotland Road	Route 1 Bridge over Parker River
I-95 Southbound Bridge over Scotland Road	Route 1A Bridge over Parker River
Larkin Road Bridge over Parker River	

Source: MVPC, March 2023.

Table T-4: Small Bridges and Culverts in Newbury

Facility/Over
Central Street over the Parker River
Hay Street over the Little River (Near Quills Pond)
Main Street over the Parker River
Newburyport Turnpike over the Mill River
Kents Island Pedestrian Bridge over MBTA
Hay Street over Brook (between Green and Low Streets)
Main Street over Parker River Bypass
MBTA over the Parker River
Newman Road over Unnamed Tributary

Source: MassDOT

TRANSIT ACCESS

MERRIMACK VALLEY REGIONAL TRANSIT AUTHORITY

The Town of Newbury is a member of Merrimack Valley Transit (MeVa), formerly known as the Merrimack Valley Regional Transit Authority. MeVa is the principal transit provider of public transportation services in the Merrimack Valley region. Currently, the MeVa does not provide fixed route services to Newbury; however, MeVa's reservation-based Ring and Ride service is available Monday through Friday between 8:00am and 5:00pm. This paratransit option provides residents a 30-minute pick-up window and ride to any MeVa serviced community, including other fixed-route locations. Consistent with MeVA's fixed route services, Ring and Ride is fare-free as of March 2022.

OTHER TRANSIT SERVICES

Newbury Council on Aging (CoA)

On Tuesday mornings, the Newbury CoA provides transportation for ambulatory elderly residents to the Shaw's and Market Basket supermarkets in Newburyport. The van is available on Thursday mornings for trips to local shopping destinations other than the grocery stores mentioned earlier. On Tuesday afternoons, the CoA van is available to transport seniors to local medical appointments. Users are asked to make a \$2 donation for each trip.

Wheelchair Transportation in the CoA Van is available for disabled residents by appointment and riders must bring a companion to assist. Recreational/education trips are provided whenever the CoA identifies six (6) or more seniors interested in an event.

Northern Essex Elder Transport (NEET)

Under this program, volunteer drivers provide curb-to-curb non-lift transportation to medical appointments (in town and out of town) for ambulatory seniors (60 years of age or older). NEET serves 14 communities in the Merrimack Valley, including Newbury. Rides are arranged through the local Councils on Aging. Eligible Newbury elders seeking to use the service must call the CoA Office at least three business days prior (and earlier for transportation to Boston) to their trip. Medical trips to Boston require one week notice.

Massachusetts Bay Transportation Authority (MBTA)

The MBTA operates daily commuter rail service along the Newburyport Branch of its Newburyport/Rockport Line. The northern terminus of this branch is at Newburyport Commuter Rail Station and the southern terminus is at North Station in Boston. Including Newburyport and North Station, there are a total of 12 stations on the Newburyport Branch and the Main Line, providing Newbury residents with the opportunity to travel by rail to the larger communities on the North Shore and into Boston.

There are currently 13 inbound and 14 outbound trains serving the Newburyport Branch, with three trains leaving Newburyport for Boston during the AM Peak (6:00-9:00 AM) and three trains leaving North Station for Newburyport during the PM Peak (4:00-7:00 PM). This level of service was instituted in 2021 and marks a reduction in the amount of service that was once provided along this line pre-COVID.

Most Newbury residents access the MBTA commuter rail to Boston at either the Newburyport Commuter Rail Station located on Route 1 just east of the Rotary, or at the Rowley train station located off Route 1A. An MBTA Commuter Rail Passengers Survey conducted on May 17, 2018 found that 423 persons boarded inbound trains to Boston at Newburyport Station while 113 persons boarded inbound trains at Rowley Station. However, with the COVID outbreak in 2020, inbound boardings at both stations have dropped significantly.

Newburyport Park and Ride Lot

Located just east of the I-95/Route 113 Interchange in Newburyport, the Newburyport Park and Ride Lot was once among the most heavily used Park and Ride Lots in the Commonwealth with C&J Transportation and the Coach Company operating frequent bus service between this location and Downtown Boston and Logan Airport.

However, the Coach Company has stopped providing commuter service between Newburyport and Boston and C&J Transportation no longer serves this location, having relocated to a new Park and Ride facility off Route 107 in Seabrook, NH. The Newburyport Park and Ride Lot is still open to persons needing a place to meet for car or vanpooling.

BICYCLE AND PEDESTRIAN TRANSPORTATION

SIDEWALKS

As an essentially rural community throughout its history, there are few streets in Newbury that have sidewalks. MassDOT's 2022 Road Inventory File shows that only approximately 9.89 of Newbury's total 69.72 centerline miles have sidewalks on at least one side. Sidewalks of varying width may be found on certain important state and local roadways such as High Road (Route 1A), School Street, Central Street, Parker Street, Rolfe's Lane, Hanover Street and Northern Boulevard. However, there are many sections of these streets where there are no sidewalks. In recent years, sidewalks have been included in some residential developments and sections of the sidewalks along Route 1A have been upgraded by MassDOT.

BIKE LANES

Currently, the Town of Newbury only has bicycle lanes striped along both sides of the Plum Island Turnpike between the Newburyport City Line to a point just west of Sunset Drive. However, the bike lanes are substandard as they are not separated from traffic and are narrow with varying widths between 4-5 feet. The Plum Island Turnpike has a posted speed of 40 mph and traffic volume of over 10,000 vehicles per day during the summer peak. Separated bike lanes or a sidepath could better accommodate safe and comfortable bicycle access along the turnpike.

Both Route 1A and Scotland Road have wide shoulders that can accommodate bicyclists and many cycling groups have been observed using these roadways.

In 2015, the Merrimack Valley Planning Commission completed its Active Transportation Plan for the Merrimack Valley MPO. The Active Transportation Plan identifies significant objectives for bicycle and pedestrian facilities, , which include:

- Connecting to village centers and Priority Development Areas/smart growth centers;
- Facilitating travel between communities;
- Providing better bicycle and pedestrian access to transit, and
- Improving walking and/or bicycling to schools.

MVPC staff worked with officials and citizens from each community to identify its important bicycle and pedestrian connections and priority improvements.

Newbury officials and residents identified the following priority actions and improvements:

- Cooperating with neighboring communities in the development of the Border to Boston Trail, which will connect Byfield Village to the Newburyport commuter rail station;
- Increasing pedestrian safety in and around Byfield Village by improving sidewalks;
- Creating bike lanes in Old Town as well as providing better bike connections to the Parker River National Wildlife Refuge; and
- Improving bicycle/pedestrian accommodation around US-1 Rotary and MBTA Commuter
 Rail Station and connections to other parts of the City.

BORDER TO BOSTON RAIL TRAIL

The Border to Boston Trail is a shared use trail that will ultimately connect Salisbury, Newburyport, Newbury, Georgetown, and Boxford with communities beyond the region. This trail will become part of the East Coast Greenway, which connects 15 states, 450 cities and towns, and extends 3,000 miles from Maine to Florida.

The first two phases of the Clipper City Rail Trail (Commuter Rail Station north to the Merrimack River and from the Waterfront to Parker Street in Newbury along the old City Branch Railroad right-of-way) are now complete as are the Eastern Marsh Trail in Salisbury (Merrimack River north to Mudnock Road) and the Salisbury Rail Trail, which extends north from Mudnock Road to the New Hampshire state line along what was the old Boston and Maine Railroad Eastern Route right-of-way. The section along Parker Street to State Street is now close to complete.

The Georgetown northern section of the trail is now under design and is scheduled to be ready for construction in 2026. It will extend from Route 97 (West Main Street) near Georgetown Square northeast along the old Newburyport Railroad Right-of-way and terminate at Byfield Village at Church Street. Also under design is the Georgetown southern section, which would run from West Main Street (Route 97) near Georgetown Square south to Georgetown Road in Boxford. Both projects appear in the MVMPO's 2023-2027 TIP for implementation.

The Town of Newbury will soon receive \$250,000 in funding that was included in the federal Bipartisan Infrastructure Law of 2021 to assist in the design of its section of the Border to Boston Rail Trail. Local officials have determined that this funding will be used to complete the design of a section of boardwalk that needs to be built to address a recent washout of the old Newbury Railroad Right-of-way just southwest of Byfield Village.

MassDOT staff and Town officials have been examining options for making the connection between the end of the Georgetown/Newbury section of the Border to Boston Trail in

Byfield and the Newburyport Commuter Rail Station, which is the southern terminus of the Newburyport Rail Trail. One option being considered is to have the Border to Boston Trail continue northeast from Byfield Center along the old Newbury Railroad Right-of-way to I-95 and then along the west side of I-95 north to Scotland Road. The Trail would then follow Scotland Road to Parker Street and then east to the train station.

PARKER STREET

The City of Newburyport is also considering bicycle and pedestrian improvement plans along Parker Street from the southern terminus of the Clipper City Rail Trail east to and across Route 1 to establish a link with the Newburyport Rail Trail and Newburyport Commuter Rail Station. As part of this effort, the city has installed a pedestrian signal adjacent to the rotary at the intersection of Parker Street and State Street. An agreement has been reached with landowners along Parker Street to create a sidepath between State Street and the Newbury Town Line.

The Parker Street Shared Use Path is an extension of the Clipper City Rail Trail, along the north side of Parker Street in Newbury. The project is proposed to improve pedestrian and bicycle safety for rail trail users and close a gap in the rail trail and the broader Coastal Trails Network

To complete the connection between the Town Line and the Clipper City Rail Trailhead, the Town of Newbury has received funding from the Commonwealth through the Shared Streets and Spaces and MassTrails programs and from the Coastal Trails Coalition to construct the shared use path along the north side of Parker Street. This project is currently under construction and scheduled for completion in early spring 2023.

JOURNEY TO WORK FLOWS AND MODE CHOICE

The work done by the Master Plan Steering Committee and MVPC in 2016 and 2017 relied on information that was current through 2015. This dataset for post-2019 numbers has not yet been released, and the older data is likely to be misleading given the shift in work patterns for certain industries since the 2020 (and the beginning of the COVID-19 pandemic). The Town should work with MVPC to monitor the release of updated numbers and evaluate them against the older data, which is presented here for future reference and comparison.

Over the years, the US Census Bureau has collected information on work travel across the nation. This includes where people live, where they work, and what travel modes they use to make their trips.

Work-trips, defined as traveling from home to place of work and vice-versa, constitute approximately 16% of all trips made by households in the United States.⁵³ Information about these trips provides an important glimpse not only of how the regional transportation network is being used by Newbury residents and those commuting to Newbury for work, but also of how this demand has changed over time.

Table T-5 on the next page shows the individual communities that Newbury residents were commuting to in 2015. Not surprisingly, more Newbury residents worked in the City of Newburyport than in any other community. Also, while the percentage of residents that work in Newbury and Newburyport has wavered over the years, it was more or less the same for the 2011-2015 period as was reported in the 2000 Census. In contrast, the number of residents that commute to Boston, Salem, MA and Chelsea was increasing at the time this data was collected.

MODE OF TRANSPORTATION TO WORK

The 2012-2016 American Community Survey (Table T-5 at right) found that the vast majority (82%) of Newbury residents drove alone to work. However, 8% worked at home. Another 4% people said their primary mode of transportation to work was via commuter rail. While the actual number of people who walked (80) as their primary mode to work was relatively small, it is not insignificant for such a small town. Of note in this table is that no persons reported that they bicycled to work.

⁵³ Summary of Travel Trends - 2009 National Household Travel Survey, Federal Highway Administration, Table 4, pages 19-20

10. TRANSPORTATION

Table T-5: Top Work Destination Communities for Newbury Residents

			2006-		2009-		2011-	
Town	2000	%	2010 ACS	%	2013 ACS	%	2015 ACS	%
Newbury	613	17.64%	700	20.35%	511	15.55%	679	19.43%
Newburyport	699	20.11%	488	14.19%	557	16.95%	583	16.69%
Boston	276	7.94%	270	7.85%	391	11.90%	459	13.14%
Rowley	65	1.87%	117	3.40%	99	3.01%	50	1.43%
Danvers	127	3.65%	116	3.37%	150	4.56%	157	4.49%
Beverly	114	3.28%	98	2.85%	116	3.53%	109	3.12%
Lynn	70	2.01%	87	2.53%	98	2.98%	74	2.12%
Salem	8	0.23%	82	2.38%	121	3.68%	163	4.67%
Haverhill	103	2.96%	80	2.33%	54	1.64%	73	2.09%
Salisbury	70	2.01%	78	2.27%	57	1.73%	69	1.97%
Seabrook	5	0.14%	76	2.21%	76	2.31%	16	0.46%
Andover	133	3.83%	71	2.06%	16	0.49%	28	0.80%
Peabody	138	3.97%	70	2.04%	104	3.16%	99	2.83%
North Andover	66	1.90%	64	1.86%	53	1.61%	32	0.92%
Woburn	8	0.23%	63	1.83%	77	2.34%	63	1.80%
Burlington	20	0.58%	49	1.42%	11	0.33%	15	0.43%
Marblehead	7	0.20%	41	1.19%	25	0.76%	17	0.49%
Lawrence	37	1.06%	40	1.16%	48	1.46%	74	2.12%
Wakefield	8	0.23%	40	1.16%	24	0.73%	16	0.46%
Portsmouth	51	1.47%	38	1.10%	23	0.70%	0	0.00%
Ipswich	107	3.08%	16	0.47%	87	2.65%	85	2.43%
Chelsea	10	0.29%	0	0.00%	41	1.25%	35	1.00%
Others	741	21.32%	755	21.95%	548	16.67%	598	17.12%
Total	3,476		3,439		3,287		3,494	

Source: MVPC, March 2023

JOURNEY TO WORK DATA FOR JOBS LOCATED IN NEWBURY

In the period from 2000 to 2015, approximately $\frac{2}{3}$ of the jobs in Newbury (65.3%) were filled by residents of the Merrimack Valley region with just under half over also living in Newbury or the neighboring communities of Newburyport, West Newbury, Georgetown and Rowley.

While that data is not yet available, a comparison, shown in table T-6, of commuting data between the 2016 ACS and the 2021 ACS indicates the shift in community patterns after the shift to remote or hybrid work in some industries as a result of the COVID-19 pandemic. As more data becomes available, the Town should continue to update these numbers. A continued presence of home-based workers may have an impact on local transportation needs and the potential economic benefits; for example, a Newbury resident who commutes to Boston three days a week may wish to bike for exercise or errands on the other two days, thus increasing the need for safer biking routes.

Table T-6: Transportation to Work (Age 16+)

Tallet a trainep		8 /		
Mode	2012-2016 ACS	%	2016-2021 ACS	%
Drove Alone	3,020	82%	2,607	72.3%
Carpool	85	2%	104	2.9%
Bus	60	2%	-	-
Subway	0	0%	-	-
Railroad	145	4%	29	0.75%
Bicycle	0	0%	-	-
Walked	80	2%	-	-
Taxicab	0	0%	-	-
Motorcycle	0	0%	-	-
Other	30	0%	866	24%
Worked at Home	305	8%	-	-
Total	3,695	100%	3,606	100%

Source: U.S. Census Bureau, American Community Survey 2012-2016 Five-year estimates and American Community Survey 2016-2021 Five-year estimates, S0802.

ONGOING TRANSPORTATION STUDIES/PROPOSED TRANSPORTATION PROJECTS THAT IMPACT NEWBURY

MERRIMACK VALLEY METROPOLITAN PLANNING ORGANIZATION FFY 2020 REGIONAL TRANSPORTATION PLAN (RTP)

Under federal transportation planning regulations, the Regional Transportation Plan serves as the foundation document in the transportation planning process. With a 25-year planning horizon, it assesses the performance of the region's transportation network and identifies recommended studies, projects and services that address any identified needs. The RTP must consider all major modes of transportation and be financially constrained, which means that each project or program appearing in the document must include an identified source of funding that will be sufficient to allow its completion in the year(s) identified.

The fiscally constrained section of the MVMPO's FFY 2020 RTP includes two projects for Newbury. These are the resurfacing of Route 1 in Newbury, Newburyport, and Salisbury and the construction of the Georgetown-Newbury section of the Border to Boston Rail Trail.

The MVMPO is now in the process of preparing the region's Metropolitan Transportation Plan, MVision250, that is anticipated to be adopted by the organization in Summer 2023.

TRANSPORTATION IMPROVEMENT PROGRAM

Implementation of RTP projects typically involves their design, permitting and then construction. Each year, the MVMPO programs projects from the RTP that have advanced sufficiently into its five-year Transportation Improvement Program (TIP). Only those projects that are specifically identified in the RTP or are consistent with its transportation concepts, programs and recommendations can be programmed in the TIP.

The MVMPO's FFYs 2023-2027 Transportation Improvement Program (TIP) includes one project in Newbury, the Georgetown/Newbury section of the Border to Boston Rail Trail. This project, now under design, is programmed to be advertised for construction in FFY 2026 with estimated cost of \$6,798,000. The southern end of the project is just west of Georgetown Square while the northern terminus will be on Church Street between Main Street and Downfall Road in Byfield.

Under the MVMPO's FFYs 2022-2026 TIP, MassDOT advertised a \$15,735,772 project for Resurfacing and Related Work on Route 1 in Newbury, Newburyport, and Salisbury (Project #608494).

ROUTE 1 ROTARY IN NEWBURYPORT

The Route 1 Resurfacing project in Newbury, Newburyport and Salisbury will include modifications to the Route 1 Rotary located near the Newburyport/Newbury boundary. The project will reduce the number of lanes in the Rotary and will provide for a controlled pedestrian crossing of Route 1 near its intersection with Parker Street. The City has already installed a pedestrian signal on State Street near its intersection with Parker Street.

TRAFFIC CONGESTION AND SAFETY

Recommended improvements to address concerns about congestion and safety are provided in Chapter 3. Expanded Vision, Goals, and Actions.

EXISTING CONGESTED TRANSPORTATION FACILITIES

The Merrimack Valley Metropolitan Planning Organization (MVMPO) has not identified any significantly congested roadways in Newbury. However, at the request of the Town of Newbury, in 2013 the MVMPO studied traffic flow, safety and parking conditions in the Plum Island Center area. This analysis found there was minor traffic congestion on the Sunset Drive approach to its intersection with Plum Island Boulevard and the Plum Island Turnpike during evening peak travel periods in the summer.

The study recommended the Town install a traffic island and Stop Sign on the Sunset Drive northbound approach to this intersection to better control access to parking and improve sight distance for motorists using Sunset Drive and Plum Island Boulevard. The Newbury DPW subsequently installed a traffic island and Stop Sign at this location, but it does not appear to be functioning as intended.

TRANSPORTATION NETWORK SAFETY

Historic traffic crash data for intersections in the Town for the years 2018-2020 was obtained from MassDOT's Impact Crash Data Portal and analyzed by MVPC Transportation staff. Table T-7 below shows the results of this analysis for the intersections in Newbury.

Eight intersections were found to have Equivalent Property Damage Only (EPDO) scores of 10 or more. The EPDO score for an intersection is assigned based on the severity of the injuries in each of the crashes over a three-year period. Fatal and serious injury crashes were assigned a score of 20 points while those that involved non-serious or possible injures received a score of 10 points. Crashes that involved property damage only to vehicles were given a score of one point. The sum of the scores for all crashes generates the intersection's EPDO Score.

Table T-7: Newbury Intersection Crashes (2018-2020)

Intersection	Number of Crashes	Fatal/ Serious Injury	Non-Serious or Possible Injury	Property Damage Only	MVPC EPDO Score
Newburyport Turnpike at Boston Road	12	1	8	3	103
High Road at Marlboro Street	2	0	2	0	20
Newburyport Turnpike at Middle Road	4	0	1	3	13
Newburyport Turnpike at Elm Street	4	0	1	3	13
Newburyport Turnpike at Hanover St/Middle Rd	3	0	1	2	12
High Road at Hanover Street/ Rolfe's Lane	2	0	1	1	11
Scotland Road at Highfield Road	1	0	1	0	10
Hay Street at Green Street	2	0	1	1	11
Middle Road at Highfield Road	4	0	0	0	4
Plum Island Turnpike at Sunset Drive	3	0	0	3	3
14 other intersections with one crash	-	-	-	-	-

Source: MVPC, MassDOT Crash Data

The Newburyport Turnpike at Boston Road intersection has by far the highest EPDO Score of any intersection in the community (103). This is also the 10th highest score for all intersections evaluated in the Merrimack Valley region. The next highest scoring intersection in Newbury is at High Road and Marlboro Street.

EXISTING CONDITIONS: TRANSPORTATION INFRASTRUCTURE

Recommended improvements to address the conditions below are provided in Chapter 3. Expanded Vision, Goals, and Actions.

BYFIELD VILLAGE

In 2010, the MVMPO and MassDOT studied traffic circulation and safety in Byfield Village in response to requests received from the community. The town subsequently hired a planning/engineering firm to further refine the recommendations from those studies and to develop preliminary designs for their implementation, which are contained in the Byfield Road Safety Improvement Project. These include recommendations to address pedestrian safety, signage, pavement markings, roadway modifications and more. One of these recommendations, the reconstruction of the intersection of Main Street/Church Street/Moody Street has been implemented. The improvement of bicycle and pedestrian facilities in the Byfield Village area is identified as a priority project for Newbury in the MVPC's Active Transportation Plan. The improvements identified in the Byfield Road Safety Improvement Project would also provide a safer connection between the Village and Border to Boston Rail Trail.

ROUTES 1 AND 1A

Route 1 and Route 1A are both under the jurisdiction of MassDOT. Route 1 carries 10,000 vehicles on an average weekday, making it one of the most important roadways in town. MassDOT is now preparing to begin construction on a project to resurface and complete related work on Route 1 in Newbury, Newburyport and Salisbury (Project #608494). One important design consideration that affects bicycle travel is the width of the roadway shoulders. While Route 1 in Newbury has roadway shoulders of 5' or more for most of its length, there are locations such as at Elm Street where this shoulder width is reduced, posing a hazard to cyclists.

With a posted Speed Limit of at least 45 MPH and 55 MPH in some sections, this roadway meets at least one of the MassDOT Controlling Criteria warrants for the construction of a separated sidepath for bicycle and pedestrian travel. However, wetlands and right-of-way limitations in the corridor make the implementation of a sidepath in many areas along Route 1 problematic.

Route 1A carries fewer vehicles (7,235/weekday) than Route 1, but is likely more important to the community's bicycle and transportation network. Unlike Route 1, this roadway largely serves residential land uses. Within that framework, it also provides a direct connection between Newburyport, Old Town, and Ipswich, is part of the Essex County Coastal Scenic Byway, and carries traffic traveling at lower speeds than occurs on Route 1. Posted speeds on Route 1A range from 30 MPH near the Newburyport Line to 50 MPH near the Rowley Town Line.

Route 1A offers wide roadway shoulders for cyclists for much of its length, but there are places where this shoulder narrows. While a sidewalk is present on much of the northbound side of the roadway from the Lower Green to Old Town, it is in poor condition, narrow (often less than 4' wide), and in some instances, has been lost.

CONDITION OF FEDERAL AID ROADWAYS

The two charts below compare the surface condition of Newbury's locally-maintained federal aid roadways as measured by MVPC staff in 2015 and 2018 for the FY 2016 and FY 2020 Regional Transportation Plans, respectively.

The Merrimack Valley MPO's FFY 2020 Regional Transportation Plan established the objective that 80% of all federal aid roadways in the region should be in 'Good' or 'Excellent' condition. The above charts show that 92.3% of the federal aid roadways in Newbury were in 'Good' or 'Excellent' condition in 2015 and this figure increased slightly to 92.9% in 2018. Both figures are higher than the figures for the entire MVPC region, which were 75% in 2015 and 79% in 2018.

What is notable in comparing the 2018 results with those from 2015 was that there was a much higher proportion of the town's federal aid roadways in 'Excellent' condition (59.0% vs 30.3%) and that there were no roadways found to be in 'Poor' condition.

With the exceptions of I-95, the Newburyport Turnpike (Route 1) and High Road (Route 1A), which are maintained by MassDOT, the remaining federal aid roadways in town are maintained by the Newbury Department of Public Works. In recent years, the Newbury DPW has implemented a Pavement Management Program to more accurately monitor the condition of town roads and to identify and schedule roadway maintenance treatments to maximize the useful life of each facility. As the above figures show, the Newbury DPW's efforts in this area are effective and the town should continue to support them, including the continued implementation of the Pavement Management Program.

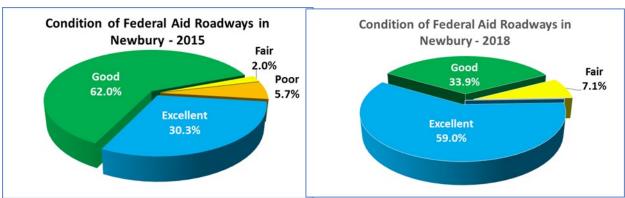


Figure T-1: Condition of Federal Aid Roadways in Newbury (2015 and 2018)

Source: MVPC, March 2023

ROADWAYS AND STORMWATER RUNOFF

During significant rainstorms, stormwater from commercial and residential properties containing harmful pollutants such as oil, grease and heavy metals from motor vehicles, pesticides, silt and sediments, and pet waste often enters roadway catch basins and roadside ditches polluting local drinking water as well as fish and wildlife habitats.

Under the Clean Water Act, the Environmental Protection Agency (EPA) requires that each designated urbanized area community reduce, to the maximum extent practicable, the discharge of untreated stormwater runoff into municipal separate storm sewer systems (MS4). To ensure this occurs, in August 2016 EPA approved National Pollutant Discharge Elimination System (NPDES) Phase II regulations and a new MS4 Permit for Massachusetts. The new permit contains provisions including staff training, public education and implementation of best management practices and went into effect in July 2018. The town has updated its Subdivision Rules and Regulations to address the requirements of the new MS4 Permit.

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FLOODING, CLIMATE CHANGE, AND TRANSPORTATION INFRASTRUCTURE

In recent decades, the Town of Newbury has become painfully aware of what the consequences of climate change will be. Usually occurring from late fall through the early spring, nor'easters and other large storms have often significantly damaged and even destroyed beachfront properties on Plum Island. These storms impact not only the roadways on Plum Island but also the low-lying areas and streams elsewhere in the community and, in doing so, the transportation infrastructure.

It is expected that the number and severity of these flooding events will increase in the coming decades as forecasted changes in the earth's climate result in higher temperatures and rising sea levels.

In response to the growing concern over climate change projections and the impacts of Hurricane Sandy, the National Wildlife Federation worked with the Ipswich River Watershed Association and with officials from the communities of Salisbury, Newburyport, Newbury, Rowley, Ipswich and Essex to develop the Great Marsh Coastal Adaptation Plan. This document assesses specific community vulnerabilities to the forecasted impacts of climate change and identifies feasible, effective and sustainable adaptation strategies.

The Great Marsh Coastal Adaptation Plan was completed in December 2017 and includes several short and long-term recommendations that address the potential impacts that climate change is expected to have on transportation infrastructure in Newbury.

Flooding created by severe storms can sometimes result in the inundation of the lower-lying areas of Northern Boulevard and Plum Island Boulevard. When this occurs, residents living along Northern Boulevard in both Newbury and Newburyport are effectively cut off from the mainland.

Town officials have identified the constricted channel of the Little River under the MBTA railroad bridge near Boston Road as a problem that contributes to recurrent flooding as far away as the Newburyport Industrial Park and parts of Newbury located near the Route 1 Rotary. A review of this bridge shows that the nearby Boston Road culvert is similarly constricted.

PEDESTRIAN AND BICYCLE INFRASTRUCTURE

While the Border to Boston Rail Trail is likely to be the principal bicycle/pedestrian facility linking Newbury to surrounding areas, it should not be considered the only one. Route 1A, with wide shoulders for cyclists and sidewalks, connects Old Town with nearby Newburyport. Rolfe's Lane, which, like Route 1A, is part of the Coastal Scenic Byway, connects the Upper Green area to the Parker River National Wildlife Refuge Visitors Center, the Mass Audubon Joppa Flats Education Center in Newburyport, and Plum Island. As discussed above, Parker Street can also link the Upper Green area to the Clipper City Rail Trail and to the Newburyport Commuter Rail Station.

As bicycle and pedestrian activity has increased across the region in recent years, there have been reports of higher levels of bicycle travel in adjacent communities such as along Middle Road in West Newbury, and Thurlow Street in Georgetown, the latter of which will directly link to the Border to Boston Rail Trail.

Plum Island Boulevard links the Plum Island Turnpike and Northern Boulevard and Plum Island Center. It also serves the commercial center in the Newbury section of the Island, which includes numerous business establishments and several restaurants located on both sides of the roadway, as well as two privately operated paid parking lots near its eastern terminus at Plum Island Center at 24 and 26 Plum Island Boulevard.

While there is a sidewalk on the westbound section of the roadway, it is poorly delineated, narrow, and not handicapped accessible due to the presence of utility poles. It also often blocked by parked or stopped vehicles.

11. IMPLEMENTATION PLAN

OVERVIEW

The Newbury Master Plan represents the work of dedicated people, many of whom volunteered their time, ideas, and energy, and contributed countless hours of service throughout the Master Plan process. The ideas and recommendations found here, updated where appropriate, reflect those solicited from a town wide survey done in 2016, meetings with focus groups, interviews with key stakeholders and community leaders, the input of members of the Master Plan Steering Committee and Working Groups focused on each of the topical elements, and research and text preparation by Town Staff, board members, and professional consultants.

Master Plans are tools to help a community to shape the future and guide policy decisions; a Master Plan does not seek to solve all problems but rather point to strategies that can be used to address issues, whether they are current or future.

HOW TO USE THE PLAN

The following pages are a table of all of the goals and recommended strategies for each chapter of Newbury's 2023 Master Plan. Each numbered subsection also includes:

- The identification of party responsible for executing or initiating the strategy;
- The priority level relative to other identified needs; and
- Possible resources, including organizations and grant sources.

Chapter 3. Expanded Vision, Goals, and Actions provide more detailed information about each of the goals and actions in this chapter.

Chapter 12: Tools and Resources provides useful information for implementation, including the following:

- Measuring Progress
- Tools
- Funding Sources
- Glossary
- Planning Resources

ZONING AND POLICY CHANGES

The following table presents a menu of potential Zoning amendments to be considered independently or in combination to advance the housing goals.

Table IP-1: Potential Zoning Options

	Diverse Housing	Affordable Housing
Establish/expand Village districts with reduced minimum lot size to allow infill development, creating more modest-sized housing.	~	
In appropriate locations (i.e., Village Districts), allow more than four units in a single structure by special permit, with design review.	~	
Allow multifamily housing with at least 10% affordable units in appropriate locations such as near the Route 1 Rotary, Pearson Plaza, and Byfield Village. Consider zoning as overlay district or Chapter 40R.	~	~
Allow/encourage conversion of existing structures to more than four units by special permit (review process to ensure they are compatible with the character of the surrounding neighborhood.)	~	
Allow multifamily senior housing by special permit, with inclusionary requirement.	~	✓
Inclusionary Zoning: Require at least 10% of units (or higher amount) in all development proposals over a minimum size to be affordable.		~
Incentive Zoning: Allow increase in density (in appropriate locations such as Village Districts) for developments that provide affordable units.		~

#	Goal/Action	
LAND USE		
LU-1	Use regulatory tools to balance the preservation of natural and historic resources with development which is consistent with the vision for each area of town.	
LU-1.1	Adopt zoning for highway-oriented commercial areas to allow a mix of multifamily and/or commercial development. Consider using Chapter 40R "Smart Growth" zoning provisions to take advantage of state incentives for transit-oriented development and revitalization of existing developed areas.	
LU-1.2	Refine zoning for Byfield Village to allow a complementary mix of housing options and village amenities. Consider "Compact Communities" zoning to encourage the development of moderately priced housing compatible with the scale, density, and physical character of the surrounding neighborhood.	
LU-1.3	Consider freeboarding incentive program or other regulatory changes to increase resiliency on Plum Island. Evaluate best practices and models used in other coastal communities.	
LU-1.4	Consider a Local Historic District or other regulatory tools for protecting historic character around the Upper and Lower Greens. Evaluate best practices and models used in other communities.	
LU-1.5	Designate the Town-owned Greens as permanent conservation land and evaluate whether other Town-owned properties are priorities for open space conservation, recreation, or other public use.	
LU-1.6	Modify zoning to create an incentive to preserve historic buildings, landscapes, and views by allowing four or fewer dwelling units on a lot using one or more of the following strategies:	
LU-1.7	Develop policies that provide for uniform enforcement for violations of local and state regulations regarding land use and environmental protection.	
LU-1.8	Adopt Inclusionary Zoning for conventional subdivisions.	
LU-2	Undertake capital improvements to address community needs and enhance the appearance and safety of village areas.	
LU-2.1	Determine and carry out a plan for construction and/or renovation of permanent space for municipal departments.	
LU-2.2	Develop plans for sidewalk, streetscape, and recreation/park improvements in each of the three village areas.	
LU-2.3	Work with MassDOT to investigate streetscape improvements, including for pedestrians and bicyclists, along Route 1A.	
LU-2.3	Support the extension of the regional trail connecting to the Newburyport and Salisbury trails through Byfield, and roadway improvements to enhance bicycle safety on Plum Island Boulevard and Route 1A.	
LU-2.4	Identify funding sources (state, Town, or private funding through betterments or mitigation) to carry out sidewalk, streetscape, bicycle infrastructure, and park improvements.	

Partners	Priority	Resources
Planning Board	High	
Planning Board	High	
Building Department Planning Board	High	CZM
Planning Board Historic Commission	Medium	
Open Space Committee	High	
Planning Board	Medium	
Inspectional Services Conservation Commission Select Board Planning Board	High	
Planning Board	High	
Municipal Building Committee Finance Committee Public Safety departments	High	
DPW Recreation Commission PITA Town Administrator Conservation Commission Planning Board	High	MVPC State grants Betterments or mitigation (private) Town funds
Planning Director Planning Board DPW	Medium	
Planning Director Planning Board DPW Recreation Commission Conservation Commission	High	MVPC MassDOT
Planning Director Town Administrator	High	

#	Goal/Action	
LU-2.5	Adopt the principles of "Complete Streets" to guide roadway improvements where appropriate and feasible.	
LU-2.6	Delineate rights-of-way on Plum Island, creating a map and installing signage to ensure they are recognized.	
LU-3	Identify priorities and funding strategies for infrastructure development and conservation measures to foster resilience.	
LU-3.1	Support the implementation of the Great Marsh Coastal Adaptation Plan to protect resource areas and Town assets that are vulnerable to coastal storms, sea level rise, flooding, and erosion.	
LU-3.2	Work with the Merrimack Valley Planning Commission to update the 2016 Hazard Mitigation Plan.	
LU-3.3	Continue to work with state, regional, and nonprofit entities to protect historic properties and agriculture.	
LU-3.4	Create an Economic Development Committee charged with making recommendations and leading initiatives to expand the tax base.	
LU-3.5	Establish a committee or partnership among existing groups to evaluate and advocate for funding to protect historic and open space resources.	
LU-3.6	Work with Merrimack Valley Planning Commission (MVPC) to update the Housing Production Plan (formerly the Regional Housing Plan).	
LU-3.7	Identify properties and areas in town experiencing failing wells and/or septic systems.	
LU-3.8	Further evaluate the need for, and options available to provide additional wastewater treatment to serve existing homes and businesses and possibly new development, especially around the highway commercial areas and Byfield Village.	
LU-3.8	treatment to serve existing homes and businesses and possibly new development, especially	

Partners	Priority	Resources
Planning Director Planning Board DPW	Medium	
Planning Director DPW Select Board	High	
Planning Board Conservation Commission DPW Open Space Committee	High	MVPC State and federal grants Regional partners
Planning Director DPW Inspectional services Public Safety Departments Conservation commission	High	MVPC Massachusetts MVP
Planning Director Planning Board Historic Commission AgriCultural Council	High	DCR Massachusetts Historic Commission Historic New England
Select Board Open Space Committee Historical Committee Agricultural Committee Finance Committee Planning Board	High	Community stakeholders Nonprofit organizations
Planning Director Select board Planning Board	High	MVPC
Old Town Water District Select Board	Medium	EOEEA grant MVPC
Select Board Board of Health Planning Board	High	EOEEA grants MVPC Technical Assistance

#	Goal/Action	
LU-4	Foster community engagement within each village area and Town-wide to encourage participation and build support for Town initiatives.	
LU-4.1	Organize events and programs using public and community spaces within each of the village areas (indoors and outdoors).	
LU-4.2	Use mapping, signage, programming, and physical improvements to increase Newbury residents' awareness and access to community spaces and recreational assets.	
LU-4.3	Encourage broader participation and leadership through ad hoc or town-appointed committees focused on the needs of each village.	
LU-4.4	Establish an Economic Development Commission to recruit and advocate for the needs of businesses that provide amenities to residents in the villages.	
LU-4.5	Hold public meetings to discuss town-wide municipal needs in various locations throughout town.	
LU-4.6	Use a variety of media including Town website, email, social media, newspapers, phone, cable television, etc., to share information about elections, town meetings, and other local issues.	
LU-4.7	Increase communication/coordination between existing community groups such as public and private schools, Council on Aging, environmental and conservation advocates, Historic New England, Greater Newburyport Chamber of Commerce, the Byfield Community Arts Center, etc., in order to share information about events, resources, volunteer opportunities, and community needs.	
LU-5	Reconsider adopting the Community Preservation Act.	
LU-5.1	Establish a committee to gather data and facilitate community meetings.	
LU-5.2	Evaluate the CPA as a potential funding source for open space (including the preservation of agricultural lands), recreation, historic preservation, and affordable housing.	

	Partners	Priority	Resources
Recreation Co Library Council on Ag Village area c Schools	ging	High	
Recreation Co DPW Conservation		High	Mass Cultural Council Newbury Arts Council
Select Board PITA		High	
Select Board		High	
Village area c Other Town c		High	Library Town Hall Schools PITA Hall
IT Director Town adminis All Town com		High	Media outlets
Schools Council on Ag Newbury Arts Conservation Historic Com	s Council Commission		Greater Newburyport Chamber of Commerce Historic New England Essex County Greenbelt Trustees of Reservations Other regional nonprofit organizations
			Community Preservation Coalition Town boards and commissions
Select Board		Medium	
Representative and groups.	ves of stakeholder committees		

#	Goal/Action					
COMMUNITY SERVICES AND FACILITIES						
CS-1	Develop a plan for a permanent location for the municipal offices.					
CS-2	Continue programs to support consistent communication with Town residents.					
CS-2.1	Expand cable access to include live broadcast of more Board, Committee, and Special Project meetings. Require that all Board and Committee meetings be televised. Expand staffing and funding as needed.					
CS-2.2	Consider moving Board and Committee meetings to a hybrid format to allow greater opportunities for resident participation.					
CS-2.3	Ensure that the Town's website is regularly updated with relevant data, studies, minutes and Board and Committee meetings.					
CS-3	Continue to evaluate the existing water and wastewater facilities to understand whether they are adequate for current needs and potential growth					
CS-3.1	Study alternatives to provide sewer service to the Business and Light Industrial District as well as to support denser development in certain residential districts and other commercial districts.					
CS-3.2	Study alternatives to solving the wastewater needs of the Upper Green and Lower Green/Cottage Road Area.					
CS-3.3	Promote opportunities to preserve and protect and expand the public water supply.					
CS-3.4	Explore the possibility of additional water sources to meet increased demand.					
CS-4	Update the Town of Newbury Open Space and Recreation Plan.					
CS-4.1	Appoint additional members to the Open Space Committee to oversee the update of the Plan.					
CS-4.2	Appropriate funding for consulting services to assist with the update of the Plan.					
CS-5	Ensure high quality internet and cell phone service.					
CS-5.1	Convene a meeting of local providers and residents along with Town officials to discuss changing technology, residents' needs, and infrastructure coverage.					
CS-6	Study the feasibility of a compost waste facility at the transfer station.					
CS-7	Plan for a permanent location for the Council on Aging.					
CS-8	Expand library hours to full funding.					
CS-9	Assess the need for capital improvements and evaluate space usage for Newbury Elementary.					

Partners	Priority	Resources
Select Board Town Administrator IT Director	High	
Select Board Town Administrator IT Director	High	
Planning Director Planning Board Select Board Town Administrator	High	
Planning Director Planning Board Select Board Town Administrator	Medium	
Select Board Town Administrator	Medium	
Select Board Town Administrator	High	
Select Board Town Administrator	High	
Select Board Town Administrator	High	
Select Board Town Administrator	Medium	
Council on Aging Select Board	High	
Select Board Town Administrator	High	
	Select Board Town Administrator IT Director Select Board Town Administrator IT Director Planning Director Planning Board Select Board Town Administrator Planning Director Planning Director Planning Director Planning Board Select Board Town Administrator Select Board Town Administrator	Select Board Town Administrator IT Director Select Board Town Administrator IT Director Planning Director Planning Board Select Board Town Administrator Planning Director Planning Director Planning Director Planning Director Planning Director Planning Board Select Board Town Administrator Council on Aging Select Board Select Board High

#	Goal/Action	
ECONOMI	C DEVELOPMENT	
ED-1	Establish local leadership on Economic Development issues.	
ED-1.1	Consider the creation of an Economic Development Commission (EDC) as a Town board to champion economic development issues, identify and pursue funding opportunities and obtain technical assistance, and represent the Town to regional and state agencies.	
ED-1.2	Form partnerships within Town Hall and cultivate relationships with neighboring communities and regional agencies to ensure inclusion of Newbury businesses and resources in regional efforts to promote economic development, workforce training, and affordable housing initiatives in the region.	
ED-1.3	Strengthen the ability of Town officials and local leaders to expedite and promote development proposals that are beneficial to the Town as a whole	
ED-2	Support and retain existing businesses within the town.	
ED-2.1	Explore collaboration with the Greater Newburyport Chamber of Commerce to support Newbury businesses	
ED-2.2	Work with the Merrimack Valley Planning Commission as the Regional Economic Development Organization to conduct business outreach to both large and small businesses.	
ED-2.3	Ensure Newbury's priorities are incorporated into the regional Comprehensive Economic Development Strategy	
ED-2.4	Increase coordination within the business community to identify opportunities for networking, events, cross-promotion, business training, and other resources.	
ED-2.5	Encourage and support home-based businesses.	
ED-2.6	Preserve agricultural land and working landscapes.	
ED-3	Definitively address and plan for infrastructure needs.	
ED-3.1	Fund an infrastructure study to evaluate scenarios for the provision of public water and sewer in Newbury to proactively manage the increased salinity in wells and failure of septic systems and to facilitate more intense development in the Business and Light Industrial Districts.	
ED-3.2	Address concerns regarding parking management, restroom facilities, waste management, and lifeguards at the Town Beach on Plum Island. Hold public meeting to discuss current plan for restroom facilities and related topics.	
ED-3.3	Use local leadership including the Selectboard and the EDC (recommended in ED-1.1) to communicate and inform the voting public regarding infrastructure options and the costs, including costs of not improving infrastructure.	
ED-3.4	Plan for and identify funding sources for streetscape improvements (sidewalk improvements, banners, plantings, street furniture, lighting, etc.) in the village commercial areas (Upper Green, Byfield Village, Plum Island Center), to make each area more pedestrian friendly, functional, and aesthetically pleasing.	

Partners	Priority	Resources
Select Board	High	
Town staff EDC	High	MVPC Greater Newburyport Chamber of Commerce
Select Board Planning Board EDC	High	
EDC Town staff Neighborhood committees	Medium	Greater Newburyport Chamber of Commerce MVPC
EDC Town staff		
EDC Town staff		
EDC Town staff		
Planning Board Town Clerk Town Administrator	High	
AgriCultural Council New Ad Hoc Committee of Residents Principal Assessor/Board of Assessors Select Board	Medium	MA Department of Agricultural Resources APR Program Division of Conservation Services (DCS) grant programs Land Trusts
Old Town Water District Select Board	High	EOEEA grant MVPC technical assistance USDA
Select Board PITA Capital Planning Committee Finance Committee	High	Parking permit fees Grants Volunteer efforts
Select Board EDC	High	
Planning Board Select Board Department of Public Works Town Administrator	Medium	Complete Streets funding Shared Streets and Spaces funding MassWorks (Community One Stop for Growth)

#	Goal/Action	
ED-4	Establish regulatory policies and procedures that support local businesses.	
ED-4.1	Explore how smaller communities support small businesses and work with MVPC to publicize their small business resources to local businesses and entrepreneurs.	
ED-4.2	Develop permitting guide for prospective businesses, including home-based businesses.	
ED-4.3	Review Town Bylaws to ensure that provisions regarding noise, waste, hours of operation, and other nuisance factors, as well as licensing requirements, are appropriately conceived and governed by reasonable metrics.	
ED-5	Ensure new and existing development is complementary to the physical context of the different geographic areas of the town.	
ED-5.1	Consider the adoption of Design Standards and Guidelines to augment Site Plan Review, giving the Town more authority to comment on the design of proposed buildings and lots to ensure they will be complementary (and within the same vernacular as surrounding structures in areas of historic concern).	
ED-5.2	Address issues with "curb appeal" and beautification in the villages by completing Streetscape Master Plans for each area. The recommendations in the Master Plans should be used to inform the Design Guidelines and it may be appropriate to have separate guidelines for the different villages.	
ED-5.3	Devise and adopt a policy to fairly address enforcement issues and make clear that clean and attractive commercial sites are expected as part of the community standard.	
ED-5.4	Develop a specific strategy for the land within the Commercial Highway Zoning District near I-95.	
ED-6	Create more opportunities for workers of all income levels to live in or commute to Newbury.	
ED-6.1	Create pathways for new development of all housing types—apartments, (affordable and market rate), condominiums, duplexes, and single-family homes.	
ED-6.2	Determine if existing businesses would benefit from having additional transportation options for their workforce—in the form of public or shared-private transportation.	

Partners	Priority	Resources
Town staff	High	
Planning Board Inspectional Services Board of Health	Medium	
Planning Board	Medium	
Planning Board	Medium	
Planning Board	Medium	
Select Board Inspectional Services	High	

#	Goal/Action	
HISTORIC /	AND CULTURAL RESOURCES	
HC-1	Increase the awareness of Newbury's unique cultural and historic resources.	
HC-1.1	Create and install markers to identify the Newbury Historic District.	
HC-1.2	Develop a voluntary program to install signs with a consistent style and information on historic buildings throughout Newbury.	
HC-1.3	Develop a series of informational markers for key areas of town that showcase history, culture, and natural resources.	
HC-1.4	Create a Newbury trail system for visitors that links history and natural resources in one or more self-guided walks, bicycle rides, and drives throughout the Town.	
HC-1.5	Develop a town-wide cultural calendar that incorporates events from the cultural and nonprofit groups throughout the Town.	
HC-1.6	Plan for the 400 th anniversary of the Town in 2035.	
HC-2	Continue cataloging historic assets in Newbury and develop priorities for cultural resource preservation.	
HC-2.1	Compile a list of resources that are underrepresented, focusing on resources within the nine heritage landscapes.	
HC-2.2	Document secondary features on residential properties which have already been listed.	
HC-2.3	Record more complete histories for assets identified as First Period Dwellings.	
HC-2.4	Prepare and submit new State and National Register District Nominations.	
HC-2.5	Encourage homeowners to put Preservation and/or Conservation restrictions on their properties.	
HC-3	Maintain the historic integrity of Newbury's existing villages.	
HC-3.1	Conduct neighborhood planning studies for each of the villages.	
HC-3.2	Investigate establishing Neighborhood Conservation Districts for the Old Town/Upper Green, the Lower Green, and Byfield Village.	
HC-3.3	Investigate zoning changes targeted to the unique identity of each village.	
HC-4	Preserve historic cemeteries in Newbury.	
HC-4.1	Create a Cemetery Committee, perhaps as a subcommittee of the Historical Commission.	
HC-4.2	Develop a comprehensive preservation and management plan for the First Settlers Burial Ground, which is the only publicly owned cemetery.	
HC-4.3	Work with owners of private cemeteries, perhaps through the Newbury Historical Commission, to ensure the preservation of historic markers, monuments, and other resources.	
HC-4.4	Facilitate the development of a "Friends of" volunteer committee to help with fund-raising and clean-up days and coordinate with the Veterans' Agent.	

Partners	Priority	Resources
Historical Commission	Medium	
Historical Commission	Low	Grant funding
Historical Commission Cultural Council	Low	
Historical Commission Cultural Council	Low	
Historical Commission Cultural Council		
Historical Commission Cultural Council	Medium	
Historical Commission	Medium-High	Grant funding
Historical Commission	Medium-High	Grant funding
Historical Commission	Medium	
Historical Commission	Medium	
Historical Commission	Medium	Massachusetts Historical Commission Essex County Greenbelt Association
Planning Board and Planning Director		
Planning Board and Planning Director		
Planning Board and Planning Director		
Historical Commission		
Historical Commission Department of Public Works Friends of the First Settlers Burial Ground	Medium	
Historical Commission	Medium	
Historical Commission	Medium	

11. IMPLEMENTATION PLAN

#	Goal/Action	
HC-5	Preserve the town's scenic landscapes and rural character.	
HC-5.1	Compile a comprehensive inventory of all roads in Newbury which could be considered scenic.	
HC-5.2	Consider adopting a Scenic Roads Bylaw to control the impact of private development and encourage homeowners to protect stone boundary walls.	
HC-5.3	Develop policies and procedures for road maintenance and reconstruction on scenic roads by the Department of Public Works.	
HC-5.4	Consider adopting a scenic overlay district bylaw to preserve the view of landscapes deemed part of the Town's history and culture.	
HC-6	Preserve historical records of the Town of Newbury and its residents.	
HC-6.1	Incorporate a climate-controlled storage space in the new or renovated Town Hall.	
HC-6.2	Apply for grants to preserve maps and historical documents.	
HC-6.3	Develop a plan to electronically scan all historic Town records and make them accessible via the Internet.	
HC-6.4	Create a policy for physical access to documents and materials for researchers.	

Partners	Priority	Resources
Planning Director		
Planning Board and Planning Director		
Planning Director Department of Public Works	Medium	
Planning Board and Planning Staff	Medium	
Select Board Town Administrator		
Town Clerk		
Town Clerk		
Town Clerk		

#	Goal/Action	
HOUSING		
H-1	Increase the diversity of housing options.	
H-1.1	Continue to promote the accessory apartment bylaw.	
H-1.2	Encourage infill development in areas that have public water and/or septic capacity (except for Plum Island).	
H-1.3	Adopt zoning in appropriate locations that allows multifamily housing and/or mixed-use development at a compatible scale and form.	
H-1.4	Identify opportunity sites for adaptive reuse, provide zoning to facilitate reuse/redevelopment with multiple units.	
H-2	Increase the supply of affordable housing.	
H-2.1	Identify potential sites such as Chapter 61 parcels, Town-owned surplus properties, and underutilized commercial or institutional properties which may provide opportunities for affordable housing development/redevelopment.	
H-2.2	Seek opportunities to create affordable housing using existing housing stock such as tax title or receivership. (Deed-restrict homes to be affordable to low/moderate income households.)	
H-2.3	Seek development partner(s) to build or rehab affordable units.	
H-2.4	Approach owners of Newbury's existing affordable housing developments to put in place long-term or permanent deed restrictions to ensure that units remain affordable beyond the term that current subsidies are set to expire.	
H-2.5	Access existing resources to support housing needs of low-income residents through the United States Department of Agriculture (USDA) and regional partnerships. (i.e., neighboring communities, regional nonprofit organizations).	
H-2.6	Coordinate access to housing rehabilitation programs and community services to enable elderly residents to safely age in place in their existing homes.	
H-2.7	Coordinate with USDA, local banks, and regional partners to participate in a first-time homebuyer assistance program.	
H-2.8	Consider inclusionary or incentive zoning tools to create affordable housing.	
H-3	Expand water/sewer infrastructure capacity to serve more diverse housing.	
H-3.1	Adopt higher density zoning in select locations to encourage private investment in infrastructure or the development of alternatives to fulfill water/ wastewater needs.	
H-3.2	Consider creating a Town well to serve existing and future development.	
H-3.3	Consider alternatives for wastewater treatment.	
H-3.4	Seek funding for infrastructure improvement through private developers or regional partnerships. Newbury may also be eligible for long term low interest loans for water and waste disposal facilities through the US Department of Agriculture Rural Development program.	

Partners	Priority	Resources
Building Department		
Planning Board	High	Technical Assistance grants
Planning Board	High	Technical Assistance grants
Planning Director Planning Board	High	
	High	
Planning Director Planning Board		
Planning Director Planning Board	High	Affordable Housing Trust USDA Housing Programs Regional nonprofit partner
Planning Director Planning Board Select Board		Habitat for Humanity Greater Newburyport YWCA Harborlight Community Partners Other regional organizations
Planning Director	High	USDA Housing Programs Programs
Planning Director Select Board		USDA Housing Programs Greater Newburyport YWCA Harborlight Community Partners Other regional organizations
Health Director Board of Health Council on Aging Veterans' Agent	High	USDA Housing Programs Greater Newburyport YWCA Harborlight Community Partners Other regional organizations
Planning Director	Medium	USDA Housing Programs Other regional organizations
Planning Board	Medium	
Planning Board	Medium	
Old Town Water District Select Board	Medium	USDA State grants
Board of Health Planning Board	Medium	USDA State grants Private developers
Town Administrator Planning Director Planning Board	High	USDA State grants Regional partnerships

#	Goal/Action	
H-4	Reduce the vulnerability of Newbury's housing stock to climate-related storm damage.	
H-4.1	Review, and as appropriate, implement the Great Marsh Coastal Adaptation Plan and the Town's Hazard Mitigation Plan.	
H-4.2	Assist property owners in accessing MEMA/FEMA funds for disaster mitigation and for retrofitting structures.	
H-4.3	Consider modifying zoning to add incentives for new construction or significant reconstruction to build at higher elevation in areas prone to coastal flooding.	
H-4.4	Consider a program that allows the Transfer of Development rights from areas exposed to sea level rise to less vulnerable areas.	
H-5	Expand local awareness and support for housing needs.	
H-5.1	Seek support from MVPC, regional organizations and neighboring communities to obtain technical assistance and shared funding opportunities and services. W	
H-5.2	Convene a Housing Summit, inviting members of all boards, commissions, departments, as well as the public to discuss housing needs, strategies, and priorities for implementation.	
H-5.3	Establish a Housing Committee or Housing Partnership/Task Force to advocate for initiatives to address housing needs.	
H-5.4	Establish an Affordable Housing Trust.	
H-5.5	Develop a funding stream for the Affordable Housing Trust that includes one or more of the following sources: in-lieu fees from inclusionary zoning, general fund distribution, charitable fundraising, or mitigation payments.	
H-6	Encourage housing development which preserves natural and cultural resources.	
H-6.1	Identify funding to exercise right of first refusal to purchase land coming out of Chapter 61 A to preserve farmland and provide affordable housing at a scale that supports the preservation of the agricultural land for future agricultural activities	
H-6.2	Work with conservation groups and land trusts to identify sites for limited development, in which a small amount of development subsidizes the preservation of open space.	

Partners	Priority	Resources
Planning Board Select Board Public Safety departments Inspectional Services	High	MVPC Great Marsh partnership members
Inspectional Services Conservation Agent Police		MEMA FEMA
Planning Board Inspectional Services	High	CZM
Planning Board	Medium	
Planning Director Planning Board Select Board		MVPC DHCD Mass Housing Partnership (MHP) USDA Neighboring communities and organizations
Planning Director Planning Board Select Board Other boards and committees	High	MVPC Nonprofit organizations
Planning Director Planning Board Select Board	Medium	
Housing Committee/ Partnership	Low	МНР
Planning Director Planning Board Select Board		
Finance Committee Select Board Open Space Committee	High	Conservation organizations Division of Conservation Services grant programs Essex County Greenbelt Association
Open Space Committee Planning Board Planning Director	Medium	Conservation organizations
Planning Board	Medium	Conservation organizations

#	Goal/Action	
NATURAL	RESOURCES	
NR-1	Protect and ensure the availability and quality of the town's water supply resources.	
NR-1.1	Establish a Board of Water Commissioners.	
NR-1.2	Adopt Massachusetts Water Conservation Standards.	
NR-1.3	Implement water conservation and drought management plans.	
NR-1.4	Consider adoption of a Water Conservation Bylaw.	
NR-1.5	Promote enhanced water conservation through education among water suppliers and watershed residents.	
NR-1.6	Balance the community's demand for water with safe yield of the Parker River.	
NR-1.7	Work with neighboring towns (Georgetown, Groveland, and West Newbury) to assess and enhance wellhead protection measures in Byfield Water District's primary recharge areas that extend beyond Newbury's border.	
NR-2	Protect and enhance inland, estuarine, and coastal water quality.	
NR-2.1	Adopt additional measures to reduce non-point source pollution to Newbury's inland and coastal waters by implementing the requirements for compliance with the Municipal Separate Storm and Sewer Systems (MS4) requirements under the National Pollutant Discharge Elimination System (NPDES) and the Clean Water Act (CWA) of 1972.	
NR-2.2	Consider creating a Stormwater Utility as a dedicated revenue source for enforcing and implementing the identified Best Management Practices for stormwater management and preserving water quality.	
NR-2.3	Consider engaging in a watershed-based planning process through the Department of Environmental Protection's non-point source reduction 604b program to organize information about pertinent water resources and aid in the development and implementation of projects which restore water quality and beneficial uses.	
NR-2.4	Link public education efforts recommended in NR-7 to the protection of water quality.	
NR-3	Protect and enhance critical upland, water resources and wetland habitats to sustain biodiversity.	
NR-3.1	Prepare and maintain an up-to-date local Open Space and Recreation Plan (OSRP).	
NR-3.2	Maintain the Open Space Committee as a standing committee.	
NR-3.3	Develop and maintain a list of vulnerable high priority open space parcels within the OSRP.	
NR-3.4	Begin discussions with owners of high priority parcels about land preservation.	
NR-3.5	Increase the Town's financial capacity to acquire priority open space.	
NR-3.6	Engage outside expertise and funds to purchase priority open space parcels.	
NR-3.7	Increase protection of wetlands throughout Newbury.	
NR-3.8	Increase protection of wetland buffer areas and vernal pools and their associated species.	
NR-3.9	Inventory and prioritize inland and estuarine wetland habitats.	
NR-3.10	Preserve and restore habitat, including wildlife corridors, natural stream courses, floodplains, and flow regimes.	

Partners	Priority	Resources
Select Board		
Select Board		
Select Board		
Planning Board Planning Director		
Department of Public Works Byfield Water District		
Select Board Byfield Water District		
Select Board Department of Public Works		
Select Board Department of Public Works		
Select Board Department of Public Works		
Select Board Department of Public Works		
Planning Director Select Board Open Space Committee		
Select Board		
Planning Director		
Select Board		
Select Board		
Select Board		
Conservation Commission		

#	Goal/Action	
NR-4	Preserve working farms and prime and unique agricultural farmland, farmland of statewide importance and farmland of local importance.	
NR-4.1	Coordinate conversations between active farmers near wetlands and surface waters with the Conservation Commission.	
NR-4.2	Create funding mechanisms for the purchase of agricultural land.	
NR-4.3	Facilitate the purchase of development rights to preserve farmland.	
NR-4.4	Support the installation of green energy systems (wind and solar) in designated areas that do not include prime agricultural soils or farmland that is unique or of state or local importance.	
N-4.5	Support the development of buffer zones between agricultural lands and water resources.	
NR-5	Manage future land development and redevelopment in an environmentally sensitive manner.	
NR-5.1	Actively promote and facilitate the use of open space residential development over conventional subdivision development.	
NR-5.2	Encourage the incorporation of "green building" techniques in all municipal, residential, and commercial/industrial development and redevelopment projects.	
NR-5.3	Become designated as a Green Community.	
NR-6	Educate Newbury residents and businesses about the Town's natural resources, resource threats, and resource protection tools and techniques.	
NR-6.1	Increase public awareness and understanding of responsible household management practices (septic system maintenance, lawn care, etc.), Improved natural resources stewardship, open space conservation, etc.	
NR-6.2	Restore options for households to dispose of hazardous wastes.	
NR-6.3	Expand environmental education in the classroom and field.	
NR-6.4	Explore opportunities to host environmental workshops and seminars	
NR-6.5	Increase public awareness of environmental success stories.	
NR-7	Implement the relevant recommendations from recent planning efforts.	
NR-7.1	2017 Great Marsh Coastal Adaptation Plan	
NR-7.2	2018 Municipal Vulnerability Plan	
NR-7.3	2020 State of the Coast Report: North Shore	

Partners	Priority	Resources
Conservation Commission		
Select Board		
Select Board		
Select Board		
Planning Director Planning Board Conservation Commission		
Planning Director Planning Board		
Select Board Municipal Building Committee		
Select Board Planning Director		
Conservation Commission		
Planning Director Planning Board Conservation Commission		
Planning Director Select Board Planning Board		
Planning Director Planning Board Conservation Commission		

#	Goal/Action	
TRANSPOR	RTATION	
T-1	Improve safety of roadways in Newbury.	
T-1.1	Route 1 @ Boston Road	
T-1.2	Route 1 @ Elm Street	
T-1.3	Elm Street @ School Street	
T-1.4	Plum Island Boulevard @ Sunset Drive/Old Point Road	
T-1.5	Highfield Road @ Middle Road	
T-1.6	Route 1 @ Middle Road and Hanover Street	
T-1.7	Route 1A (High Road) @ Newbury Neck Road & Lane's End	
T-1.8	Middle Road @ Boston Road	
T-1.9	Improve bicycle and pedestrian facilities in Byfield Village.	
T-2	Maintain the quality of Newbury's mobility infrastructure.	
T-2.1	Continue to support the Pavement Management Program.	
T-2.2	Continue to compare the updated Subdivision Rules and Regulations with the EPA regulations to ensure continued compliance with the MS4 Permit	
T-2.3	Pursue the construction of an emergency by-pass road from Northern Boulevard to Old Point Road to address the safety of residents of Plum Island.	
T-2.4	Replace culverts identified in the Great Marsh Coastal Adaptation Plan.	
T-2.5	Address roadways subject to flooding as identified in the Great Marsh Coastal Adaptation Plan.	
T-2.6	Maintain ADA ramps on sidewalks and maintain/repair deteriorating sidewalks throughout town.	
T-2.7	Work with the MBTA perform a full hydrological study to identify all the constrictions along the Little River and assess the impacts both upstream and downstream if they are removed.	
T-3	Enhance safe bicycle and pedestrian circulation.	
T-3.1	Adopt a Complete Streets Bylaw and Implementation Plan.	
T-3.2	Create a Newbury Biking and Pedestrian Facilities Master Plan.	
T-3.3	Develop a program of recommended bicycle and pedestrian improvements for Route 1 and Route 1A in advance of future MassDOT improvements to this area and coordinate those recommendations with MassDOT early in the design process.	
T-3.4	Connect the Upper Green, Old Town, and Byfield Village with bicycle and pedestrian infrastructure.	

Partners	Priority	Resources
Select Board Department of Public Works		
Select Board Department of Public Works		
Select Board Department of Public Works		
Select Board Department of Public Works		
Select Board Department of Public Works		
Select Board Department of Public Works		
Select Board Department of Public Works		
Select Board Department of Public Works		
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Select Board Department of Public Works		
Select Board Department of Public Works		

#	Goal/Action	
T-3.5	Connect the new sidepath from the Clipper City (Phase II) Trailhead to the existing sidewalk on Parker Street, located on the westbound (north) side of Parker Street.	
T-3.6	Work with MassDOT to provide a link between the Newburyport Rail Trail and the Byfield Village endpoint of the Border to Boston Rail Trail.	
T-3.7	Reconstruct the sidewalk on Rolfe's Lane and extend it to the Newburyport city line.	
T-3.8	Monitor bicycle and pedestrian travel patterns in neighboring communities and remain aware of any proposed or planned roadway, sidewalk or trail projects.	
T-3.9	At Plum Island Center, improve the existing sidewalk, better define the existing crosswalks in the area, and add crosswalks where appropriate.	
T-3.10	Add bicycle and pedestrian amenities to support investments in sidewalks and bike lanes and support pedestrians and bicyclists at their destinations.	
T-3.11	Provide education about road safety to all users.	
T-4	Enhance safe access to Plum Island and Town beaches and waterways for Newbury residents and visitors.	
T-4.1	Eliminate parking spaces along Sunset Drive that are contributing to the degradation of the roadway and environment and replace those spaces elsewhere.	
T-4.2	Identify, delineate, and maintain public rights-of-way to the beaches on Plum Island.	
T-4.3	Install bicycle and pedestrian amenities on Plum Island.	
T-4.4	Review parking availability at boating access points and identify ways to support access.	
T-4.5	Develop and maintain a Community Water Trails Map that includes information on the location and use of the facilities to improve the use of existing boat access locations.	

Partners	Priority	Resources
elect Board epartment of Public Works		
elect Board epartment of Public Works		
elect Board epartment of Public Works		
elect Board epartment of Public Works		
elect Board epartment of Public Works		
elect Board epartment of Public Works		
elect Board epartment of Public Works		
elect Board epartment of Public Works		
elect Board epartment of Public Works		
elect Board epartment of Public Works		
elect Board epartment of Public Works		
elect Board epartment of Public Works		

12. TOOLS AND RESOURCES

OVERVIEW: TOOLS AND RESOURCES

This chapter provides a series of resources for implementation.

- MEASURING PROGRESS. A short guide to thinking about how to set up benchmarks.
- TOOLS. A collection of additional tools that were identified as possible options for the Town during the planning process.
- **FUNDING SOURCES.** A list of grant programs that may help fund some of the implementation actions.
- GLOSSARY. A list of common planning terms and their definitions.
- PLANNING RESOURCES. A list of websites for those who want to learn more about planning.

MEASURING PROGRESS AND BENCHMARKS

Communities are starting to define benchmarks to assess progress in achieving their goals over time. Benchmarks can include the completion of specific actions or changes in trends.

Trends can include a change in the production of housing by units or by type; the addition of commercial square footage, or the linear feet of bicycle paths installed.

Benchmarks can be identified by the relevant board, committee, or department, perhaps with assistance from the Master Plan Implementation Committee (MPIC). A critical component of establishing benchmarks is ensuring that the data is easy to measure and collect as volunteers and staff rarely have time to do in-depth data collection. The ideal data sets would be either publicly available (from data sets such as the US Census, MHP's Datatown, the Massachusetts Division of Local Services, and others) or already collected by the relevant department (such as the number of building permits filed or seniors assisted with housing requests, for example).

Examples of benchmarks to consider include the following:

- Change in the number of:
 - New businesses in town, by location.
 - Businesses retained.
 - Housing units produced.
 - Affordable units produced.
 - Residents (this could be broken down by age, to track long-term tends and need for specific services)
- Number of linear miles installed for trails, bikes lanes, improved sidewalks.
- Number of crosswalks installed.
- Square feet of conservation land placed under permanent protection.
- Square feet of agricultural land placed under permanent protection.

TOOLS

The tools listed in this section are expansions on the information in the relevant chapter.

COMMUNITY SERVICES AND FACILITIES

MS4 Requirements

As authorized by the Clean Water Act (CWA) of 1971, certain sections of Newbury are subject to the Municipal Separate Storm and Sewer Systems (MS4 for short). This is in effect a permission to discharge stormwater into the waters of the United States under the National Pollutant Discharge Elimination System (NPDES). The more densely populated sections of the town, as determined by the 2010 census, are subject to this permit.

These are federally-designated "Urbanized Areas" and are operated as a municipal storm drainage system. As such, the Town of Newbury is required to comply with the Federal Environmental Protection Agency's (EPA) Phase II stormwater management regulations. Compliance with these regulations requires the town to apply for and obtain a discharge permit which is issued jointly by EPA and the Massachusetts Department of Environmental Protection. (This permit was obtained by Newbury in April 2003.) As a requirement of the permit, the town, acting through the Highway Department and Conservation Commission, prepared a Storm Water Management Plan (SWMP) that describes a series of best management practices (BMPs) the town is committed to implementing by 2008. Together, these management practices are intended to prevent or significantly reduce stormwater pollution through a combination of heightened local regulation and public education and participation. This permit was extended in 2008, due to delays in accommodating public comments. A new permit with far more extensive requirements was promulgated by USEPA in 2016 to become effective on July 1, 2017. Due to multiple lawsuits, USEPA again extended the effective date to July 1, 2018.

The region's rivers, the Parker, Little, Mill, Plum Island and Merrimack, are all impaired because of pathogens, including disease carrying bacteria and viruses. It is the challenge of each community to remove the source of these pollutants. While in compliance with the USEPA mandate within the federally designated areas, pollution can still come from other sections of town that are not so designated. Therefore, the Town should develop other tools and policies beyond the minimum USEPA requirements to reduce contaminated stormwater discharge to all the town's waters. The Town should educate residents aware of these issues and expand the testing program throughout the town. Stormwater pollution affects the shellfish industry, the health of marine life and the health of all who swim and play in the region's waters.

The town is required to perform six categories of activities in order to be in compliance with the permit. These categories are referred to as "Minimum Control Measures" as follows:

- Public Education This involves getting the word out to residents as to the importance of discharging only clean storm water into streams and rivers. The town has provided informative brochures on the town website and they are available for pick up at town hall or the town library. These brochures have also been sent out in the tax bills. A continuation of this outreach is planned.
- Public Participation In order to have as many residents as possible involved in storm water activities, the Stormwater Committee was formed. The Committee includes volunteers along with public officials who will conduct public hearings for the following required documents.
 - Notice of Intent
 - Stormwater Management Program
 - Illicit Discharge Detection and Elimination Plans (IDDE).
 - Operations and Management Program (town owned facilities)
 - Stormwater Pollution Prevention Plan (town owned facilities)
- ILLICIT DISCHARGE DETECTION AND ELIMINATION. This is a program of outfall and catch basin inspection, chemical and biological testing with follow-up to determine the source of any detected contamination and removal of said contamination. To date only a minor amount of this work has been completed, but a draft of the IDDE Plan has been written. Additionally, the town has enacted a bylaw and related regulations to govern Stormwater Management and Illicit Discharge and Erosion Control. These are administered and enforced by the Conservation Commission.
- CONSTRUCTION SITE STORMWATER RUNOFF CONTROL. This addresses the problem
 of disturbed soil washing into the storm drain system and onto receiving water bodies.
 The Conservation Commission provides oversight for projects subject to the Wetlands
 Protection Act and a volunteer monitors upland projects.
- STORMWATER MANAGEMENT FOR NEW DEVELOPMENT AND REDEVELOPMENT. Post construction stormwater management:
 - Town regulations require green infrastructure which minimize the discharge of pollutants and nutrients into waterways and prevent flooding.
 - The town has identified five town-owned properties which can be retrofitted to reduce pollution from stormwater runoff

12. TOOLS AND RESOURCES

- Good Housekeeping and Pollution Prevention for operation of town owned property.
 This control measure requires the town to keep plans and records for the following:
 - Pesticide and Fertilizer application
 - Proper safe guards for the storage of salt, fuel and hazardous material.
 - Proper schedule of catch basin clean out
 - Proper schedule of inspection of various components of the stormwater system;
 ditches, outfalls, catch basins, manholes and pipes.
 - Proper schedule of street sweeping
 - Pollution prevention such as spill prevention and response plans. A key element of this program is a computer system maintained by the Merrimack Valley Planning Commission that provides mapping of the various components of the Newbury Stormwater System, along with recording the condition, maintenance history and water quality testing results.

HISTORIC AND CULTURAL RESOURCES

Demolition Delay Bylaw (also known as the "Preservation of Historically Significant Structures)

Under the provisions of this Bylaw, the Historical Commission can require up to a nine-month waiting period before a historic structure can be demolished, if the Commission deems the structure (or any portion thereof) "Significant" and determines whether it should be "Preferably Preserved." The Building Commissioner is required to forward notification of a proposed demolition to the Newbury Historical Commission within 7 days of receipt of the application. The Demolition Delay Bylaw (DDB) is initiated automatically for any structure built in 1820 or before. However, the proposed demolition of any structure deemed "Significant" by the Historical Commission can also require DDB review. By preserving and protecting significant structures, streetscapes, and neighborhoods, this Bylaw promotes the public welfare by preserving important historic and cultural assets and making the town a more attractive and desirable place in which to live and work.

National Register of Historic Places

Listing on the National Register potentially provides several direct benefits to the property owner, including:

- Eligibility for state and federal preservation grant programs for property owned by non-profits or municipalities; and
- A phasing-in of increases in assessed values which are a result of a rehabilitation work undertaken by a homeowner.
- Tax Incentives: listing allows the owners of income-producing properties certain federal tax incentives for substantial rehabilitation according to standards set by the Department of Interior.
- Protection: National Register properties are afforded limited protection from adverse effects of federally assisted projects; and, through automatic inclusion in the State Register of Historic Places, limited protection from state actions.

Neighborhood Conservation District

This tool sets development standards for demolition, new construction, major alterations, and additions which are proposed in historically important areas. These development changes must be approved by a design review boards before proceeding. A Neighborhood Conservation District provides a more flexible form of review than is found in a Local Historic District, and provides only nonbinding advisory reviews on other, minor architectural changes.

Scenic Road Overlay

Without adequate regulatory controls in place, new development or redevelopment that is not sensitively designed and sited could spoil scenic resources. As an overlay district, the Scenic designation would be superimposed over the underlying zoning districts and provide additional protections to scenic areas. Areas so designated might include those within 500 feet of the edge of a Scenic Road or prominent hilltops or ridgelines. Through site plan review, new construction would be directed away from the line of view and blend with the natural landscape. This can be achieved through tools such as height restrictions, setback requirements, design review, sign controls, and landscaping and environmental impact standards. The Scenic Overlay District Bylaw could be written to apply not just to the scenic "back roads" in town, but also to numbered routes, which are not protected under a Scenic Roads Bylaw.

NATURAL RESOURCES

Tools for Land Preservation

Outright Acquisition

Outright (or "fee simple") acquisition provides the highest amount of protection for a piece of property. It also affords the purchaser of the property the ability to control how it is used and managed. However, outright acquisition is generally the most expensive technique as well. Funding mechanisms for outright acquisition include:

- Town funding from a one-time appropriation, an annual contribution to a land protection fund, or the Community Preservation Act;
- Grant funding: for example, through the State's Self-Help Program administered through the Division of Conservation Services;
- Private conservation organizations such as The Trustees or the Essex County Greenbelt Association;
- Donations or "bargain sales" from landowners seeking to conserve their land or gain income tax benefits.

Conservation Restrictions and Fasements

Conservation Restrictions ("CRs") and easements limit the future use of land by restricting or prohibiting development. However, the land continues to be owned and operated by a private owner. If the restriction on development is in perpetuity, this mechanism provides as much protection for land as outright acquisition. In addition, it can cost less than outright acquisition and offers more flexibility to meet the needs of the landowner. For example, a restriction could be negotiated that allows a landowner to continue to farm or log the land, live on the land, or even build another house on the property. Alternatively, CRs can prohibit the rebuilding of dwellings or structures destroyed by storm events or erosion.

Funding can come from the same mechanisms as for outright acquisition. In addition, grant funding is available from various State programs including the Agricultural Preservation Restriction (APR) Program, which purchases development rights from farmers to preserve the land as farmland.

Temporary Protections

The State's Chapter 61, 61A, and 61B programs offer tax incentives for landowners to keep their property in active forestry, agricultural, and recreation use, respectively. However, these programs do not guarantee long-term protection of the land.

Other Tools

Other land conservation tools take advantage of the economics of land development to protect open space as part of new development projects (usually residential). As long as the open space is protected with a suitable conservation restriction, this form of open space protection can be as effective as outright acquisition. These additional tools include:

- ZONING TOOLS. Open Space Residential Development (already adopted by Newbury),
 a Scenic Overlay District, reduced frontage lot provisions, and other regulations for
 development density can be effective zoning tools to increase the amount of open
 space in new developments, even if the overall development density remains the same.
- LIMITED DEVELOPMENT. In limited development projects, a conservation group (usually a
 nonprofit but sometimes a government body) first purchases a piece of land they would
 like to conserve as open space. Then, a portion of the site that is least important for
 conservation purposes is carved off and sold as high-end real estate such as a "country
 estate." The proceeds from this sale, which can sometimes equal 50% of the purchase
 price or more, are used to repay money borrowed for the land purchase or to fund
 future conservation efforts.

Options for Wetlands Bylaw

A local wetlands bylaw might include the following provisions and extended jurisdictions:

- ISOLATED WETLANDS. The local wetlands bylaw might apply to isolated wetlands not covered under the Wetlands Protection Act. Uncertified Vernal Pools are not protected by the WPA, unless they are a part of another resource area. Isolated wetlands support many of the same interests and values as Bordering Vegetated Wetlands.
- VERNAL POOLS. Vernal pools provide the only breeding habitat for several rare amphibian species, as well as habitat for other animals. Adjacent upland areas are important to amphibian survival as well. A substantial no-disturb buffer zone surrounding vernal pools could be established to better protect this important habitat and its resident species.

- NO BUILD/NO DISTURB ZONES. Some communities have chosen to adopt a 25-foot
 "no disturbance" buffer zone and a 50-foot "no habitable structure" buffer zone to
 jurisdictional wetlands. These are stricter than the State Act, which ordinarily allows
 activities within the wetland buffer zone subject to an Order of Conditions. Newbury
 Conservation Commission currently encourages the adoption of the 25'/50' buffers,
 with generally good compliance.
- INCREASED ACEC JURISDICTION. Newbury has a significant amount of upland adjacent to the Great Marsh Area of Critical Environmental Concern (ACEC). Many communities have increased the jurisdictional buffer from the ACEC beyond the 100' included in the WPA and 310 CMR, or established more specific performance standards within that buffer. The Town may want to consider increasing the buffer to 150' and review overall setbacks in wetland and BOH jurisdictions (septic setbacks).
- FILING AND REVIEW FEES. One of the strengths of a local bylaw is that it allows the Conservation Commission to charge additional application fees to help defray the cost of reviewing projects that fall under the bylaw's jurisdiction. In addition, the bylaw can require the applicant to pay for the reasonable cost of a technical expert (consultant) to review the applicant's wetland flagging and/or project plans.
- MONUMENTATION. Permanently marking no build/no disturb zones can help prevent landowner confusion after a project is completed.
- FREEBOARD. With a predicted rise in sea level and increased chance of inland flooding, a Bylaw might specify additional clearance above base flood elevations.
- SEPTIC SYSTEM SETBACKS. The Town enacted a Bylaw restricting the placement of sanitary systems within 300' of the non-tidal portions of the Parker River and its tributaries, leaving estuarine resources with less protection. The Con Comm has jurisdiction limited to 50 feet from wetland resource areas with a Board of Health approved septic design. Reviewing the Town Bylaw and including it in a Wetland Bylaw might streamline process and provide more uniform resource protection. Additional regulation of septic systems in tidal areas may be effective in maintaining and improving estuarine water quality.
- ESTABLISH PERFORMANCE STANDARDS. Wetland Regulations do not contain
 performance standards for some resource areas, such as Land Subject to Coastal
 Storm Flowage and Land Subject to Tidal Action. While these areas may be adequately
 protected by compliance with the State Building Code in flood hazard areas, communities
 can add standards to a Wetland Bylaw to allow review along with other resource
 concerns.

Green Building

A Green Building is carefully sited, designed, constructed, and operated so as to enhance the well-being of its occupants while minimizing negative impacts on the community and the natural environment. Green Buildings:

- Incorporate energy and water efficient technologies
- Use recycled materials in their construction
- Minimize construction and demolition waste
- Are sited and landscaped for energy and water efficiency
- Employ renewable energy technologies
- Improve indoor air circulation and air quality
- Provide a healthier and more comfortable environment
- Enhance long term economic performance
- Are built to last

Natural Features Important to Wildlife

Large dead standing trees	Nesting and roosting sites for hawks and eagles
Large trees with cavities	Nesting sites and shelter for owls, wood ducks, and other animals
Large dying trees	Roosting sites (under the loose bark) for bats
Stone walls and rock piles	Cover for snakes and small mammals
Seasonal pools	Breeding sites for amphibians
Understory tangles	Cover for many birds and wildlife species
Woody debris in streams	Basking areas for turtles and snakes
Stream bank burrows	Habitat for weasels, otters, and muskrats
Sandy soils with sun exposure	Nesting areas for turtles
Large stands of conifer trees	Wintering areas for deer
Hollow trees and logs	Dens for some mammal species
Fallen shaded logs	Preferred habitat for some salamander species

FUNDING SOURCES

This chapter contains a selection of funding sources that are applicable to one or more of the actions listed in the Implementation Plan. Some of these sources are competitive grants with specific requirements and funding cycles.

Mass EEA: Parkland Acquisitions and Renovations for Communities (PARC) Grant Program

This grant can be used by municipalities to acquire parkland, build a new park, or to renovate an existing park. More information can be found here: https://www.mass.gov/service-details/parkland-acquisitions-and-renovations-for-communities-parc-grant-program.

MassDOT/Chapter 90.

Chapter 90 refers to the highway funds in the annual state funding packages provided to municipalities throughout Massachusetts.

MassDevelopment Commonwealth Places.

This program supports placemaking projects with the support of the crowd-funding mechanism Patronicity. MassDevelopment matches up to \$50,000 if the community can meet its goal within 60 days. More information can be found here: https://www.massdevelopment.com/ what-we-offer/real-estate-services/commonwealth-places/

Community One Stop for Growth

In 2021, the Commonwealth of Massachusetts rolled the application process for ten grant programs into a single process. Programs that may be relevant include the following:

- MassWorks
- Massachusetts Downtown Initiative
- Community Planning Grants
- Site Readiness
- Underutilized Properties

More information can be found here: https://www.mass.gov/guides/community-one-stop-for-growth

Massachusetts Downtown Initiative (\$25,000)

The focus of this grant is downtown revitalization. The Technical Assistance program provides a consultant and funding for that consultant's work to communities who need help with specific problems. MDI also aids with the development of a Business improvement District, or BID. This grant is part of the Community One Stop for Growth program.

More information can be found here: https://www.mass.gov/service-details/massachusetts-downtown-initiative-mdi

Community Planning Grants (\$25,000-\$75,000)

This is a new program and provides funding for planning projects at a larger scale than the MDI program. Project Recommendation for which this grant would be appropriate might include zoning changes, particularly those that support density, studies for development within a 1/2-mile of a commuter rail station or a multi-town corridor that look at both density and multimodal connections, or other similar planning processes. This grant is part of the Community One Stop for Growth program.

More information can be found here: https://www.mass.gov/how-to/community-planning-grant-program

District Local Technical Assistance Grant (DLTA)

Funds for this program are allocated to the regional planning agencies. These funds may be used for planning projects. Each Regional Planning Agency (RPA) has a different focus on how these funds may be used to meet the state's funding goals. All municipalities are eligible to apply directly to their RPA. The RPA will work with the municipality on the program; a separate consultant is not usually required. MVPC is Newbury's Regional Planning Agency.

Mass Cultural Council

The Mass Cultural Council has one-year project grants for specific public programming. Mass Cultural Council defines public programming as activities that engage with the public. The municipality's own Local Cultural Council may have additional grants to support local arts and culture

https://massculturalcouncil.org/organizations/cultural-investment-portfolio/projects/

Massachusetts Historical Commission, Survey and Planning Grant Program

This grant is a 50/50 matching program that support planning activities that help preserve significant historic resources. For communities, whose target area contains significant resources, this source may help fund design guidelines that include specific requirements for the preservation of significant historic resources. Interested communities are encouraged to reach out to the Massachusetts Historic Commission directly about this grant; it may be tied to the creation of a local historic district.

https://www.sec.state.ma.us/mhc/mhchpp/surveyandplanning.htm

Massachusetts Department of Transportation, Complete Streets Funding Program

This program provides funds to municipalities who have adopted a Complete Streets Policy and created a Prioritization Plan. Any street infrastructure recommended in this report should be added to the Prioritization Plan. This grant program can help address recommended improvements for pedestrian and bicyclist mobility, safety, and comfort.

This grant can also assist with a design guidelines; these do not have to be limited to the private realm. Creating consistency in a downtown, village, or corridor is an important part of defining its identity both within and beyond the community. As part of a Complete Streets Project, a municipality should identify the specific materials, street furniture, trees, and public signage (including wayfinding) that will be used in the target area. These choices can be incorporated into the overall design guidelines to address both public and private realms.

This program could leverage the municipality's funding under Chapter 90 to ensure that multimodal infrastructure is connected, over time, throughout the community.

https://www.mass.gov/complete-streets-funding-program

Massachusetts Department of Transportation, Shared Streets and Spaces

This program provides funds to support the improvement of "plazas, sidewalks, curbs, streets, bus stops, parking areas, and other public spaces." The focus is on public health, safe mobility, and renewed commerce.

https://www.mass.gov/shared-streets-and-spaces-grant-program

WATER-DEPENDENT AND OTHER INFRASTRUCTURE RESOURCES

Federal resources

Two recent programs may have implications for funding that could assist Newbury with larger projects. The full extent of these programs is not yet known, so the Town should watch for specific funding announcements.

- INFRASTRUCTURE INVESTMENT AND JOBS ACT. This act will support many programs, including rebuilding and repairing roads and bridges and addressing the resiliency of infrastructure to climate change, including flooding.
- **INFLATION REDUCTION ACT.** This act focuses on the clean energy economy, and may provide incentives for some of the recommendations for electrification in this plan.

Massachusetts Resources

Seaport Economic Council Grant

This grant addresses economic growth in the maritime sector by providing funds for capital projects. More information can be found here: https://www.mass.gov/seaport-economic-council-programs-and-grants

CZM Coastal Resilience Grant Program

This program provides funds to address coastal flooding, erosion, and sea level rise. The StormSmart Coasts program provides funds for planning, design, permitting, construction, and monitoring. More information can be found here: https://www.mass.gov/service-details/coastal-resilience-grant-program

CZM Coastal Pollutant Remediation Grant Program

This program helps communities address nonpoint source pollution, including stormwater runoff from paved surfaces and the construction of pumpout facilities for commercial boats. More information can be found here: https://www.mass.gov/service-details/coastal-pollutant-remediation-cpr-grant-program

EEA MVP Program Action Grant

These grants help communities implement infrastructure improvements to address the impacts of climate change. The program prefers those strategies that are nature-based. More information about the criteria to apply can be found here: https://www.mass.gov/service-details/mvp-action-grant-eligibility-criteria

EEA Dam and Seawall Removal or Repair Program

This program helps fund repairs to and removal of dams and seawalls. More information can be found here: https://www.mass.gov/dam-and-seawall-repair-or-removal-program

Hazard Mitigation Grant Program

The Commonwealth provides funding for hazard mitigation plans. More information can be found here: https://www.mass.gov/hazard-mitigation-assistance-grant-programs

Information on this page also includes the Flood Mitigation Assistance Grant; and the Pre-Disaster Mitigation Grant.

MA DEP s319 and 604(b) Grant Programs

These address water quality, including nonpoint source pollution, management planning, and stormwater management. More information can be found here: https://www.mass.gov/info-details/grants-financial-assistance-watersheds-water-quality

Massachusetts Division of Marine Fisheries Marine Recreational Fisheries Development Fund

The fund can support improvements to recreational fishing. More information can be found here: https://www.mass.gov/service-details/the-marine-recreational-fisheries-development-fund

MassWorks Infrastructure Program

Administered by the Executive Office of Housing and Economic Development (EOHED); this is a competitive grant program for public infrastructure projects and is part of the Community One Stop for Growth program. Priority is given to those projects that support multi-family housing in walkable mixed-use districts; immediate job creation; and/or economic development in weak or distressed areas. MassWorks grants may be used for streetscape improvements, bridge repairs, and other such improvements. Municipalities must demonstrate that the application is consistent with the Commonwealth's Sustainability Principles and meets the programs investment goals. More information is available here: https://www.mass.gov/service-details/massworks-infrastructure-grants

MassWorks Dredging Grant

First announced by the Baker-Polito administration for fiscal 2018 as part of the MassWorks Infrastructure Program and intended to support the blue economy by the saltwater dredging of public waterways. EEA and CZM will coordinate this program. More information is available here: https://www.mass.gov/service-details/about-the-massdredge-program

GLOSSARY

General Planning Terms

- ADAPTIVE REUSE. The reuse of an existing building for a use that was not originally intended. For example, a school that has been converted to housing.
- MASTER PLANNING. A process of developing a vision for a community's future and the steps required to realize that future. In Massachusetts, master plan and comprehensive plan may be used interchangeably that is not true in other states.
- DIVERSE POPULATION. One that is inclusive of (but not limited to) different ages, races, ethnicities and cultural backgrounds, physical ability, sexual orientation, gender identifications, and a wider range of incomes, including those who are economically disadvantaged.
- VISION VS. GOALS VS. OBJECTIVES VS. ACTIONS. A community's vision is a statement of
 desired future condition. Goals are the high-level paths to achieve that vision and are
 community wide. Objectives divide the goals into more specific paths that may affect
 a subset of boards, departments, and committees. Actions are the individual steps that
 must be taken to achieve the goals and implement the vision.
- MASTER PLAN VS. MASTER PLAN UPDATE. A MASTER PLAN, in Massachusetts, is enabled by Massachusetts General Laws Chapter 41, Section 81D. The plan must include certain elements. The original goal of the master plan is to ensure that the use of land within the municipal boundaries is consistent with community goals. The planning process for a master plan expands beyond that to consider almost all aspects of municipal operations that have an impact on land use. A MASTER PLAN UPDATE is a planning process that reviews the previous master plan(s) and updates them based on current data and goals and expectations for the future of the community.
- MIXED-USE DEVELOPMENT. A development in which more than one land use is present
 on a lot. Mixed use may be any combination of office, residential commercial, and
 industrial. Some communities do not allow residential in some mixed-use zoning districts.
- NONCONFORMING LOTS. Lots that do not conform with the zoning of the district in which they are located.
- PLACEMAKING. The re-imagination and reinvention of public spaces in a community to create a unique sense of place responsive to the community's understanding of its identity.

- **REVITALIZATION.** Creating incentives for economic growth in an area that has experienced a significant decline in terms of jobs and population. Often accompanies by regulatory changes; the provision of grants or tax incentives; and public infrastructure improvements and/or placemaking initiatives to attract private investment.
- SMART GROWTH. Growth that takes advantage of existing development patterns, primarily infrastructure (roads, water, sewer) and access to public transit. The goal is to preserve undeveloped area by encouraging development or rehabilitation and reuse within existing developed areas. Often accompanied by an increase in the allowable square foot or units of land use, often housing, per acre.
- U. S. CENSUS. A count of the population of the United States every ten years. The most recent census count happened during 2020; some of the data from this count will not be available until 2023.

Circulation

- **COMPLETE STREETS.** The design of streets to safely accommodate multiple users (pedestrians, bicyclists, drivers) simultaneously.
- MULTI-MODAL. Infrastructure that provides access to more than one mode of transportation, for example, a road that provides safe access, marked access for private vehicles, public transit, bicyclists, and pedestrians. May also refer to multiple methods of providing public transit, such as bus or train.
- STREETSCAPE. The design of a street, including the natural and built environment; the quality and components of that design.

Economic Development

• MAKER SPACE. A collaborative workspace which provides tools and space for multiple uses. May require a membership and may be used as an incubator for small businesses.

Housing

- AFFIRMATIVE ACTION. Policies or practices in which an individual's color, race, sex, religion, or national origin are considered to increase representation in groups and opportunities for (among other aspects of society education, jobs, and housing for an under-represented part of society.
- AFFORDABLE/WORKFORCE HOUSING. "Housing that is affordable to households earning 60 to 120 percent of the area median income." (Urban Land Institute)

- Cost Burdened: According to the U.S. Department of Housing and Urban Development (HUD), cost-burdened families pay more than 30 percent of their income for housing.
- SEVERELY COST BURDENED. According to the U.S. HUD, severely cost-burdened families pay more than 50 percent of their income for housing.
- LOW-INCOME HOUSEHOLDS. Defined by U.S. HUD as a four-person family at 1.6 times the very-low income limit and adjusted by family size.
- **VERY-LOW INCOME HOUSEHOLDS.** Defined by U.S. HUD based on a four-person family at 50% of the area median income and then adjusted by specific formulas.

Municipal Finance

- MUNICIPAL BUDGET PROCESS. The annual process by which the Town's operating and capital budgets are developed and approved by Town Meeting.
- TAX BASE. The total assessed value of all property in the Town, including real estate, motor vehicle, and personal property.
- NON-TAX BASE REVENUE SOURCES. All non-tax sources or revenue, including grants, loans, bonds, and gifts. Also includes state funding, such as Chapter 90 (highway) and Chapter 70 (education).
- OPERATING FUNDS VS. CAPITAL FUNDS. OPERATING FUNDS are spent on the day-today operations of a municipality, such as staff salaries and supplies. CAPITAL FUNDS are investments in long-term physical projects or assets, such as roads, vehicles, and computer equipment.

Open Space and Recreation

- ACTIVE/PASSIVE RECREATION. ACTIVE recreation includes playgrounds, sports fields, and other areas that have special facilities or equipment. PASSIVE recreation, by contrast, does not require such facilities and include such uses as waking, mountain biking, birding, snow shoeing canoeing, hunting fishing, and riding,
- AQUIFER. A body of permeable rock which can contain or transmit ground water. May be the source of a community's water supply.
- AQUIFER PROTECTION/ WATER SUPPLY PROTECTION DISTRICT. Aquifers which serve as
 the source of a water supply must be protected from contamination and from overuse.
 In Massachusetts, this is known as Source Water Protection.

- GREENWAY TRAIL. A trail within a linear corridor that links water and land to natural, cultural, and recreational resources.
- POCKET PARK. Small outdoor space (less than 1/4 acre) which may be owned publicly
 or privately but is open to the public. Often found in urbanized areas to provide a
 public gathering space and usually a mixture of impervious surfaces (hardscape) and
 permeable landscaped areas.
- PROTECTED OPEN SPACE. Open space that is protected from development by acquiring the land by fee simple (buying the land) or by buying either a conservation or agricultural easement or restriction. The acquisition of easements by the state easements are authorized under M.G.L. Chapter 184, Sections 31-33 and is protected under Article 97 of the Amendments to the Massachusetts Constitution. Chapter 61 programs allow landowners to reduce their property taxes by donating easements on their land for forestry (61), agriculture (61A), or open space and recreation (61B). However, these are not permanent easements and therefore do not protect the land in perpetuity.
- URBAN FOREST. All trees and vegetation growing within an urbanized area.
- VIEWSHED. The geographic area visible from a specific location, including all elements within sight and excluding those that are blocked from view.

Regulations and Regulatory Tools

- 40B. Refers to Massachusetts General Laws Chapter 40B which enables the Zoning Board of Appeals to approve a development providing affordable housing as long as certain standards are met. A community with 10% or more of its the housing units in town on the Subsidized Housing Inventory are exempted from certain requirements of this provision.
- 40R SMART GROWTH DISTRICT. Refers to Massachusetts General Laws Chapter 40R
 which allows municipalities to create zoning districts for housing in areas that meet
 certain criteria and provides a financial benefit from the state to the municipality for
 permitting housing within those district. Also allows the community to enact design
 standards for development in the 40R district.
- **SECTION 81D.** Refers to Massachusetts General Laws Chapter 40, Section 81D which is the enabling legislation for master plans.
- **DESIGN STANDARDS**. As used in this document, the use of specific requirements to control the visual aspects of a building and site as part of the local approval process for a building or use. May also be used to refer to road or streetscape design.

12. TOOLS AND RESOURCES

- FLOOD PLAIN. An area defined by the Federal Emergency Management Administration (FEMA) as susceptible to flooding on a regular basis and at a given level of severity.
- FREEBOARD. Additional amount of height above the Base Flood Elevation used as a factor of safety. (https://www.fema.gov/glossary/freeboard)
- MASSACHUSETTS GENERAL LAWS VS. REGULATIONS VS. BYLAWS. MASSACHUSETTS
 GENERAL LAWS provide the enabling legislation for many of the tools mentioned
 in this plan. REGULATIONS are created by state and federal agencies to provide
 interpretation of legislation and to state how the legislation will be applied. BYLAWS
 or ordinances are approved by the municipality and govern the functions and
 authority of the municipality and its departments.
- OVERLAY DISTRICTS. A zoning district that does not replace the current underlying or base zoning but provides for different land uses or development standards within a specific area as long as the development meets certain conditions.
- ZONING. The control of land use by means of a local ordinance (in a city) or bylaw (in a town).

Sustainability/Resiliency

- BRUNDTLAND COMMISSION. Created in 1983 by the United Nations and formerly known as the World Commission of Environment and Development (WCED) and replaced by the Center for Our Common Future. Developed the standard definition of sustainable development.
- RENEWABLE ENERGY. Energy production that does not rely on fossil fuels; for example, energy derived from wind turbines or solar panels.
- RESILIENCY. Community resilience is a measure of the sustained ability of a community to utilize available resources to respond to, withstand, and recover from adverse situations. (RAND).
- SUSTAINABILITY. Defined as "development which meets the needs of current generations without compromising the ability of future generations to meet their own needs" (WCED, 1987).

WEBSITES

DATA SOURCES		
AARP Livable Communities.	https://www.aarp.org/livable-communities/	
Citizen Planner Training Collaborative	https://masscptc.org/	
This is an excellent resource for Planning Boa planning. A recent webinar discussed the dev	ard members and others interested in municipal velopment of master plans in Massachusetts.	
Massachusetts Department of Housing and Community Development (DHCD)	https://www.mass.gov/orgs/housing-and- community-development	
MassDevelopment	https://www.massdevelopment.com/	
Both DHCD and MassDevelopment have gra	ant programs and resources for implementation.	
Massachusetts Department of Transportation (MassDOT)	https://www.mass.gov/orgs/massachusetts- department-of-transportation	
This site provides information about MassDOT programs that may be appropriate for some strategies.		
Massachusetts Division of Local Services	https://www.mass.gov/orgs/division-of-local-services	
In addition to training for local officials, DLS supports the Municipal Finance Trend Dashboard, which, like MHP's DataTown below, allows communities to compare themselves against others. The Dashboard is here: https://www.mass.gov/service-details/municipal-finance-trend-dashboard , and the Community Comparison report is here: https://www.mass.gov/service-details/community-comparison-report .		
MassGIS	https://maps.massgis.digital.mass.gov/MassMapper/ MassMapper.html	
MassGIS's MassMapper is an online mapping layers for their town.	platform that allows people to view different data	
Massachusetts Historical Commission/ MACRIS	https://www.sec.state.ma.us/mhc/	
	under the purview of the Secretary of the on about MHC, resources (including grants and tax which provides detailed information about historical	
Massachusetts Housing Partnership	www.mhp.net/datatown	
	, which has information about demographics, housing, wnloaded as charts or a .csv file, allowing for additional data is updated frequently.	

12. TOOLS AND RESOURCES

Massachusetts Municipal Vulnerability Preparedness Program	https://resilientma.org/mvp/	
This site provides information about the MVP planning program, adaptation strategies, and supporting grants. More information is provided in two tools:		
The ResilientMA map viewer is here:	https://resilientma.org/map/	
The ResilientMA data grapher is here:	https://resilientma.org/datagrapher/?c=Temp/state/ maxt/ANN/MA/	

General Planning Resources	
American Planning Association	www.planning.org
Bloomberg City Lab	https://www.bloomberg.com/citylab
Congress for the New Urbanism	https://www.cnu.org/
Cornell Small Farms Program	https://smallfarms.cornell.edu/
Curbed	https://www.curbed.com/
Esri	https://livingatlas.arcgis.com/en/home/
Lincoln Institute of Land Policy	https://www.lincolninst.edu/research-data/data/place-database
National Low Income Housing Coalition	https://nlihc.org/housing-needs-by-state/ massachusetts
MassWoods	https://masswoods.org/sites/masswoods.net/files/ Ch61-v2.pdf
Park Score	https://www.tpl.org/parkscore
Planetizen	https://www.planetizen.com/
Project for Public Spaces	www.pps.org
RAND - Community resilience	https://www.rand.org/topics/community-resilience.html
Route Fifty	https://www.route-fifty.com/
Strong Towns	https://www.strongtowns.org/
Smart Growth America	https://smartgrowthamerica.org/
Trust for Public Land	https://www.tpl.org/
Urban Land Institute	https://uli.org/
UMass Center for Agriculture, Food, and the Environment	https://ag.umass.edu/

Walk Score	https://www.walkscore.com/			
Regional, State, Federal, and International Resources				
Federal Emergency Management Agency	https://www.fema.gov/ https://msc.fema.gov/portal/home			
Massachusetts Emergency Management Agency	https://www.mass.gov/orgs/massachusetts- emergency-management-agency			
East Coast Greenway	https://www.greenway.org/states/massachusetts			
Massachusetts Department of Conservation and Recreation (DCR)	https://www.mass.gov/orgs/department-of- conservation-recreation			
Massachusetts Department of Housing and Community Development (DHCD)	https://www.mass.gov/orgs/housing-and-community-development			
MassDevelopment	https://www.massdevelopment.com/			
Massachusetts Division of Local Services	https://www.mass.gov/orgs/division-of-local-services			
Massachusetts Housing Partnership	https://www.mhp.net/			
Massachusetts Smart Growth/Smart Energy Toolkit	https://www.mass.gov/smart-growth-smart-energy-toolkit-information-and-resources			
Secretary of the Interior's Standards for the Treatment of Historic Properties	https://www.nps.gov/tps/standards.htm			
Source Water Protection	https://www.mass.gov/source-water-protection			
United Nations - Sustainable Development	https://sdgs.un.org/			
U.S Census	https://www.census.gov/			
U.S Census - American Community Survey	https://www.census.gov/programs-surveys/acs			
U.S Economic Development Administrations	https://www.eda.gov/resources/economic-development-directory/states/ma.htm			
U.S. Department of Housing and Community Development	https://www.hud.gov			
U.S. Forest Service	https://www.fs.usda.gov/managing-land/urban- forests			
USDA Rural Development	https://www.rd.usda.gov/about-rd			