

Town of Lincoln, Massachusetts

Comprehensive Plan



September 22, 2009

Second Printing
March 2010

Prepared for:

Lincoln Planning Board

Prepared by:

Community Opportunities Group, Inc.

In association with:

Dodson Associates, Ltd.

Vanasse Hangen Brustlin, Inc.

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Preface

That Lincoln may be unique among communities in Massachusetts is evident to all who drive its country roads, walk its conservation trails, or engage with their fellow citizens to shape its destiny. The way Lincoln looks and acts did not happen by accident. Rather, its appearance and culture are the result of its long tradition of approaching challenges in a thoughtful and deliberative manner, and doing so for the benefit of the wider community.

The roots of ingenuity, action and perseverance are deep, going back to 1729 when the town fathers began a twenty-five year struggle to form a separate community from Concord, Lexington and Weston because of the hardship of traveling so far to worship every Sunday. Their efforts were finally rewarded when the Legislature granted their petition and established the Town of Lincoln in 1754.

These same qualities have been passed down through the generations of Lincoln's citizenry and have created a culture that has successfully retained its distinctively rural, small town character despite its proximity to Boston and the intense development of the region over the last six decades.

Throughout its history, Lincoln's residents have engaged in planning through consensus decision-making, starting with the adoption of its first zoning bylaws in 1929 to guide development. Shortly after implementing two-acre zoning in 1955, the town began to embrace the concept of preserving open space, resulting in much of the protected beauty and agricultural heritage that we enjoy today. As stated in the 1958 *Planning for Lincoln* report authored by Charles Elliot and Morton Braun, "Different parts of the metropolitan region should be expected to serve different purposes, peculiar to the physical conditions, history and potentialities of the particular area."

Lincoln has long been pro-active around planning, having hosted a number of town-wide conferences and charrettes that have laid the foundations for key land acquisitions and changes in the zoning bylaws to permit creative development through the use of overlay districts. Guided by Lincoln's Vision Statement, its policies, practices, and fiscal planning continue to implement the community's desire to maintain its unique character.

Lincoln's Vision Statement

Lincoln is a town that cherishes its rural, agricultural character, its small town heritage, its open space, and its historical legacy. The Town is committed to:

- ❖ Achieving a balance between preserving these values while making reasonable provision for citizens' safety and convenience;
- ❖ Fostering economic, racial, ethnic, and age diversity among its citizenry through its educational, housing and other public policy;
- ❖ Excellence in its public educational system; and
- ❖ The Town Meeting form of government and the traditions of civic leadership and volunteer public service.

Embedded in the Vision Statement, and no stranger to the deliberations over land use, are the tensions that exist in balancing competing interests, whether public or private, fiscal or ideological. There have always been trade-offs, and because it is the land that ultimately is the source of tax revenue to pay for services desired, the attitude and decisions about land use remain pivotal in how to go about preserving the physical and social character of the community. The Comprehensive Plan seeks to articulate a process for decision-making that best represents the will of the Town as Lincoln's faces even greater challenges. It is hoped that the actions that result from this effort are worthy of remembrance as Lincoln continues to move pro-actively and optimistically into the future.

KENNETH E. HURD, CHAIR
Comprehensive Long-Range Plan Committee

Acknowledgements

The following Lincoln residents and Town staff served on subcommittees of the Comprehensive Long-Range Plan Committee (CLRPC).

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Peter Sugar
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Introduction

On March 25, 2006, the Annual Town Meeting voted to authorize the Planning Board to explore the creation of a Comprehensive Long Range Plan for the Town of Lincoln. Although each town has been required by the State for some years to prepare such a plan, not all have done so. Lincoln's decision to move forward on creating a master plan was driven not so much by the state's requirement as it was by the desire to continue the legacy of controlling its destiny by innovative and pro-active means using all available tools.

As a result, the Comprehensive Long Range Planning (CLRP) Committee was formed with representatives from nearly all town boards and commissions to discuss how to best approach such a task. There was early agreement that this effort needed to represent a broad spectrum of concerns in as broad a context as possible with respect to our place in the region and to anticipated changes over time. The group agreed that it should not be, nor become a one-issue committee, and that its recommendations had to represent what is best for the Town over time.

There were some initial public outreach meetings that allowed the Committee to get a reading on the kinds of issues and interests that were most relevant to the attendees and to seek volunteers to participate in the sub-groups to be formed to address the various topics required by the State. These included Land Use & Zoning, Natural Resources, Cultural & Historic Resources, Open Space, Housing, Economic Development, Transportation & Circulation, Community Services & Facilities and Governance. The topic of Built Environment was added as being of particular relevance to Lincoln.

In the Autumn of 2006, a Steering Committee was formed to help guide the efforts of the soon-to-be-formed sub-groups. Although it was initially thought that this could be an entirely volunteer effort, it became very clear early on that it would require the help of a consultant. Accordingly, the Planning Board asked for and was granted funding at the Annual Town Meeting on March 19, 2007. After issuing a Request for Proposals and the subsequent interview process, Community Opportunities Group (COG) was engaged in September of 2007.

The sub-groups comprising nearly 50 people were formed in the Spring of 2007 and began their work in earnest under the guidance of Judi Barrett of COG. Her team met several times with each sub-group and helped to host another public forum in February 9, 2008, in which each sub-group posited the issues that would elicit the greatest response from the public, either pro or con. As work continued, there was a report to the March Town Meeting followed by a televised meeting with the Selectmen on June 23, 2008. Each sub-group provided an update of their work and the competing issues that were beginning to surface. This was followed by a well-attended State of the Town Meeting in Fall of 2008 which was devoted almost exclusively to the Master Plan, including presentations on each topic as well as an open forum for any concerns by the general public. As a result of more input, refinements were made to the draft chapters, including their goals and recommendations, and on January 21, 2009, the CLRPC hosted an all-boards meeting to solicit input on five key issues that had surfaced as having the highest collective priorities: 1) Lincoln Station Area, 2) Land Use Assessment Criteria, 3) Town Meeting/Volunteerism, 4) Communication, and 5) Open Land Management. The results of this discussion were reported at the Annual Town Meeting on March 28, 2009, and copies of goals and recommendations for each topic were available for everyone. During the Spring, the Executive Summary and the Implementation Plan were completed, there was another televised meeting with the Board of Selectmen in June, and the Planning Board held a hearing on July 21, 2009 to receive any other public input. Finally, the Planning Board voted to approve the plan on September 22, 2009.

The original goal of this Comprehensive Long-Range Plan was to create a dynamic document, one that:

- ❖ Would articulate the core values of the Town;
- ❖ Could be updated periodically by Town Meeting vote in order to keep it current and relevant, allowing it to adapt to change over time;
- ❖ Provides guidance:
 - ◆ To leaders and decision-makers, rather than leaving it to guesswork,
 - ◆ To developers and property owners as to what the Town wants,
 - ◆ For a more comprehensive approach in managing growth;
- ❖ Provides coordination:
 - ◆ To mesh new and existing plans into a single document in a single location,
 - ◆ To encourage big-picture thinking with respect to planning for housing, open space, recreation, town facilities, etc.,
 - ◆ To allow the creation of a balance among competing interests for all plans,
 - ◆ To help coordinate our efforts with respect to common regional interests,
- ❖ Provides accountability:
 - ◆ To articulate who is responsible for achieving goals and objectives,
 - ◆ To set timelines for doing so, and
 - ◆ To provide a mechanism to develop an implementation strategy for meeting goals and objectives.

This document is organized to appeal to multiple ways of using it. The Executive Summary gives a quick glimpse of the issues, goals and recommendations, whereas the individual chapters give the reader an in-depth analysis of existing conditions, issues, and the thinking behind the goals and recommendations. The Implementation chapter is designed to provide the framework for an Implementation Committee to track and report on progress on various actions that would lead to fulfillment of the recommendations.

Finally, the CLRP Committee wishes to acknowledge the efforts of so many citizens who have participated in this massive effort, some of whom have moved away from town since the process began. Truly, we hope this document remains vital and relevant as it guides us toward the future.

KENNETH E. HURD, CHAIR
Comprehensive Long-Range Plan Committee

Executive Summary

The Lincoln Comprehensive Plan represents more than three years of work by citizens and town staff to create a guidance plan for Lincoln's future. The planning process was led by a five-member Comprehensive Plan Steering Committee and enhanced by the efforts of five subcommittees, each charged with contributing their ideas to two elements of the Comprehensive Plan: Land Use and Economic Development; Housing and the Built Environment; Cultural and Historic Resources and Governance; Services, Facilities and Circulation and Transportation; and Open Space and Natural Resources.



In addition to the many working meetings conducted by the Steering Committee and subcommittees, the planning process included public workshops in July 2007 and February 2008, a discussion session at the State of the Town Meeting in November 2008, and a presentation of the draft Comprehensive Plan goals and recommendations at the Annual Town Meeting in March 2009. Throughout, the Town Administrator's office, Planning Department, and Conservation Department offered staff support for the work of volunteers. In August 2007, the Planning Board hired a consultant to assist with preparing the new Comprehensive Plan.

COMPREHENSIVE PLAN ELEMENTS

The Comprehensive Plan contains eleven major elements, or chapters devoted to specific planning topics. Most are required by the state's master plan law, M.G.L. c. 41, § 81D. Each element includes comprehensive plan goals, policies, and recommendations to address Lincoln's current and future needs.

Land Use & Zoning

The land use element describes Lincoln's physical evolution and town character, existing land uses, zoning history, and policies for managing growth. It also discusses the land use challenges that currently face the town and others that are likely to materialize in the near future: reaching consensus about opportunities for housing and commercial development around Lincoln Station, accommodating the potential for redevelopment of institutional properties, and balancing the town's long-standing desire to limit growth with other community needs and market pressure for new development. In addition, the land use element outlines a process for considering rezoning proposals from landowners and developers and provides guidelines for reviewing those proposals. Finally, it reviews a series of regulatory strategies to encourage creative projects and identifies aspects of the Lincoln Zoning Bylaw that need to be updated.

GOALS & RECOMMENDATIONS

Goal LU-1. Institute a comprehensive process for considering proposed zoning changes.

LU-1.1. Develop and publish the criteria that Lincoln’s town boards will use to guide their review and evaluation of future proposed zoning changes.

LU-1.2. Charge the Planning Board with responsibility for coordinating the review process with other town boards, providing timely feedback and guidance to proponents, and providing avenues for the public to participate in the review process.



Goal LU-2. Create a compact, vital, walkable village center in the Lincoln Station area that provides more housing choices near public transportation, goods and services for residents, and opportunities for social interaction.

LU-2.1. Conduct a public planning process that captures resident interests in, as well as concerns about, further development at Lincoln Station.

LU-2.2. Identify potential benefits and drawbacks, if any, arising from compact, mixed-use, and transit-oriented forms of development, and determine acceptable trade-offs.

LU-2.3. Capitalize on and reinforce existing investment at Lincoln Station in infrastructure, services, and housing choices.

Goal LU-3. Consider land development and preservation techniques that address local needs.

LU-3.1. Consider land development and preservation techniques such as transfer of development rights and “by right” open space-residential development.

LU-3.2. Evaluate the town’s approach to development review and permitting, and consider options to make the permitting process more efficient for proposals that advance the goals of this Comprehensive Plan.

Goal LU-4. Maintain communication with non-profit organizations and institutions in Lincoln in order to integrate their long-range plans with the town’s plans.

LU-4.1. Identify in a timely fashion land use and facilities development proposals that affect either the Town or the institution, and their possible impacts.

LU-4.2. Pursue cooperative efforts that leverage a non-profit or institution’s mission to the benefit of the Town culturally, economically, or physically.

Natural Resources

The natural resources element includes an inventory of Lincoln's land, water, and wildlife resources. It reviews the town's past and present resource protection efforts by the Conservation Commission, the Lincoln Land Conservation Trust (LLCT), and others. This element also explores Lincoln's present and foreseeable challenges, such as the need for regional cooperation to address traffic, air quality, watershed protection, stormwater, habitat disturbance, and environmental hazards. The natural resource recommendations focus on stewardship, public education, water conservation, and regulatory tools to protect air and water quality and protect habitats.



GOALS & RECOMMENDATIONS

Goal NR-1. Preserve Lincoln's natural resources and agricultural land uses.

- NR-1.1. By purchase, restriction, or other method, continue to protect lands which contain or contribute to the protection of valuable natural resources, including public drinking water supplies.
- NR-1.2. Continue to secure deed restrictions to protect wetland buffer zone areas.
- NR-1.3. Establish goals for water use – both voluntary and mandatory – in order to conserve water and bring Lincoln in line with the state's water use guidelines.
- NR-1.4. Develop property management plans for the protection of conservation land and habitat areas.
- NR-1.5. Encourage or require best management practices for soil and water conservation on all construction projects in Lincoln, including agricultural lands to the extent allowed by law.
- NR-1.6. Ensure that developers comply with requirements for environmental impact reports, stormwater management, and open space development guidelines.

Goal NR-2. Promote water conservation, ecological landscaping practices, and energy and resource conservation among all property owners and town employees.

- NR-2.1. Develop conservation guidelines for all public buildings, including schools, the town offices, public safety, and public works.
- NR-2.2. Continue to educate the public about Lincoln's conservation ethic and commitment to stewardship.
- NR-2.3. Investigate and seek opportunities to participate in state, national, and global environmental programs, such as dark skies and green cities initiatives.

Goal NR-3. Improve controls against environmental degradation and pollution.

NR-3.1. Continue to educate the public about alternatives to chemical pesticides, herbicides, and fertilizers in landscaping and lawn maintenance activities.

NR-3.2. Consider adopting a Low-Impact Development (LID) bylaw, consistent with state stormwater regulations and guidelines, to require developers to include stormwater best management practices (BMPs) in future projects.

NR-3.3. Identify and evaluate the town’s options for regulating chemical and sediment pollution of private and public water supplies and establishing local standards for the use of chemical pesticides, herbicides, and fertilizers, to the extent allowed by law.

NR-3.4. Adopt noise pollution regulations, with clear standards to define noise disturbance.

NR-3.5. Ensure that new construction projects meet appropriate environmental standards by creating an avenue for reviewing such projects.

NR-3.6. Through identification, public education, regulations, and guidelines, increase the effectiveness of programs to control invasive species.



Goal NR-4. Improve communication and coordination between the Water Department and other town agencies responsible for developing and implementing natural resource protection plans.

NR-4.1. Ensure that town agencies have a basic understanding of Lincoln’s drinking water supplies and water storage and distribution systems.

NR-4.2. Ensure consistency between Lincoln’s land use policies and water resource protection laws that affect the amount of water Lincoln can withdraw from surface water and groundwater supplies.

NR-4.3. Coordinate water conservation efforts among Lincoln’s land use and natural resource agencies and all town departments with operations and maintenance responsibilities for public buildings and grounds.

Cultural and Historic Resources

The cultural and historic resources element provides a summary of Lincoln’s historic resources, focusing primarily on buildings, structures, and landscapes, and describes the steps Lincoln has taken to preserve and protect them. In addition, it identifies conditions that make historic preservation difficult in Lincoln: the lack of a comprehensive resources inventory, the challenges involved with protecting historic built assets that are not

located in a designated local historic district, the cost to maintain and improve historic municipal buildings, and the need for more measures to store, preserve, and manage permanent town records above and beyond constructing the new vault at the Lincoln Public Library. Further, the cultural and historic resources element includes an overview of Lincoln's numerous non-profit cultural organizations and institutions, and explores ways to strengthen relationships between these groups, town government, and the schools.

GOALS & RECOMMENDATIONS

Goal CH-1. Strengthen collaboration with Lincoln's cultural and historic organizations.

- CH-1.1. Establish a Council for Cultural and Historic Organizations that would be the forum for exploring mutual opportunities for town government and cultural, historical, educational, and other non-profit organizations to share resources and expertise.
- CH-1.2. Provide information about activities sponsored by cultural and historic organizations on the town's website.
- CH-1.3. Encourage partnerships between the town's cultural institutions and the Lincoln Public Schools to identify opportunities for integrating cultural programs into the existing curriculum.

Goal CH-2. Identify, evaluate, and protect Lincoln's cultural and historic assets.

- CH-2.1. Building on the Lincoln Historical Commission's previous efforts, prepare a comprehensive inventory of Lincoln's cultural and historic resources, including areas, structures, buildings, objects, and historic landscapes.
- CH-2.2. Upon completion of the comprehensive inventory, identify eligible buildings and districts for listing on the National Register of Historic Places.
- CH-2.3. Work with residents to create additional local historic districts where appropriate.
- CH-2.4. Promote the use of preservation restrictions to protect public and privately owned buildings and structures.
- CH-2.5. Explore opportunities for preserving archaeological sites.
- CH-2.6. Re-establish funding for consultant and administrative expenses in the town's annual operating budget, as appropriate, to support historic preservation.

Goal CH-3. Promote stewardship of Lincoln's cultural and historic resources.

- CH-3.1. Make information on Lincoln's cultural and historic character, buildings, districts, cemeteries, and other heritage treasures widely available to residents and visitors in formats that are attractive, accurate, and easily understood.
- CH-3.2. Expand the collections and search aids for the newly integrated archives and records management initiative spearheaded by the Lincoln Public Library and the Town Clerk's Office.
- CH-3.3. Support stewardship by collaborating with existing local organizations and providing funding from local and non-local sources.

The Built Environment

The built environment element is a tribute to the role that structures and their settings play in defining Lincoln’s rural character. This chapter provides an analysis of four key design elements that repeat throughout Lincoln: the pattern of woodlands along the roads and the varied placement of buildings within the trees, views from the road, the town’s rural roadways, and the relationship between the built and the unbuilt. It also reviews several conditions that make it difficult to protect the unique qualities of Lincoln’s built environment. The conditions range from teardowns and mansionization to the impact of very large residential acces-



sory structures on adjacent properties and surrounding neighborhoods, new construction on lots bordering conservation land and scenic views, the energy and environmental impacts of new growth, and the need for more effective regulations and other tools to influence building and site design.

GOALS & RECOMMENDATIONS

Goal BE-1. Preserve key aspects of Lincoln’s rural roots and agricultural heritage, its varied architecture, and the prominence of its natural land formations.

- BE-1.1. Update, clarify, and strengthen Lincoln’s regulations and review procedures governing demolition and renovation requiring significant demolition.
- BE-1.2. Encourage the creation of Neighborhood Conservation Districts in appropriate areas.
- BE-1.3. Expand protection of scenic roadways, vistas from roadways, and other elements that enhance the character of a rural and agrarian environment.
- BE-1.4. Encourage owners of private property with historic or scenic vistas to keep the view open and visible to the public.

Goal BE-2. Preserve rural character achieved by recent public and private efforts in Lincoln to conserve open space and to place land in permanent conservation.

- BE-2.1. Increase non-disturbance setbacks on lots contiguous to Lincoln’s conservations lands.
- BE-2.2. Consider establishing scenic overlay districts as a means to protect land features bordering conservation lands.
- BE-2.3. Require site plan review by the Planning Board of any development on lots contiguous to Lincoln’s conservation lands.

Goal BE-3. Encourage new structures to fit within the landscape and to respect Lincoln’s mix of both traditional New England structures and unique contemporary architecture.

- BE-3.1. Create a Visual Preference Guide that articulates and illustrates key visual characteristics and preferred building-to-land relationships as an aide to residents, homebuilders, and developers.
- BE-3.2. Review the Zoning Bylaw and remove regulatory barriers to allowing buildings to conform to the landforms, particularly with respect to overall height on sloped sites.
- BE-3.3. Strengthen regulations that govern massing, scale, and issues of adjacency of principal and accessory structures to ensure they fit within context of surrounding neighborhoods.
- BE-3.4. Support educational programs sponsored by local organizations that work to protect the town’s identity.

Goal BE-4. Encourage environmentally sensitive building and landscape practices for all future development which preserve and enhance view sheds.

- BE-4.1. Consider incorporating energy and environmental performance standards in Lincoln’s development regulations.
- BE-4.2. Increase public outreach and access to information about environmentally responsible design, using the town’s website, newspaper articles, coordination with groups that sponsor public education programs, and other means.
- BE-4.3. Encourage higher-density development in designated areas, such as the Lincoln Station area, to preserve open space elsewhere.

Open Space

The open space element reviews Lincoln’s renowned achievements in open space protection and promotes continued attention to preserving conservation, agricultural, and recreation lands. Consistent with Lincoln’s new *Open Space and Recreation Plan* (2008), the comprehensive plan emphasizes the importance of stewardship through managing and monitoring Lincoln’s conservation holdings. The open space element also identifies conditions that may lead the town to consider new land acquisitions or special zoning strategies to save priority landscapes in the future, e.g., the sale of a large institutional property with unprotected land. In addition, this element identifies needs such as access to conservation trails for people with disabilities and providing adequate land and facilities for many types of recreation interests.

GOALS & RECOMMENDATIONS

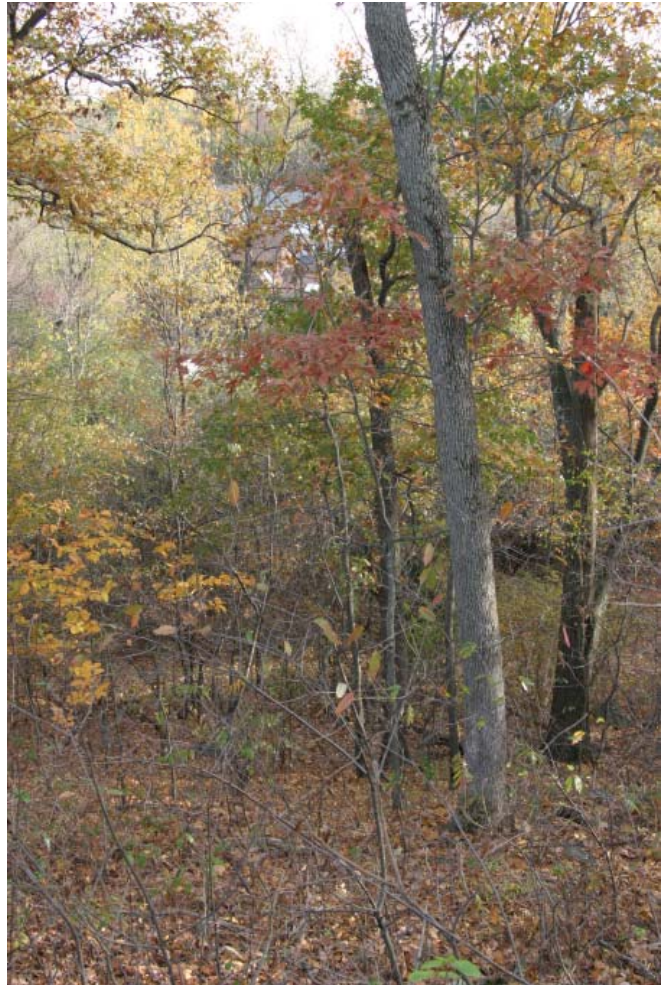
Goal OS-1. Preserve, protect, and increase conservation, agricultural, and recreational lands.

- OS-1.1. Continue efforts to protect existing conservation land and open space from development.
- OS-1.2. Evaluate the effectiveness of Lincoln’s existing bylaws, regulations, and policies to protect open space, and strengthen them as appropriate.
- OS-1.3. Protect lands of conservation and recreation interest, such as private farms, Chapter 61 lands, view corridors, buffers and scenic vistas, outstanding natural features, and fields appropriate for recreational use.

- OS-1.4. Provide incentives to farmers on private property to place conservation or agricultural preservation restrictions on non-protected agricultural land.
- OS-1.5. Maintain open communication among conservation organizations and continue to explore funding, land acquisition, or limited development opportunities.
- OS-1.6. Partner with adjacent towns, the state, and regional non-profit organizations to promote mutual conservation and recreation interests.

Goal OS-2. Promote active stewardship of existing agriculture and conservation land.

- OS-2.1. Maintain the Conservation Commission's Property Baseline Inventory and Monitoring Program.
- OS-2.2. Encourage best land management practices, such as farming or recreation field maintenance practices compatible with natural resources, ecologically sound woodlot management, and scientifically sound management of existing open farm ponds.



- OS-2.3. Support long-term land stewardship with local resources, grants, stewardship fees, and other funding sources.
- OS-2.4. Establish and enforce policies for addressing violations of conservation restrictions and regulations governing the use of conservation land.

Goal OS-3. Maximize recreational opportunities on recreation and conservation land.

- OS-3.1. Provide for multiple uses of recreation and conservation land, and multiple recreation uses of conservation trails.
- OS-3.2. Maintain and evaluate opportunities to expand the roadside path and trail network.
- OS-3.3. Maintain current recreation facilities and provide new facilities to meet evolving community needs.

Housing

The housing element documents Lincoln's past and present efforts to provide for a variety of housing types and encourage population diversity. Reinforcing issues identified in the built environment chapter, the housing element explores the impact of trends such as teardowns and mansionization on the makeup of Lincoln's population and households. It also discusses the difficulties of creating affordable housing in a town with high home prices and land values. Recommendations in the housing element include maintaining Lincoln's traditional commitment to affordable housing, continuing to provide a variety of housing at different market levels, focusing future housing initiatives on populations not well served by the town's existing housing, and continuing to take steps that will protect the town from large, unwanted Chapter 40B developments.



GOALS & RECOMMENDATIONS

Goal H-1. Provide for a variety of housing types to encourage diversity of Lincoln's population.

- H-1.1. Create higher-density housing, including a modest amount of additional multi-family housing, in the Lincoln Station area.
- H-1.2. Consider development incentives such as M.G.L. c. 40R (smart growth) to achieve Lincoln's housing goals.
- H-1.3. Encourage retention or creation of smaller homes in order to maintain a range of housing stock available to smaller households and those in early or later stages of life.
- H-1.4. Consider removing zoning obstacles to preserving smaller homes by allowing them to be relocated to another lot with an existing residence for use as an accessory dwelling unit.
- H-1.5. Encourage accessory apartments to provide more options in current housing stock.

Goal H-2. Provide more housing and/or services to accommodate the needs of individuals who may be under-served by Lincoln's existing housing stock.

- H-2.1. Determine the need, availability, and cost of in-home services to assist the elderly and people with disabilities so they are able to remain in their own homes if they choose.
- H-2.2. Conduct outreach and provide information to elderly taxpayers about available programs such as reverse annuity mortgages or work in lieu of property taxes, which might allow them to remain in their own homes for as long as possible.
- H-2.3. Determine the need for additional age-restricted (55+) housing beyond Lincoln's existing developments, including options such as an elderly cottage housing opportunity (ECHO) program.

H-2.4. Continue to study needs for supportive housing to serve adults with disabilities, particularly adult children of Lincoln residents.

Goal H-3. Maintain Lincoln’s long-standing commitment to provide affordable housing that meets local needs.

H-3.1. Continue to seek affordable housing opportunities throughout the town, using techniques such as scattered site development, condominium buy-downs, and group homes.

H-3.2. Ensure that affordable housing is included in residential and mixed-use developments in the Lincoln Station area.

H-3.3. Support the Lincoln Housing Commission in setting local targets and strategies to provide affordable housing.

Goal H-4. Maintain local control over affordable housing development.

H-4.1. Review, refine, and update Lincoln’s Affordable Housing Plan.

H-4.2. Continue to prevent hostile comprehensive permits by ensuring that Lincoln meets the ten percent statutory minimum affordable housing under M.G.L. c. 40B.

H-4.3. Propose, shape, and support positive changes to state legislation that would align with Lincoln’s affordable housing goals without posing a threat to its rural character.

Economic Development

By choice, Lincoln does not have a large base of businesses or industries. The comprehensive plan strives for consistency with the town’s long-standing policies of limiting business development while remaining open to creative residential, mixed, and commercial development ideas. The economic development element provides a statistical profile of Lincoln’s labor force and employment base. It also includes an overview of existing commercial land uses and the town’s tax base. This element’s recommendations call for establishing an economic development committee charged with the responsibility to identify and assess Lincoln’s economic development opportunities and to advise the Board of Selectmen, Planning Board, and other town boards about economic development policy. Other recommendations of the economic development element include developing the Lincoln Station area as a mixed-use village center, evaluating other areas in Lincoln for mixed-use or commercial development, establishing an economic development committee, capitalizing on the town’s agriculture and base of institutional land uses as a possible springboard for agri-tourism development, supporting home occupations and home-based businesses, and preserving and promoting working farms,.

GOALS & RECOMMENDATIONS

Goal ED-1. Develop the Lincoln Station area as a higher-density mixed-use village that complements and reinforces the vitality of Lincoln’s existing small businesses, consistent with smart-growth principles and Lincoln’s core values.

ED-1.1. Create a Lincoln Station Area Planning Committee appointed by the Planning Board to undertake an initial study of the opportunities, factors and constraints that would inform the necessary steps toward incenting desirable development in the area.

ED-1.2. Review and build upon the Report to the Lincoln Planning Board by the South Lincoln Business Area Planning Committee that was the outcome of the 1998 charrette, and prepare a report that adjusts, refines, or adds to its recommendations to apply to current conditions.

ED-1.3. Prepare a needs analysis and feasibility study to determine what commercial activities would best serve the town's interests.

ED-1.4. Develop realistic economic goals and evaluate the fiscal impact of enacting any recommendations to increase the density of development in the area.

ED-1.5. Prepare a comprehensive development plan including the infrastructure required to encourage desirable development.



Goal ED-2. Provide for economic development that respects Lincoln's rural character and adds to the quality of local residential life by providing goods and services desired by residents, jobs and livelihoods for Lincoln residents, and tax revenue that support the town services that are important to Lincoln residents.

ED-2.1. Create an Economic Development Committee with members appointed by the Board of Selectmen to identify and assess Lincoln's economic development opportunities and advise the Board of Selectmen, Planning Board, and other town boards about economic development policy.

ED-2.2. Consider opportunities for new mixed uses or commercial uses that can be developed and operated for the benefit to the town.

Goal ED-3. Retain and capitalize on Lincoln's cultural, educational, environmental, and other non-profit charitable organizations as a vital part of the local economy.

ED-3.1. Encourage partnerships between non-profit organizations and local businesses for special events, programs, and other forms of joint marketing that would be mutually beneficial for them and of interest to Lincoln residents.

ED-3.2. Support non-profit organizations by including their programs and activities on a community-wide calendar maintained on the town's website.

ED-3.3. Encourage non-profit organizations to provide a variety of educational and enrichment opportunities for Lincoln's youth, both in and outside of the classroom.

Goal ED-4. Promote local businesses and home-based businesses as a source of local, "zero-commute" employment.

ED-4.1. Periodically evaluate the needs of local businesses, such as business services, expansion space, communications technology, networking, or supportive policies from town government.

- ED-4.2. Review the town’s zoning regulations in order to determine if there are barriers to appropriate at-home employment.
- ED-4.3. Encourage local businesses to collaborate and coordinate with the town’s non-profit organizations and institutions to address mutual interests, such as planning and cross-promotions of special and seasonal events, and wayfinding to the Lincoln Station area.

Goal ED-5. Continue to encourage agriculture as a way of life and a source of local employment and food.

- ED-5.1. Adopt a right to farm bylaw.
- ED-5.2. Support and collaborate with local and regional organizations to promote agri-tourism in Lincoln and increase the base of loyal customers for Lincoln agricultural products.
- ED-5.3. Continue the Conservation Commission’s agricultural leasing program and explore opportunities to expand it, where appropriate.

Transportation and Circulation

The transportation and circulation element examines the impact of local and regional traffic on Lincoln’s rural, scenic roads and the challenges of protecting public safety while also preserving town character. This element includes an inventory of the town’s roads, roadside paths, trails, and other transportation options, notably the commuter rail, and provides a snapshot of current efforts to improve Crosby’s Corner. It encourages the use of traffic calming measures in appropriate locations to slow vehicular traffic, increasing the town’s focus on speed regulation and enforcement, maintaining Lincoln’s traditional activism in regional transportation planning and problem-solving, increasing the town’s investment in maintaining and expanding the roadside paths, exploring ways to increase safety and access for bicyclists, and providing more transportation choices for Lincoln residents, especially those for whom driving is not an option.



GOALS & RECOMMENDATIONS

Goal TC-1. Increase the safety of Lincoln’s roadways.

- TC-1.1. Implement traffic-calming measures to manage vehicle speeds and reduce the amount of cut-through traffic through certain areas of town.
- TC-1.2. Control traffic speed through speed limit regulation and enforcement in a manner guided by a balanced traffic management program.

TC-1.3. Institute public education and outreach to encourage traffic safety and awareness for users of Lincoln's roads, roadside paths, and trails.

TC-1.4. Continue to coordinate with state and regional transportation agencies regarding Route 2 improvements, including the Crosby's Corner project, and provide active participation in the 128 Central Corridor Coalition.



TC-1.5. Assess and, if necessary, improve parking in the center of town.

Goal TC-2. Encourage the use of both motorized and non-motorized modal alternatives for intra- and inter-town transportation.

TC-2.1. Improve the attractiveness of and access to Lincoln's pedestrian and bicycle infrastructure, including roadway shoulders.

TC-2.2. Explore feasibility of expanding bicycle access to the trail network in coordination with the Conservation Commission.

TC-2.3. Explore ways of increasing availability of motorized transportation alternatives, such as ridesharing and shuttle service, and investigate mechanisms to fund them.

Goal TC-3. Address transportation issues on a regional level.

TC-3.1. Continue to build upon partnerships with surrounding towns and regional agencies to address regional traffic congestion through transportation alternatives to single-occupancy vehicle commutes.

TC-3.2. Encourage ridership on the MBTA commuter rail.

TC-3.3. Coordinate regional economic development with plans to develop regional transportation infrastructure and congestion management plans.

Goal TC-4. Coordinate the need for traffic control measures with preserving the rural character of Lincoln's roadways.

TC-4.1. Continue to use Lincoln's Roadway Design Guidelines when reconstructing or maintaining town roads.

TC-4.2. Consult with and incorporate the recommendations of the Lincoln Garden Club's Report on Lincoln's Roadsides preliminarily adopted by the Board of Selectmen for publication in 2009.

Community Services and Facilities

The purpose of a community services and facilities element is to identify existing and future needs for public services as a town’s population grows and changes over time. Lincoln’s Comprehensive Plan includes an inventory of existing municipal and school facilities, a review of each facility’s condition, and a profile of services provided by town departments. Noting that Lincoln residents have approved many Proposition 2 ½ overrides in order to maintain town services and pay for capital projects, this element outlines ideas for controlling future growth in service



costs, such as centralizing town facilities management under a full-time facilities manager, periodically surveying residents about their community service needs and preferences and allocating budget resources accordingly, and continuing to look for new revenue sources to support local government service delivery. It also reviews the recent “privatization” of military housing at Hanscom Air Force Base (HAFB) and the potential impacts on Lincoln.

GOALS & RECOMMENDATIONS

Goal SF-1. Continue to identify and assess community service needs, considering Lincoln’s changing population, the cost of services, the revenues available to support them, and alternative models of service delivery.

- SF-1.1. Periodically evaluate needs for existing or new local government services through resident surveys, consultations with town staff and organizations that provide services to Lincoln residents, and review of program participation statistics and other available information.
- SF-1.2. Explore opportunities to provide services through agreements with private organizations and other local governments in Lincoln’s region.
- SF-1.3. Continue to review the sufficiency of user fees and charges to recover most or all of the town’s cost to provide certain programs and services.
- SF-1.4. Establish objective methods of measuring and analyzing the net cost of community services and provide information to town boards and town meeting.
- SF-1.5. Assess citizen’s level of support for alternative revenue sources.

Goal SF-2. Improve the management and maintenance of town facilities and infrastructure.

- SF-2.1. Establish and fund a full-time facilities manager position to coordinate and oversee the management and maintenance of all municipal facilities.

- SF-2.2. Institute a Planned Preventive Maintenance (PPM) program in order to maximize the efficiency, reliability, and lifespan of building systems and equipment.
- SF-2.3. Support Lincoln's asset management needs through a comprehensive capital improvements plan and broadly supported policies for use of non-exempt and exempt debt, capital outlays, and to the extent allowed by law, capital reserve funds.
- SF-2.4. Identify, assess, and pursue opportunities to increase the amount of revenue generated by private use of municipal facilities, consistent with the facility's intended municipal uses and the town's values as expressed in its vision statement.
- SF-2.5. Systematically maintain and improve the water distribution system in order to conserve water and meet or exceed state standards for unaccounted water.
- SF-2.6. Increase support for upgrading, integrating, and maintaining information technology at the town offices and other public buildings.

Goal SF-3. Continue to invest in local government innovation, capacity, and efficiency.

- SF-3.1. Continue to attract and retain highly qualified managers, professionals, and support staff in all town departments, and provide the facilities and technology they need to work efficiently.
- SF-3.2. Provide adequate, timely opportunities for employee training and professional development to encourage state-of-the-art practices and increase the town's capacity to comply with federal and state mandates. Create mechanisms to routinely solicit employee input for analysis of systems, best practices and potential for innovation.
- SF-3.3. Explore opportunities to reorganize, consolidate, or centralize functions in order to improve efficiency and control growth in operating costs.
- SF-3.4. Continue to invest in technology improvements in order to support inter-departmental operating needs and provide residents with timely access to public information.

Goal SF-4. Continue to monitor the status of Hanscom Air Force Base and initiatives with respect to military housing, through base closure or privatization of existing housing, that may place new demands on Lincoln's municipal and school services.

- SF-4.1. Maintain an active leadership role in the Hanscom Area Towns Committee (HATS) in order to ensure vigorous representation of Lincoln's interests.
- SF-4.2. Secure specialized legal services, as appropriate, to ensure that local officials have the best available information to guide decisions about responding to a change in the status of Hanscom's housing stock.
- SF-4.3. Pursue all appropriate political and legal means to protect Lincoln from having to absorb the cost of residential services at Hanscom without predictable sources of offset revenue from non-local sources.

Governance

The governance element seeks to preserve and enhance Lincoln’s tradition of citizen participation in town government. It promotes new ideas for making town meeting attendance and public service attractive to residents, encourages more effective use of technology to communicate with and reach out to residents, and recommends strategies such as a skills bank to identify qualified people to serve on boards and committees. In addition, this element calls upon Lincoln to take an active role in working to reform the system of local government finance by enlisting help from the Massachusetts Municipal Association (MMA) and others.

GOALS & RECOMMENDATIONS

Goal G-1. Increase citizen participation in town government.

- G-1.1. Work with community organizations and networks to encourage public participation and provide town government information to residents.
- G-1.2. Provide regular e-news about town government activities, issues, and decisions.
- G-1.3. Establish a citizen skills bank (database) as a resource to identify qualified volunteers and candidates, and encourage town boards and committees to use the skills bank to identify and cultivate new members.
- G-1.4. Create a volunteer coordinating committee to assist with outreach and recruitment of potential volunteers, with a special emphasis on engagement of new residents.

Goal G-2. Make public service and town meeting participation engaging and attractive to residents and office-holders.

- G-2.1. Encourage regular, informal breakfast meetings for town board chairs to exchange ideas and information.
- G-2.2. Provide training for board and committee chairs and members, and additional staff support as needed.
- G-2.3. Hold interdepartmental meetings of town boards and staff to coordinate the town’s response to issues that involve multiple boards or committees.
- G-2.4. Prepare and distribute a booklet with clear, simple, user-friendly descriptions of town meeting warrant articles and even-handed descriptions of the arguments pro and con.

Goal G-3. Enhance the frequency and effectiveness of town government and citizen communications.

- G-3.1. Improve the town’s website to facilitate access to information about the town and town government activities.
- G-3.2. Enhance two-way electronic communications between residents and the town offices.
- G-3.3. Consider the creation of blogs to facilitate constructive dialogue about town-related issues.

Goal G-4. Work with other communities and the state to overhaul the system of real property taxation as the primary method of financing local government.

- G-4.1. Seek assistance from the Massachusetts Municipal Association (MMA) to form a task force to facilitate discussions and to develop proposals.
- G-4.2. Work to ensure that the Massachusetts Association of Town Finance Committees becomes an active participant in reform efforts.

Implementation

The implementation element is an action plan to carry out the major recommendations of the Comprehensive Plan. This element recommends establishing a Comprehensive Plan Implementation Committee to coordinate implementation of the Comprehensive Plan, set timelines for achieving various objectives, and provide support to the town boards, commissions, and departments with direct implementation responsibilities. The Committee also would evaluate the town's implementation progress and periodically review the plan to determine whether it needs to be amended. For each recommendation in the Comprehensive Plan's topic chapters, the implementation element identifies priorities, responsible parties, and needs for new resources or a reallocation of existing resources. It also links the recommendations to key themes that appear throughout the Comprehensive Plan report.

KEY THEMES

Seven themes integrate the elements of the Comprehensive Plan and provide a coherent picture of the town's future opportunities and challenges. Sound municipal management requires sensible balancing of the various needs and objectives. These themes include:

- ❖ Land use policy
- ❖ Assets and resources
- ❖ Town character
- ❖ Transportation
- ❖ Finances and economic sustainability
- ❖ Governance and civic responsibility
- ❖ Infrastructure and communications

Through these themes, the Comprehensive Plan reaffirms Lincoln's community vision statement.

Land Use Policy

Land use policy forms the heart of any comprehensive plan. Most of Lincoln consists of low-density development and substantial open spaces which evolved from Lincoln's original vision and long-standing desire to retain its rural character. Beginning in the 1950s, concerted land use planning and conservation practices has allowed the town to sustain the rural character of a small New England town in both geographic and social terms. The two-acre (80,000 sq. ft.) zoning policy that Lincoln adopted in 1955 has provided a number of significant benefits. These include: limited development impact on environmentally sensitive areas, reduced pressure on local water supplies, safe sewage/septic disposal without requiring a town-wide system, and controlled growth in demand for town services and facilities, among others. As a by-product of its lower density, Lincoln's small and relatively stable population has helped to preserve its culture of citizen participation and civic responsibility, and the viability of its Town Meeting form of government.

While Lincoln has used low-density zoning to accomplish overall community objectives, it nevertheless has a significant number of homes on smaller lots that were created prior to 1955. In addition, the town has embraced several creative higher density proposals and made wise decisions in building innovative developments throughout the town. These include the commercial center around Lincoln Station, Lincoln Woods, Farrar Pond Village, Lincoln Ridge, Battle Road Farm, Lincoln North, and The Groves. Capitalizing on existing higher density development in the Lincoln Station area, Lincoln is now considering embracing new planning tools such as smart growth design, a basic principle of which is to cluster denser development around a mass transit node. Today, many people in Lincoln seem enthusiastic about developing the Lincoln Station area as a mixed-use village, with more housing close to the train and nearly all of the town's businesses – an idea endorsed widely in this Comprehensive Plan and foreshadowed in Lincoln's previous master plans.

Allowing a higher-density development like Farrar Pond Village in Lincoln's southwest corner was fairly cutting-edge in the 1960s, and acquiring forty-seven acres in North Lincoln for a mixed-income housing development and a large office building was a highly successful project in the mid-1980s.

Smart evolution would be fairly straightforward if Lincoln just focused on the train station area, but the town has already learned that "growing smart" requires more tools and strategies than transit-oriented development. Allowing a higher-density development like Farrar Pond Village in Lincoln's southwest corner was fairly cutting-edge in the 1960s, and acquiring forty-seven acres in North Lincoln for a mixed-income housing development and a large office building was a highly successful project in the mid-1980s. More recently, Lincoln has recognized that some of its institutional properties might be sold and two-acre zoning would not make much sense for those locations. Accordingly, the town commissioned a study of these and other sites and ultimately extended an existing zoning overlay for The Groves, located on land formerly occupied by the Boston Institute for Intercultural Communications (BIIC). In true Lincoln fashion, these projects were accomplished through dedicated efforts and hundreds of hours of volunteer and staff time.

Balancing the desire to remain small with the possibility that future land use changes could occur in many parts of town will continue to pose challenges for Lincoln. While Lincoln now earns high marks on many aspects of smart growth, the town will continue to be open to new ways of thinking about land use policy in the future.

- ❖ **Creating a range of housing choices.** Lincoln has done a far better job of providing housing options than a majority of the Commonwealth's small towns. Moreover, it has done so without ever relying on Chapter 40B comprehensive permits to create affordable housing. Lincoln has once again surpassed the ten percent statutory minimum through its innovative zoning and the tireless efforts of the Lincoln Housing Commission and others. There remains broad support for such housing choices and housing affordability today. Since the town has not directly experienced the negative effects of an unwanted or hostile Chapter 40B development, in which the control of local zoning is overridden, Lincoln's challenge going forward resides in maintaining its vigilance even if there is a change in its political culture or a failure to fully appreciate the consequences of such uncontrolled development.
- ❖ **Walkable neighborhoods.** Lincoln has constructed roadside paths along most of the major roadways and conservation trails throughout the town provide hikers with the potential of visiting neighbors and town facilities on foot. Since most goods and services are concentrated around Lincoln Station and most governmental services are concentrated in the town center, for residents living in these areas, many of their needs can be met just by walking to and from home. Although it is also possible for residents living in other parts of town to leave their cars at home or park in one place and walk to several destinations, it rarely happens other than recreationally. As such, Lincoln faces obstacles to preserving, promoting use of, and expanding its pedestrian networks and reducing the extent to which its own population generates vehicular traffic.
- ❖ **Citizen participation and stakeholder collaboration.** Lincoln welcomes spirited debates. What some call "the Lincoln way" is a serious, deliberative, time-consuming process of consensus about public policy choices – a style of decision-making that Lincoln deeply appreciates. Still, one concern raised during the Comprehensive Plan process is that Lincoln may have to work harder to communicate with and engage citizens. It can be difficult for residents to understand all of the trade-offs involved with major land use decisions when they participate only occasionally in these discussions, but not everyone can participate in all aspects of civic life all the time. Although Lincoln's traditional approach to considering zoning changes has worked well in the past, many residents today did not live in Lincoln when the town tackled projects such as Battle Road Farm and Lincoln North. Transparency, a broadly understood process, and clear, timely communication are equally important now, but they may require more effort (or different types of efforts) on the part of local government.
- ❖ **Fair development decisions.** Lincoln's zoning has been in place for many years and has been kept up to date with occasional modifications. A developer with relatively unconstrained land can expect to obtain subdivision approval for the number of 80,000 sq. ft. house lots that a site can support, given the collective requirements of zoning, subdivision control, wetlands protection, and septic system standards. However, this type of conventional subdivision has not been constructed for many years because a much more desirable cluster subdivision can be readily negotiated with the Planning Board through site plan review and issuance of a special permit.
- ❖ **Distinctive places.** Lincoln has so many distinctive areas that some consider the entire town a distinctive place in its own right. It is easy to see why people would think this way. Lincoln has impressive historic and modern buildings, inviting roads and scenic views, farms, and visually interesting neighborhoods. There is little about Lincoln that qualifies as a homogenous suburb, though mansionization has begun to introduce some homogenous forms and architectural styles. Lincoln's low-density zoning operates as a mainstay, changing only when a developer or landowner comes forth with a proposal for something different.
- ❖ **Mixed uses.** Mixed-use development integrates land uses in order to bring people close to services, reduce vehicular traffic, and make efficient use of land. The overlay district around Lincoln Station establishes a

process to create planned development districts that could include a mix of housing and businesses or a mix of different types of businesses. The effort and expense involved with proposing a planned development district could discourage some developers – particularly developers of small-scale projects – from pursuing what Lincoln says it wants to achieve at Lincoln Station, but the planned development district model has been used successfully in Lincoln for a long time. In addition, Lincoln needs to determine realistic waste-water solutions and plan for public realm improvements in order to create a cohesive village. The long-term vision for Lincoln Station makes good planning sense, but the town needs to understand how much development and outside traffic is feasible and it also has to decide how much development residents actually want. Furthermore, Lincoln has areas outside of Lincoln Station that may be appropriate for mixed-use or commercial development, too. If some of the estates or institutional compounds were sold in the future, preserving their landmark qualities will most likely hinge on access to flexible zoning and options to create uses that Lincoln currently prohibits in the R-1 District.

- ❖ **Preserving open space and natural resources.** Lincoln has earned national acclaim for its open space innovations and efforts to protect wetlands, water quality, habitat areas, and farms. Large contiguous areas of protected conservation land exist in many parts of Lincoln. The physical arrangement of these open spaces contributes to the “sense of arrival” in the town center and Lincoln Station. Most of Lincoln’s open space is protected because it was acquired by or given to the town, the LLCT, the Rural Land Foundation (RLF), and other organizations, or because of conservation restrictions. These methods have been effective, but Lincoln might want to pursue other ways to preserve open space by design. Its zoning bylaw allows cluster development as small as two homes, and in the future, Lincoln might consider other regulatory tools to protect open space. These may include backlot development and transfer of development rights (TDR). Furthermore, important natural resource protection challenges still exist in Lincoln. Water consumption per capita significantly exceeds state guidelines, and Lincoln does not yet require or offer incentives for developments to meet energy and environmental performance standards.
- ❖ **Farms.** Lincoln has done an exceptional job of protecting its remaining farmland. It has an effective agricultural licensing program for its conservation land, and a number of small farms continue to thrive. But, of Lincoln’s 547 acres of productive agricultural land, 158 acres are not protected by restrictions against a change in use. The high cost of land in Lincoln will make it increasingly challenging to protect the remaining farms or encourage new farming activity. In addition, it is often difficult for farmers to find affordable housing near their agricultural fields.
- ❖ **Environmental protection.** Lincoln is concerned about the impacts of chemical pesticides, herbicides, and fertilizers on wetland and water resources and the quality of its wildlife habitats, but state law makes it very difficult for individual communities to regulate pesticide use. Public education and voluntary guidelines and standards can help, but it takes constant leadership, volunteer and staff resources, and incentives to change public behavior.
- ❖ **Transportation choices.** Lincoln residents have convenient access to several modes of transportation: the commuter rail station, a limited network of pedestrian paths and trails, and a frame of scenic roads (and mostly interconnected roads). They also have easy access to the regional highway system. Though Lincoln offers more transportation options than many towns, ironically its own residents are nearly as auto-dependent as their counterparts elsewhere. This is largely due to Lincoln’s low-density development pattern and lack of local employment options, for Lincoln residents tend to work in Boston, Cambridge, and other major employment centers with high-wage industries – not all of which are located near train stops.

❖ **Compact building design.** Lincoln’s mainstay approach to land use regulation does not promote compact building design, but the town has supported innovative developments that make efficient use of land. Lincoln Woods, Battle Road Farm, and Farrar Pond Village – all in different settings – are good examples. Future plans for Lincoln Station could help the town accomplish even more to reduce land consumption, particularly if some of the development that occurs there involves the strategic transfer of development rights from still-undeveloped land in other parts of Lincoln. At issue is how much development the Lincoln Station area can support in terms of wastewater disposal, parking, and access, and how much development town citizens would favor. Good design solutions and the right mix of land uses could make it possible for Lincoln Station to accommodate more development than some might imagine. However, Lincoln Station is not the only area where compact design could benefit a particular site or the town as a whole. Redevelopment opportunities will surface in other locations, as recently happened with the conversion of the BIIC property to The Groves. Smart evolution is hardly a new idea in Lincoln. The town’s challenge will be to continue to engage an increasingly disengaged citizenry, to inform, and respond to its citizens, and provide as many opportunities as possible for the public to participate in planning for future land use changes.

Future plans for Lincoln Station could help the town accomplish even more to reduce land consumption, particularly if some of the development that occurs there involves the strategic transfer of development rights from still-undeveloped land in other parts of Lincoln.

❖ **Adaptation and reuse of existing development.** In many parts of the United States, smart growth policy occurs in a framework with strong regional planning and regional resource sharing. “Local” control is exercised by a county planning commission or another regional entity. Some states promote smart growth by enabling regional authorities to designate growth and preservation areas that cross city and town lines. Massachusetts is different. Here, municipalities adopt and administer their own zoning bylaws and ordinances, and while they must have a master plan, they do not have to follow it. The state’s existing land use laws also make it difficult for communities to implement their plans. As a result, “growing smart” in Massachusetts often means that each community must look inside its own borders for places with capacity to support growth and do their best to steer development toward those locations. While it has rural characteristics due to its farms and a large amount of protected open space, Lincoln is a suburb with mature development that will continue to evolve. The adaptation and reuse of existing development to meet future needs may be a critical ingredient in Lincoln’s future land use decisions. Lincoln already has noteworthy examples of reuse, such as the Carroll School and the Massachusetts Audubon Society’s headquarters: both located in former estates, and both well-known non-profit organizations. These kinds of opportunities will surface again and ideally, the town will be prepared to address them.

The Comprehensive Plan seeks to address a comprehensive approach to land use policy through the following goals: LU-1, LU-2, BE-1, H-1, ED-1, and TC-2.

Assets and Resources

Lincoln’s agricultural landscapes and acres of protected woodlands are among the town’s finest assets. Hilltops, valleys, wetlands, red maple swamps, wooded drumlins, ponds, streams, rivers, agricultural fields, and forest are all part of the natural features found within and near Lincoln’s boundaries. Lincoln has attractive, prominent

water resources that serve local and regional interests, too, including Flint’s Pond, the town’s primary water supply, and the Cambridge Reservoir, which provides water to the City of Cambridge. People probably imagine that Lincoln’s clean water and pristine wetlands are as safe as all of its undeveloped open space. The tendency to fuse “open space” with “natural resources” is common in most communities, often leading people to assume that if only a town buys enough land, its water resources, vegetation, wildlife, air, and other elements of the natural environment also will be protected. However, this is not entirely true. It takes a culture of public responsibility, effective regulations and enforcement, and stewardship to ensure high quality land and water resources and plentiful wildlife habitat.

...an assets inventory would be incomplete without considering Lincoln’s own population: diverse, highly educated, traditionally committed to social responsibility and social equity, and unified by a strong conservation ethic.

Natural resources and open space are physical assets that Lincoln residents clearly value, but they are not the town’s only assets. Indeed, an assets inventory would be incomplete without considering Lincoln’s own population: diverse, highly educated, traditionally committed to social responsibility and social equity, and unified by a strong conservation ethic. Lincoln’s extraordinary stock of local human character and entrepreneurship, the preservation of its still-strong rural character in a location not far from the center of the major metropolitan area, its access to rail transportation and major highways, and the presence of many non-profit charitable and educational institutions are all major strengths of the town. Indeed, today’s residents benefit from a legacy of natural, built, and human assets and resources that provide a foundation for the new Comprehensive Plan. Protecting and enhancing these assets will require thoughtful planning and advocacy as Lincoln continues to evolve.

- ❖ **Regional forces.** Despite Lincoln’s impressive efforts to protect its small town character, social diversity, land and water resources and wildlife habitats within its borders, the town is not immune to the direct and secondary effects of development throughout the region. Local concerns about traffic, air quality, watershed protection, storm water, habitat disturbance, and environmental hazards will remain challenging to address without concerted regional action and regional cooperation. Although many neighboring towns share Lincoln’s interests in environmental quality, problems with growth management and needs for tax revenue make it difficult for cities and towns along Route 128 to work toward a consistent vision of the region.
- ❖ **Population diversity.** Lincoln residents have enjoyed the social and educational benefits that a demographically diverse community provides. Growth in housing prices and the scarcity of vacant land have led to an increase in demolition of smaller homes to fulfill market demand for new, larger, more valuable homes. As a result, some of Lincoln’s elderly, and young families who could use starter homes, are being priced out of the market. Continued mansionization could impact middle and upper middle class professional residents as well. This group has served as the core of Town volunteers in the past. Among the long-term consequences of very high home values could be the gradual loss of population diversity that Lincoln has worked so hard to preserve.

The Comprehensive Plan seeks to address the preservation and enhancement of Lincoln’s assets and resources through the following goals: NR-1, CH-1, OS-1, OS-2, H-3, and ED-3.

Town Character

Lincoln's special character has been preserved because of the town's commitment to stewardship. Many people think of stewardship as responsibility to protect natural resources – air, land, water, and wildlife – and by that definition, Lincoln has achieved impressive results. The environmental quality and scenic beauty that today's residents enjoy reflect more than fifty years of careful work by the town, the LLCT, the RLF, and private property owners to save natural landscapes and farms, protect wetlands and water supplies, and preserve scenic views. Lincoln's conservation ethic remains strong, and residents say they would support acquiring more open space despite the high cost of land. However, taking care of the land Lincoln already owns has become a guiding principle in the town's open space planning because saving land from development is only one aspect of stewardship. Like any other asset, land needs to be managed. Lincoln's commitment to land management is extraordinary, from its baseline inventory and monitoring programs to the agricultural leases that have kept farmland in productive use.

If stewardship of community character focused only on caring for natural resources and open space, Lincoln could continue to support and build upon its renowned conservation programs, and residents would have few worries. However, protecting community character requires stewardship of other types of resources, too: the built assets and heritage landscapes that express how people molded the terrain in order to meet human needs, through plowing, cultivating, harvesting, constructing, demolishing, relocating, paving, covering, uncovering, and otherwise changing their land. In fact, Lincoln would not be all that it is without its character-defining buildings – residences, farm structures, estates, and municipal and institutional buildings – found in village centers, suburban neighborhoods, and rural areas. Together, Lincoln's open land, water, farms, roadways, and historic, modern, and contemporary buildings create a highly desirable residential suburb. Its built environment has design elements that repeat throughout the town and create a sense of place:

- ❖ **The pattern of undulating woodlands edging the town's roadways and the varied arrangement of buildings placed within these trees.** Specific architectural styles of the buildings located in these areas do not dominate the landscape.
- ❖ **The view from the roads.** Lincoln presents a variety of building-to-road associations, from the traditional farmhouse set close to the road with its associated outbuildings, fields and stone walls, to the historic country estates set within or at the back of a meadow or maintained lawn.
- ❖ **Lincoln's roadways.** Meandering and curbless, Lincoln's scenic roadways are defined by their stonewalls, adjacent vegetation, and low posted travel speeds.
- ❖ **The relationship between the built and the unbuilt:** the combination of permanently protected land and low density development that allows the landscape to be the dominant, organic form.

Landscape architect Charles Eliot, who contributed to Lincoln's 1958 planning report, once described open spaces as "...the 'voids' which give meaning to the 'solids'...the areas which provide the balance in our lives, with contrast between natural and man-made, between living, growing things and buildings, pavement or mechanical devices." He argued that town planning should respect and reinforce the physical patterns formed by voids and solids and that places are defined by the interplay of open space and the built environment. Today, Lincoln finds stewardship of its built environment just as challenging as stewardship of its natural environment. For example:

- ❖ **Mansionization.** Substantial alterations, out-of-scale additions, and outright teardowns have begun to change the physical form of older neighborhoods where small homes once inconspicuously occupied modest lots. Large houses, strikingly large accessory buildings, and intrusive lighting alter these settings by clearing mature vegetation, changing the view from the road, cluttering the night sky, and in Eliot’s words, sacrificing the balance between voids and solids.
- ❖ **Development bordering on wetlands and conservation land.** The wetlands and vistas that generations of Lincoln residents worked so hard to protect face different challenges now as the construction of larger homes – whether the product of teardowns or simply new construction on once-vacant parcels – covers more land and situates buildings to take advantage of pristine views, often partially blocking public vistas.
- ❖ **Ensuring the viability of working farms.** Unlike most towns in Eastern Massachusetts, Lincoln has managed to preserve quite a bit of farmland and more importantly, to keep it in active agricultural use. Through agricultural leases of public land, agricultural preservation restrictions (APR), and Chapter 61A, the property tax incentive to use agricultural land productively, Lincoln still has 547 acres of active farms which comprise 6% of the overall land area (9,588 acres). Aside from the pleasure afforded by agricultural views, farms have to be profitable for the people who work them or the business of farming will decline. Maintaining, increasing, and diversifying markets for locally produced food and ensuring that people who farm Lincoln’s land can afford to live in the town are significant, ongoing challenges that require new ways of thinking about agricultural stewardship.
- ❖ **Historic preservation.** Lincoln has four local historic districts and five National Register districts, and it has placed several individual properties on the National Register as well. Although the Lincoln Historical Commission and other organizations continue to work on documenting historic buildings, Lincoln does not have a comprehensive, town-wide historic resources survey that would identify all types of historic resources. The town also has found it challenging to preserve and protect its historic records. Collaborative efforts by the Town Clerk, the Lincoln Public Library, and the Lincoln Historical Commission have culminated in the development of a new vault at the Library, and many archival materials will be transferred there. However, other records will remain at the Town Office Building, which has inadequate vault and storage facilities. Stewardship of cultural resources will require ongoing steps to preserve the Town’s general records and archival materials.
- ❖ **Stewardship of roads.** Lincoln is no stranger to debates about roads. Years ago, the Town fought with state and federal authorities over a proposed relocation of Route 2, a realignment of Route 2A, and a short-lived plan to integrate Route 126 with a proposed “middle belt” highway between Route 128 and I-495. It is no surprise that Lincoln residents have taken custody of their own streets so seriously, first because the Town has been threatened by large, unwanted road projects in the past and second, scenic roads are an integral part of the Town’s character and beauty. Road maintenance is expensive, and ironically, keeping roads in good condition can bring about the unwanted consequence of inviting more traffic at higher speeds. Lincoln has worked very hard to preserve the character of its roads, such as by adopting rural roadway design guidelines more than a decade ago, protecting mature vegetation, and opting for roadside paths instead of suburban sidewalks. Protecting public safety and rural character will continue to involve difficult stewardship choices as traffic volumes and speeds present ongoing challenges for the Town.

The Comprehensive Plan seeks to preserve Lincoln’s town character through the following goals: CH-3, BE-2, BE-3, H-4, and TC-4.

Transportation

Few aspects of life in Lincoln are untouched by transportation. Although Lincoln is a small suburb, its transportation system is developed, complex, and an important part of the town's past, present and future. The original roadways that once connected the town center to farmsteads provide the foundation of Lincoln's road network today. Lincoln has preserved a roadway design based on a distinctly rural aesthetic that makes travel along its streets and roads a beautiful experience. Also, Lincoln's network of roadside paths and trails is a greatly appreciated amenity not found in most communities. While in many towns a sense of place is imparted only through open space and buildings, in Lincoln the roadways and paths play an equal if not greater role in communicating the town's aesthetic and social values. In addition, Lincoln's commuter rail station offers a major source of opportunity for the town's future development.

Through decades of planning, regulation, and investment, Lincoln has worked to preserve and enhance its scenic roadsides, vistas, and rural appearance. Many years ago, North Lincoln residents blocked plans that would have relocated and widened Route 2 along a northern alignment. Today, increased traffic volumes and speeds on local roads, coupled with the absence of sidewalks or paths except on major roads, has created an increasingly unsafe environment for local drivers, walkers, and bikers. Traffic calming, traffic enforcement, and non-vehicular modes of transportation have become necessities. Improving the paths and trails for bikers and encouraging shared motor vehicle use will help to increase mobility for residents and enhance Lincoln's sense of community. However, Lincoln's dispersed development pattern, limited funds, and lack of viable local transportation options pose significant challenges to meeting its transportation needs.

- ❖ **The inseparable relationship between land use and transportation planning.** Overall, Lincoln residents are highly protective of the town's scenic vistas and the privacy and autonomy this brings. At the same time, they want solutions to the increased traffic and congestion caused by commuters from outside of the town who enjoy using the town streets as a daily route to work. Understanding the relationships and trade-offs between the town's scenic roads and regional commuters will be critical to having a meaningful public discussion about real transportation options in Lincoln in the future.
- ❖ **Quality of life.** A transportation system – especially the amount of vehicle traffic it carries – is a major determinant of a town's quality of life. In the past twenty years, Lincoln and the surrounding communities have experienced modest yet constant population growth due to their convenient access to major highways and proximity to commuter routes and the commuter rail system. This access, combined with Lincoln's attractive, rural character, makes the town an especially desirable place to visit and live. In addition, development beyond Lincoln's boundaries has generated more traffic on local roadways, all of which has put pressure on its transportation infrastructure. As development continues both locally and regionally, providing a safe, adequate, and equitable transportation system while maintaining Lincoln's unique sense of place will be a major challenge for the town.
- ❖ **Regional collaboration and cooperation.** Since most transportation is regional in nature, expanding Lincoln's transportation options must involve regional collaboration. Regional solutions are the only effective and long-term way to address significant issues such as congestion, pollution, and safety on major roadways. Lincoln has proven itself a willing partner in regional transportation initiatives. By participating in MAGIC -- sub-regional meetings of the Metropolitan Area Planning Council (MAPC), the Route 2 CAC (Corridor Advisory Committee), Hanscom Area Towns (HATS) and, more recently, the 128 Central Corridor Coalition (128 3C), Lincoln has taken the right steps toward increasing its ability to address pressing transportation issues and needs. It will be important to build a constituency within town for regional transportation initia-

tives, however. While some may feel that the best way to deal with non-local traffic is to attempt to divert it from Lincoln’s roadways, these measures will only go so far. Moreover, they will not do anything to address the larger problems of pollution and congestion on major roadways.

- ❖ **Changing lifestyles.** Like most towns, Lincoln has witnessed growth in morning and afternoon traffic around the Lincoln School complex. Though parents have been driving children to school for decades, the volume of traffic associated with school trips has increased. In Massachusetts, this problem has been magnified by the state’s decision in 2004 to end partial reimbursement for the cost of school transportation – a move offset in most communities by charging user fees. Despite Lincoln’s roadside path system, which connects parts of Lincoln with the town center, it seems that even children who live near to the school are less likely to walk than to commute as passengers in a car with their parents. The general decline in use of public transportation to and from schools is a national problem, one that raises many public health concerns, from air pollution to childhood obesity.
- ❖ **Overcoming transportation disadvantages.** Lincoln is an auto-based town, as is the case with most rural communities, so particular attention needs to be paid to groups for whom driving is a barrier to mobility. Today, there are more elderly residents and fewer people to take care of them, and this has forced the issue of mobility for seniors into public dialogue. Some Lincoln residents may also face barriers to auto use due to income or a disability. Although each of these groups has transportation needs that require special attention, generally increasing transportation options, including non-motorized forms of transportation such as walking and biking, will benefit everyone in some way and also align with recommendations for mitigating roadway congestion. Additionally, efforts must be made to make Lincoln’s limited non-auto transportation options accessible. The MBTA needs to make the Lincoln Station fully accessible to persons with disabilities.

Improving the paths and trails for bikers and encouraging shared motor vehicle use will help to increase mobility for residents and enhance Lincoln’s sense of community. However, Lincoln’s dispersed development pattern, limited funds, and lack of viable local transportation options pose significant challenges to meeting its transportation needs.

The Comprehensive Plan seeks to address Lincoln’s many transportation challenges through the following goals: TC-1, TC-3, LU-1, and SF-2.

Finances and Economic Sustainability

The process of growth and change has been fairly kind to Lincoln because the town took bold steps to manage it many years ago. Choosing two-acre zoning in 1955 helped to reduce Lincoln’s housing development potential, but zoning was never the only tool that Lincoln used to control its future. Acquiring large and small tracts of open space – sometimes supported by limited development – investing in trails and roadside paths, and working to preserve productive farms helped to create a place that encourages social interaction outdoors and appreciation for the environment. The same measures have helped to secure Lincoln’s prosperity. Opportunities arose for limited commercial development that has provided a significant infusion of non-residential revenues. These kinds of growth management strategies worked well for their intended purposes, but as vacant developable land

declined and market demand for housing swelled, new challenges surfaced. Lincoln's growth rate declined, but the demands placed upon the town to provide services and facilities, accommodate multiple interests, and meet a wider variety of needs increased.

If local governments could manage the fiscal impact of change just by minimizing housing growth, Lincoln would have few controversies now. However, Lincoln's financial challenges today have less to do with controlling the total amount of development than finding new revenues and ways to accommodate change regardless of new growth and to ensure a sustainable future for the town. For example:

- ❖ **Preserving and creating housing affordability for many types of households.** Although Lincoln's tax rate is relatively low when compared to neighboring towns, Lincoln is one of the Commonwealth's most expensive communities to live in because housing sale prices (and the resulting assessed property values) are very high. These conditions challenge the town's ability to provide for racial, cultural, age, and economic diversity in the make-up of its population.
- ❖ **Paying for the town and school services that residents have come to expect.** Lincoln residents appreciate the quality of the services they receive. Respondents to a Comprehensive Plan survey gave high marks to town employees. In order to pay for quality services, residents have almost always been willing to approve Proposition 2 ½ overrides and debt exclusions. The good news is that Lincoln's town government seems to have considerable support from the community; the unfortunate news is that growth in municipal and school service costs is borne almost exclusively by residential taxpayers and this, along with Lincoln's lack of scale and preference for local control of essential services, contributes to the high cost of living in Lincoln.

Stewardship of the community's resources for the benefit of future generations must account, at some level, for the probability that Lincoln, like other towns, faces a near-term future in which a significant share of its households will consist of retirees and the elderly: people with less financial flexibility than working-age householders. Lincoln has managed to avoid the hazards of fiscal zoning, or the tendency of some towns to zone large amounts of land for commercial and industrial development simply for the anticipated tax revenue. Still, Lincoln may need to be more receptive to creative strategies in order to control growth in residential tax bills as its population continues to age. There may well be a place for a moderate amount of commercial development in any plan for economic sustainability, but the unresolved questions for Lincoln are where, and how much? In such discussions, an open and transparent decision-making process is critical.

- ❖ **Understanding the difference between economic development and commercial development.** While Lincoln will continue to experience needs for revenue growth and new sources of revenue to support town services, it is crucial to recognize that fiscal policy, land use policy, and economic development policy are inherently entwined. A sound economic development policy should neither endanger Lincoln's valuable assets nor neglect their contribution to the town's prosperity and resilience. Both non-profit organizations and outdoor recreation are growing sectors of the national economy, as are self-employment and home-based economic activity: all notable features of Lincoln's community, all important elements of its high quality of life, and all unrelated to the generation of commercial tax revenue.
- ❖ **Controlling Lincoln's fate against forces over which the Town has little control, notably the future of Hanscom Air Force Base (HAFB).** Partially located in North Lincoln, HAFB and the adjacent airport, Massport's Hanscom Field, have been integral to the postwar evolution of four towns: Lincoln, Lexington, Bedford, and Concord. To date, the Defense Base Realignment and Closure (BRAC) process has spared

HAFB from closure. *Base closure would put over 800 acres of land up for redevelopment. The portion located in Lincoln is already developed for 800 housing units. The balance of the land is in Lexington and Bedford and would be available for commercial development. This would mean increased traffic and town revenue challenges to serve the housing units in Lincoln.*

While it remains unlikely that HAFB will be closed, the military housing – all located in Lincoln – has been “privatized” under the federal Military Housing Privatization Initiative. The Air Force still owns the land, but a for-profit developer controls the buildings and infrastructure under a fifty-year lease. The privatization plan includes not only the construction of more housing but also the renovation of older military housing created by the Air Force, and some of the older housing will be made larger to accommodate families. Moreover, the developer is entitled to lease units to non-military households if the housing units fall below 95 percent occupancy. This raises major issues for Lincoln, not the least of which is whether the Town will have a legal obligation to provide municipal and school services to some of the residents at HAFB without federal financial support.

The Comprehensive Plan seeks to provide for Lincoln’s financial and economic sustainability through the following goals: LU-2, LU-3, NR-2, OS-3, H-2, ED-2, SF-1, and SF-4.

Governance and Civic Responsibility

Like many Massachusetts towns, Lincoln has seen a decline in civic engagement by residents as evidenced by decreasing attendance at town meeting and a drop in the number of volunteers and candidates for election. For many people, open town meeting embodies popularly held ideas about democracy. Lincoln residents clearly value town meeting and they want to preserve it, but many of them worry about declining town meeting attendance and what appears to be an increasingly homogenous pool of participants: Lincoln’s older, long-time residents. The limited presence of newcomers and young families has been an ongoing concern to some, for they think town meeting attendance is a barometer of broader changes in citizen participation and interest in local government. Reversing these trends will take sustained and strong leadership by town officials, commitment of citizen and staff resources, improved communication, and more effective collaboration with established local organizations, institutions, and networks.

- ❖ **Community values.** Town officials with many years of experience speak reverently of Lincoln’s past achievements. They worry about what the future holds if Lincoln fails to attract a new generation of like-minded citizens to town government. One respondent to a survey of present and past officials described a key weakness of the town as a “gradual deterioration in Lincoln’s pervasive, unifying ethos for conservation, open space, and rural character.” The possibility exists that new and long-time residents simply have different ideas about what it means to live in Lincoln.
- ❖ **Cultural and political change.** As a result of implementing two-acre zoning in 1955, the town growth during the past twenty years has been primarily limited to the implementation of two large projects. During the 1990s, Lincoln gained a total of 241 housing units, many of these located at Battle Road Farm. Since 2000, the town has gained approximately 290 housing units, and well over half are attributable to The Groves. Despite Lincoln’s very low rate of new housing or population growth, the town has gradually changed. It continues to experience some tension as old and new values, lifestyles, expectations, and hopes for the future converge – and sometimes collide. Lincoln may need to work harder to harmonize the interests of its people and promote a sense of community by encouraging more citizen participation.

- ❖ **Outreach.** Town leaders and staff spend considerable time preparing for town meeting. They try to inform the public ahead of time about major decisions that need to be made. While Lincoln’s website needs to be improved, the town does a commendable job of making important information available on the internet. Still, posting information on the website and mailing the annual town meeting warrant to all households may not be enough to engage the public. Cable television announcements, town meeting broadcasts, or pre-town meeting neighborhood parties could provide additional ways to make people aware of town meeting and encourage them to participate. However, all of these initiatives take time and they would require many volunteers.
- ❖ **Regionalism.** Lincoln town boards are currently engaged in several regional collaborations (MAPC, HATS MAGIC, 128 3C) and the Town Administrator has developed numbers of regional agreements to date. For small towns such as Lincoln, the important questions are whether residents have an appetite for surrendering some control in order to collaborate effectively with other towns, and whether the potential advantages of regionalizing outweigh the risk that the interests of larger communities could supersede the interests of smaller communities.

The limited presence of newcomers and young families has been an ongoing concern to some, for they think town meeting attendance is a barometer of broader changes in citizen participation and interest in local government. ..The possibility exists that new and long-time residents simply have different ideas about what it means to live in Lincoln.

The Comprehensive Plan seeks to encourage citizens to participate in all aspects of town government through the following goals: G-1, G-2, SF-1, CH-1, and LU-2.

Infrastructure and Communications

A town’s infrastructure includes both structural improvements – roads, water supplies and distribution systems, communications systems, and public safety, health care, education, and solid waste disposal facilities – and the methods and practices of putting these facilities to use in order to serve the population. Open space and greenways also constitute part of a community’s infrastructure, sometimes called “green infrastructure.” It is expensive to acquire, construct, manage, maintain, upgrade, and replace these kinds of assets, and in small towns the expense can be overwhelming because there are so few taxpayers and ratepayers to share the burden. Three conditions make Lincoln’s infrastructure challenges particularly significant: first, the town is small; second, residents have high expectations for the standard of service they receive; and third, Lincoln’s government consists of many independently elected boards, each with authority over financial and personnel resources, and this sometimes makes it difficult for the town to use its resources as efficiently as possible.

- ❖ **Historic public buildings.** Most of Lincoln’s public buildings are historically significant and they need major capital improvements. Setting priorities and agreeing upon a long-term financing plan will be difficult because the estimated cost of improvements is so high. It might be easier and less expensive to replace some of Lincoln’s existing facilities, but residents deeply appreciate the history and architecture of their municipal buildings. The town center’s sense of place is inextricably tied to the presence of historic municipal and institutional properties, and Lincoln residents do not want to sacrifice aesthetics and heritage.

- ❖ **Near-term capital improvements.** In the next five years, Lincoln is likely to face capital improvement requests ranging from a low of \$36.5 million to a high of \$66.5 million in current dollars. The capital projects include road improvements, renovations to the Town Office Building and other public facilities, open space acquisitions, recreation facilities, and school building improvements. While the debt service for any one of these projects could be accommodated within Lincoln’s current policy of limiting property tax growth to about five percent per year, the cost of all needed improvements significantly exceeds what the town can afford.
- ❖ **Facilities management.** Lincoln may benefit from cost-effective practices such as centralized management and maintenance of public facilities and a comprehensive approach to asset management and long-range facilities planning. Instituting these practices may be difficult due to Lincoln’s decentralized government, which is an asset for public participation but a challenge for achieving efficiency.
- ❖ **Asset management plan.** Lincoln also needs to develop a long-range asset management plan that provides for elements of Lincoln’s infrastructure to be replaced and for advance funding of replacement costs to the extent allowed by law. This process is known as Planned Preventative Maintenance (PPM). Advance funding through special capital reserve accounts, developed in consultation with the Board of Selectmen and town counsel, should be based on the predictable useful life of each facility or component of the town’s infrastructure and coordinated with Lincoln’s efforts to incorporate “green building” principles in its public facilities.
- ❖ **Technology.** Throughout the development of the Comprehensive Plan, residents have said the town needs more effective avenues for providing public information and communications within government and between government and residents. Toward these ends, Lincoln will need to enhance its use of information technology and this, too, could require a significant investment of public funds.
- ❖ **Methods and practices.** Lincoln has highly qualified department heads, professional staff, and support personnel. It will be important for Lincoln to ensure that the organization of its local government supports interdepartmental planning and problem-solving, and that Lincoln’s deliberative approach to making policy decisions does not impede the ability of staff to do their jobs. To achieve greater efficiency and more control over growth in operating costs, Lincoln will need to consider increasing its investments in technology and provide employees with the tools they need to work as efficiently as possible. Further, the town may need to be open to consolidating functions that could be carried out more efficiently in an organization with a more centralized structure than Lincoln has today.

The Comprehensive Plan seeks to address Lincoln’s infrastructure and communications needs through the following goals: SF-1, SF-2, SF-3, G-3, CH-2, TC-2, and TC-3.

Land Use & Zoning

OVERVIEW

Lincoln has successfully guided development in a manner that has protected its natural beauty, preserved its historic resources, and addressed the housing, services, and social needs of its growing population. The town's land use decisions have been an important part of guiding development, both in terms of preserving open space as well as crafting innovative solutions to development opportunities. As undeveloped land becomes scarce, as redevelopment of existing properties becomes more frequent, as the needs and desires of residents evolve, and as regional issues grow in their urgency and impact, the need for creative and broadly supported land use decisions increases in importance.



Key Findings

- ❖ Compared with most communities in Massachusetts, Lincoln is fairly small. Its total area (including ponds) is 15.0 sq. mi. and its total land area is 14.4 sq. mi. (9,588 acres)
- ❖ Ninety-seven percent of the town's land area is zoned for single-family homes on 80,000 sq. ft. lots. However, a significant number of existing residential lots are less than two acres and homes on these lots are "grandfathered" using lot lines in existence prior to the current zoning requirements.
- ❖ Residential development occupies about 3,530 acres of land. The average single-family home density in Lincoln today is 0.45 units per acre.
- ❖ Together, residential, institutional, and commercial uses occupy approximately 4,850 acres of land, excluding land with community facilities or other government uses.
- ❖ The town has approximately 3,200 acres of protected open space.
- ❖ Lincoln has many non-profit charitable and educational institutions, including some with large landholdings that are not protected from future development.
- ❖ Despite its proximity to Boston, Lincoln still has 547 acres of agricultural land and several small, working farms.

- ❖ Noticeable variations in Lincoln’s land use pattern correspond with major transportation features, notably Route 2, Bedford Road and Lincoln Road, and the railroad.
- ❖ Approximately eight percent of the town’s land area is controlled by two intensive land uses, both exempt from Lincoln’s zoning: Hanscom Air Force Base (544 acres) and Massport’s Hanscom Field (117 acres).

Key Challenges

- ❖ Lincoln does not have much developable vacant land left, but some vacant parcels are fairly large and visible, where new development could have a significant impact on surrounding neighborhoods and views from the road.
- ❖ Approximately 140 single-family parcels may have enough land to support additional development. In mature suburbs, the incremental division of larger holdings with an existing house often has a more conspicuous impact on town character and views from the road than the development of remaining vacant parcels, which tend to be constrained.
- ❖ Lincoln has several properties with redevelopment potential. Some of these properties include large amounts of land. They may require carefully designed overlay districts in order to guide redevelopment toward the best possible outcomes both for the individual properties, the surrounding neighborhoods, and the town as a whole.
- ❖ There is support for a policy of controlling Lincoln’s overall buildout with two-acre zoning while being open to creative proposals for other land uses and in particular concentrating development around the train station in South Lincoln. However, the Lincoln Station area does not have sewer service, and the feasibility of shared or district-wide wastewater disposal facilities has not been determined.
- ❖ North Lincoln is challenged by the presence of major roadways, land takings for roadway projects that never materialized, and large government-owned facilities. It could change dramatically if Hanscom Air Force Base (HAFB) were closed in the future. Even without base closure, however, North Lincoln could be affected by plans to build more housing at HAFB, to expand the L.G. Hanscom Field (Hanscom Field), or by any other redevelopment of the Hanscom area.
- ❖ There is considerable uncertainty regarding whether shortages in the amount of drinking water available to Lincoln residents will limit future development.

EXISTING CONDITIONS & TRENDS

A community’s land use pattern is defined by the location, arrangement, and intensity of its residential, commercial, industrial, and institutional uses, along with transportation features, open land, and water resources. Land use patterns vary by the land and water resources that support them, the eras in which development occurred, and whether it occurred before or after the adoption of zoning. The ages of buildings in various parts of a town usually correlate with changes in land use patterns. This can be seen in Lincoln, since the arrangement of buildings, the size and shape of the lots, and the architectural styles of residences and outbuildings are quite different in the town center, South Lincoln, and the post-1950 neighborhoods found off the main roadways and along the edge of town.

Development Pattern

Lincoln's development pattern is linked to its agricultural history, topography, roads, and wetlands, and the expectations of its residents. Located in the Commonwealth's most affluent region – Boston's west suburbs – Lincoln is nearly surrounded by upper-income communities with common interests in protecting open space, maintaining high property values, preserving historic buildings and landscapes, and controlling development. Lincoln has marshaled the tools of zoning regulation, planning and site control to save large amounts of open space and still create great places for people to live. These innovations were made possible by the town's long-standing partnerships with two local organizations: the Rural Land Foundation (RLF) and the Lincoln Land Conservation Trust (LLCT).

Farming has continued to shape Lincoln's landscape since the town was first settled. The manner in which roads, farms, and housing were located and built during Lincoln's first 250 years created a rural New England landscape of unusually strong appeal. The vernacular design of buildings, ranging from the colonial to the Victorian era, reflected regional traditions expressed locally with a design character unique to Lincoln. Early industrial-age estates and homes blended in with Lincoln's rural buildings and landscapes. A dramatic change in the type and layout of new development occurred gradually during the twentieth century, but most dramatically during and after World War II. HAFB, the expansion of major highways and local roads, the emergence of suburban development patterns, building styles, and parking areas supplanted the earlier rail and horse-drawn landscapes. Many developed portions of the town include a mix of historic, older and newer development: often compatible, and sometimes not. Still, much of Lincoln's newer development has been thoughtfully sited and designed in relation to older structures and landscapes.

Lincoln residents have worked hard to preserve the town's amenities while accommodating the demands of growth. Over the past fifty years, Lincoln has protected more than 3,200 acres of open space.¹ The open space includes agricultural, forested, and undisturbed land, in large tracts and small pockets and in planned and seemingly random arrangements. Although Lincoln's housing is overwhelmingly composed of detached single-family homes, its residential architecture is hardly homogenous. Lincoln has both grand and modest homes, conventional and unusual neighborhoods, and nodes of multi-family housing – most of it consciously planned to meet social and conservation needs. Lincoln also stands out for its pleasant town center, multitude of institutional uses, and limited, carefully planned commercial development. Overall, Lincoln's existing development is low-density and small-scale.

Route 2 and the MBTA commuter rail line roughly divide Lincoln into thirds. In general, Lincoln's land use pattern changes in response to these two major transportation features, and south of Route 2 the pattern is divided further by Bedford Road/Lincoln Road, one of Lincoln's historic transportation routes. The rail line, dating back to the 1840s and featured in Thoreau's journals at Walden Pond, represents public transportation with deep historical roots. The current Route 2 is a product of the twentieth century, with far more significant visual, auditory, and land use impacts than the rail line. Despite Lincoln's many assets, the town has not been immune to intrusion from forces beyond its control, particularly in the area north of Route 2.

The development pattern in North Lincoln differs from that of the rest of town, mainly because of Route 2, Route 2A, HAFB, and Hanscom Field. North Lincoln also hosts the Minuteman National Park, Minuteman Career & Technical High School, the town's solid waste transfer station, and Lincoln's largest commercial development. Tucked around and between North Lincoln's highways and intensive land uses are its postwar and new neighborhoods, which are largely unconnected due to the layout of the road network, and Battle Road Farm, a

¹ Town of Lincoln, Open Space Committee, *Open Space and Recreation Plan* (March 2008), 34.

nationally recognized planned development. Other than HAFB and Hanscom Field, there is no defined center or focal point for development in North Lincoln.

Existing Land Uses

Table 2.1 reports the current distribution of land uses in Lincoln. The most prevalent land uses include open space and conservation land and low-density residential development. As shown in Map 2.1, the areas south of Route 2 and east of Bedford Road and Lincoln Road, and South Lincoln in general, are the most intensively developed parts of town, not including HAFB and Hanscom Field. The west side of Lincoln is less developed due to the large amounts of conservation, agricultural, and watershed protection land that exist there, together with some institutional uses that occupy large parcels. However, a few residential neighborhoods have been developed toward the northwest side of town around Crosby's Corner, on both sides of Route 2. Pockets of vacant land can be seen throughout Lincoln, some of it already protected with conservation restrictions.

Residential Development. Lincoln's primary land uses include residential development and open space. Approximately 3,530 acres have been developed for housing, mainly single-family homes, but the pattern of single-family development varies throughout town. Many large, generally irregular lots can be seen on Trapelo Road, Lexington Road, Sandy Pond Road, and in the vicinity of the town center. Conventional, evenly sized lots of regular shape define many of the subdivisions in the southern and western side of town, and deep, narrow frontage lots occur in areas such as the southern end of Tower Road. In addition, Lincoln has single-family homes in fairly new developments with open space, such as the Osborne Farm cluster and the Oak Meadow development just south of Route 2. Approximately 140 single-family home properties in Lincoln appear to have enough land to support some additional house lots.

Lincoln also has significant planned developments. Farrar Pond Village, Lincoln Ridge, Lincoln Woods, and Battle Road Farm are examples of housing built to address social objectives, such as modest homes for people seeking a smaller house and a managed residential community, or housing for moderate-income families. In addition, Lincoln has townhouses on Ridge Road, small garden-style condominiums on Ridge Road and Todd Pond Road, and three recently built developments with a variety of housing for seniors.²

Commercial Development. A remarkable feature of Lincoln is the very limited amount of land devoted to commercial uses. According to data from the assessor's office, commercial development occupies about forty-four acres of land, with less than seven acres devoted to retail businesses. Lincoln's largest commercial facility, Lincoln North, is a 138,000 sq. ft. office building in North Lincoln on a site the town acquired during the 1980s. For the most part, however, commercial uses are concentrated around Lincoln Station. A few pockets of business activity exist along South Great Road (Route 117) and Concord Road, too, but these are largely non-conforming business uses. Lincoln's former town hall on Lincoln Road is zoned for retail and service businesses.

Industrial Development. Lincoln does not have any industrial development. Although Lincoln has zoning regulations for an industrial district as recommended in the town's first master plan, no land has been zoned for industrial uses. Moreover, Lincoln's history is that of an agricultural town, not an industrial village, so it does not have the structures or development pattern of an industrial heritage landscape.

² Mark Whitehead, Town Planner, to Community Opportunities Group, Inc. See also, Chapter 7, Housing.

Charitable, Educational and Religious Uses.

Lincoln has institutional uses of regional and statewide significance. The DeCordova Museum and Sculpture Park on Sandy Pond Road and the Massachusetts Audubon Society's headquarters on South Great Road are perhaps Lincoln's most renowned non-profit charitable institutions, and the private non-profit Carroll School on Baker Bridge Road its most recognized educational institution. Lincoln also is home to the Walden Woods Project, an education and conservation advocacy organization on Baker Farm Road. In addition, the town has two other small private schools, three churches, and the Farrington Memorial (Farrington Education Center), a non-profit organization that specializes in educational, recreational, and agricultural activities for urban children.³

**Table 2.1
Land Use by Acres (2008)**

Class of Use	Acres	Class of Use	Acres
Residential Uses		Institutional Uses	
Single-Family Dwellings	3,429.0	Charitable, Education, Religious	394.6
Multi-Family Housing	101.5	Public Uses (Municipal, Other)	882.8
Mixed Uses	6.6	Public Utilities	33.4
Commercial		Undeveloped Land	
Retail	6.3	Vacant Land	799.6
Other	35.5	Chapter 61A, 61B Land	337.5
		Conservation and Parks	3,194.1

Source: Town of Lincoln FY 2008 Assessor's Parcel Database, Lincoln GIS Parcel Map.

Notes:

- (1) "Single-Family Dwellings" includes about 140 single-family parcels with enough land to support additional house lots.
- (2) "Multi-Family Housing" includes, in most cases, acres set aside as open space.
- (3) "Public Uses" includes facilities owned or controlled by the Town of Lincoln, Hanscom AFB, and Massport (Hanscom Field).
- (4) "Vacant Land" includes undeveloped parcels. It excludes parcels with an existing home and enough land to support additional lots, which are included under (1).
- (5) "Chapter 61, 61A Land" acres include both the land and an existing residence or farm stand, as applicable.
- (6) "Conservation and Parks" includes properties owned by the town, the federal government, and non-profit organizations. Excludes privately owned open space reported in other categories of land use.

Municipal Uses. Most of Lincoln's municipal and school facilities are located in the town center, defined generally by the convergence of Bedford Road and Lincoln Road, Sandy Pond Road, Trapelo Road, and Weston Road. Bemis Hall, the Lincoln Public Library, the Town Offices, and the Pierce House lie within walking distance of each other and form the institutional and civic heart of the town. In addition, the Lincoln School complex and recreation facilities are located less than one mile south of the Town Offices, set back from a wooded area on Lincoln Road. By choice, Lincoln has kept its core public services in one area and made it a recognizable community center separate from the commercial business area. Lincoln's other municipal facilities include a combined police and fire station on the corner of Lincoln Road and Codman Road in South Lincoln, a highway department garage on Lewis Street in South Lincoln, and a solid waste transfer station and recycling center off Route 2A in North Lincoln. Public cemeteries are located on Lexington Road and adjacent to the town center.

Agriculture and Recreational Uses. Although Table 2.1 identifies 337.5 acres of land under Chapter 61A or 61B agreements, Lincoln has more land devoted to agriculture and recreation, and not all of the acres reported in Table 2.1 are actively used for these purposes. In addition to Lincoln's remaining privately owned farmland, the town owns the Codman Farm and the Conservation Commission leases about 210 acres of conservation land for farming.⁴ Most of Lincoln's outdoor recreation facilities – playgrounds, playing fields, tennis and basketball

³ See Chapter 4, Cultural and Historic Resources, for additional information about Lincoln's non-profit institutions.

⁴ *Open Space and Recreation Plan* (2008), 4, 44.

Visual Districts and Focal Points

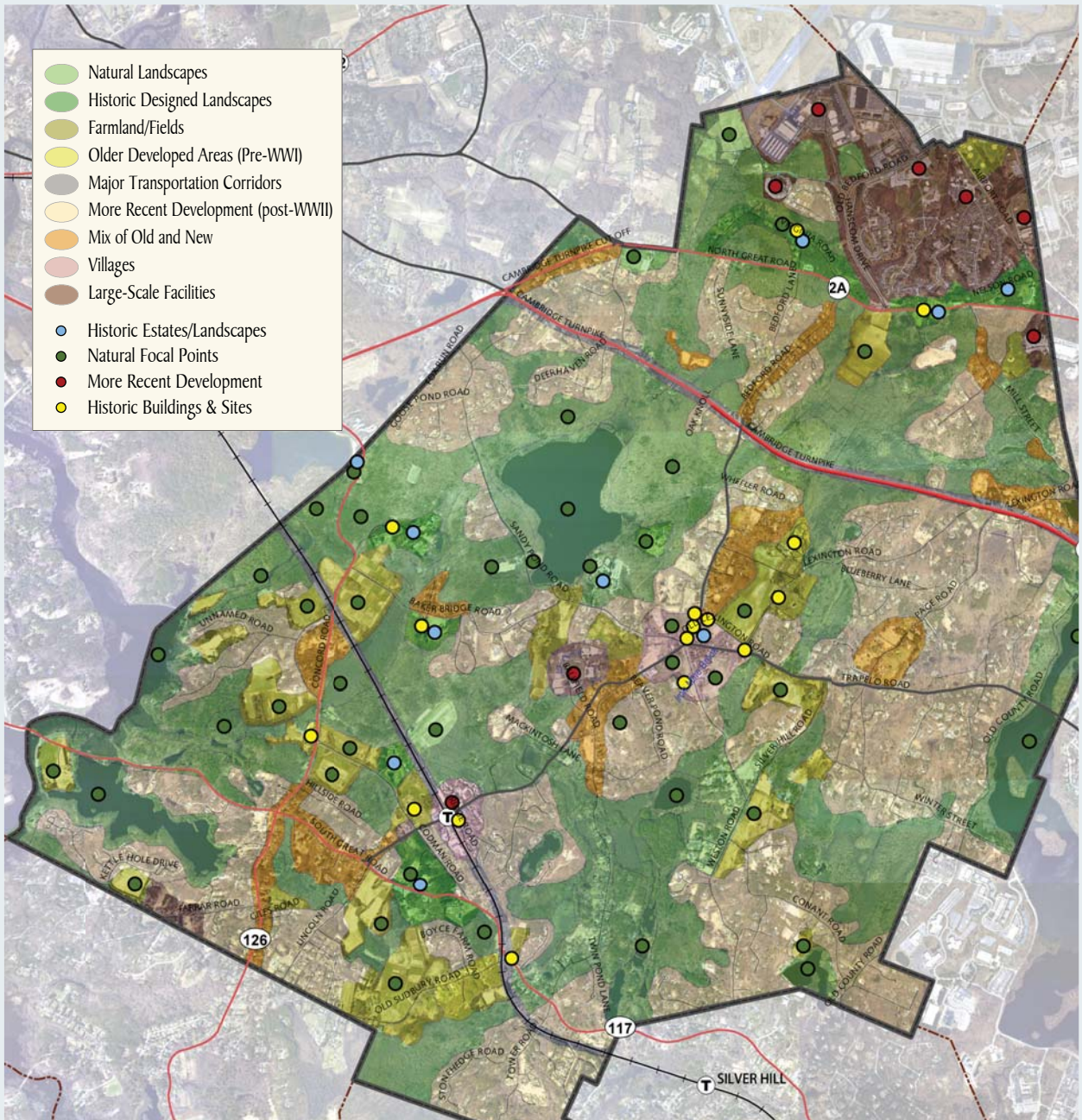
Most people do not think of “land use” as a physical arrangement of development, roads, and natural resources. They also do not think of zoning. Instead, “land use” is what people see around them – more often than not, from their cars. The view from the road conveys both instant and lasting impressions of a town. While the amount of land in various uses sheds light on a community’s development maturity and zoning, a visual inventory expresses what a land use pattern looks like, given all of its component parts.

Visual districts are distinct areas with common physical, visual, and cultural characteristics. These characteristics are relatively objective and they include a variety of features of the built and natural environment: landform, vegetation, water, land use, historic features, development type and era, settings and context. In Lincoln, cohesive visual districts can be seen in the town’s natural landscapes, post-war neighborhoods, farms, and historic estates. **Views** consist of places with vistas across an extensive area. They can be experienced from a specific point such as an overlook, from a linear corridor such as a road, or from a larger area, such as around the edges of a pond or field. Sandy Pond, the DeNormandie Sledding Hill, Beaver Pond, Minute Man National Historical Park, and the grasslands at Hanscom Field are a few examples of the unique views experienced in Lincoln today.

Focal points are highly visible objects or landscapes that occupy a prominent place in the natural or built landscape. They may consist of individual buildings, groups of buildings, or natural features such as hilltops, ponds, or prominent stands of trees. Some of Lincoln’s noteworthy focal points include the Lincoln Center, the Pierce House, Flint’s Farm, Lincoln Station, Codman Community Farm, Farrar Pond, Hanscom Field, and Lincoln North.

Though less prominent than focal points, **points of interest** attract attention because of their significance to the community. They include famous places or buildings, historic sites, and other places of meaning. Lincoln has numerous points of interest, ranging from the Carroll School to the Farrington Memorial and the DeCordova Sculpture Park and Museum. **Visual corridors** are linear routes such as highways, roads, railroads, streams and trails that provide views and a consistent visual character over an extended distance, such as Route 2A through Lexington, Lincoln, and Concord, portions of the railroad bed between Lincoln Station and the Concord town line, Old Concord Road, Baker Bridge Road, and Page Road. Some focal points are located in adjacent communities but visible from points in Lincoln, such as Walden Pond, the office developments in Waltham on the Cambridge Reservoir, and portions of HAFB.





Visual Inventory, Lincoln, Massachusetts; Fall 2007. Dodson Associates.



courts, and the town pool – are located on the grounds of the Lincoln School. Public recreation facilities also exist at the Walden Pond State Reservation off Concord Road and Minuteman Career & Technical High School in North Lincoln, and a private recreation area is located around Valley Pond.

Vacant Land. Lincoln has less than 800 acres of privately owned vacant land today, but according to the town’s assessors, only 301 acres have some development potential. Most of the land that remains vacant is currently undevelopable due to constraints such as wetlands or steep slopes on one hand, and conservation restrictions and Agricultural Preservation Restrictions (APR) on the other hand. Future changes in technology and the economy may make some of this land available for development, however. Lincoln does have some relatively large, unprotected parcels and small pockets of developable land scattered about the town.

Conservation Land and Park Land. The amount of conservation land and public park land in Lincoln has earned the town a national reputation for its environmental and land use initiatives. The 3,194 acres of public and semi-public land reported in Table 2.1 represents a subset of the total number of open space acres in Lincoln, for it includes only the town’s conservation land, land owned by the LLCT and other conservation organizations, and the Minuteman National Historical Park. Lincoln has more acres of protected open space due to conservation restrictions and APRs – land classified above as agricultural or recreation land and privately owned vacant land. As of 2008, the total amount of protected open space in Lincoln was 3,282 acres.⁵

Regional Trends

Lincoln evidences several planning and land use trends that can be seen in neighboring towns. Boston-area suburbs have different challenges than the Commonwealth’s high-growth areas along I-495, in southeastern Massachusetts and Worcester County, and on Cape Cod. Lincoln’s region may not be growing as rapidly as other parts of the state, but it has clearly changed in the past fifteen to twenty years.

New Development, Infill, and Redevelopment. With the exception of Sudbury, the communities in Lincoln’s western suburban region have been growing slowly for the past two decades. Some experienced slight declines in total population after 2000. Most of these towns have little land left to develop compared with the large amounts of vacant land available west of I-495. However, a limited supply of vacant land does not preclude new development. The recent redevelopment of Metropolitan State Hospital in Lexington, and the redevelopment of the Boston Institute for Intercultural Communications (BIIC) property and commercial expansion at Lincoln Station in Lincoln, and proposed reuse of the former Raytheon site in Wayland as a new town center all reinforce the importance of reuse and redevelopment in the evolution of older suburbs. Even though population and household growth rates may continue to accelerate in a westward path across the Commonwealth, the Route 128 suburbs will grow and change in ways that may be very challenging for them.

Teardowns and Mansionization. A good example of differences between Boston’s Route 128 suburbs from other parts of the state is the frequency of teardown and mansionization. Teardown activity has been intense in maturely developed suburbs such as Wellesley, Lexington, Winchester, and Lynnfield, which have little vacant land and very high demand for housing. Weston and Lexington have explored different ways to address mansionization, such as Weston’s design guidelines brochure, *Preserving Weston’s Rural Character*. Lexington has increased its demolition delay period to twelve months, and the Lexington Historical Commission has

⁵ Ibid, 34.

conducted public education to work with owners of houses defined as “preferably preserved” under the town’s demolition delay bylaw.⁶

Chapter 40B. Comprehensive permits affect communities along Route 128 differently than the small towns west of I-495. Most of Boston’s maturely developed suburbs fall below the ten percent statutory minimum under Chapter 40B, but their lack of vacant land does not immunize them from comprehensive permits. These communities tend to have water and sewer service, public transportation, easy access to regional employment centers, and significant redevelopment sites. As a result, comprehensive permit activity is more likely to involve properties with many abutters, whereas outlying towns are more likely to lose unprotected open space and vacant industrial land. Lincoln is regionally unique because during the 1990s, it met the ten percent minimum largely because of Battle Road Farm. Even though Lincoln fell below ten percent after Census 2000, it has restored its percentage of affordable housing through careful planning, the strategic use of planned development districts, and the work of the Lincoln Housing Commission. The possibility exists that Lincoln will need to create more affordable housing in order to remain above ten percent after Census 2010.⁷

Zoning

Like most towns, Lincoln relies on several means to regulate development: zoning, subdivision control, wetlands protection, septic system requirements, and local historic districts. Lincoln also has adopted demolition delay and a neighborhood conservation district bylaw in an effort to save the small, older homes found in neighborhoods built during the interwar years and after World War II – homes that have become targets for teardown and mansionization. While all of these regulations effectively determine what can be done – and how much can be done – on a parcel of land, land use is squarely the province of zoning. Lincoln’s very limited amount of business activity, lack of industrial development, predominantly single-family residential neighborhoods, and unique multi-family developments are, in large part, a product of zoning requirements.

EVOLUTION OF ZONING IN LINCOLN

Lincoln adopted zoning in 1929 and has amended its land use regulations several times since then. The first use districts included a single-family residence district, a general residence district for single-family, attached or two-family dwellings, a business district, and a light industrial district. For seven years, Lincoln allowed single-family homes on 10,000 sq. ft. lots, and some relatively small house lots can be seen scattered around the town. In 1936, however, Town Meeting voted to increase Lincoln’s minimum lot area to 40,000 sq. ft. and also imposed deeper front yard setbacks. In the ensuing thirteen years, Lincoln established minimum frontage and basic lot shape controls, and eventually doubled its frontage requirement (to eighty feet). The effects of these decisions can be seen in the increasing regularity of residential development in Lincoln during and immediately following the interwar years.

By the early 1950s, Lincoln had begun to experience postwar housing demand as roadside open space gave way to house lots and back land was subdivided. Residents worried about the adequacy of Lincoln’s water supply to accommodate growth and the impacts of development on wetlands. Since Lincoln does not have public sewer service, all of its homes and businesses rely on private wastewater disposal systems. Due to concerns about the effects of growth on Lincoln’s rural character and natural resources, the town doubled its minimum lot area to 80,000 sq. ft. in 1955. Town Meeting also imposed deeper front, rear and side yard setbacks and increased the minimum frontage requirement to 120 feet. By the time many towns in Massachusetts were adopting zoning for

⁶ See Chapter 5, Built Environment, for additional discussion of teardowns and mansionization.

⁷ See Chapter 7, Housing, for additional discussion of Chapter 40B.

the first time, Lincoln had dramatically changed its original land use regulations. It also had set the stage for an unusually high ratio of residential land use per capita and a development pattern which, while seemingly protective of the environment, also increased the risk of high residential water use, auto dependency, and incremental, largely invisible encroachments on wetland resources.

Within ten years of instituting two-acre lots, Lincoln took steps to liberalize its zoning, first by authorizing the Zoning Board of Appeals to approve small multi-family dwellings in the General Residence District (1960) and two years later, by allowing multi-family housing by right in the same zone, subject to modest density controls. A subsequent generation of voters embraced new ideas about zoning: flexible site planning and open space preservation, mixed residential uses, moderate-income housing development, and accessory apartments in single-family homes. The progressive zoning decisions that Lincoln residents made in the early 1970s paved the way for developments such as Farrar Pond Village and Lincoln Woods, and generally increased public awareness of the ways that zoning could accomplish more than simply restricting growth. Further, the emergence of flexible zoning in this period probably helped Lincoln deal with far greater challenges after 1978, when a hoped-for realignment of Route 2 had been abandoned by the state and Massport began to signal its interest in expanding the Hanscom Field. Lincoln responded by establishing a temporary overlay district and building moratorium throughout North Lincoln, and another new zoning era was born.

USE DISTRICTS

Lincoln's underlying zoning is fairly conventional and prescriptive. The Zoning Bylaw is dated, both in terminology and substance. It is not as attuned to current thinking about issues such as site development standards, stormwater management, and off-street parking as one would expect in a town like Lincoln. It has all of the qualities of a bylaw that has been amended incrementally over time, without a comprehensive update in many years. Still, in other ways the Lincoln Zoning Bylaw is progressive, notably its provisions for "Big House" review. The town has four residential use districts and three nonresidential use districts (Map 2.2).

The **Residence 1 Single-Family Residence District (R-1)** is what its name implies: a zoning district intended for detached single-family homes. It includes about ninety-seven percent of the town.

- ❖ Single-family homes and accessory buildings are allowed as of right under a one-house-per-lot development policy.
- ❖ The minimum lot area is 80,000 sq. ft., minimum frontage is 120 feet, and yard setbacks, fifty feet on all sides for residential buildings and seventy-five feet for nonresidential structures. Depending on the size and shape of the parcel, the front setback could be noticeably deeper due to a lot width requirement of 250 feet between side lot lines through the principal building. Lincoln also has a lot shape regulation that disqualifies small, odd-shaped fragments of land from being counted toward the minimum lot area, frontage, and other dimensional requirements.
- ❖ A developer could qualify for a twenty percent density bonus, or up to ten extra units, if at least half of the additional units were restricted as affordable housing.
- ❖ Charitable, educational and religious uses (most classified as exempt uses under the Zoning Act), small boarding houses, agriculture, and small home occupations are also allowed as of right in the R-1 District, while hospitals and nursing homes, kennels, commercial greenhouses, non-profit clubs, golf courses, municipal uses, public utilities, radio towers, larger home occupations – defined as one requiring more than

four parking spaces – and accessory apartments require a special permit from the Zoning Board of Appeals.

- ❖ Cluster developments on parcels with at least 160,000 sq. ft. are allowed by special permit from the Planning Board. Lincoln offers no density incentives to encourage R-1 cluster developments. However, almost all sub-divisions created within the past ten years have been cluster developments.
- ❖ Under the **“Big House”** bylaw (2003), site plan review applies to all new dwellings to be constructed on vacant land, or when the gross floor area of a home and accessory buildings exceeds the greater of 4,000 sq. ft. or eight percent of the lot area, or 6,500 sq. ft.

The **Residence 2 General Residence District (R-2)** applies to approximately twenty-four acres in the vicinity of Ridge Road.

- ❖ Single-family homes are allowed as of right; two-family homes and garden-style and attached multi-family units also are allowed as of right, subject to site plan review by the Planning Board.
- ❖ Other uses permitted in R-1 are also permitted in R-2.
- ❖ The minimum lot area is 12,000 sq. ft. for a single-family home, 10,000 sq. ft. per unit for a two-family or three-family home, and 8,000 sq. ft. per unit for multi-family dwellings with four or more units. However, the density of a project in the R-2 District could be increased by twenty percent, or up to ten more units, if half of the units qualify as affordable housing.
- ❖ The minimum frontage and minimum lot width are 100 feet, with yard setbacks of forty feet in front of the principal building and thirty feet on the side and rear.

The **Residence 3 Open Space Residential Development District (R-3)** and **Residence 4 Planned Community Development District (R-4)** apply to two areas of Lincoln: R-3 (143 acres), Farrar Pond Village, and R-4 (65 acres), Lincoln Woods. The R-3 District’s purpose is to encourage creative site plans that save open space and provide a mix of housing. The purpose of the R-4 District is similar, but the mix of housing must include affordable units. Unless a developer applies for permits to build under the provisions of R-3 or R-4, the R-1 single-family development regulations apply. In effect, the R-3 and R-4 Districts function as overlay districts even though the Zoning Bylaw does not designate them as such. In the R-3 and R-4 Districts:

- ❖ Single-family homes are allowed as of right, but may not exceed twenty percent of the total number of units in a development; semi-detached and multi-family dwellings are allowed by special permit from the Zoning Board of Appeals, subject to site plan review.
- ❖ A qualifying site must have at least twenty-five acres, and at least seventy percent of the site must be preserved as open space.
- ❖ Total density is capped at twice the number of units that would be allowed under R-1 regulations. In the R-4 District, however, a developer could request additional density, up to a maximum of one unit per 10,000 sq. ft. of lot area, if at least sixty percent of the additional units are affordable housing. A developer in the R-2 District could qualify for a twenty percent density bonus if half of the additional units are affordable.

- ❖ In the R-3 District, the developer is required to show that a project’s population density and traffic will not significantly exceed the population density or traffic that would be generated by the site if it were developed under the regulations of the R-1 District.

The **Business 1 Retail Business District (B-1)** applies to a total of 8.8 acres, including the Rural Land Foundation’s property around Lincoln Station, land on the opposite side of Lincoln Road, and the former town hall on Lincoln Road.

- ❖ Permitted uses include retail stores, personal service businesses, offices, banks, a post office, rail or bus terminal, and outdoor display and retail sale of merchandise on the same lot, as a use accessory to a retail establishment.
- ❖ Restaurants and other food service establishments require a special permit from the Planning Board.
- ❖ The minimum lot area is 6,000 sq. ft., with a minimum lot frontage of fifty feet.
- ❖ Yard setbacks and lot width are determined by site plan review.
- ❖ Building height is a remarkably low twenty-five feet.

The **Business 2 Service Business District (B-2)** applies to 8.9 acres of land in the vicinity of Lewis Street in South Lincoln.

- ❖ Uses permitted in the General Residence District are also permitted in the B-2 District.
- ❖ Some uses allowed by right in the B-1 District require a special permit from the Board of Appeals in B-2, such as business or professional offices and personal service businesses (e.g., barber shop, dry cleaner).
- ❖ Gas stations, craft workshops, light manufacturing, and shops for construction and landscaping contractors also require a special permit from the Board of Appeals.
- ❖ Restaurants and food service establishments require a special permit from the Planning Board.
- ❖ Lot area, frontage, and setbacks are determined by site plan review, while building height in this district is also limited to twenty-five feet.

The **Selected Light Industrial District (B-3)** establishes use and dimensional regulations for industrial development. However, B-3 is a “text-only” district because Lincoln has not zoned any land for industrial uses.

- ❖ Even though the B-3 District is intended for research buildings, offices, and light industry, the only “by right” permitted uses in this district are educational and religious uses exempt under Chapter 40A.
- ❖ Research uses, offices, light manufacturing, parking areas, banks, gas stations, and accessory uses require a special permit from the Zoning Board of Appeals.
- ❖ The minimum lot area for uses in the B-3 District is 400,000 sq. ft., and the maximum building height, thirty-six feet.

OVERLAY DISTRICTS

Since the mid-1980s, Lincoln has used overlay districts to consider major development projects on a case-by-case basis in North Lincoln and South Lincoln. Many Massachusetts towns have overlay districts today, but Lincoln's approach is unique. The **North Lincoln Overlay District**, established permanently in 1986, may include land north of Route 2 and within 100 feet south of Route 2, subject to Town Meeting approval. It creates a process for developers to present concept plans to the town, details about the size and type of project they want to pursue, building and landscaping plans, impact studies, supporting documentation, and a list of any underlying zoning regulations that are not met by the project. Under Section 12.5 of the Zoning Bylaw, the Planning Board holds a community-wide public hearing, and ultimately Town Meeting decides whether to establish a Planned Development District (PDD) with use, dimensional and other requirements based on the developer's concept plan – known as a preliminary development and use plan. By approving a PDD, Town Meeting creates a two-year window within which the Planning Board may grant a special permit and site plan approval for a detailed plan that substantially conforms to the developer's preliminary development and use plan. Depending on the detailed plan, the project may require a second community-wide public hearing process. The district designation expires if the Planning Board does not grant a special permit within two years or if the developer fails to construct under the special permit within two years of its issuance.

Although the PDD zoning model is an arduous process and may be an expensive and time-consuming proposition for developers and the town, the collaborative public process that developers and the Planning Board follow clearly embraces “the Lincoln way” of approaching issues of town-wide interest. It would be difficult to replicate in most communities, yet Lincoln has succeeded with it. The town currently has four PDDs in North Lincoln – Battle Road Farm (NL-1), the Lincoln North office development (NL-2), Minuteman Commons (NL-4), and The Groves (NL-5) – and one in the **South Lincoln Overlay District** for the Mall at Lincoln Station (SL-1).

In addition to these special planning districts, the town has a Wireless Communications Facilities Overlay District and three protective overlay districts:

- ❖ Lincoln established the **Open Space Conservation Overlay District (C)** in 1960 to protect water supply and natural features, and prohibit development in areas subject to flooding. It applies to about 212 acres, mainly the floodplain areas surrounding the Hobbs Brook and Stony Brook in the southern part of town. Permitted uses include farming, forestry, passive recreation, water conservation, boat houses and landings. Barns, stables, kennels, a town cemetery or town well is allowed only by special permit. A property owner's written consent is required in order for land to be placed in the district. A subsequent owner who believes the land is not prone to flooding has the option of presenting evidence to the Board of Appeals and obtaining permission to construct under the regulations of the R-1 District.
- ❖ The **Wetland and Watershed Protection District (W)**, adopted in 1973, serves purposes similar to those addressed by the C District, and additionally the protection of groundwater recharge areas, wetlands, wildlife habitat and open space. It applies to standing and flowing water bodies such as ponds, streams, and bogs. However, while the regulations imply that this district also includes other wetland resources, the W District bylaw does not define the wetlands it covers or refer to a wetlands map for boundary determinations. The same uses permitted by right in the C District also control in the W District, but the approach to special permitted uses is different. In the W District, the Board of Appeals may grant a special permit for any use permitted in the underlying zone if the applicant submits an environmental impact report acceptable to the Conservation Commission and the site to be developed is found not to be significant for water supply protection purposes. For land located in the W District, wetlands may be used to satisfy the underlying zone's minimum lot area requirement as long as the parcel has at least 20,000 sq. ft. of contiguous upland.

- ❖ Lincoln adopted the **Flood Plain District (FP)** in 1978 to comply with federal flood insurance requirements. The FP District includes all land in Zone A, A1-30 on the Flood Insurance Rate Maps and Flood Boundary and Floodway Maps (effective 1985). For new construction and substantial reconstruction within the FP District, the lowest floor of a building must be at or above the 100-year base flood elevation on the Flood Insurance Rate Maps (FIRM). In addition, no construction is allowed within floodway areas unless a registered professional engineer certifies that a proposed activity will not increase flood levels during a 100-year storm event.

Lincoln's parking regulations are unusually broad...In addition, Lincoln's zoning focuses on minimum parking spaces for each use class regulated by the off-street parking requirements. Today, planners emphasize maximum parking requirements and related standards to reduce pavement and increase landscaping, all toward the goal of reducing stormwater runoff.

OTHER REQUIREMENTS

Inclusionary Zoning. In 2005, Lincoln adopted an Inclusionary Housing bylaw that requires affordable housing in developments with six or more new units. Lincoln's earlier affordable housing regulations allowed an increase in density, but the Inclusionary Housing bylaw provides no authority for a special permit to award additional units or other types of cost offsets. It establishes a sliding scale of required affordable units based on the size of a project, generally fifteen percent. Developers have the option of locating the affordable units in their projects or in other parts of town, paying a fee in lieu of units to Lincoln's affordable housing fund, or donating usable land to the town so that an organization like the Lincoln Housing Commission can build affordable housing on the town's behalf.

Site Plan Review. The Zoning Act does not specifically authorize or even mention site plan review, but the courts have upheld it as a valid exercise of local authority and today, most communities have some type of site plan review procedure. Site plan review is a mechanism for reviewing projects that are likely to have an impact on surrounding land uses, natural resources, and traffic. It also provides a mechanism for placing reasonable conditions on projects prior to issuance of a building permit. However, it does not create power to disapprove permitted uses. Unlike a subdivision plan or a special permit, an approved site plan does not "grandfather" or protect any zoning rights from later changes to the Zoning Bylaw.

In Lincoln, Site Plan Review under Section 17 of the Zoning Bylaw applies to virtually all new construction, site alterations or excavation on a vacant lot, exterior alterations or expansion of nonresidential and multi-family uses, and any use requiring a special permit. Lincoln also requires limited site plan review for uses exempt from local zoning under Section 3 of the Zoning Act: uses generally referred to as "Dover Amendment" uses, such as schools, colleges, group homes and religious uses. There is disagreement within the legal community about requiring site plan review for so-called "Dover Amendment" uses, but many communities have regulations like Lincoln's. The challenge for local officials involves balancing land use policy and the interests of neighbors with the Dover Amendment's intent to protect educational and religious institutions from zoning constraints.

Off-Street Parking. Communities often use off-street parking requirements as a surrogate for controlling intensity of use, and sometimes they use it as leverage to obtain concessions from developers. These objectives are met by imposing excessive parking requirements, particularly on multi-family, commercial, and industrial development – requirements that make it very difficult to build out a site in conformance with "actual" density and dimensional controls such as building setbacks, building height, lot coverage restrictions, or floor area ratios.

The Planning Board intends to review Lincoln's current parking regulations, such as the requirement that there be a large number of parking spaces for retail uses – one space for each 140 sq. ft. of floor area for retail or service business. The noteworthy issue is that Lincoln's parking regulations are unusually broad, and not always well connected with the rest of the Zoning Bylaw. For example, the regulations include minimum parking space requirements for various uses, yet there is no standard for professional or business offices and banks – uses one would expect to find in the South Lincoln business area. In addition, Lincoln's zoning focuses on minimum parking spaces for each use class regulated by the off-street parking requirements. Today, planners emphasize *maximum* parking requirements and related standards to reduce pavement and increase landscaping, all toward the goal of reducing stormwater runoff.

NEEDS, ISSUES & CHALLENGES

Lincoln's planning needs include problems that affect all Massachusetts communities and some that are unique to the town. Since Massachusetts is a home rule state, municipalities have broad latitude to regulate development as long as their bylaws and policies do not conflict with the state constitution or state laws that limit local control. However, Massachusetts can be a challenging regulatory environment for local governments because the Zoning Act, M.G.L. c. 40A, has never been revised to reflect the principles of home rule. It is not an “enabling act,” though many people still refer to it that way. Today, efforts to improve Chapter 40A remain tangled in a political dispute. Tensions between city and town officials, planners, developers and homebuilders, legislators, and state agencies have made it difficult to reach agreement about zoning reform. Meanwhile, the legislature has approved various zoning and permitting “options” for communities to adopt if they wish, further blurring the line between home rule and state authority.

Zoning Reform

In the past several years, the legislature has considered numerous proposals to revise Chapter 40A, but invariably the proposals were referred to committee for further study. The legislature is currently reviewing a new round of zoning-related bills, including some from previous years. Of the two most widely discussed proposals, one involves a comprehensive reform and update of Chapter 40A and the Subdivision Control Law, and the other promotes a combination of some reforms and incentives for cities and towns to adopt plans and zoning consistent with regional and state growth policy objectives.

- ❖ The **Community Planning Act**, or CPA-II, promotes updating Chapter 40A to make it more like the zoning laws found in many other states. It also requires consistency between local comprehensive plans and zoning. When CPA II was submitted to the legislature in 2005, many developers and some housing advocates objected to it. Opposition from developers was reinforced by the publicity surrounding a then-recent study produced by the Pioneer Institute and the Rappaport Institute. The study asserts that zoning and other local regulations impede housing development in the Boston metropolitan area and place a damper on job growth and economic vitality.
- ❖ The **Land Use Partnership Act** (LUPA) promotes a voluntary system for communities to adopt plans consistent with state requirements, such as designating land for commercial growth and high-density housing by right and expediting the permitting process for these uses. In exchange, communities with LUPA-compliant plans would be allowed to exert more control over development by gaining access to some regulatory tools that CPA-II would provide to all cities and towns: eliminating the “Approval Not Required” process, placing limits on vested rights, adopting rate-of-growth regulations, and making zoning changes with a simple majority vote at Town Meeting. LUPA is the result of work initiated in 2007 by the Executive Office of

Housing and Economic Development (EOHED), which assembled a Zoning Task Force in order to find some middle ground between supporters and opponents of CPA-II and explore other alternatives.

Zoning Changes

By law, citizens can petition for an article to be placed on a Town Meeting warrant. If the proponents have enough signatures, the Board of Selectmen must allow the petition to proceed to Town Meeting. When the petition involves zoning, the statutory process for considering it is fairly straightforward. Under M.G.L. c. 40A, s. 5, the Board of Selectmen refers the matter to the Planning Board, which in turn is required to hold a public hearing and make a report to Town Meeting. Zoning changes also may be proposed by the Board of Selectmen, Planning Board, Zoning Board of Appeals, the regional planning agency (the Metropolitan Area Planning Council), or an individual landowner, but the Planning Board public hearing and reporting requirements still apply. Adopting or amending a zoning bylaw or zoning map requires a two-thirds vote of Town Meeting.

Lincoln has made creative use of overlay districts to provide for a variety of housing and a large office development, and in order to begin the process of encouraging a village center around Lincoln Station. The overlays “float” over a designated area until Town Meeting decides to locate a PDD within it. This involves amending the zoning map and authorizing special regulations for the PDD, as depicted on the developer’s preliminary plan. Only then does the developer gain access to a permitting process that will determine whether the project can be built. Most communities would have trouble working with a zoning scheme like the North Lincoln and South Lincoln Overlay Districts, but overall there is consensus that it has benefited the town and created a framework for vetting creative ideas. Very few zoning changes approved by Town Meeting have not worked out as local officials anticipated and in such cases the rigorous review process outlined in the Zoning Bylaw had not anticipated unforeseen future changes. For example, North Lincoln Planned Development District 3, approved in 1999, was never developed, but economic conditions at that time made such development not feasible.

In consultation with the Planning Board and other town boards, the Board of Selectmen appointed the At-Risk Properties Committee in 2005 to study six properties believed to be on the verge of sale. The Committee’s charge involved identifying plausible development and preservation scenarios and estimating the environmental, traffic, and fiscal impacts of each option. The results were published in a report, which was well received at the 2005 State of the Town Meeting. Some officials say the report helped Lincoln when Deaconess Abundant Life Communities approached the town about developing The Groves, which occupies one of the sites analyzed by the At-Risk Properties Committee.

More recently, Leggat McCall Properties inquired about rezoning land for a large office building on the Lincoln-Waltham line, just south of the Cambridge Reservoir. Known as the Arshad property, the land is in a residential neighborhood with access controlled by a one-way street designation established years ago to prevent cut-through traffic from office and industrial uses in Waltham. The Arshad property abuts one of the parcels in the At-Risk Properties Study. The Board of Selectmen reconvened the At-Risk Properties Committee to review the developer’s idea, following the same process used for the original study. This time, the process did not fare as well. As expected, neighborhood residents objected, but residents from other parts of town also criticized the At-Risk Properties Committee and the process as a whole. Some said the process should have been designed to discourage proposals that conflict with Lincoln’s traditional zoning framework. Others said the neighborhood should have had more opportunities to participate in the review, and still others questioned whether Lincoln’s tax revenue concerns had begun to outweigh other planning needs that the town had managed to balance for many years.

The office building proposal disappeared when the purchase and sale agreement expired. Still, the issues that surfaced during Lincoln's review process illustrate how difficult it can be to consider such zoning alternatives. As towns progress toward buildout under existing zoning and their population changes over time, it becomes increasingly challenging to explore new land uses.

Lincoln needs to clarify its priorities for "smart evolution" because the town has many competing needs and agendas, and they are not always compatible.

Smart Growth

Since 2003, state government has shown some interest in smart growth, a set of planning principles that emphasize environmental protection by promoting compact, mixed-use development near public transportation, more transportation options to reduce vehicle dependency, housing and employment choices for people of all income levels, and fairness in development review and permitting procedures. The state's strategy involves measures such as Chapter 40R, which offers financial incentives to communities that allow higher-density housing by right. Massachusetts also promotes green buildings and renewable energy through public education and low-interest loans and grants for commercial, industrial, and government buildings that address the state's energy and water conservation policies. In addition, Chapter 43D encourages communities to identify areas for commercial, industrial, or mixed-use development ("Priority Development Sites") and make the permitting process for those projects efficient and clear.

Lincoln thinks of smart growth as "smart evolution," and its most obvious opportunity is the area around Lincoln Station. The town has taken steps to provide for different types of land uses there, notably by adopting the South Lincoln Overlay District. One challenge for Lincoln involves determining the feasibility of providing adequate wastewater disposal facilities to serve new growth within the overlay district. A second, perhaps more difficult, challenge will be to decide how much additional development should occur in the South Lincoln business area if district-level wastewater disposal solutions can be achieved. A third issue is how best to apply "smart evolution" to other places that become candidates for development or redevelopment in the future. Some of Lincoln's non-profit institutions seem well-established in their present settings and unlikely to relocate, yet the properties without any use restrictions could change. In addition, Lincoln could inherit the homes at HAFB if it closes in the future – not to mention the portion of HAFB's land that lies within Lincoln, where there is considerable redevelopment potential for many types of uses. Reuse of existing properties is an important feature of smart growth, even without direct access to public transportation. Lincoln needs to clarify its priorities for "smart evolution" because the town has many competing needs and agendas and they are not always compatible.

Creative Development

Lincoln has had a successful history of creative development. However, in order to further expand future development possibilities, it may want to consider additional zoning tools such as transfer of development rights (TDR) and backlot development. Under a TDR bylaw, the development rights of one parcel can be transferred to another, thereby making it possible both to save open space and create compact development in areas appropriate for it. Most but not all TDR bylaws establish two types of zones: *sending and receiving areas*. *Sending areas* represent the locations from which development rights will be transferred, and *receiving areas* represent the locations designated for growth. Some TDR bylaws establish an overall development maximum for a specific district (usually an overlay district) and allow the development rights to be exercised anywhere in the district or within defined sub-districts as long as projects comply with a set of open space performance standards. Though

often practiced in other parts of the country, TDR has not gained much recognition in Massachusetts except in urban communities. Towns that have attempted to pass TDR bylaws report opposition from residents living in or near designated receiving areas, from property owners who feared that land in a sending area would be devalued, and from developers who perceived TDR regulations as onerous, complicated, and bureaucratic. Even without clearly mapped sending and receiving areas, TDR has been a hard sell in many towns. A notable exception is Groton.

When the timing of real estate transactions makes it impossible for a single private developer to obtain site control over a priority sending site and an eligible receiving site, Lincoln could use TDR to finance the purchase of critical open space. For example, the town or the RLF could acquire and “bank” zoning rights for future sale to developers who agree to create projects with significant public benefits in other locations. Due to Lincoln’s high land costs, TDR may be one appropriate way to protect large, valuable tracts of open space, such as the DeNormandie farm on Trapelo Road or the Farrington Memorial. The town also could allow developers to acquire zoning rights and propose one or more locations to “send” the development to, e.g., by using the existing North Lincoln Overlay District as a mechanism to assemble development rights north of Route 2 and reallocate them within the same area through the use of sending and receiving sub-districts. Furthermore, small towns, larger suburbs, and cities could have inter-local TDR if the legislature authorized the creation of a special district. Massachusetts has a few precedents for placing land within two or more communities in a special district with permitting, revenue, and public services administered jointly. It would not take much creativity to extend the same type of structure to a regional TDR initiative.

Future Development Potential

Nearly a decade ago, the Executive Office of Energy and Environmental Affairs (EOEAA) funded a statewide program to estimate the future growth capacity of every city and town in the Commonwealth. According to the analysis of undeveloped land in Lincoln, the town’s reserve growth capacity included 326 new housing units and about 16,500 sq. ft. of additional commercial space.⁸ This is a very low growth projection compared with that of most Massachusetts towns, including maturely developed suburbs near Boston. However, the state’s projection ignores Lincoln’s potential for redevelopment. The South Lincoln Overlay District currently contains a PDD for the South Lincoln Mall, but it allows for the possibility of more PDDs within the boundaries of the overlay district. The same applies to North Lincoln. Moreover, Lincoln has properties with redevelopment potential outside of the established overlay districts. While the state buildout study ignored these issues, Lincoln is keenly aware of them.

GOALS & RECOMMENDATIONS

Goal LU-1. Institute a comprehensive process for considering proposed zoning changes

- LU-1.1. Develop and publish the criteria that Lincoln’s town boards will use to guide their review and evaluation of future proposed zoning changes.
- LU-1.2. Charge the Planning Board with responsibility for coordinating the review process with other town boards, providing timely feedback and guidance to proponents, and providing avenues for the public to participate in the review process.

⁸ Executive Office of Environmental Affairs (now known as Executive Office of Energy and Environmental Affairs), 2001.

DISCUSSION

The Planning Board's scope of review under the Land Use Review Criteria is broad and touches on physical design, social and economic impacts, open space impacts, historic preservation, and other subjects. Under the proposed review process, the Planning Board may designate a review committee to oversee the process, drawing upon representatives of other Town boards with relevant expertise such as the Selectmen, Finance Committee, Conservation Commission, Housing Commission, and others. As envisioned by this Comprehensive Plan, the review process would consist of the following:

- ❖ The Planning Board will serve as the single point of contact for any proponent of a zoning change.
- ❖ Following an initial meeting with the Planning Board, the proponent will be asked to:
 - ◆ Provide a conceptual plan of the proposal that requires a zoning change;
 - ◆ Provide a sketch plan of the property's development potential under current zoning and the assumptions used to determine such potential; and
 - ◆ Provide a narrative analysis of the conceptual plan's responsiveness to the Land Use Review Criteria and the specific public benefits of the proposal.
- ❖ The Planning Board will conduct a preliminary review of the proponent's conceptual plan and narrative analysis in a meeting with the proponent. The Board will identify potential issues with the plan, possible tradeoffs, and the degree to which a proposed zoning change considers the Land Use Review Criteria recommended in this Comprehensive Plan.
- ❖ The Planning Board may request alternative plans to address issues identified during the initial review. If the proponent remains interested in pursuing a zoning change, the Planning Board will hold

Summary: Land Use Review Criteria

A proposed zoning change will be considered based on the degree to which it:

- ❖ Is consistent with – and preferably enhances – the rural character of Lincoln;
- ❖ Enhances the social and economic diversity of the town;
- ❖ Enhances the long-term financial stability of town government;
- ❖ Promotes the equitable sharing of burdens and enrichment among residents;
- ❖ Maintains Lincoln's strategic use of open space;
- ❖ In addition to these five priorities, additional criteria will be considered given their special focus on emerging trends or relevance to specific land uses:
- ❖ Enhances Lincoln as a "green" town;
- ❖ Creates amenities that enrich the experience of living in Lincoln;
- ❖ Maintains Lincoln's long-standing special relationship with agriculture;
- ❖ Encourages historic preservation;
- ❖ Enhances the educational orientation and resources of the town;
- ❖ Enhances social connection and civic engagement among residents and among neighborhoods;
- ❖ Helps Lincoln contribute positively to the region.

Note: Appendix B contains a complete list of the proposed Land Use Review Criteria.

a public informational meeting and inform and include all of the key policy and regulatory boards as well as neighborhood residents.

- ❖ Following the public informational meeting, the Planning Board will refer the proponent’s plan to the Board of Selectmen and Conservation Commission for review and comment. The Planning Board may also designate a review committee to oversee the process. Depending on the nature of the proposal, other boards may be asked to assist with the review process, e.g., the Historical Commission or Housing Commission. In addition, the Planning Board will refer the plan to town department heads for technical review. Town staff will coordinate the review process at the department head level and compile all departmental comments into a single submission to the Planning Board.
- ❖ The Planning Board may ask the proponent to meet with the reviewing parties in order to address their questions before they submit comments to the Planning Board.
- ❖ The Planning Board will hold a second public informational meeting once all comments have been received from the reviewing parties. The purpose of the second meeting will be for the Planning Board to consider the comments received, provide an opportunity for the proponent to respond to the comments, and provide an opportunity for residents to submit comments as well.
- ❖ If the proponent remains interested in pursuing a zoning change, the Planning Board will work with the proponent to revise the conceptual plan so that it addresses the comments received, to the extent possible, and to maximize the proposal’s public benefits to the town. Agreements reached by the Planning Board and the proponent may be referred to the Board of Selectmen for inclusion in a development agreement to be prepared by the Board of Selectmen, Town Counsel, and the proponent, if a development agreement is warranted.
- ❖ If the Planning Board and the proponent arrive at a conceptual plan that substantially addresses all of the applicable Land Use Review Criteria, the Planning Board will conduct a third public informational meeting to present the revised conceptual plan. The Planning Board will be responsible for articulating:
 - ◆ How the proposal meets or falls short of the Land Use Review Criteria;
 - ◆ The degree to which the proposal addresses comments received from reviewing parties;
 - ◆ The opportunities and challenges presented by the proposal;
 - ◆ Where applicable, why it is infeasible or inadvisable to make further changes to the proposal; and
 - ◆ The proposal’s consistency with the goals of this Comprehensive Plan.
- ❖ The Planning Board may elect to sponsor the proposed zoning change, support the zoning change if petitioned by the proponent, or recommend unfavorable action on the zoning change following a public hearing under M.G.L. c. 40A, s. 5.
- ❖ A complete set of zoning amendments to facilitate the proponent’s plan will be prepared by the proponent and submitted to the Planning Board for review. To the extent appropriate for the project, the regulatory amendments will provide for an efficient permitting process, such as a consolidated application for all approvals required from various town boards and expedited decision periods where allowed by law. Once the amendments are acceptable to the Planning Board, they will be referred to Town Counsel for review.

- ❖ The Board of Selectmen and proponent will execute a development agreement, if one is warranted for the project.
- ❖ The proposed zoning change will be presented to Town Meeting, at which time the Planning Board will present its report.
- ❖ If the zoning change is adopted by Town Meeting and subsequently approved by the Attorney General, the proponent will be eligible to apply for necessary permits and approvals as set forth in the new bylaw.

Goal LU-2. Create a compact, vital, walkable village center in the Lincoln Station area that provides more housing choices near public transportation, goods and services for residents, and opportunities for social interaction.

- LU-2.1. Conduct a public planning process that captures resident interests in, as well as concerns about, further development at Lincoln Station.
- LU-2.2. Identify potential benefits and drawbacks, if any, arising from compact, mixed-use, and transit-oriented forms of development, and determine acceptable trade-offs.
- LU-2.3. Capitalize on and reinforce existing investment at Lincoln Station in infrastructure, services, and housing choices.

DISCUSSION

The Lincoln Station area provides access to public transportation, a mix of services for residents, and a variety of housing choices. It has the potential to evolve as a higher-density, walkable neighborhood with opportunities for social interaction. The South Lincoln Overlay District includes the Lincoln Station area and promotes “enhanced mixed use, commercial, office, and residential opportunities.” Its flagship project, the Mall at Lincoln Station, has been completed. While a basic consensus plan for the Lincoln Station area was developed several years ago, Lincoln needs additional information in order to determine how much development the area can support, the types of development that residents want to see, the public improvements needed in order to achieve the overlay district’s purposes, the cost of those improvements, and options for financing them. Since sizing the capacity of a wastewater disposal facility is crucial in any development plan, it will be important for Lincoln to understand both the options available for wastewater disposal and their potential consequences. However, wastewater disposal concerns should not discourage further investigation. Lincoln’s unique process for creating PDDs will help to reduce the risk of overdevelopment because each PDD is subject to a development cap.

The cost to prepare a master plan for Lincoln Station area will depend on how much work the town expects to do in-house and how much will be contracted to consultants. Lincoln has so many residents employed in engineering, architecture, and allied professions that a group of skilled volunteers, supported by town staff, could do a considerable amount on their own. Hiring a team of consultants would be expensive because the scope of the project involves design services, but the town could consider a multi-phase master planning process that begins with an evaluation and feasibility study of wastewater disposal options and a reassessment of the zoning district’s boundaries.

In developing a master plan for South Lincoln, the town may want to consider ways that the village could support “smart evolution.” For example, density that seems unacceptable on face value might be more acceptable if it involved transferring development rights from an important tract of open space in another part of town. Density also could be advantageous to the town if it meant a substantial contribution from developers to

relocate the public works garage from Lewis Street, thereby opening highly valuable land for better use. A building height that would be unacceptable under other circumstances may be palatable if the extra height enabled a project to locate some parking below grade and provide more open space on a lot. In short, the planning process for Lincoln Station could be very beneficial to Lincoln if the goals for that area were designed to implement the broader framework set by this Comprehensive Plan.

Goal LU-3. Consider land development and preservation techniques that address local needs.

- LU-3.1. Consider land development and preservation techniques such as transfer of development rights and “by right” open space-residential development.
- LU-3.2. Evaluate the town’s approach to development review and permitting, and consider options to make the permitting process more efficient for proposals that advance the goals of this Comprehensive Plan.

DISCUSSION

Lincoln’s existing R-1 and R-1 Cluster zoning provisions have led to development that is consistent with the Town’s historical development patterns, and these development patterns are widely supported and appreciated by the Town’s residents. Lincoln also has an overlay district process for North Lincoln and South Lincoln, but other opportunities may exist to encourage creative proposals both within North and South Lincoln and in other parts of the community. The existing process for establishing PDDs is project-driven, that is, the process triggers when a landowner or developer approaches the town about a development proposal that needs special zoning. Lincoln might wish to consider providing additional alternative ways to develop property and preserve open space or historic assets. The following techniques are included as a guide for further study.

Transfer of Development Rights. There are several ways to design a TDR bylaw, but the underlying concept is the same: one area is preserved by transferring its development rights to another area. In Lincoln, TDR could be used to preserve all or a substantial portion of a priority tract of open space by acquiring the development rights and exercising them on other parcels designated for more intensive development, such as Lincoln Station. In addition, TDR could be used to establish an overall development maximum for the Lincoln Station area and allow the development rights to be “transferred” anywhere within the overlay district.

Cluster by Right and Backlot Development. Cluster subdivisions are usually preferable to conventional subdivisions because they foster preservation of relatively large tracts of open space. With very few exceptions, virtually all subdivisions approved in the last 10 years within the Town have been clusters. Even though the Town’s zoning does not provide a density bonus for cluster subdivisions, proponents voluntarily choose this option because it provides desirable flexibility in lot sizes, shapes, and building setbacks. There does not presently appear to be a need to provide additional incentives for cluster development (or disincentives for conventional subdivisions). If, at some point in the future, clusters are shunned by developers, the Town might consider allowing small clusters of two to four homes as of right, subject to site plan review, instead of the current requirement of a discretionary special permit. Another tool for small projects, backlot development, encourages developers to locate new homes far back from the road and preserve the roadside open space under a perpetual conservation restriction. Although this method of site development is common elsewhere in the country, it has been difficult to institute in Massachusetts because the “Approval Not Required” procedure for creating new lots is so attractive to housing developers. However, a few communities in Western and Central Massachusetts have adopted and successfully implemented backlot development special permit regulations by offering an extra lot in exchange for restrictions that preserve the view from the road.

Open Space-Residential Development. Many communities in Massachusetts have embraced a different approach to “cluster” development known as Open Space-Residential Development (OSRD). Unlike the early “cluster” bylaws, OSRD prescribes a specific site planning process for defining development envelopes and locating roads. In addition, OSRD bylaws often require architectural design submissions as part of the project review process in order to ensure the appropriateness of proposed buildings for the site and surrounding area. Over the past twenty years, communities throughout the state have adopted zoning that requires OSRD for subdivisions over a certain size in one or more residential districts. However, a recent Appeals Court decision makes it virtually impossible to *require* developers to apply for an OSRD special permit if they wish to subdivide a tract of land into conventional house lots. To make an OSRD bylaw attractive to developers, Lincoln may need to provide a modest density bonus, allowing a mix of residential uses (such as single-family homes and townhouses) on one site, or ways to “streamline” the project review and decision process. However, it might be preferable to place some additional areas in the existing R-3 District rather than to craft an OSRD bylaw that would apply anywhere in the R-1 District.

“Great Estates” Zoning. Several Massachusetts communities have adopted flexible zoning that allows a range of reuse possibilities and some infill development on historic estate properties. Often known as a “Great Estates” bylaw, this type of zoning places designated estates in an overlay district within which otherwise prohibited land uses may be developed under a special permit. Lincoln has not had to consider a special regulatory tool for estate properties because so many of them have been acquired and preserved by non-profit organizations with missions that largely align with the town’s desire to protect open space. Although these properties seem secure, most do not have conservation restrictions or historic preservation restrictions. Virtually all of the historic estates lie within the R-1 District and outside the North and South Lincoln Planning Districts, so if they were sold in the future, the only options Lincoln provides for them are conventional and cluster subdivisions. Estates in a local historic district would be subject to additional non-zoning controls.

“Great Estates” and similar bylaws in other parts of the state provide for a range of uses such as multi-family housing, assisted living residences and continuing care retirement communities, corporate conference centers, commercial offices and research and development facilities, and for-profit colleges or universities (which do not qualify as exempt educational uses under the Dover Amendment). An advantage to establishing an overlay district for these types of properties is that the zoning regulations and procedures would be in place, but Lincoln would not have to place any land in the district unless asked by an institutional owner – much like the North Lincoln and South Lincoln Overlay Districts. Using the process described under Goal LU-1, Lincoln could consider requests to place land in the district and negotiate for community benefits on a project-by-project basis.

Zoning Relief to Preserve Older Buildings. The effectiveness of demolition delay could be enhanced by providing “last resort” options for the reuse or relocation of older buildings. For example, some communities allow the conversion of an existing single-family dwelling to a multiple-unit dwelling if the demolition delay period fails to produce realistic alternatives to a teardown. At least one Massachusetts community allows “last resort” relocation of a single-family home to another lot with an existing house if moving the building is the only way to save it. In these cases, the relocated home becomes an accessory use to the other residence, e.g., a detached accessory dwelling, an elder cottage housing opportunity (ECHO) unit, or a miniature mixed-use arrangement that includes an accessory dwelling and office space for a home occupation. This type of zoning could be compatible with the town’s interests in protecting the environment and providing housing that meets social objectives.

Development Impact Fees. While most states grant specific authority to cities and towns to charge development impact fees, Massachusetts does not have impact fee legislation. The absence of a general law providing for impact fees, coupled with restrictions in the state constitution that limit the power of local governments to raise revenue, have made it very difficult for communities in Massachusetts to set impact fees that will survive a challenge in court. Instead, some communities rely on negotiated development agreements to obtain financial benefits from developers in exchange for approving zoning amendments or granting special permits and variances. This may change if the legislature enacts CPA-II, LUPA, or other proposals to update the Zoning Act. Lincoln could prepare for the eventuality of impact fees by reviewing its existing capital planning process, assembling the data required to document development impacts on municipal facilities and infrastructure, and developing a methodology for converting documented impacts of residential and commercial development into cost estimates that can form the basis for fees.

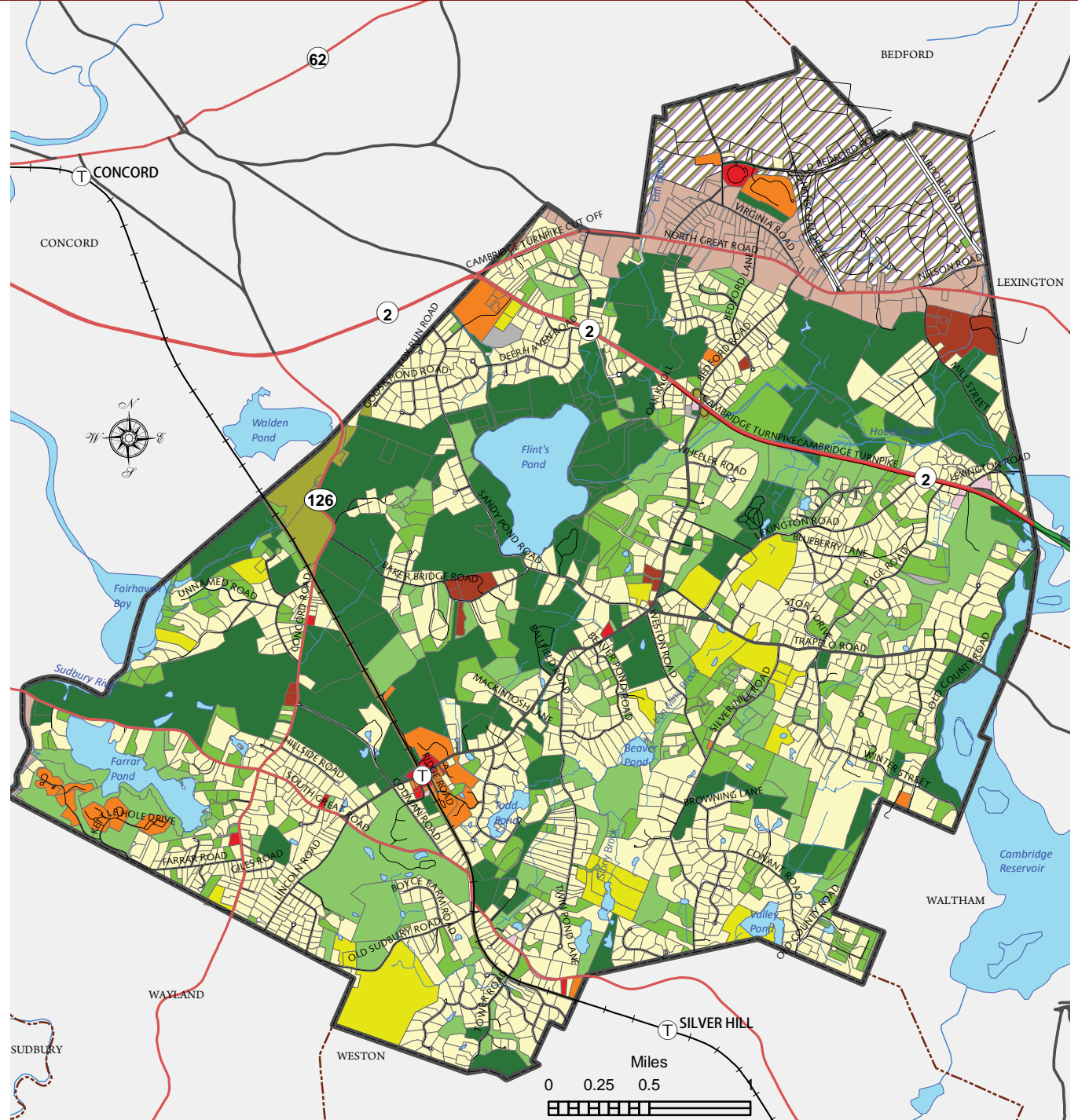
Goal LU-4. Maintain communication with non-profit organizations and institutions in Lincoln in order to integrate their long-range plans with the town’s plans.

- LU-4.1. Identify in a timely fashion land use and facilities development proposals that affect either the town or the institution, and their possible impacts.
- LU-4.2. Pursue cooperative efforts that leverage a non-profit or institution’s mission to the benefit of the town culturally, economically, or physically.

DISCUSSION

Lincoln has an unusually large number of non-profit organizations and non-local government agencies operating within its borders. In addition to the estimated ninety-seven non-profit organizations in Lincoln today, the National Park Service, the Massachusetts Department of Conservation and Recreation (DCR), and the City of Cambridge own or control quite a bit of land in Lincoln – excluding all of the land controlled by the federal government and Massport in North Lincoln. The Board of Selectmen periodically meets with the town’s non-profits, and the Conservation Commission frequently communicates with Cambridge, but there does not appear to be a formal process for communicating with Lincoln’s tax-exempt landowners. In most cases, activities they carry out on the properties for public, charitable, educational, or religious purposes are exempt from zoning, which means that substantial changes in use could occur with little control by the town. In addition, a decision by any of Lincoln’s larger non-profits to sell their land could lead to unanticipated land use changes. Lincoln might benefit from establishing regular meetings between non-profits and other governmental agencies with a working group of town officials, including designees of the Board of Selectmen, Planning Board, and Conservation Commission, and possibly the School Committee and Finance Committee. (*See also, Chapter 4, Cultural and Historic Resources, Goal CH-1.*)

LINCOLN COMPREHENSIVE PLAN



Community Opportunities Group, Inc.

MAP 2.1 EXISTING LAND USES

Sources: MassGIS, Lincoln Conservation Department, USGS, U.S. Bureau of the Census, Community Opportunities Group, Inc.

April 2009

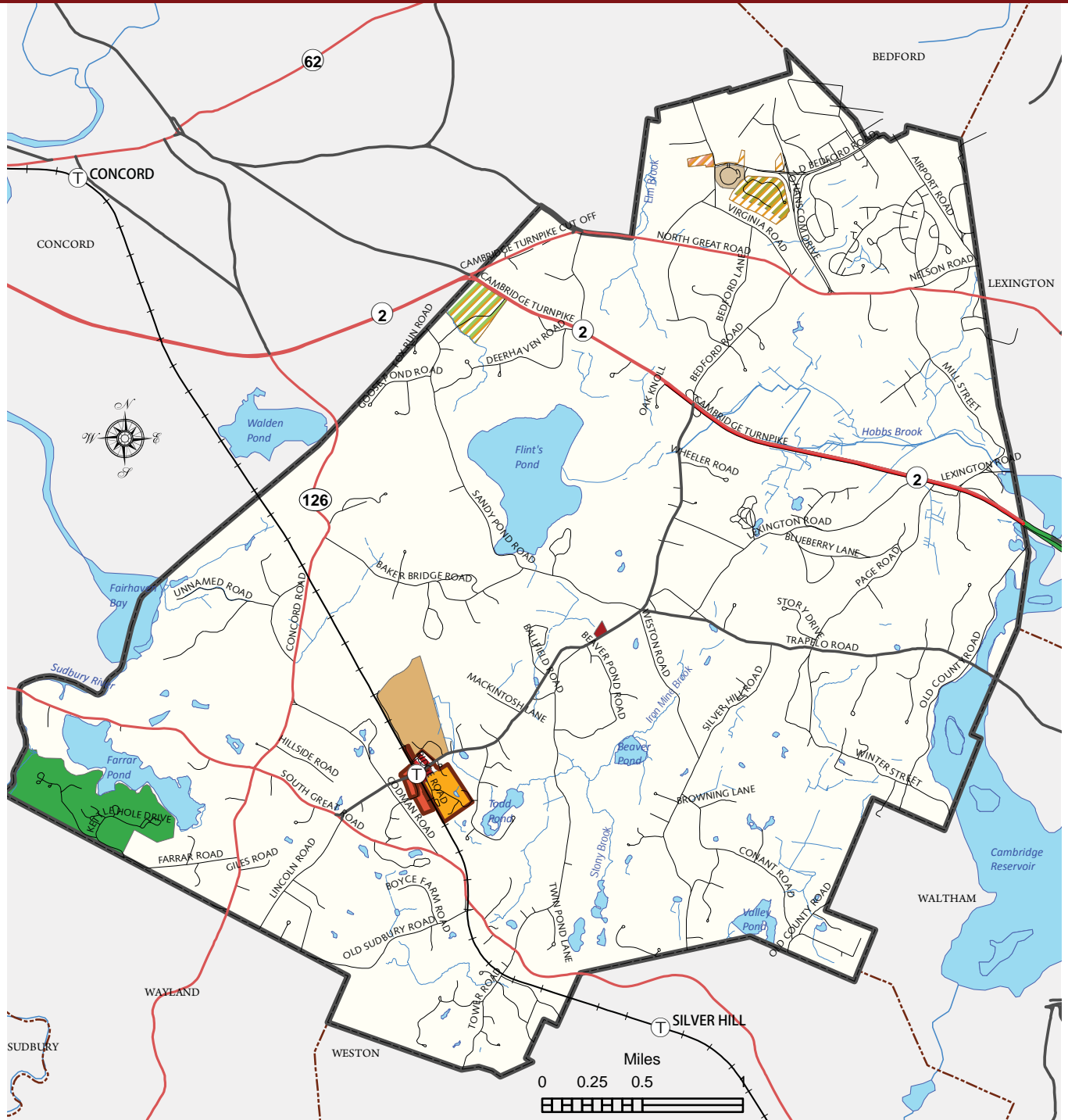
Legend

- | | | |
|---|--|---|
| <p>LAND USE</p> <ul style="list-style-type: none"> Single-Family Multi-Family/Condominium Mixed Uses Commercial | <ul style="list-style-type: none"> Institutional Use Vacant Land Chapter 61, 61A, 61B Privately Owned Open Space Other | <ul style="list-style-type: none"> Military, Aviation Town Property State Property Federal Property |
|---|--|---|

LINCOLN PLANNING BOARD



LINCOLN COMPREHENSIVE PLAN



Community Opportunities Group, Inc.

MAP 2.2 EXISTING ZONING

Sources: MassGIS, Lincoln Conservation Department, USGS, U.S. Bureau of the Census, Community Opportunities Group, Inc.

April 2009

Legend

DISTRICT

Single-Family Residence

General Residence

Open Space Residential Development District

Planned Community Development District

South Lincoln Planning District

South Lincoln PD District No. 1

Retail Business District

Service Business District

North Lincoln Planning District

North Lincoln PD District No. 1

North Lincoln PD District No. 2

North Lincoln PD District No. 4

North Lincoln PD District No. 5

LINCOLN PLANNING BOARD



Natural Resources

OVERVIEW

Lincoln's biodiversity and its many acres of protected woodlands and fields attest to its success in protecting natural resources. Through land acquisitions, public education, and building a strong conservation ethic, Lincoln has done an exceptional job of preserving ecologically sensitive areas and the quality of its drinking water supply. However, the high cost of land and changing lifestyles of residents make it increasingly difficult for Lincoln to protect its land and water resources. It will take a sustained commitment to environmental regulation and enforcement, water management, public education, and stewardship to ensure the continued quality and abundance of these resources as the town continues to grow and change.



Key Findings

- ❖ Lincoln has approximately 2,609 acres of wetlands, or twenty-seven percent of the town's total area. There are large, contiguous wetland areas in North Lincoln and the southeast side of town. Lincoln regulates activities that affect wetland resources by diligent administration of the State Wetlands Protection Act and an even more restrictive local wetlands bylaw. Approximately half of all wetland acres in Lincoln are protected by public or non-profit ownership, conservation restrictions, or state regulations that govern activity in the watersheds of the Lincoln and Cambridge drinking water reservoirs.
- ❖ Lincoln has approximately 100 vernal pools, including eight certified by the Natural Heritage and Endangered Species Program (NHESP).
- ❖ According to the U.S. Department of Agriculture, nearly half of Lincoln's total area is composed of soils conducive to various types of farming: gently sloped, loamy soils found primarily in the western half of town, nutrient-rich "muck" soils suitable for fruits and vegetable crops, and some moderately sloped soils that can support productive agriculture if managed properly.
- ❖ Lincoln depends on local water resources to provide drinking water to residents and businesses. Flint's Pond meets most of Lincoln's drinking water needs, supplemented by a well on Tower Road.
- ❖ Lincoln is withdrawing increasingly large amounts of water from its own water supplies. Since 2005, maximum day demand has steadily increased from 0.97 to 1.19 million gallons per day (gpd), and average day demand per capita exceeds the state's water resource planning guidelines under the Water Management Act. Much of this growth in demand goes hand-in-hand with summer water use, notably outdoor watering.

Lincoln also appears to be losing water through water main leaks and other conditions because its annual percentage of unaccounted-for water exceeds state standards, too.

Key Challenges

- ❖ Lincoln has done an exceptional job of protecting farmland. It has a renowned agricultural licensing program for its conservation land, and a number of small farms continue to thrive. Of Lincoln’s 547 acres of productive agricultural land, 158 acres are not protected by restrictions against a change in use. The high cost of land in Lincoln will make it increasingly challenging to protect the remaining farms. In addition, it is difficult for farmers to live in Lincoln near their agricultural fields.
- ❖ Lincoln is concerned about the impacts of chemical pesticides, herbicides, and fertilizers on wetland and water resources and the quality of its wildlife habitats, but state law makes it very difficult for individual communities to regulate pesticide use. Public education and voluntary guidelines and standards can help, but it takes constant leadership, volunteer and staff resources, and incentives to change public behavior.
- ❖ Despite Lincoln’s impressive efforts to protect land and water resources and wildlife habitats within its borders, the town is not immune to the direct and secondary effects of development throughout the region. Local concerns about traffic, air quality, watershed protection, stormwater, habitat disturbance, and environmental hazards will remain challenging to address without concerted regional action and regional cooperation. Although many neighboring towns share Lincoln’s interests in environmental quality, problems with growth management and needs for tax revenue make it difficult for cities and towns along Route 128 to work toward a consistent vision of the region.
- ❖ Although many of the surrounding communities obtain water from the Massachusetts Water Resources Authority (MWRA), Lincoln relies on its own local water supplies, both surface water and groundwater. It will take effective leadership, public education, and investment of town funds to reduce residential water consumption and improve the water distribution system so that it works efficiently and loses less water.

EXISTING CONDITIONS & TRENDS

Lincoln’s agricultural landscapes and acres of protected woodlands attest to the town’s success in protecting its land and natural resources. Hilltops, valleys, wetlands, red maple swamps, wooded drumlins, ponds, streams, rivers, agricultural fields, and forest are all part of the natural features found within and near Lincoln’s boundaries. Lincoln has attractive, prominent water features that serve local and regional interests, too, including Flint’s Pond, the town’s primary water supply, and the Cambridge Reservoir, which provides water to the City of Cambridge. The tendency to fuse “open space” with “natural resources” is common in most communities, often leading people to assume that if only a town buys enough land, its water resources, vegetation, wildlife, air, and other elements of the natural environment also will be protected. However, this is not really true. It takes a culture of public responsibility, effective regulations and enforcement, and stewardship to ensure high quality land and water resources and plentiful wildlife habitat.

Geology, Soils & Topography

Geology, soils, and topography play a key role in the development of communities. For example, areas with bedrock at or near the surface are difficult to build or farm on, agriculture does well in floodplain soils and soils high in nutrients, and level terrain tends to be built on before steep terrain. The slope and mineral content of soils influence the establishment of local flora and fauna and associated natural communities. Slope also influ-

ences habitat formation, such as riffles and pools in streams, vernal pools, and soil development, accumulation, and erosion. Further, the mineral content of soils affects soil fertility and water chemistry. Natural landscape features provide economic and recreation opportunities, such as conservation land in areas of valuable habitat or agricultural tourism. Lincoln's underlying geology and soil structure have had a profound impact on its development. Much of the town's landscape is wet, rocky, or otherwise not conducive to intensive use. These conditions place great pressure on Lincoln's developable land, including parcels that have already been built upon. With fewer and fewer vacant parcels, environmentally constrained land and land that supports Lincoln's older housing stock will continue to be targeted for development.

BEDROCK GEOLOGY

Lincoln's landscape expresses its underlying geology. Like all of New England, Lincoln's geology reveals evidence of glacial scouring from the relatively recent past overlaid onto remnants of intense tectonic activity from the more distant past. The erosion, weathering, and accumulation of materials since the last glacier retreated resulted in a mix of soil types built up over much of Lincoln's landscape. The bedrock consists of igneous and metamorphic rock ledges trending from southwest to northeast (Map 3.1), formed in the early to middle Paleozoic Era (490 to 354 million years ago) when the continent experienced tremendous mountain building along its margins. In many areas, notably along the east side of town and to the south along Route 117, pronounced bedrock outcrops reveal the hard rock of the land's crust. In fact, areas characterized by outcrops and shallow bedrock cover more than seven percent of the town.¹

SURFICIAL GEOLOGY

The unconsolidated materials that form the building materials of soil are called *surficial geology*. Lincoln's surficial geology is the result of erosion and deposition of materials by the glaciers that once covered this area. Natural climate cycling caused the glaciers to descend and retreat many times over, crushing, scraping, and carrying soil and rock that in turn smoothed hilltops and gouged valleys. As the glacier rode over the landscape, crushing the rock below, it left behind a compacted material called *glacial till*, an unconsolidated mixture of varying sizes of broken rock to silt. When the glacier receded, meltwater filled with debris and sediment poured off and formed rivers, lakes, dams, and deltas. It deposited a generally well-sorted (consistent grain sizes) layer of *stratified drift* or *glacial outwash* in the valleys and depressions of the land.

Glacial till deposits may be shallow, sparsely covering bedrock between visible outcrops, or more than 20 feet deep, forming elongated hills and rough plains. In Lincoln, shallow or thin till extends across roughly 30 percent of the town and, not surprisingly, it occurs in the higher elevations. Virtually all of the bedrock outcrops in Lincoln coincide with areas of thin till. A pocket of thick till occurs northwest of Beaver Pond, manifested on the land as a *drumlin*. Glacial till usually serves as a stable base for building, but it transmits water slowly, making it poorly suited for groundwater supply or sewage disposal. Specific soil types have developed on glacial till: generally dense and stony, like the till, making farming difficult as well. These soils produced the large rocks that colonial farmers used to build the stone walls found in Lincoln and much of southern New England today.

More than half of Lincoln's total area is composed of glacial outwash deposits, mainly coarse deposits. A large area of *glaciolacustrine* deposits (material left by lakes that formed temporarily as the glacier melted) extends northeasterly from Concord Center into Bedford and across Bedford Levels, covering most of southern Bedford and the northern tip of Lincoln, where Hanscom Air Force Base (HAFB) is located. The well-sorted sediments formed from glacial meltwater are generally more level and free of large stones. The soil types associated with

¹ Derived from U.S. Geological Survey, "Surficial Geology 1:24,000" GIS Database, MassGIS, <http://www.mass.gov/mgis/sg24k.htm>.

outwash deposits tend to be suitable for farming if they are not too sandy and fast-draining. Outwash deposits often form productive aquifers and provide storage for seasonal hydrologic cycling and floodwaters. Lincoln's underlying aquifers coincide with these deposits (Map 3.2).

SOILS

Soil is a dynamic resource that affects hydrology, supports plant life, controls biogeochemical cycles, determines plant and animal habitat, and supports human habitation. However, soils are fragile resources, vulnerable both to human impacts and extreme events, such as flooding. They can be damaged easily by erosion, disturbance, or covering over, reducing their value for the natural environment and for human use. Significant erosion can cause damaging sedimentation in streams and low lying land, which in turn can have harmful impacts on natural habitats.

Soils have identifiable properties that allow for their description and classification. Soils with broadly similar properties and profiles make up a distinct *soil series*. All the soils of one series have generally comparable major *horizons* (texture and color), composition, and thickness because they developed from similar parent materials in a similar environment. *Soil map units* are typically comprised of one or more components and consist of the soil series name modified by factors such as texture, slope, and stoniness (e.g. Canton Fine Sandy Loam, 3 to 8 percent slope, extremely stony). They are classified by origin, formation, and identifiable properties that make them suitable for specific uses. Lincoln has nearly eighty soil map units, from hydric (wet) soils to well-drained, sandy soils (Map 3.3). Lincoln's soil types vary widely due to differences in topography, substrate type, vegetation, groundwater conditions, micro-climate and land-use history. The most common soils in Lincoln include Freetown Muck, Canton Fine Sandy Loam, Narragansett-Hollis-Rock Outcrop Complex, Narragansett Silt Loam, Merrimac Fine Sandy Loam, Haven Silt Loam, and Montauk Fine Sandy Loam.²

Prime Farmland Soils. Agriculture has played a key role in Lincoln's economy and cultural identity since well before the town was incorporated in 1754. Despite the amount of bedrock in Lincoln, the soils that cover more than half the town have value for farming even though much of the land in these locations has been developed. The Natural Resource Conservation Service has certified 2,273 acres as Prime Farmland, 1,200 acres as Farmland of Unique Importance, and an additional 1,265 acres as Farmland of Statewide Importance. The Prime Farmland soils are gently sloped, loamy soils such as Merrimac Fine Sandy Loam, Haven Silt Loam, Narragansett Silt Loam, Canton Fine Sandy Loam, and several other soil series occurring in larger bands and in somewhat greater concentrations on the west side of town. Farmland of Unique Importance also has strong production capacity for high-value food and fiber crops, such as fruits and vegetables. In Lincoln, these soils occur throughout town and they are composed primarily of nutrient-rich "muck" soils. Finally, Lincoln's Farmland of Statewide Importance include moderately sloped Windsor, Hinckley, Narragansett and other soils capable of producing high-value crops "if treated and managed according to acceptable farming practices."

TOPOGRAPHY

The natural beauty of Lincoln – its hills and valleys, ponds, forests, swamps and fields – is largely a product of the shape of its land. The town's topography resulted from glacial scouring of the land, modified by the ceaseless action of water. Lincoln's landscape may be thought of as a blanket of soil overlaying ancient bedrock, with vegetation and surface waters serving as other character defining features. Lincoln's major landforms include the hilly, generally high terrain that extends across its geographic center, the pattern of ridges and valleys found throughout the town, the large wetland areas off Route 2 and in Lincoln's southeast quadrant, and the Stony

² U.S. Department of Agriculture, Natural Resources Conservation Service, Soil Survey Geographic (SSURGO) database for Middlesex County, Massachusetts, <http://soildatamart.nrcs.usda.gov/>. See also, Appendix C.

Brook, which drains roughly two-thirds of the community. Lincoln's topography ranges from a high of about 380 feet above sea level at the Reservoir on Bedford Road to a low of about 112 feet above sea level on the Sudbury River.³

Water Resources

WATERSHEDS

Since most natural resources do not follow or lie wholly within municipal boundaries, it is more practical to use natural land features to describe natural resource boundaries. Watersheds provide a useful perspective because they encompass an area's topography, drainage patterns, and to a large degree, soils, vegetation and wildlife. They also provide an excellent example of the interrelatedness of natural resources, as can be seen in Lincoln. Watersheds are divisions of the land surface into sections in which water drains to a common point or water body. The line dividing any two drainage basins is a topographic divide, or relatively higher area. The term "watershed" describes both the divide between two areas and the area itself, also known as a drainage basin.

The U.S. Geological Survey (USGS) Water Resources Division divides Massachusetts into eight large drainage basins and a total of twenty-seven drainage basins associated with major rivers.⁴ The drainage basins of the major rivers include thirty-two watershed planning areas both for the rivers and their principal tributaries, and each watershed typically has several sub-watersheds. In a condition that speaks to Lincoln's relatively high elevation in the region, the town is located within three USGS-designated river basins. (Map 3.4). Most of Lincoln is drained by the Stony Brook, a tributary of the Charles River, which in turn drains all or part of thirty-five cities and towns in a 308 sq. mi. area from its headwaters in Hopkinton east to Boston Harbor.⁵ In addition, the Concord River watershed includes two sub-watersheds in Lincoln: the Sudbury River and the Concord River mainstem, both federally designated as Wild and Scenic Rivers in 1999.⁶ The Concord River, part of the 377 sq. mi. SuAsCo watershed, ultimately flows into the Merrimack River in Lowell. Finally, the Shawsheen River originates near Hanscom Field and drains most of North Lincoln, eventually merging with the Merrimack River in Lawrence. Its watershed covers about 78 sq. mi. in twelve communities.⁷ Though Lincoln is a fairly small town, both in population and land area, its environmental policy decisions and practices have consequences far beyond its own political boundaries.

SURFACE WATER

Lincoln has open bodies of water, several brooks, and extensive wetlands, but it is not a river town. The absence of rivers or major streams crossing through Lincoln has a great deal to do with the town's rural-agricultural appearance today, for unlike Concord and Acton, Lincoln never attracted early industries and their attendant village settlement patterns. The Sudbury River forms part of Lincoln's westernmost boundary, but its broad, low-lying meadows supported farming. Lincoln's surface waters nonetheless have profound importance to local and regional drinking water supplies and the wildlife diversity that endures in town, in addition to contributing to its scenic beauty. Lincoln has several named water bodies:

³ Town of Lincoln, Open Space Committee, *Open Space and Recreation Plan* (2008), 4.

⁴ U.S. Geological Survey, Massachusetts-Rhode Island Water Science Center, <http://ma.water.usgs.gov/basins/>.

⁵ Charles River Watershed Association, <http://www.crwa.org/>.

⁶ SuAsCo Watershed Community Council, Ambient Engineering, *Sudbury-Assabet-Concord Watershed Action Plan* (2005), 1-1. The National Wild and Scenic Rivers Act, passed in 1968, permanently protects rivers with outstanding scenic, geological, recreational, ecological, historical, or cultural significance.

⁷ U.S. Geological Survey, *Water Resources of Massachusetts* (1992), 16.

- ❖ The Cambridge Reservoir, which extends along the border between Lincoln and Waltham and provides nearly all of the City of Cambridge’s drinking water;
- ❖ Valley Pond, Todd Pond, and Beaver Pond in Lincoln’s southeast quadrant;
- ❖ Farrar Pond on the southwest;
- ❖ Walden Pond (though located primarily in Concord); and
- ❖ Lincoln’s primary drinking water supply, the 156-acre Flint’s Pond (Sandy Pond), a state-designated Great Pond situated northwest of the geographic center of town.⁸ Lincoln withdraws approximately 200 million gallons of water per year from Flint’s Pond.⁹ Remarkably, the town has protected ninety-two percent of the pond’s 464-acre watershed as open space managed by the Lincoln Conservation Commission.¹⁰

The absence of rivers or major streams crossing through Lincoln has a great deal to do with the town’s rural-agricultural appearance today, for unlike Concord and Acton, Lincoln never attracted early industries and their attendant village settlement patterns.

Each of Lincoln’s named water bodies is connected, directly or through adjacent wetlands, to a brook or stream. The most noteworthy streams include the Stony Brook and Hobbs Brook, both source waters to the Cambridge Reservoir; Iron Mine Brook, which flows into the Stony Brook from a large wetlands area near Flint’s Pond; and Elm Brook (Tanner’s Brook), a tributary of the Shawsheen River.¹¹ Under the three-tier framework for regulating activity within the watersheds of drinking water supplies, the Stony Brook, Iron Mine Brook, and Hobbs Brook constitute part of the Cambridge Reservoir’s “Zone A” and they are regulated and monitored as a Class A Public Water Supply under the Massachusetts Surface Water Quality Standards.¹²

WETLANDS

Wetlands are protected by federal and state law due to their importance to the health and balance of the natural environment. Wetlands offer aesthetic and recreational value, and in Lincoln they are integral to the diversity and beauty of the landscape. Most of Lincoln’s 2,609 acres of wetlands are forested bottomlands located shoreward of, and hydrologically related to, surface waters. These wetland communities, typically composed of red maple swamp, make up about seventy-five percent of the wetlands in Lincoln,¹³ with the largest contiguous areas occurring at the headwaters of Hobbs Brook in North Lincoln and surrounding the Stony Brook on its course through the southeast part of town to the Cambridge Reservoir. Shrub swamps and shallow marshes often line the edges of forested wetlands, such as around the Iron Mine Brook and north of Flint’s Pond, but

⁸ Commonwealth of Massachusetts, Executive Office of Energy and Environmental Affairs, Department of Environmental Protection (DEP), “Massachusetts Great Pond List,” <http://www.mass.gov/dep/water/resources/grtpond.htm>.

⁹ Lincoln Water Department, *Public Water Supply Annual Statistical Report 2007* (26 February 2008), Table E1.

¹⁰ Lincoln Water Department, *Annual Water Quality Report 2006*; and *Open Space and Recreation Plan*, 15.

¹¹ Massachusetts Department of Fish and Game, Massachusetts Riverways Program, “Massachusetts Rivers and Streams,” <http://www.mass.gov/dfwele/river/>.

¹² See 314 CMR 4.05(3)(a). A Class A inland water supply is an authorized public drinking water supply, suitable for aquatic habitat and contact recreation, with excellent aesthetic value. The water supply, its tributaries, and associated wetlands are regulated as Outstanding Resource Waters, a designation that prohibits discharges of any kind without prior DEP approval.

¹³ Derived from DEP Wetlands Conservancy Program Maps, GIS Database, April 2007, <http://www.mass.gov/mgis/wetdep.htm>.

they also occur in pockets all over town. Further, Lincoln has identified and mapped more than 100 vernal pools, or temporary woodland ponds, including eight certified by the Natural Heritage and Endangered Species Program (NHESP).¹⁴ Approximately 1,417 acres of wetlands, or more than half of all wetland acres in Lincoln, are protected by conservation deeds, conservation restrictions, and the City of Cambridge's watershed land.¹⁵

FLOODPLAINS

Floodplains hold water during times of increased flow, usually in early spring as the snow melts or during times of heavy rainfall. They serve important public safety, public health, and environmental interests. Any disturbance within the floodplain, such as filling, earth removal, or construction has the potential to alter its water-holding capacity. When this happens, flooding can extend beyond the actual boundary of the floodplain, causing damage to roads and buildings and potentially redirecting the course of rivers and streams. The Federal Emergency Management Agency (FEMA) determines the boundaries of floodplains and publishes the data on Flood Insurance Rate Maps (FIRM), used by the National Flood Insurance Program as a uniform standard for establishing property insurance requirements. Massachusetts and other states also use the FIRM for floodplain management. The 100-year floodplain is determined by the edge of the water level of a flood that has a one percent chance of occurring each year.

GROUNDWATER

In most parts of New England, groundwater is obtained from large areas of stratified drift, which support the storage and flow of water (transmissivity) far better than glacial till or fractured bedrock. Stratified drift generally occurs in lowland areas, and valleys of stratified drift are often isolated or separated by uplands of till and shallow bedrock. Lincoln's surficial geology is a classic example of this pattern. *Groundwater recharge* is the part of the hydrologic cycle that replenishes aquifers. Water enters the aquifer through rainfall and often by downward discharge of some of the surface water in streams, rivers, lakes, and ponds. It leaves the aquifer by flowing into other aquifer areas or surface water bodies, or through direct removal by pumping for human use. When more water enters the aquifer than is taken out, the water table rises; when more is taken out, it falls. Most aquifers can support a specific volume of pumping removal and maintain equilibrium with the volume of water entering them. The U.S. Geological Survey and Massachusetts Department of Environmental Protection (DEP) classify aquifers as low, medium, and high yield, according to the volume of water they can sustainably produce.

Lincoln provides drinking water from Flint's Pond and a groundwater well on Tower Road, which supplements Flint's Pond year-round, though mainly during non-peak periods.¹⁶ The Tower Road well has a *safe yield* of 750,000 gallons of water per day. Its watershed (Zone II) includes about 1,000 acres extending from Flint's Pond to South Great Road. A majority of the Zone II is composed of coarse outwash deposits, which facilitate the movement of groundwater as well as pollutants. For this reason, DEP characterizes Lincoln's Tower Road Well as "highly susceptible" to contamination.¹⁷ According to local records, naturally occurring chloride and sodium levels have increased since the well was brought on line in 1966. Lincoln operated a third well, the Farrar Pond Well, until 1986, when the water supply was converted to an emergency standby well following discovery of trichloroethylene (TCE), a toxic industrial solvent.¹⁸ In addition to its own surface water and groundwater

¹⁴ Executive Office of Energy and Environmental Affairs, Department of Fish and Game, NHESP, "Number of Certified Vernal Pools by Town," 13 April 2007, <http://www.mass.gov/dfwele/dfw/nhesp/nhesp.htm>.

¹⁵ *Open Space and Recreation Plan* (2008), 48.

¹⁶ *Public Water Supply Annual Statistical Report, 2006-2007*, Tables E and E-1.

¹⁷ DEP, *Source Water Assessment and Protection (SWAP) Report for Lincoln Water Department* (23 June 2003), 2.

¹⁸ *Open Space and Recreation Plan* (2008), 14-15.

supplies, Lincoln is among the Cambridge Reservoir's host communities and contains portions of the recharge areas for water supplies in neighboring towns (Map 3.5).

Land Cover

The types and patterns of vegetation found in Lincoln contribute to its beauty. The town is predominantly forested and located in a transitional place in the mosaic of forest types that characterize New England: a blend of northern (hardwood-hemlock-white pine) and southern (hardwood-oak-hickory) New England forests. Lincoln's woodlands contain most of the tree varieties typical of the southern New England hardwood (mixed deciduous) forest, including red, black, and white oak (*Quercus rubra*, *Q. velutina*, and *Q. alba*), white pine (*Pinus strobus*), red maple (*Acer rubrum*), eastern hemlock (*Tsuga canadensis*), beech (*Fagus grandifolia*), and hickory varieties (*Carya* spp.), occurring at varying densities and proportions based on geologic setting, soil drainage, soil texture, nutrient levels, stoniness, and topography of the land. The understory tends to be dominated by lowbush blueberry (*Vaccinium angustifolium*), mountain laurel (*Kalmia latifolia*), witch-hazel (*Hamamelis virginiana*), and huckleberry (*Gaylussacia baccata*), and ferns and wildflowers. This diverse mixture of hardwoods and conifers and their associated shrubs and herbaceous cover provide a wide range of habitats for wildlife. Lincoln also has some fine examples of sandplain grasslands, too, notably at Hanscom Field.

Lincoln's history of efforts to protect its natural resources can be seen just about everywhere. Despite the presence of suburban development, Lincoln remains largely open and undeveloped, with views from the road made interesting by the mix and extent of terrestrial communities in each part of town. Contiguous vegetated areas provide habitat not only for rare plant species, but for many species of native plants and wildlife that require large areas or corridors of land for their habitat. Both common and rare wildlife in Lincoln have been documented by the Conservation Department and the Lincoln Land Conservation Trust. NHESP recognizes many of Lincoln's unique, ecologically significant areas:

- ❖ Exemplary freshwater habitats known as "Living Waters" and their supporting watersheds, which include Walden Pond and its watershed, and Elm Brook in North Lincoln.¹⁹
- ❖ Highly valuable "core" habitats and supporting natural lands: within and adjacent to HAFB and Hanscom Field in North Lincoln, the Hobbs Brook watershed, the Cambridge Reservoir, Walden Pond, the marshes and upland along the Sudbury River, and Farrar Pond.²⁰
- ❖ Significant rare species habitats include most of the areas listed above, along with the wetlands that form the headwaters of Hobbs Brook and Stony Brook adjacent to Flint's Pond, and the extensive wetlands between Lincoln Road and Old Sudbury Road in South Lincoln.²¹

According to NHESP, ten vascular plant species classified under the Massachusetts Endangered Species Act (MESA) as threatened, endangered, or rare have been identified in Lincoln. They include a species of special concern, the terete arrowhead (*Sagittaria teres*); five threatened species, the resupinate bladderwort (*Utricularia resupinata*), grass-leaved ladies'-tresses (*Spiranthes vernalis*), swamp oats (*Sphenopholis pensylvanica*), rigid flax (*Linum medium* var. *texanum*), and dwarf bulrush (*Lipocarpa micrantha*); and four endangered species, wild

¹⁹ NHESP, *Living Waters: Guiding the Protection of Freshwater Biodiversity in Massachusetts* (2003), Living Waters Program, <http://www.mass.gov/dfwele/dfw/nhesp/>, and associated GIS Data, MassGIS.

²⁰ NHESP, *BioMap: Guiding Land Conservation for Biodiversity in Massachusetts* (2001), and associated GIS Data, MassGIS.

²¹ NHESP, *Massachusetts Natural Heritage Atlas*, 12th Ed. (2006), and associated GIS Data, MassGIS.

senna (*Senna hebecarpa*), violet wood-sorrel (*Oxalis violacea*), cornel-leaved aster (*Doellingeria infirma*), and Andrew's bottle gentian (*Gentiana andrewsii*).²²

Fisheries and Wildlife

Lincoln's forests, open fields, ponds, and brooks host many common and some rare species of birds, fish, and other wildlife. The native species are generally interdependent; impacts to the habitat of one species will likely affect that of others. The most critical aspect of protecting both rare and common wildlife is protecting natural habitats. Wildlife habitats tend to overlap, with gradual variation in physical characteristics. The presence of large tracts of protected open space shared by Lincoln and neighboring towns has helped to preserve functional wildlife corridors in an otherwise suburban region. This is particularly important for birds and large animals, which often require multiple natural communities and large areas or corridors to thrive. Lincoln has considerable wildlife diversity because of its varied terrestrial and wetland communities, which support a wide range of flora and fauna and provide areas for breeding and shelter. (Map 3.6)

The most critical aspect of protecting both rare and common wildlife is protecting natural habitats. The presence of large tracts of protected open space shared by Lincoln and neighboring towns has helped to preserve functional wildlife corridors in an otherwise suburban region.

Lincoln contains many species of birds, mammals, reptiles, amphibians, insects, invertebrates, and fish. The wide variety of birds observed in Lincoln speak to the diversity of its landscape and vegetation. For example, the eastern wood-pewee (*Contopus virens*), red-eyed vireo (*Vireo olivaceus*), brown creeper (*Certhia americana*), hermit thrush (*Catharus guttatus*), red-tailed hawk (*Buteo lineatus*), yellow warbler (*D. dominica*), black-capped chickadee (*Poecile atricapillus*), red-breasted nuthatch (*Sitta canadensis*), crested flycatcher (*Myiarchus crinitus*), and scarlet tanager (*Piranga olivacea*) reside in the mixed wooded and coniferous forests, while the red-wing blackbird (*Agelaius phoeniceus*), tree swallow (*Tachycineta bicolor*), red-eyed vireo and wood ducks (*Aix sponsa*) inhabit the marshes and wooded swamps. Bobolinks (*Dolichonyx oryzivorus*) nest and thrive in the open fields, and the grasslands at Hanscom Field support the upland sandpiper (*Bartramia longicauda*), an endangered bird, and grasshopper sparrow, (*Ammodramus savannarum*) classified as a threatened species in Massachusetts. Other species documented in Lincoln include wood thrush (*Hylocichla mustelina*), goshawk (*Accipiter gentilis*), common loon (*Gavia immer*), red-necked grebe (*Podiceps grisegena*), common merganser (*Mergus merganser*), black duck (*Anas rubripes*), and goldeneye (*Bucephala clangula*).²³

In addition to common animals such as eastern chipmunks (*Tamias striatus*), gray and red squirrels (*Sciurus carolinensis*, *Tamiasciurus hudsonicus*), raccoons (*Procyon lotor*), and deer (*Odocoileus virginianus*), Lincoln has red fox (*Vulpes vulpes*), beaver (*Castor canadensis*), fisher (*Martes pennanti*), and coyote (*Canis latrans*). The forests provide habitat for a variety of shrews (*Soricidae* spp.), the woodland jumping mouse (*Napaeozapus insignis*), white-footed mouse (*Peromyscus leucopus*), and redbacked vole (*Clethrionomys gapperi*), while the grasslands support populations of meadow voles (*Microtus pennsylvanicus*), meadow jumping mice (*Zapus hudsonius*), the northern short-tailed shrew, long-tailed weasels (*Mustela frenata*), kestrels (*Falco sparverius*), and wintering northern harriers (*Circus cyaneus*). Mink (*Mustela vison*), deer, beaver, and raccoons use marshland habitats. The

²² NHESP, "Rare Species Occurrences by Town," http://www.mass.gov/dfwele/dfw/nhesp/info_by_town.htm.

²³ For a comprehensive inventory of birds observed in Lincoln, see Lincoln Land Conservation Trust, *A Guide to Conservation Land in Lincoln* (2005); and *Open Space and Recreation Plan* (2008), 20-28 passim.

northern redback salamander (*Plethodon cinereus*) is common in Lincoln's woods, while the marshes provide habitat for leopard, pickerel, green and bull frogs (*Rana* spp.), and red-spotted newts (*Notophthalmus viridescens*). Lincoln's vernal pools provide breeding areas for wood frogs (*Rana sylvatica*), spotted turtles (*Clemmys guttata*), and two species of mole salamanders (*Ambystoma* spp.), as well as invertebrate fauna, including fairy shrimp (*Eubranchipus* spp.).

For Lincoln, NHESP's inventory of rare wildlife lists eleven species classified as threatened, of special concern, or endangered. The species of special concern include the purple tiger beetle (*Cicindela purpurea*); two amphibians, the four-toed salamander (*Hemidactylium scutatum*) and blue-spotted salamander (*Ambystoma laterale*); two birds, the barn owl (*Tyto alba*) and sharp-skinned hawk (*Accipiter striatus*); and a dragonfly, the mocha emerald (*Somatochlora linearis*). A threatened bird species, the grasshopper sparrow (*Ammodramus savannarum*), and four endangered birds, the gold-winged warbler (*Vermivora chrysoptera*), the sedge wren (*Cistothorus platensis*), Henslow's sparrow (*Ammodramus henslowii*), and the upland sandpiper have been observed in Lincoln as well.²⁴

Resource Protection and Management Capacity

Lincoln has done far more than most communities to identify, assess, and protect its natural assets. It has acquired a considerable amount of land for conservation purposes and instituted local capacity to plan and carry out sophisticated conservation projects. Lincoln's successful conservation program reflects the efforts of the town through its Conservation Commission and its partnerships with two local non-profit organizations, the Lincoln Land Conservation Trust and the Rural Land Foundation. These and other organizations have worked with the town to protect 3,282 acres in perpetuity.²⁵

- ❖ Lincoln established a conservation commission in 1958. The Lincoln Conservation Commission includes seven members appointed by the Board of Selectmen. It oversees a department with four staff, including a director, conservation planner, land manager, and ranger, as well as seasonal employees. It has statutory responsibility for administering the Massachusetts Wetlands Protection Act, M.G.L. c. 131, s. 40, and local responsibility for administering Lincoln's Wetlands Protection Bylaw.²⁶ It also is responsible for managing the 1,500 acres of conservation land owned by the town, initiating new acquisitions or conservation restrictions, and protecting wildlife habitats. In support of the Commission's work, the Conservation Department provides educational programs on natural resources and public safety through its Conservation Ranger Program.²⁷

²⁴ NHESP, "Rare Species Occurrences by Town."

²⁵ *Open Space and Recreation Plan* (2008), 34.

²⁶ The Massachusetts Wetlands Protection Act gives local Conservation Commissions and DEP authority to regulate activities affecting wetlands for the following specific interests: protection of public and private water supply; protection of ground water supply; flood control; prevention of storm damage and pollution; protection of land containing shellfish; protection of fisheries; and protection of wildlife habitat. In 1996, the Massachusetts Rivers Protection Act expanded the purview of the Wetlands Protection Act by creating authority to regulate activities within 200 feet of perennial rivers and streams. Many years ago, Lincoln enacted its own local wetlands bylaw to provide more protection for wetlands and establish jurisdiction over resources not regulated very effectively under the state law, e.g., geographically isolated wetlands, vernal pools and surrounding woodland habitat, the 100-ft. area adjacent to wetlands, and wildlife corridors. For example, Lincoln's Wetlands Bylaw establishes an inner 50 ft. "no-disturb" zone within the 100-ft. buffer area. Recent bylaw amendments empower the Conservation Commission to require, as part of an approved Order of Conditions, undisturbed upland buffers and deed restrictions to protect buffers on existing lots from future alteration.

²⁷ *Annual Town Report* (2007), 116-119.

- ❖ Founded in 1957, the Lincoln Land Conservation Trust (LLCT) was among the nation's first private community land trusts. The LLCT currently owns 500± acres of conservation land and holds conservation restrictions on another 420 acres. Beyond its land holdings, the LLCT provides advocacy and public education about natural resources through school programs, forums, lectures, and special events.
- ❖ The Rural Land Foundation (RLF) was formed in 1965. It is acclaimed for its creative use of limited development to finance the cost of purchasing open space, often saving large tracts of land by developing only a few house lots.

Other organizations have natural resource protection responsibilities, too. Through zoning, subdivision control, and wastewater disposal regulations, the Planning Board, Zoning Board of Appeals, and Board of Health help to minimize adverse impacts from development. Lincoln adopted zoning in 1929 and established its first Planning Board in 1937. During the 1960s, Lincoln adopted the Open Space-Conservation District, a conservancy zone designed to preclude development on land placed in the district with the owner's consent. Later, the town created another conservancy zone, the Wetland and Watershed Protection District (1973), which applies mainly to wetlands and surface water resources within the Flints Pond watershed. Lincoln also has zoned the flood hazard areas shown on the FIRM as a local Flood Plain District. Further, the Board of Health protects groundwater through its authority over septic system installations and upgrades, operating under its own local regulations as well as Title V. The Board is currently exploring changes to its local regulations due to recent Title V amendments that could make some land easier to develop.²⁸

Aside from regulation, Lincoln has many governmental policies, programs, and services that help to protect environmental quality. Town departments routinely use Lincoln's website for public education, such as the Conservation Commission's online repository of information about invasive plants and the Recycling Commission's recycling guidelines. The Conservation Department sponsors conservation land walking tours every week and encourages residents to notify the Conservation Commission of unusual or common species observed in Lincoln. Under the aegis of the Green Energy Committee, the town is looking at its own municipal building operations for ways to reduce energy.²⁹ In short, Lincoln actively promotes environmental awareness, and support for natural resource protection runs deep throughout the town.

NEEDS, ISSUES & CHALLENGES

Protecting the quality and quantity of natural resources requires many tools: a strong regional planning framework, open space acquisitions, environmental regulations systematically and competently enforced, zoning and transportation policy decisions informed by natural resource interests, and everyday actions by citizens to place resource protection ahead of their own convenience. Lincoln's environmental ethic is to enhance awareness of the role that individuals play as stewards of their environment. Lincoln's conservation brochure, *Community Conservation in Lincoln*, says that residents should: "...accept membership in that larger community – of soils, of water, of animals, of plants – and that we must, in good conscience, always weigh the consequences of our individual and collective decisions as humans upon the rest of the community." Taking natural resources seriously is a strong community ethic in Lincoln.

²⁸ Elaine Carroll, Board of Health, to Community Opportunities Group, Inc., 10 June 2008.

²⁹ Town of Lincoln, <http://www.lincolntown.org/>.

Regional Initiatives

Lincoln has recognized for a long time that protecting natural resources requires a regional approach. The town has good working relationships with other towns, federal and state agencies, and non-profit organizations such as the SuAsCo Watershed Association and Charles River Watershed Association. It also collaborates with Cambridge to protect the Cambridge Reservoir watershed.³⁰ The Lincoln Conservation Commission is currently working with the National Park Service and the Town of Concord to develop new trails within the park and to control invasive aquatic species.³¹ The Commission has also conducted annual inspections and joint work projects over the past six years with Concord and the Great Meadows National Wildlife Refuge to remove invasive species in Fairhaven Bay.³²

Lincoln's determination to protect natural resources is both enhanced and sometimes frustrated by policies in neighboring communities. Despite efforts by the Metropolitan Area Planning Council (MAPC) to promote regional planning and regional collaboration, the interests of other communities in MAPC's large service area – 101 cities and towns around Boston – and within the small sub-region that includes Lincoln do not always coincide harmoniously. In an era dominated by concerns about climate change, direct emissions from use of fossil fuels, and the larger “carbon footprint,” metropolitan Boston suburbs and small cities find themselves in a seemingly irreconcilable conflict between environmental responsibility and their own fiscal condition. About four million sq. ft. of new office, retail, and multi-family development have been permitted in Waltham and other nearby communities on Route 128, much of it destined to bring more traffic through Lincoln and potentially complicate the town's interest in preserving the character of its roads.

In coordinating with other towns, Lincoln may not have taken full advantage of one mechanism that is already in place, namely the Hanscom Area Town Selectmen (HATS). Although somewhat misleading in its title, the forum is intended to include representation from each of the four towns' (Bedford, Concord, Lexington and Lincoln) Conservation Commissions. As the pressure to allow development at HAFB increases, this body may become even more important in maintaining vigilance over the area's natural resources.

Lincoln's traditional focus on protecting its rural character finds company in some of the plans that guide growth in nearby communities, but not to the same extent and not always for the same reasons. A good example of a core value that distinguishes Lincoln from most communities is the town's enduring commitment to protecting wildlife and habitat diversity, yet effective habitat preservation requires a synchronized regional approach. It is difficult to engage Massachusetts communities in a conversation about regional resource protection when each city and town has its own master plan and must balance preservation interests with the need to provide government services and build a secure tax base. With terms such as “structural deficit” echoing in the background, even Lincoln has found itself confronting some of the same issues. As one speaker observed at a community meeting for this Comprehensive Plan, “Land use decisions and town finance decisions are starting to co-mingle. We need to keep them separate.”³³

³⁰ *Open Space and Recreation Plan* (2008), 40.

³¹ Angela Seaborg, Conservation Planner, to Community Opportunities Group, Inc., 9 June 2008.

³² *Open Space and Recreation Plan* (2008), 50.

³³ Comprehensive Long-Range Plan Committee, “Large-Group Discussion Notes: February 9, 2008 Public Meeting,” <http://www.lincolntown.org/depts/planning.htm>.

Drinking Water

Like neighboring Wayland, Sudbury, and Concord, Lincoln relies on drinking water supplies located within its own boundaries.³⁴ It also sells some of its own water to adjacent communities, including those connected to the Massachusetts Water Resources Authority's (MWRA) water system. In addition, Lincoln is host to the City of Cambridge's primary water supply. While Lincoln is ultimately responsible for its own water, ground waters that flow through Lincoln feed other municipal water supplies downstream, and this makes Lincoln's stewardship of water resources a matter of regional importance.

Table 3-1 reports Lincoln's monthly water use in 2005, 2006, and 2007. This data points to the challenges of operating a public water supply in an affluent, low-density town. Lincoln's water rate structure rewards water conservation, but residents seem willing to pay higher water bills in order to maintain their lawns. Lincoln's daily residential consumption per capita exceeds the state standard for groundwater withdrawals in a stressed river basin such as the Charles River, which is sixty-five gallons per capita per day.³⁵ Also disconcerting is the steady annual increase in maximum day demand – that is, a measure of the greatest stress placed on Lincoln's drinking water system in any twenty-four hour period, usually in the summer. Moreover, “unaccounted for water,” or the difference between water withdrawn and water attributable to metered use, hydrant flushing, water main breaks, and other known factors, increased from 23.5 to 32.8 million gallons in Lincoln, or 13.6 to sixteen percent of total water use, between 2006 and 2007. The Water Management Act (WMA) planning standard is ten percent.³⁶

The pattern illustrated in Table 3.1 – a decline in consumption in 2006 and a significant increase in 2007 – is consistent with MWRA water use during the same period.³⁷ The summer of 2006 was cooler, and a considerable amount of rain fell in the Boston area in June and July. According to the Lincoln Water Department's *Annual Water Quality Report*, summer water use can be as much as 1½ times the amount of water used during the winter.³⁸ Given these significant seasonal increases, Lincoln's water customers need to do more to conserve water.

³⁴ Bedford, Lexington, Waltham, and Weston obtain their drinking water from the Massachusetts Water Resources Authority (MWRA).

³⁵ Massachusetts Water Resources Commission, *Water Conservation Standards* (July 2006), 18; and “Stressed Basins in Massachusetts,” 11 December 2001, http://www.mass.gov/dcr/waterSupply/intbasin/stressed_basins.htm.

³⁶ In 2007, DEP adjusted the locally reported percentage of unaccounted for water to 24 percent, based on data in the town's annual report. See DEP, “Residential Gallons per Capita Day (RGPCD) and Unaccounted for Water (UAW),” 2007 Spreadsheet [Electronic Version], *Performance Standards for Public Water Supplies*, <http://www.mass.gov/dep/water/resources/watercon.htm>. See also, Chapter 9, Community Services & Facilities.

³⁷ Massachusetts Water Resources Authority, “Water System,” <http://www.mwra.state.ma.us/>.

³⁸ *Annual Water Quality Report 2006*, 2.

Lincoln's water rate structure rewards conservation, but residents seem willing to pay higher water bills in order to maintain their lawns. Residential consumption per capita exceeds the state standard for groundwater withdrawals in a stressed river basin such as the Charles River, which is sixty-five gallons per capita per day. It is very challenging for affluent towns to convince the public to conserve because the financial incentives that sometimes work in other communities have little if any impact on people who can afford to pay for the resources they consume.

Table 3.1
Lincoln Water Department: Water Withdrawal and Consumption Statistics, 2005-2007

Withdrawal Period	Millions of Gallons of Water/Year				
	2005	2006	Change	2007	Change
January	12.39	12.23	-0.16	12.47	0.24
February	10.62	10.76	0.13	11.80	1.04
March	13.00	11.90	-1.10	13.00	1.10
April	13.55	13.95	0.40	12.07	-1.88
May	15.10	16.18	1.08	17.47	1.29
June	20.94	16.83	-4.11	21.92	5.09
July	24.42	19.67	-4.76	23.27	3.60
August	22.97	20.21	-2.75	25.51	5.30
September	19.87	15.98	-3.89	24.81	8.83
October	13.22	13.74	0.52	17.29	3.55
November	11.80	11.80	0.00	12.93	1.13
December	11.89	11.89	0.00	13.40	1.51
<i>Annual Total</i>	189.77	175.14	-14.64	205.94	30.81
Water Transfers					
Sold to Other Towns	3.48	4.18	0.70	4.01	-0.17
Purchased from Weston	2.24	1.75	-0.49	2.33	0.58
<i>Net Local Water Use</i>	188.53	172.70	-15.83	204.26	31.56
Actual Metered Consumption	154.33	137.83	-16.50	151.17	13.34
Residential Consumption	144.76	127.45	-17.32	135.64	8.19
<i>Residential Per Capita</i>	79.72	70.19	-9.54	74.70	4.51
<i>Residential % Total</i>	93.8%	92.5%		89.7%	
Maximum Day Demand	0.97	1.12	0.15	1.19	0.07

Source: Lincoln Water Department, *DEP Public Water Supply Annual Statistical Report, 2005, 2006, 2007*. Water withdrawal statistics represent finished, not raw, water.

Eliminating leaks, installing water conservation devices, e.g., low-flow faucets, showerheads and toilets, reducing lawn irrigation through use of Best Management Practices (BMPs), and implementing water management plans in municipal and school facilities, commercial establishments and institutional uses would help. Lincoln is not the only town that needs residents and others to use water more efficiently; other communities face similar challenges, and some are experimenting with a variety of conservation strategies. For example, Concord offers rebates to homeowners for purchasing low water use appliances and installing water conservation devices, and also offers information on its website about sustainable landscaping practices. The Lexington DPW’s web page includes a link to a “Water Saver Home” website with water conservation guidance for residential customers.³⁹

WATER QUALITY

Lincoln has taken many steps to protect the quality of its drinking water. Flint’s Pond is largely surrounded by protected land and meets state regulatory requirements. However, because the aquifer that supports the Tower Road well lies within a glacial outwash basin with no impediments to the movement of contaminants, it is rated “highly susceptible” to water quality degradation according to DEP’s Source Water Assessment and Protection (SWAP) report. Further, the Zone II recharge area contains some potentially high-risk land uses: railroad tracks and institutional, multi-family, and commercial development. The potential contaminant sources include spills and leaks of oils and automotive fluids, excessive use of herbicides and pesticides, septic waste, releases from

³⁹ Town of Concord, Department of Public Works, http://www.concordnet.org/Pages/ConcordMA_Water/index, and Town of Lexington, Department of Public Works, <http://ci.lexington.ma.us/dpw/dpw.htm>.

transported chemicals and other hazardous materials or waste, and even microbial contaminants from aquatic wildlife. In contrast, Flint’s Pond ranks as a “moderately susceptible” water supply. Its risk factors include residential uses around the Pond and the threat of septic waste, home heating oil, and lawn care chemical releases.

DEP identified several measures already undertaken by the Lincoln Water Department to protect the town’s water supplies, and recommended some additional ones:

- ❖ Increase monitoring of non-water supply activities within Zone A of Flint’s Pond;
- ❖ Adopt land use controls that meet current requirements of 310 CMR 22.21(2) [wellhead protection bylaw] and 310 CMR 22.20C [surface water protection bylaw]; and
- ❖ Develop and implement a surface water supply and wellhead protection plan.⁴⁰

Wildlife

HABITAT PROTECTION

Despite episodes of wavering support for wildlife protection at the federal and state levels, Lincoln has persevered with public education, land acquisitions, and documenting the town’s biodiversity. The Open Space and Recreation Plan (2008) includes a fine analysis of Lincoln’s natural communities, yet much of this information is not reflected in the Commonwealth’s wildlife mapping. In most cases, the natural communities that exist in Lincoln do not qualify as priority communities under a state-prescribed ranking system. However, Lincoln has extensive and very beautiful habitat and wildlife corridors of value both to common and rare species. Unfortunately, Lincoln’s natural communities are at risk of degradation from the spread of invasive plants. The 2008 Open Space Plan notes that three species in particular have increased most noticeably in the past several years: black swallow-wort (*Cynanchum louiseae*), garlic mustard (*Alliaria petiolata*), and Japanese knotweed (*Polygonum cuspidatum*), a plant known to tolerate a wide range of soil conditions.⁴¹

Lincoln has several areas of designated Priority Habitat – that is, habitat for state-listed rare species. When the state updated its habitat maps following recent amendments to the Massachusetts Endangered Species Act regulations (2005), Lincoln made some modest gains in Priority Habitat and Estimated Habitat areas.⁴² This partially reflects the town’s species identification efforts and its success at enlisting help from residents.

INVASIVE PLANT SPECIES

Non-native and invasive plant species are common in many parts of Lincoln. “Invasive species” include plants, animals, and other organisms that can cause environmental damage or economic loss, or threaten human health, when introduced in areas where they do not usually occur.⁴³ Lincoln has been particularly concerned about

⁴⁰ DEP, “Source Water Assessment and Protection (SWAP) Report for Lincoln Water Department (2003)” [Electronic Version].

⁴¹ *Open Space and Recreation Plan* (2008), 25.

⁴² NHESP, “Classification of Natural Communities,” and “Priority Natural Communities,” http://www.mass.gov/dfwele/dfw/nhosp/natural_communities/natural_communities.htm, and “Massachusetts Endangered Species Act,” http://www.mass.gov/dfwele/dfw/nhosp/regulatory_review/reg_review_home.htm. See also, NHESP, *Massachusetts Natural Heritage Atlas*, 12th Ed. (2006). The central difference between Priority and Estimated Habitat areas is a regulatory distinction, the former being subject exclusively to MESA and the latter being subject both to MESA and the Wetlands Protection Act.

⁴³ National Invasive Species Council, <http://www.invasivespeciesinfo.gov/council/main.shtml>

combating invasive plants, which reproduce rapidly and disrupt the habitats of naturally occurring (native) plants. Some of the more prevalent invasive species in Lincoln include Black Swallow-wort (*Cynanchum rossicum*), Garlic Mustard (*Alliaria petiolata*), Glossy Buckthorn (*Frangula alnus*), Tree-of-Heaven (*Ailanthus altissima*), Japanese Knotweed (*Polygonum cuspidatum*), and Oriental Bittersweet (*Celastrus orbiculatus*). The Conservation Commission has developed several initiatives to address this problem, including an “Invasive Exotic Plants in Lincoln” webpage on the town’s website, an Invasive Exotic Plants brochure, and public outreach events to identify and control invasive species. Recently the Conservation Commission received CPA funds to support invasive species management on conservation land.

WILDLIFE CONFLICTS

The reforestation of New England has allowed the recovery of many of the region’s original wildlife populations. As suburban development continues to spread into reforested areas, some animals have adapted well enough to co-exist with human habitation and their activities can conflict with human interests. Red fox, fishers, deer, raccoons, and beavers have become increasingly common in Lincoln. Fishers are known to prey on pets and livestock, and while raccoons are usually thought of as garbage thieves, they and some other mammals are potential vectors for rabies. The deer population in Lincoln, estimated at twelve to fifteen deer per sq. mi., or about 200 resident deer, raises several concerns.⁴⁴ Deer can carry ticks that host Lyme disease, a serious illness that has become fairly well established in Eastern Massachusetts. In addition, deer can cause accidents on local roadways. Beaver have the potential to cause flooding and loss of property for homes constructed close to floodable land. The Conservation Commission has developed informational material for homeowners to address some of these wildlife conflicts.

Environmental Quality

STORMWATER MANAGEMENT

Federal law requires communities to manage *stormwater runoff*, which carries nutrients and pollutants from farm fields, lawns, roads, and other sources into waterways. Some communities have adopted **Low-Impact Development (LID)** bylaws that encourage or require developers to include stormwater BMPs in future projects. These principles encourage the reduction of impermeable surfaces, mimicking the natural system as closely as possible, and relying less on engineered structures to achieve stormwater and erosion control. Examples include the use of native vegetation in buffer strips, open channels, and rain gardens to trap and filter pollutants. Such techniques also help to reduce stormwater runoff volume through infiltration into the groundwater.

Municipalities must require applicants for construction sites greater than one acre to file a Stormwater Pollution Prevention Plan that meets local approval. In addition, they are required to implement a stormwater management program that (1) reduces the discharge of pollutants to the “maximum extent practicable” (MEP), (2) protects water quality, and (3) satisfies the appropriate water quality requirements of the Clean Water Act. In 2004 and 2005, Lincoln submitted stormwater management progress reports to DEP.⁴⁵ While the reports demonstrate overall compliance with the town’s general stormwater permit, they also list some shortcomings, e.g., locating and mapping stormwater outfalls that may affect rare or endangered species or historic properties (the reports indicate neither would be applicable), as well as water quality assessments. Lincoln had begun implementing public education and outreach programs, detecting and eliminating illicit discharges, controlling of pre-and post-construction site stormwater runoff, and preventing pollution at the municipal level.

⁴⁴ *Open Space and Recreation Plan* (2008), 26.

⁴⁵ Town of Lincoln, National Pollutant Discharge Elimination System (NPDES) Small MS4 General Permit Annual Report, November 2004.

Lincoln's abundant open space is not a shield against the effects of intensive development elsewhere in the region. The amount of impervious cover in a watershed increases with the construction of more buildings, roadways, and parking lots. In 2003, the Center for Watershed Protection evaluated data from 225 studies of impervious cover and its effect on the watershed. Stream impairment becomes evident in watersheds with ten percent impervious cover (corresponding with two-acre lots) and is significant in watersheds with twenty-five percent impervious cover (corresponding to 0.25-acre lots).⁴⁶ A major component of these impairments is poor stormwater management practices that allow untreated stormwater to enter streams and waterways.

LID offers one way to reduce impervious cover without banning development outright. For example, LID promotes designing building envelopes to avoid intruding upon natural resources, increasing on-site infiltration and groundwater recharge, keeping land disturbance and impervious cover to a minimum, and preserving and enhancing natural drainage patterns. Engineering firms often incorporate LID techniques as part of the site planning process, with or without local requirements. They can be expected to do so more frequently because the same techniques qualify as BMPs under the state's stormwater management standards, which require some degree of stormwater infiltration on all sites.⁴⁷ While Lincoln does not have a LID bylaw, the town's website offers stormwater management information to developers and homeowners through links to state and federal online repositories.⁴⁸ The state recently featured plans for the "Discovery Barn" at the Massachusetts Audubon Society's Drumlin Farm Sanctuary as an example of LID design for rural communities.⁴⁹

CONTAMINATION CONCERNS

The SWAP report notes that while industrial uses are not a significant concern within Lincoln, adjacent communities have industrial activities that could be harmful to the local water supply in the event of an accidental release. The risk of a release affecting Lincoln relates directly to the presence of regional highway corridors that support truck transportation and multiple transportation facilities, including the railroad. Train operations routinely release chemicals during normal use and track maintenance and herbicide use. In addition, DEP points out that accidents can cause spills of train engine fluids. Lincoln will need to remain cognizant of these issues, as it has in the past, mainly by monitoring activities within the watersheds of its drinking water supplies.

Lincoln has largely been spared from many of the serious, costly consequences of industrial contamination, though the town had to reclassify the Farrar Pond well as an emergency-only supply due to the discovery of organic compounds years ago. In May 2008, the DEP database of Chapter 21E Tier Classified Oil and Hazardous Material Sites included fifty-six releases reported in Lincoln between 1985 and 2007. All that required remediation appear to have met state regulations.⁵⁰ The only outstanding hazardous waste site is the old sanitary landfill on Virginia Road at Hanscom Field. HAFB and Hanscom Field accounted for more than twenty of the releases in DEP's database. Another eight releases were associated with leaks or spills from gasoline stations or automotive garages, and others were relatively small oil spills resulting from electrical transformer failures or roadway accidents. The few industrial releases listed appear to relate to the former military uses in the area, such as the former Nike missile installation on the Wayland border. Only one classified site, a transformer oil spill on Sandy Pond Road (RTN 03-0011522), is listed as a location within a water supply protection zone.

⁴⁶ Center for Watershed Protection, *Impacts of Impervious Cover on Aquatic Systems* (2003).

⁴⁷ DEP, *Massachusetts Stormwater Handbook* (February 2008), see Chapter 1 and Chapter 3

⁴⁸ Town of Lincoln, "Stormwater Management," <http://www.lincolntown.org/depts/stormwater.htm>

⁴⁹ EOEEA, Smart Growth Toolkit, Low-Impact Development Case Studies, http://www.mass.gov/envir/smart_growth_toolkit/pages/SG-CS-lid.html.

⁵⁰ DEP, <http://db.state.ma.us/dep/cleanup/sites/Results2.asp>

Hanscom Field presents undeniable risks to Lincoln's natural resources. Recent proposals to expand the airport have included the addition of jet fuel storage tanks, one of which was located above ground over a protected aquifer. Yet, while the Chapter 21E database reinforces these concerns, Hanscom Field is not Lincoln's only environmental problem. The town has other indicators of environmental stress as well. According to the Proposed Massachusetts Year 2008 Integrated List of Waters (Clean Water Act Sections 303d and 305b), the Upper Basin of the Cambridge Reservoir, the Elm Brook, and the Shawsheen River all constitute impaired waters requiring a Total Maximum Daily Load (TMDL), or a plan and regulatory strategy to control the amount of pollutants that a degraded water body can accept from point, non-point, and natural sources.⁵¹

Local Government Environmental Initiatives and Challenges

Town government has conducted many public education programs. Lincoln's official town website has numerous links to information about environmental topics, mainly to educate homeowners about steps they can take to protect the local and regional environment. In conjunction with the town's conservation groups, the Lincoln Board of Health prepared a pamphlet, *Healthy Lawns and Landscapes*, to encourage residents to consider organic lawn care. The Conservation Department has also created educational programs to encourage conservation and knowledge of Lincoln's regulations and bylaws. Through brochures, educational work days and site visits, the Conservation Commission promotes the use of native plants, reduced lawn area, and BMPs on agricultural fields including drip irrigation, cover crop and companion planting. It also encourages residents to water during early morning and evening hours.

Water conservation is as challenging for town government as for homeowners, businesses, institutions, and farms. Lincoln does not have a local bylaw or regulations for water conservation, but the Water Department charges different water rates based on consumption and it can impose voluntary water restrictions. The town also employs water conservation measures by limiting irrigation of its recreation fields, but balancing landscape management and water conservation on recreation fields is difficult. Presently, Lincoln does not irrigate most of its athletic fields and relies on a routine of annual slice seeding, aeration, lime application, and a quarterly fertilization. The Town Offices Field has an irrigation system, but the field's lack of proper drainage renders it unusable most of the year. (The irrigation system has not been used more than once or twice since it was installed years ago.) Lack of irrigation will become more problematic as demands on playing fields continue to increase.

The town has installed an irrigation system for its tennis courts but avoids watering during mid-day hours. Watering typically occurs at midnight and around 5 p.m. in order to keep the clay surface playable. The irrigation system is equipped with a sensor to shut down when it rains. As the summer progresses, the town applies calcium chloride to the surfaces to help them retain moisture better, and typically increases the irrigation schedule as seasonal temperatures rise. Of all of Lincoln's recreational facilities, the Codman Pool obviously uses the largest amount of water. The pool shell was repaired about seven years ago to improve its holding capacity, but the town is still required to add water daily during the peak season due to evaporation and user displacement. There is no regular irrigation of the pool lawn area.⁵²

⁵¹ DEP, Massachusetts Year 2008 Integrated List of Waters Proposed Listing of the Condition of Massachusetts' Waters Pursuant to Sections 303(d) and 305(b) of the Clean Water Act (April 2008); Charles River Watershed 2002-2006 Water Quality Assessment Report (April 2008), and Shawsheen River Water Quality Assessment Report (July 2003), <http://www.mass.gov/dep/water/resources/tmdls.htm>. A TMDL currently exists for pathogens in the Shawsheen River and Elm Brook.

⁵² Dan Pereira, Lincoln Recreation Director, to Community Opportunities Group, Inc., 10 June 2008.

To address the management needs of its own open space, Lincoln is currently working on property management plans for conservation land. Stewardship efforts primarily include maintenance of open field habitats through mowing, management of non-native invasive plants by hand-pulling, mowing and cutting, and protection of wetland resource areas and preservation of existing contiguous woodland habitats.

GOALS & RECOMMENDATIONS

Goal NR-1. Preserve Lincoln’s natural resources and agricultural land uses.

- NR-1.1. By purchase, restriction, or other method, continue to protect lands which contain or contribute to the protection of valuable natural resources, including public drinking water supplies.
- NR-1.2. Continue to secure deed restrictions to protect wetland buffer zone areas.
- NR-1.3. Establish goals for water use in order to conserve water and bring Lincoln in line with the state’s water use guidelines.
- NR-1.4. Develop property management plans for the protection of conservation land and habitat areas.
- NR-1.5. Encourage or require best management practices for soil and water conservation on all construction projects in Lincoln, including agricultural lands to the extent allowed by law.
- NR-1.6. Ensure that developers comply with requirements for environmental impact reports, stormwater management, and open space development guidelines.

DISCUSSION

Lincoln has worked diligently over a long period of time to protect natural resources through regulatory controls, conservation land acquisitions, public education, and thoughtful administration of the local wetlands bylaw. The town’s population is changing, and while many people are attracted to Lincoln because of its abundant open space, they may not be familiar with the role of conservation and stewardship in Lincoln’s culture. Public education tools that reach people in a wide variety of locations and settings could help to increase local knowledge of the town’s conservation agenda and how individuals can be part of it. The following are essential or “foundation” steps to guide the implementation of this Comprehensive Plan:

- ❖ Continue to protect lands of conservation interest through land acquisitions and conservation restrictions, and regulatory techniques such as obtaining deed restrictions for wetland buffer areas as part of the process of issuing an Order of Conditions, and site development standards (through zoning) to guide construction away from critical resources.
- ❖ Increase efforts to educate the public about water conservation, and explore options in addition to the existing water rate structure to reduce water use by residents, businesses, and institutions both through voluntary and legally enforceable means, including establishing goals for appropriate water consumption.
- ❖ Adopt a land clearing and grading bylaw to ensure the use of best management practices (BMPs) during site construction.
- ❖ Make a consistent commitment to stewardship by providing adequate financial and staff support for the Conservation Commission’s baseline inventory and monitoring program.

- ❖ Review site plan and special permit submission requirements to ensure that town officials receive the information they need to evaluate, regulate, and minimize the adverse impacts of development on land and water resources. This effort should be paired with a comprehensive review and update of the town’s Zoning Bylaw and subdivision regulations.
- ❖ Implement the 2008 *Open Space and Recreation Plan*.

Goal NR-2. Promote water conservation, ecological landscaping practices, and energy and resource conservation among all property owners and town employees.

- NR-2.1. Develop conservation guidelines for all public buildings, including schools, the town offices, public safety, and public works.
- NR-2.2. Continue to educate the public about Lincoln’s conservation ethic and commitment to stewardship.
- NR-2.3. Investigate and seek opportunities to participate in state, national, and global environmental programs, such as dark skies and green cities initiatives.

DISCUSSION

For communities seeking to conserve water and energy and encourage ecological landscaping practices, it makes sense to set an example by implementing conservation guidelines in all municipally owned properties. Several Massachusetts towns have planted low water use gardens with non-invasive species on the grounds of their town halls and libraries, instituted rainwater harvesting, redesigned municipal parking lots to incorporate bioretention, and implemented the recommendations of energy audits in older buildings. Lincoln has been working to promote energy and water conservation in public buildings and should continue its existing efforts. Implementing a consistent approach to conservation on municipal and school property will be challenging because Lincoln’s public buildings are managed by the individual departments that occupy them. Establishing a full-time Facilities Manager (Chapter 10: Community Services & Facilities) will enhance Lincoln’s ability to develop and carry out water and energy conservation guidelines.

Lincoln has done more than most communities to maintain and increase public support for conservation and stewardship. Through programs and publications by the Conservation Commission, Board of Health, and LLCT, Lincoln residents have access to all of the information they need in order to understand the roles that individuals can play to conserve energy and water. It is very challenging for affluent towns to convince the public to conserve because the financial incentives that sometimes work in other communities have little if any impact on people who can afford to pay for the resources they consume. Continued use of the town’s website to disseminate information, working with the Lincoln Public Schools and community organizations to provide environmental education for children, making presentations at the State of the Town Meeting and the Annual Town Meeting, and encouraging residents to organize conservation activities at the neighborhood level are appropriate steps for Lincoln to take to reinforce the town’s conservation ethic. In addition, establishing and maintaining a “skills bank” database (Chapter 11, Governance) could help to identify residents with the skills, interest, and time to take on special environmental projects, such as leading the development of a climate action plan or identifying ways for Lincoln to engage more actively in national and global environmental programs.

Goal NR-3. Improve controls against environmental degradation and pollution.

- NR-3.1. Continue to educate the public about alternatives to chemical pesticides, herbicides, and fertilizers in landscaping and lawn maintenance activities.
- NR-3.2. Consider adopting a Low-Impact Development (LID) bylaw, consistent with state stormwater regulations and guidelines, to require developers to include stormwater BMPs in future projects.
- NR-3.3. Identify and evaluate the town's options for regulating chemical and sediment pollution of private and public water supplies and establishing local standards for the use of chemical pesticides, herbicides, and fertilizers, to the extent allowed by law.
- NR-3.4. Adopt noise pollution regulations, with clear standards to define noise disturbance.
- NR-3.5. Ensure that new construction projects meet appropriate environmental standards by creating an avenue for reviewing such projects.
- NR-3.6. Through identification, public education, regulations, and guidelines, increase the effectiveness of programs to control invasive species.

DISCUSSION

The Massachusetts courts have held that cities and towns lack authority to regulate the use of chemical pesticides, herbicides, and fertilizers because the state retains exclusive jurisdiction. Lincoln could try to enlist support from other towns, the Massachusetts Association of Boards of Health, or the Metropolitan Area Planning Council to petition for amendments to the Massachusetts Pesticide Control Act, but this would be a long-term endeavor. It will be important to continue providing public education in multiple formats – such as the internet, special inserts in water bills, working with local landscaping contractors to promote environmentally responsible alternatives, or display boards in the Town Offices and the library – in order to engage residents, business owners, and institutional property owners as partners. It also makes sense to develop guidelines for chemical pesticides, herbicides, and fertilizers and work with some of the town's large property owners to institute them voluntarily. In addition, while the town may not be able to prohibit chemical pesticides, it could establish site development standards such as limits on the percentage of a site that can be covered by turf, prohibitions against landscaping with invasive species, and requirements for water conservation plans. These types of standards could be incorporated in the Zoning Bylaw and enforced through site plan review and the special permit process.

Some communities in Massachusetts have recently adopted bylaws and ordinances to regulate offensive noise. Lincoln could establish a working group or committee that includes staff and designees of the Conservation Commission to review the town's options for a workable noise-reduction bylaw and the administrative requirements for implementing it. Factors to consider in any noise bylaw include not only a clear definition of offensive noise and ambient noise, but also the sources of noise and noise-generating activities that will be regulated under the bylaw, the intensity, duration, and frequency of regulated noises that would constitute an offense, and activities that would be exempt, e.g., emergency work, special events, or the operation of farming equipment.

Goal NR-4. Improve communication and coordination between the Water Department and other town agencies responsible for developing and implementing natural resource protection plans.

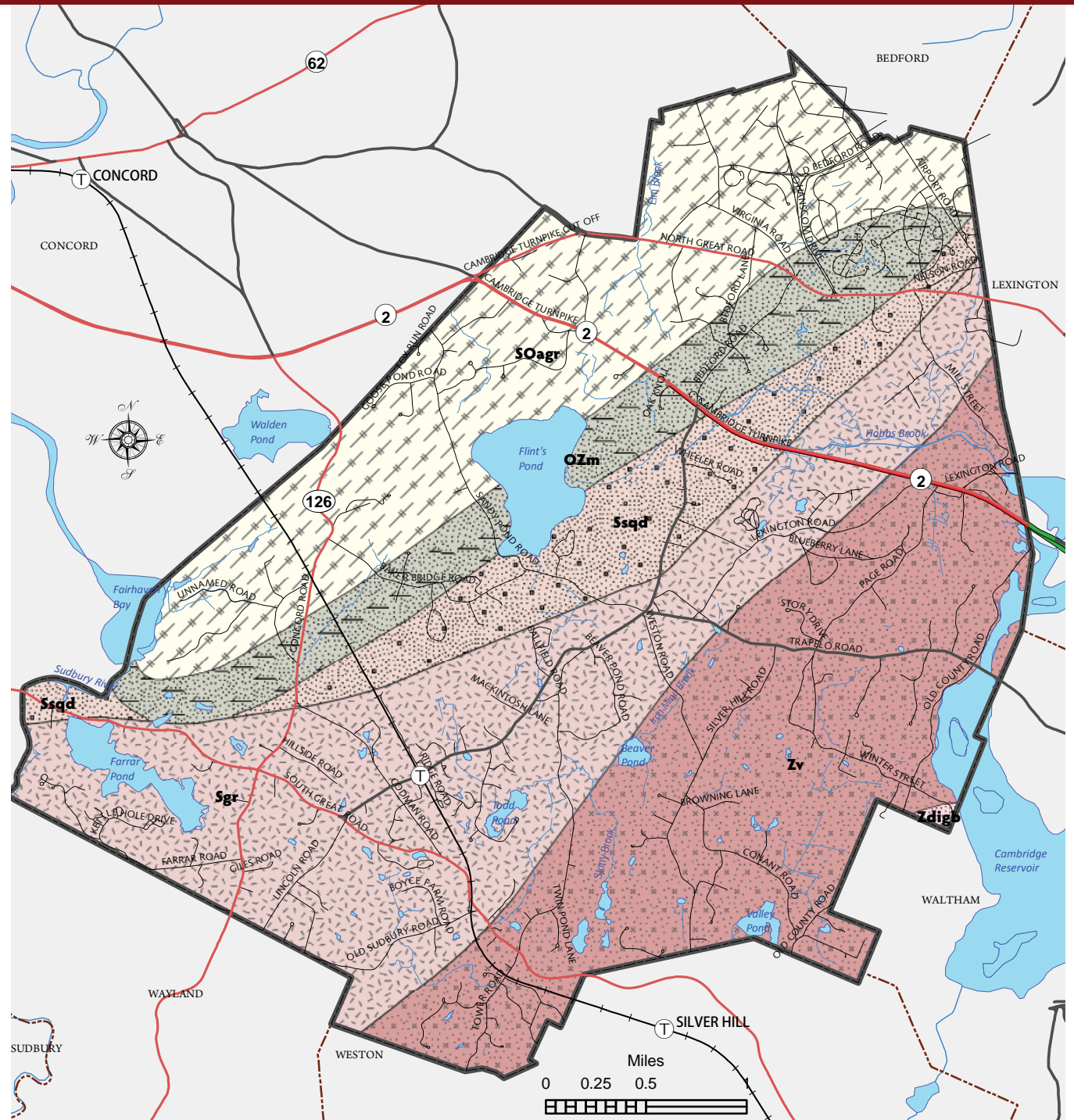
- NR-4.1. Ensure that town agencies have a basic understanding of Lincoln's drinking water supplies and water storage and distribution systems.

- NR-4.2. Ensure consistency between Lincoln’s land use policies and water resource protection laws that affect the amount of water Lincoln can withdraw from surface water and groundwater supplies.
- NR-4.3. Coordinate water conservation efforts among Lincoln’s land use and natural resource agencies and all town departments with operations and maintenance responsibilities for public buildings and grounds.

DISCUSSION

A decentralized government like Lincoln’s can make it difficult to coordinate the work of independently elected boards and the departments they oversee. During this Comprehensive Plan process, it became clear that many town officials and department heads had limited knowledge of the Water Department, the state of the town’s water system, and the degree to which water supply may be a controlling factor in meeting many of the town’s Comprehensive Plan goals. Although water quality is a very high priority in Lincoln’s land use and conservation policies, there does not appear to be a clear or widely shared understanding of constraints on the town’s water supply. Simple measures such as ensuring the water superintendent’s attendance at department head and development review team meetings, and engaging the Board of Water Commissioners to participate in land use planning and policy discussions, would improve Lincoln’s ability to integrate water management with growth management.

LINCOLN COMPREHENSIVE PLAN



Community Opportunities Group, Inc.

MAP 3.1 BEDROCK GEOLOGY

Sources: MassGIS, Lincoln Conservation Department, USGS, U.S. Bureau of the Census, Community Opportunities Group, Inc.

April 2009

Legend

BEDROCK FORMATION

Marlborough Formation

Andover Granite

Rusty-weathering biotite granite to granodiorite

Sharpners Pond Diorite

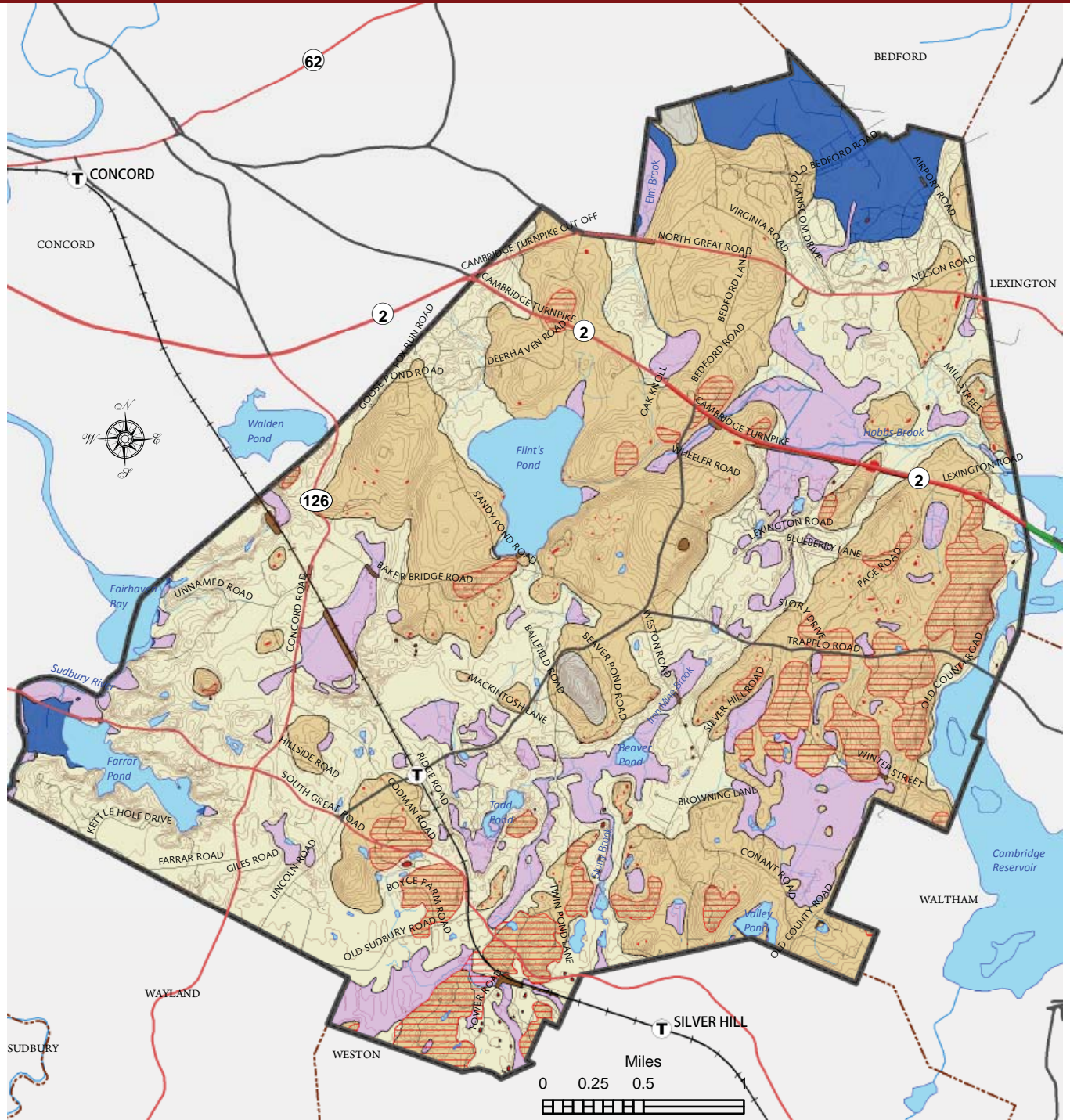
Diorite and gabbro

Metamorphosed mafic to felsic flow

LINCOLN PLANNING BOARD



LINCOLN COMPREHENSIVE PLAN



Community Opportunities Group, Inc.

MAP 3.2 SURFICIAL GEOLOGY

Sources: MassGIS, Lincoln Conservation Department, USGS, U.S. Bureau of the Census, Community Opportunities Group, Inc.

April 2009

Legend

Shallow Bedrock

Abundant Outcrop and Shallow Bedrock

Postglacial Deposits

Artificial Fill

Swamp Deposits

Glacial Stratified Deposits

Coarse

Glaciolacustrine Fine

Till Bedrock

Thick Till

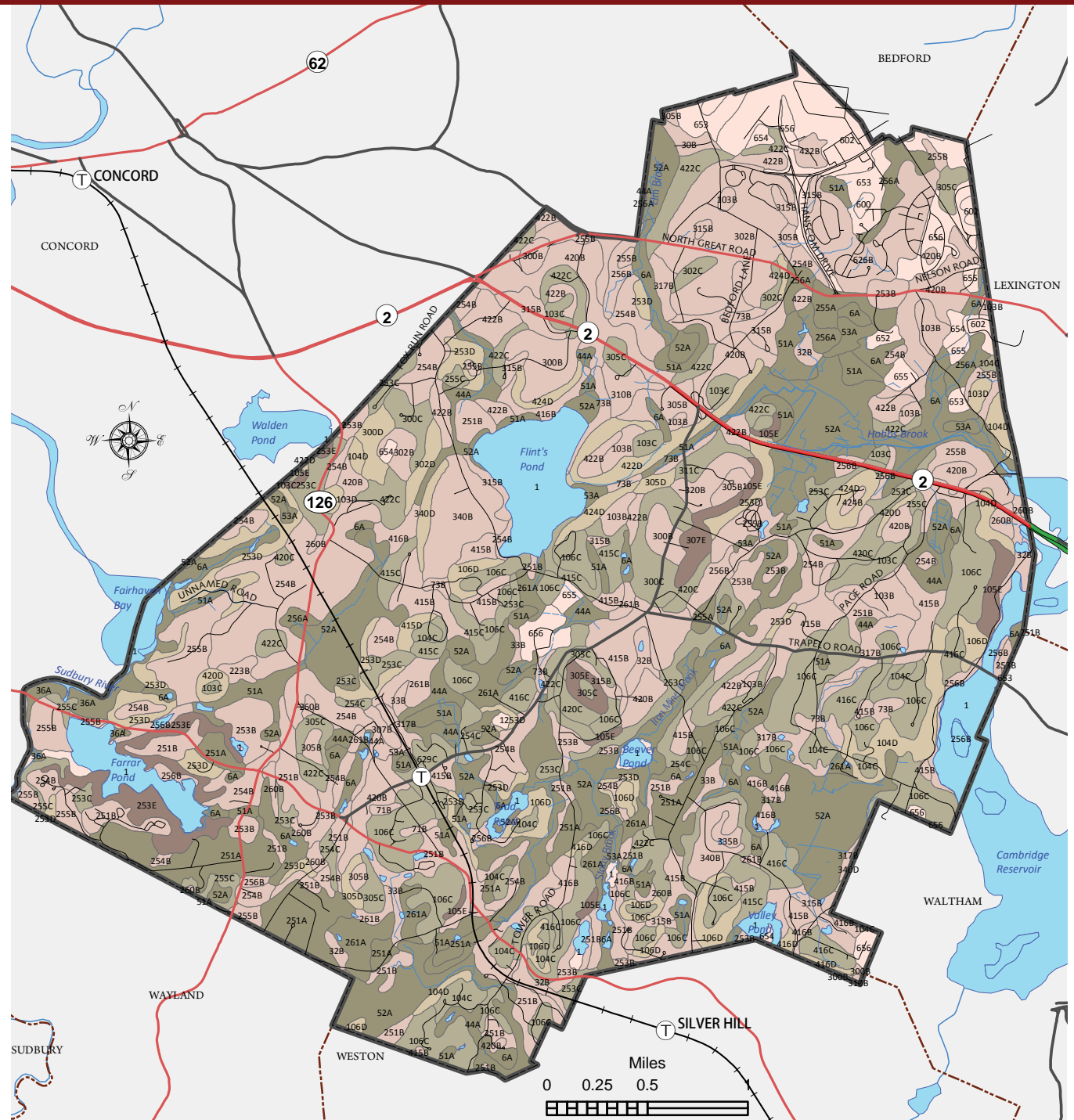
Bedrock Outcrop

Thin Till

LINCOLN PLANNING BOARD



LINCOLN COMPREHENSIVE PLAN



Community Opportunities Group, Inc.

MAP 3.3 SOILS

Sources: MassGIS, Lincoln Conservation Department, USGS, Natural Resources Conservation Service (NRCS), U.S. Bureau of the Census, Community Opportunities Group, Inc.

April 2009

Legend

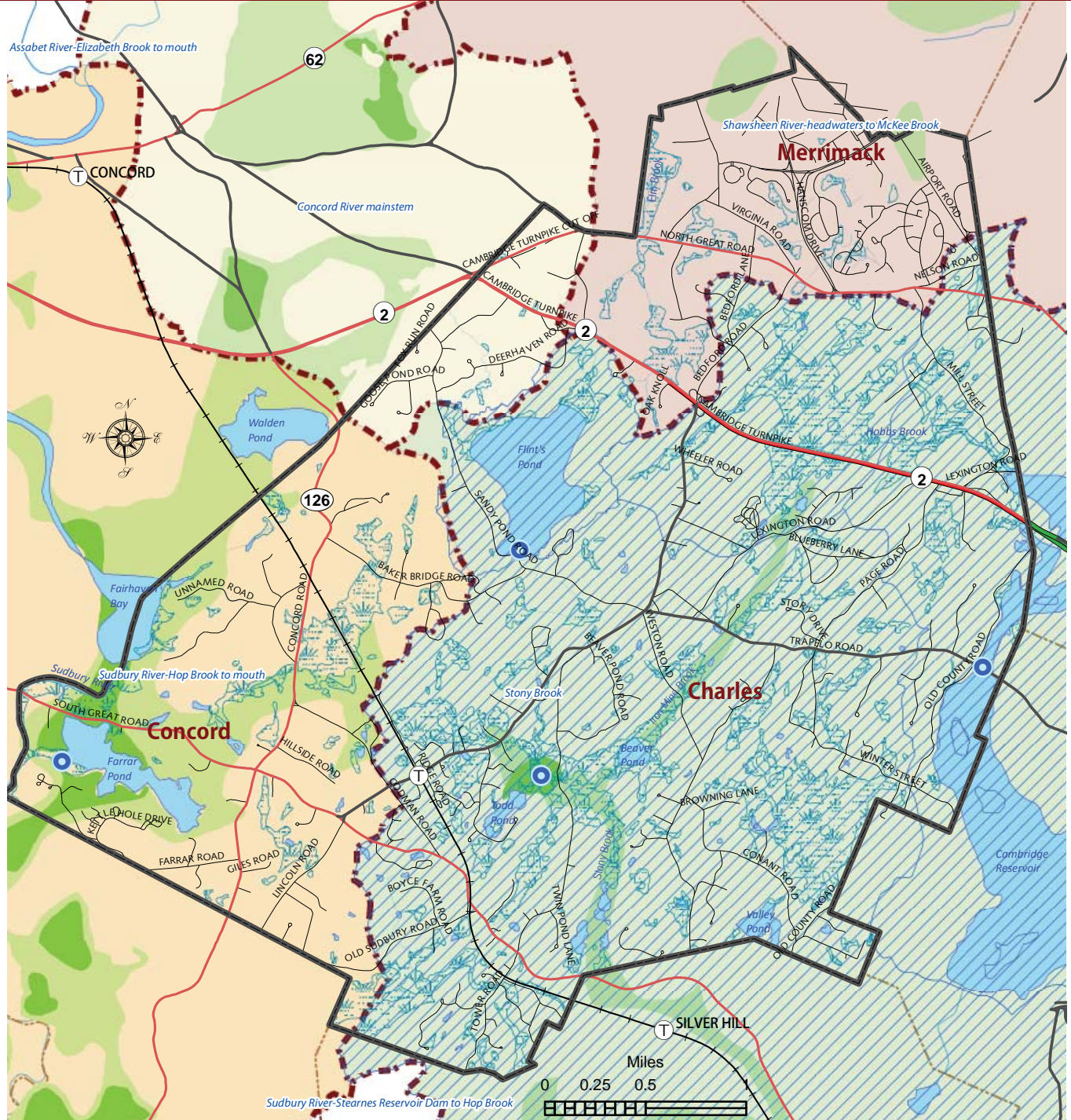
- | | | | |
|--------|----------|-----|---------------------|
| SLOPE | 15-25 % | 52A | Soils Map Unit Code |
| 0-3 % | 25-35 % | | |
| 3-8 % | No slope | | |
| 8-15 % | | | |

*See also, Appendix C: Soils Prevalent in Lincoln.

LINCOLN PLANNING BOARD



LINCOLN COMPREHENSIVE PLAN



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MAP 3.4 WATER RESOURCES

Sources: MassGIS, Lincoln Conservation Department, USGS, U.S. Bureau of the Census, Community Opportunities Group, Inc.

April 2009

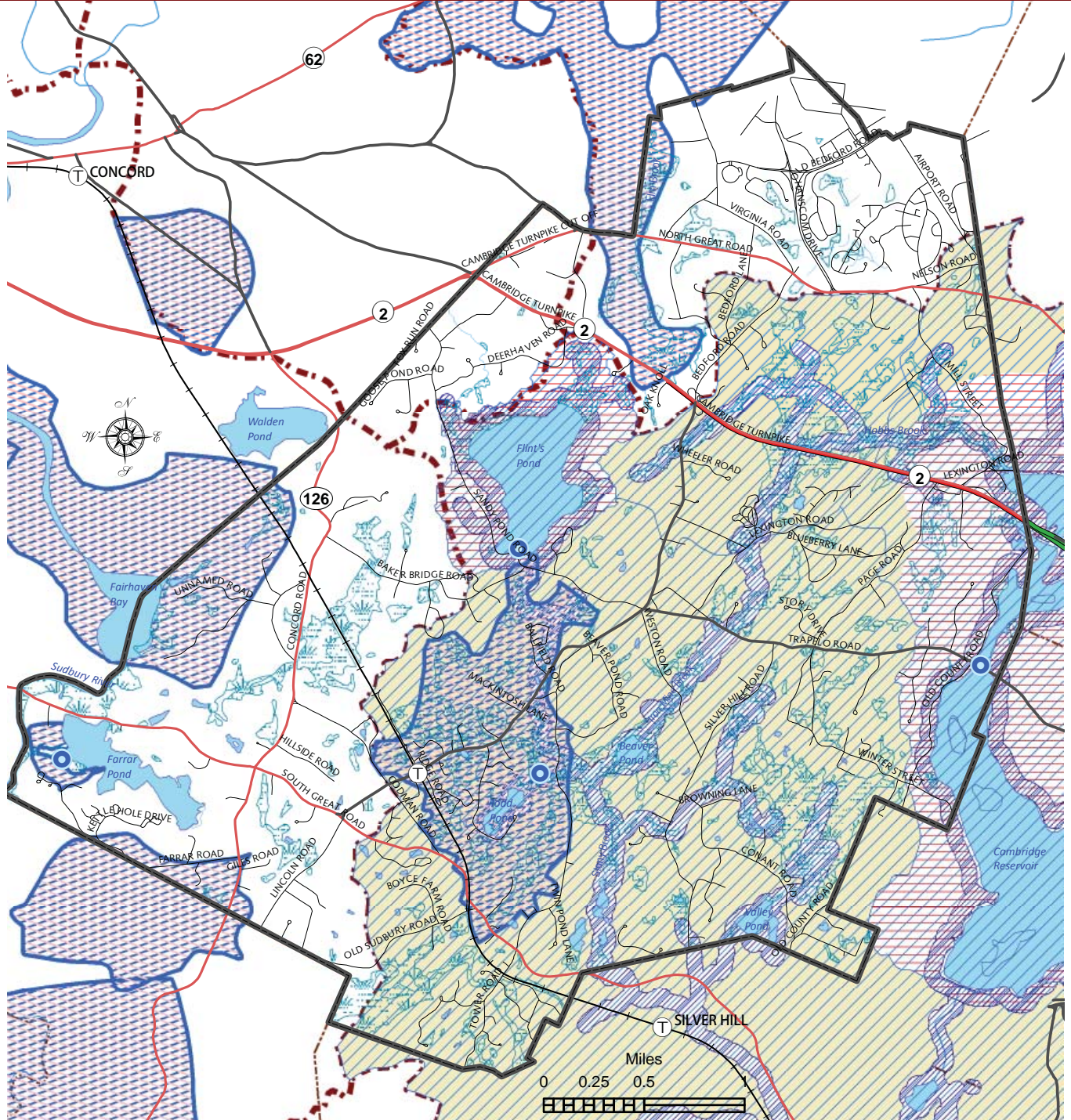
Legend

- Open Water
- River or Stream
- Public Water Supply
- Wetlands
- Outstanding Resource Waters
- High Yield
- Medium Yield
- Watershed Boundary
- Sub-Watersheds
 - Concord River mainstem
 - Shawsheen River-headwaters to McKee Brook
 - Stony Brook
 - Sudbury River-Hop Brook to mouth

LINCOLN PLANNING BOARD



LINCOLN COMPREHENSIVE PLAN



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MAP 3.5 WATER SUPPLY PROTECTION ZONES

Sources: MassGIS, Lincoln Conservation Department, USGS, U.S. Bureau of the Census, Community Opportunities Group, Inc.

April 2009

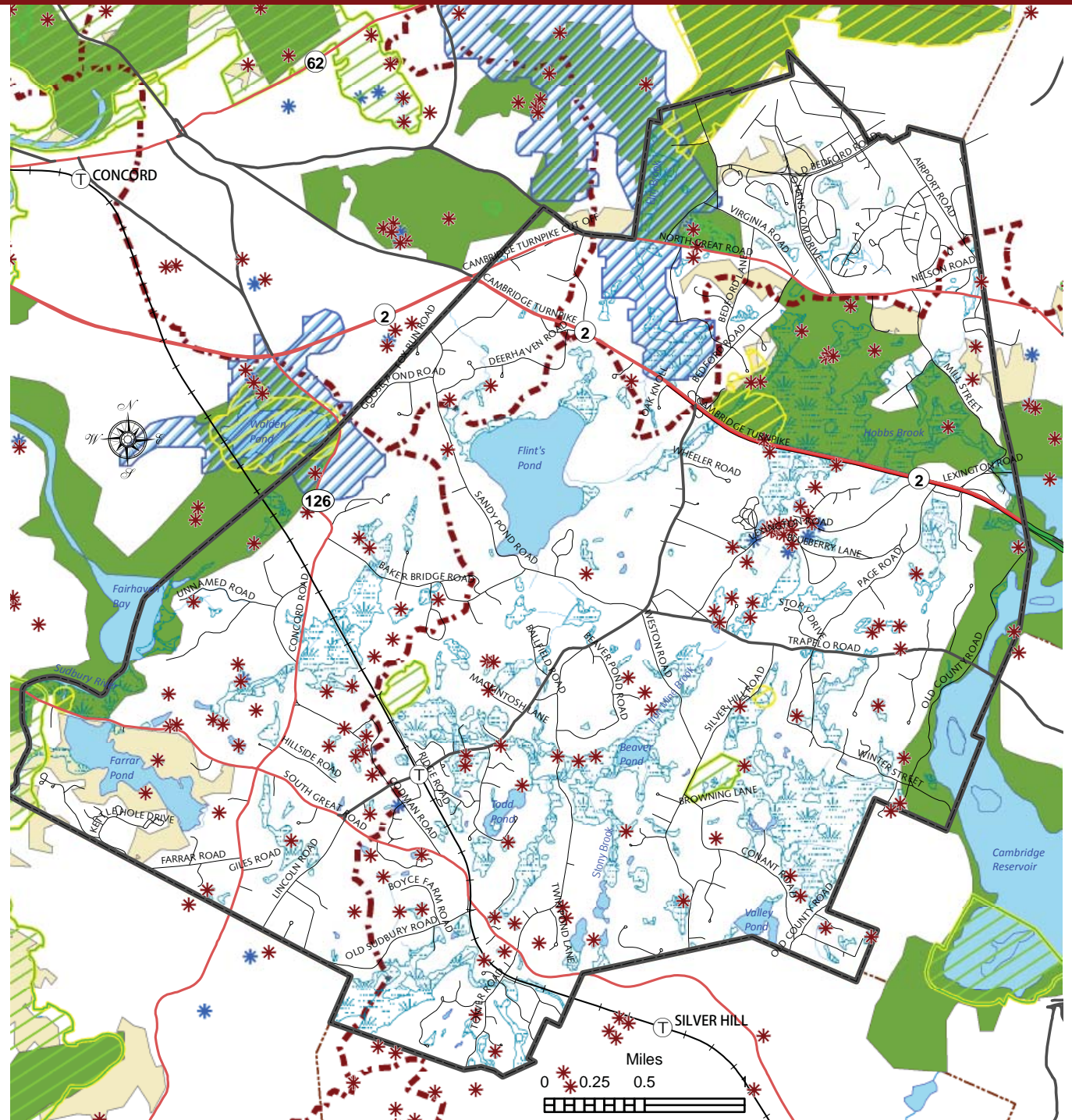
Legend

- Watershed Boundary
- Open Water
- River or Stream
- Public Water Supply
- DEP Approved Zone II
- Surface Water Protection Areas
- ZONE A
- ZONE B
- ZONE C
- Outstanding Resource Waters

LINCOLN PLANNING BOARD



LINCOLN COMPREHENSIVE PLAN



Community Opportunities Group, Inc.

MAP 3.6 WILDLIFE HABITATS

Sources: MassGIS, Lincoln Conservation Department, USGS, U.S. Bureau of the Census, Community Opportunities Group, Inc.

April 2009

Legend

- | | | |
|-----------------------------------|-------------------------------------|------------------------------------|
| Watershed Boundary | NHESP DATABASES | Certified Vernal Pools |
| Open Water | Estimated Habitats of Rare Wildlife | Potential Vernal Pools |
| River or Stream | Priority Habitats of Rare Species | Living Waters Core Habitat |
| NHESP Natural Communities | BioMap Core Habitat | Living Waters Supporting Watershed |
| Core Habitat Supporting Landscape | | |

LINCOLN PLANNING BOARD



Cultural & Historic Resources

OVERVIEW

The Town’s mission statement says: “Lincoln is a town that cherishes its rural, agricultural character, its small town heritage, its open space, and its historical legacy.” While Lincoln has adopted a wide range of preservation tools and techniques, changing times and growing economic pressures make it increasingly difficult to ensure the continued preservation of town-owned historic assets. Lincoln is home to many cultural, educational, and historical institutions that embody and enhance the town’s character and legacy while also contributing to its sense of community. Frequently, however, there are unfulfilled opportunities for collaboration between the community, the schools, and these cultural and historic organizations, together with, at times, a lack of coordination among the organizations themselves.



Key Findings

- ❖ Lincoln has documented more than 300 historic buildings, areas, structures, and objects and approximately forty archaeological sites that are included in the Inventory of Historic and Archaeological Assets of the Commonwealth.
- ❖ Lincoln has adopted a local historic district bylaw, a neighborhood conservation district bylaw, a scenic roads bylaw, and a demolition delay bylaw. Under its local historic district bylaw, Lincoln has designated four local historic districts.
- ❖ Many of Lincoln’s most iconic historic properties are open to the public for visitation. These well-preserved historic properties are owned and used by a variety of governmental and non-profit organizations.
- ❖ Lincoln’s cadre of preservation and cultural organizations include non-profit as well as municipal and other governmental entities. Together, they oversee protection and advocacy for the town’s historic resources.
- ❖ Lincoln has more than seventy-five organizations that serve the social, spiritual, economic, recreational, and cultural interests of the community.

Key Challenges

- ❖ Lincoln has done more than many communities to protect its historic resources. Still, its future efforts could be hampered by the lack of a town-wide, comprehensive historic resources inventory and a town-wide archaeological reconnaissance survey.

- ❖ Lincoln’s desirability has contributed to the rise in demolitions of moderately-sized houses and their replacement with significantly larger and more expensive homes. Although sections of the town are protected by a local historic district, many areas of historic significance remain unprotected by a local historic district or neighborhood conservation district. A gap in understanding the benefits of these designations and resistance from some property owners could make it difficult for Lincoln to do more to prevent the loss of historic buildings and structures.
- ❖ Lincoln’s historic town buildings are generally well-preserved, but it will be expensive to maintain them and preserve their historic character while also creating access for people with disabilities and providing adequate work space for staff. However, the town’s historic public buildings contribute significantly to the character of the town, and they should be appropriately preserved and reused.
- ❖ Increasing traffic is having significant negative impacts on the character of Lincoln, including its scenic roads. The Scenic Roads Bylaw provides only limited protection for stone walls and trees within the right-of-way. Beyond the right of way, historic stone walls which reflect Lincoln’s valued agricultural heritage remain unprotected.
- ❖ Lincoln is building a new Archives vault at the Library to replace a smaller vault there, but the town still needs more efficient and usable means for handling its public records. While many municipal archival materials will be transferred to the Library vault, other records will remain at the Town Offices, where inadequate vault and storage facilities continue to exist.
- ❖ Many local cultural organizations cite needs for improved communication with each other, the town, and the public. Increased communication and involvement between these organizations would result in stronger partnerships and likely help to meet some of the challenges they currently face.

EXISTING CONDITIONS & TRENDS

Lincoln displays a remarkable breadth of historic resources and cultural and historical institutions that protect, oversee, and promote awareness of the significance of these resources. The town also has adopted many of the most effective programs and laws to preserve a community’s historic character. However, Lincoln’s historic and archaeological resources remain at risk due to intense market pressure, mainly for housing. Further, Lincoln’s cultural institutions are stewards of some of the town’s most visible historic properties, but this stewardship is not the same as having legal mechanisms in place to protect the properties in perpetuity. Sometimes overlooked, though, is the critical, integral role performed by Lincoln’s institutions in supporting and advancing the broader core mission of the town both in education and in preserving Lincoln’s rural, agricultural character, its small-town heritage, its open space, and its historical legacy.

Lincoln’s range of historic and archaeological resources documents the history of the community and the region. These resources include archaeological sites dating from the Middle Archaic Period (8,000-6,000 B.P.); buildings and landscapes associated with the battle on April 19, 1775, which started the American Revolution; historic landscape features that helped to inspire Henry David Thoreau and America’s conservation movement; and one of the most significant collections of mid-20th-century modern houses in the state, including the internationally famed Gropius House. Whether a farmhouse, tavern, or outbuilding that predates Lincoln’s establishment as a town in 1754, a former summer home or country estate that once stood on substantial acreage, or one of the modern houses built between the 1930s and the 1960s, Lincoln’s predominantly residential collection of

historic buildings represents every period in its historic and architectural development. Historic institutional buildings are present as well, including the buildings that have served as town halls, the public library, and a small number of church structures and school buildings. The community's range of historic structures and objects varies widely, including stone walls, horse troughs, bridges and sculptures. All of these resources help to define Lincoln.

A notable concentration of historic buildings and other resource types, including cemeteries, can be found in the town center. Although a meeting house was constructed in this area in the 1740s, the area did not become fully developed until after the American Revolution, when houses on smaller village lots began to appear. Here and throughout Lincoln, historic residential properties are well preserved, and many retain their original outbuildings, including barns, stables, carriage houses, and greenhouses. Throughout the town, the stone walls that line the adjacent roads or extend back within the lots are a reminder of Lincoln's agricultural heritage. Reflecting both its farming heritage and the town's earlier estates, Lincoln's iconic open, natural, and designed landscapes complement many of these properties. Documented archaeological sites, both ancient Native American and those associated with the town's later development – including visible remnants such as dam and mill sites or a canal (ca. 1827) on Hobbs Brook – are also numbered among Lincoln's historic resources, although they may not always be well-known or understood in a larger context.

Historic Preservation

TOWN BOARDS, COMMISSIONS, AND DEPARTMENTS

Several town boards, commissions, and departments hold responsibilities that affect Lincoln's historic resources. They include:

- ❖ The **Lincoln Historical Commission (LHC)** is responsible for local survey efforts, National Register nominations, and reviewing Neighborhood Conservation District (NHD) proposals. The LHC also administers the demolition delay bylaw, serves as the contact in state and federal historic preservation review processes, and holds preservation restrictions.
- ❖ The **Lincoln Historic District Commission (LHDC)** is responsible reviewing proposed alterations to buildings and structures located within the town's four local historic districts. It also studies proposed modifications of the historic district bylaw.
- ❖ The **Planning Board** is responsible for administering Lincoln's Scenic Roads Bylaw. Other boards and commissions have an opportunity to comment on proposals affecting scenic roads and the LHC and LHDC can take related actions within local historic districts.
- ❖ The **Community Preservation Committee (CPC)** reviews and recommends requests for Community Preservation Act (CPA) funds related to open space protection, historic preservation, and affordable housing.
- ❖ The **Cemetery Commission** controls and maintains the historic physical appearance and dignified atmosphere of Lincoln's four cemeteries.
- ❖ The **Trustees of the Lincoln Public Library**, the **Town Clerk**, and the **Lincoln Archives Advisory Committee** each have a role in the preservation of the town's municipal archives materials as well as with other donated collections.

PRESERVATION BYLAWS AND PLANNING TOOLS

Lincoln has recognized and protected its historic properties through a variety of documentation and designation programs and by adopting preservation bylaws and education programs. A brief synopsis of the intent and function of each is presented below, arranged from the most protective to the least protective program.

Preservation Restrictions. The LHC, the Massachusetts Historical Commission (MHC), and Historic New England (HNE) individually or jointly hold preservation restrictions in perpetuity for five Lincoln properties. (See Table 4-1) Preservation restrictions, which run with the property, consist of a recorded legal agreement between the property owner and a qualified non-profit or governmental organization to maintain exterior features of a property, and it may include interior restrictions as well. The qualified organization is responsible for monitoring the property and approving any proposed changes to those portions of the building included in the restriction. Donating a preservation restriction to a qualified organization may allow the owner to take a federal charitable contribution deduction if the property is listed in the National Register of Historic Places. Many of Lincoln's significant cultural landscapes are also permanently protected as conservation land owned by either the town or the Lincoln Land Conservation Trust (LLCT). Both entities also hold conservation restrictions on properties that include restrictions on buildings. These properties include 155 Weston Road, 5 Sandy Pond Road, 145 Old Concord Road, and 8 Bedford Road.¹

Local Historic Districts. Today, Lincoln has four areas under the jurisdiction of its local Historic District Bylaw. Town Meeting adopted the historic district bylaw in 1981, creating a single district with three smaller historic districts: the Grange Complex/Codman Estate, Lincoln Center Historic District, and the Gropius/Wood's End Road Historic District. All three districts are also listed on the National Register of Historic Places. An addition to the boundaries of the Lincoln Center District was approved in 2001, and a fourth local district, the Cory-Brown-Hunt District, was approved in 2007. The bylaw provides the LHDC with authority to review and approve proposed alterations visible from a public way to buildings and structures located within these districts. Proposals for demolition and new construction are also subject to approval by the LHDC. The Commission reviews proposed alterations in a public hearing to determine if a certificate of appropriateness can be issued for the work.

- ❖ The **Grange Complex/Codman Estate** is a 34.5-acre complex that includes nine buildings and structures associated with the prominent Russell and Codman families. The complex features two houses, including an eighteenth-century mansion attributed in part to noted Boston architect Charles Bulfinch, several barns and other outbuildings, as well as an impressive designed landscape and fields. Much of the surrounding landscape is preserved as conservation land, contributing to an understanding of the properties within their historical context.
- ❖ The **Lincoln Center** district extends along portions of Bedford, Lincoln, Sandy Pond, Trapelo, and Weston Roads. The boundaries of the local district are slightly larger in size than its National Register counterpart. This local historic district contains seventy properties, including both institutional and residential buildings, although a majority of the buildings are residential. Containing houses dating from the eighteenth through the twentieth centuries, the district reflects the development of the central village over time, with representative styles from all periods, but some periods and styles are represented more than others. For example, this village includes a particularly strong representation of the town's Greek Revival-style buildings. A number of historic fields within and adjoining the district are protected as conservation land or through conservation restrictions, again contributing to an understanding of the properties within their historical context.

¹ Angela Seaborg, Conservation Planner, to Community Opportunities Group, Inc, 11 March 2009.

Table 4-1
Properties Listed in the State Register of Historic Places

Name	Address	National Register of Historic Places	Local Historic District	Preservation Restriction	National Historic Landmark
Black Rabbit Archaeological Site	Restricted			X	
Brooks, Daniel House	19 Brooks Rd.	X (I)			
Cory-Brown-Hunt Historic District	Conant Rd.		X		
Flint Homestead (house and barn)	28 Lexington Rd.	X (I)		X	
Grange Complex-Codman Estate	Codman Rd.	X (I)	X		
Gropius House	68 Baker Bridge Rd.	X (D)	X	X	X
Higginson, Henry House	44 Baker Farm Rd.	X (I)			
Hoar Tavern	268 Concord Turnpike	X (I)			
Henry B. Hoover House	154 Trapelo Road			X	
Lincoln Center Historic District	Boundaries of NR and LHD differ	X (D)	X		
McCune Site	Restricted	X			
Minute Man National Historical Park	Rt. 2/2A, North Lincoln	X (D)			X
Walden Pond	Rt. 126, Walden Street & Concord Rd.	X (I)			X
Wheeler House and Outbuilding	61 Bedford Rd.			X	
Woods End Road Historic District	Baker Bridge and Woods End Rds.	X (D)	X		

Note: the Cory-Brown-Hunt District is not included in the State Register, which appears to be an error. I=Individual listing; D= district.

- ❖ The **Wood's End** district at the intersection of Baker Bridge and Wood's End roads contains five houses, all single-family residences built in 1938 and 1939, including the modernist houses designed by architects Walter Gropius, Marcel Breuer, and Walter Bogner for their personal residences. Established as a local historic district in 1981 when all of the contributing buildings were less than fifty years old, the presence of the Wood's End district represents Lincoln's foresight in recognizing the significance of the Modern movement and its contributions to the community.
- ❖ The **Cory-Brown-Hunt** district is located on Conant Road. It includes a Colonial house erected prior to 1739, an associated 1838 barn, and a 1919 gardener's cottage that was originally an accessory building on the same farmstead.²

Neighborhood Conservation Districts. Lincoln adopted a Neighborhood Conservation District (NCD) Bylaw in 2005. The bylaw establishes the designation criteria, study and review procedures, and commission composition required for a NCD. Once Town Meeting establishes a district, a Neighborhood Conservation District Commission (NCDC) will be appointed to review alterations proposed within the district's boundaries. To date, no areas in Lincoln have been NCD-designated.³

² Information compiled from the Lincoln *Open Space and Recreation Plan* (2008), Lincoln Historic Properties and Study Areas database file, and the Preliminary Study Report, Cory-Brown-Hunt Historic District on file at the MHC.

³ See Chapter 5, Built Environment, for additional discussion of Neighborhood Conservation Districts.

Demolition Delay. Lincoln originally approved a six-month demolition delay bylaw in 2000 and extended the length of the demolition period to twelve months in 2007. Every building or structure proposed for demolition (defined as more than twenty-five percent of the volume of a building or structure or twenty-five percent of its roof area) is subject to review by the LHC. If the LHC determines that a building or structure is architecturally or historically significant and “preferably preserved,” a twelve-month demolition delay period ensues. While the delay is in effect, the LHC can work with the property owner to identify alternatives to demolition or appropriate mitigation. However, the property owner can demolish the building after the delay period expires.

Scenic Roads Bylaw. Lincoln has accepted the provisions of M.G.L. c. 40, s. 15C, the Scenic Roads Act, and adopted a Scenic Road Bylaw that applies to twenty-one local roads designated by Town Meeting. The Planning Board has authority over the removal of trees or stone walls during repair, maintenance, reconstruction, or paving within the right-of-way of a designated scenic road. By state law, state-numbered routes and state highways cannot be designated as scenic roads.⁴

National Historic Landmarks.

Lincoln has three National Historic Landmarks (NHL): the 1938 Gropius House, Walden Pond, and Minute Man National Historical Park. The NHL program is administered by the National Park Service under the Secretary of the Interior. NHLs are nationally significant historic places that “possess exceptional value or quality in illustrating or interpreting the heritage of the United States.” Fewer than 2,500 historic places in the United States have been honored with this distinction. NHL properties are afforded a limited level of protection from projects with federal involvement, requiring mitigation for any proposal that may have an adverse effect on a designated property. The National Park Service monitors NHLs annually for threats to their condition or appearance.



National Register of Historic Places. The National Register is the official federal list of districts, sites, buildings, structures, and objects deemed significant in American history, architecture, archaeology, engineering, and culture. Any development or construction project seeking federal funding, licenses, or permits must be reviewed by MHC in compliance with Section 106 of the National Historic Preservation Act of 1966. Mitigation is required for any proposal that may have an adverse effect on a National Register property.

State Register of Historic Places. The State Register is the compendium of all Massachusetts properties within local or National Register historic districts, individually listed in the National Register or as a National Historic Landmark, protected by preservation restrictions under M.G.L. c. 184, ss. 31-32, or formally determined eligible for National Register designation by the National Park Service. Any project seeking funding, licenses,

⁴ See Chapter 5, Built Environment, for additional information about Lincoln’s scenic roads.

or permits from a state agency must be reviewed by MHC in compliance with M.G.L. c. 9, ss. 26-27C (also known as Chapter 254). This law requires state agencies to consider alternatives for projects that may have an adverse effect on properties listed in the State Register.

INVENTORY OF HISTORIC AND ARCHAEOLOGICAL ASSETS OF THE COMMONWEALTH

Identifying and documenting a community's historic resources through a cultural resource inventory provides the basis of preservation planning at the local level. Lincoln has submitted over 300 inventory forms to MHC since the 1970s. Inventory forms include information on a property's appearance, history, and significance, and generally include photographs and a locus map. Once accepted by MHC, properties documented on inventory forms are added to the Inventory of Historic and Archaeological Assets of the Commonwealth.

Historic Assets. The Lincoln Historical Society initiated the first inventory of historic buildings in the 1960s. After the LHC was established, the inventory was updated and expanded in the 1970s. This effort focused primarily on documenting residential buildings dating from the 1830s and earlier and buildings located within the town center and Wood's End Road areas. These older forms contain only minimal information about each resource's historical, architectural, and contextual significance, and they generally do not include information on secondary features such as outbuildings, stone walls, and landscape elements – information not required on forms completed thirty years ago. The National Park Service began a limited inventory of buildings in the Minute Man National Historical Park in the 1960s, and it has since prepared a number of studies, plans, and inventories for the Park.

In 1980, the Massachusetts Historical Commission completed a *Reconnaissance Survey Report* for Lincoln as part of a statewide effort to address documentation of the Commonwealth's historic built environment, and to standardize information about the development of its towns and cities.⁵ The report for Lincoln, outlined by chronological periods, ends at 1940, conspicuously omitting any mention of Lincoln's significant mid-twentieth century residences and neighborhoods.

Today, many of Lincoln's inventoried properties are part of a local or National Register historic district, or both, with the more recent inventories covering later periods and architectural styles. Map 4.1 shows the locations of properties in Lincoln's inventory. Copies of the inventory forms are kept at the Lincoln Public Library and MHC. A listing of Lincoln's historic resource inventory is also available from the Massachusetts Cultural Resource Information System (MACRIS), which is regularly updated and maintained on MHC's website. However, it is important to note that while Lincoln has documented over 300 historic resources, it has not completed a town-wide comprehensive historic resource survey, which would identify all types of historic resources located throughout the community.

Archaeological Assets. Lincoln's documented archaeological resources include close to forty properties, with two archaeological sites listed in the State Register of Historic Places: Black Rabbit Archaeological Site, protected by a preservation restriction in perpetuity with the MHC, and the McCune Site, individually listed in the National Register of Historic Places. Archaeological resources include both Ancient Native American sites and historic sites, with most of the recorded archaeological sites concentrated in two areas: the northern part of Lincoln and near the Sudbury River/Fairhaven Bay. They are associated with earlier amateur finds, development

⁵ Massachusetts Historical Commission, *Reconnaissance Report: Town of Lincoln, Massachusetts* (1980).

projects that required archaeological investigations, or sites within Minute Man National Historical Park. It is likely that some of these sites, especially those recorded earlier, may no longer be extant.

The potential for additional ancient and historic archaeological sites is fully recognized due to the presence of riverways, ponds, and well-drained settlement areas, and to the limited development and gentle use of the land over time. The town has not conducted a town-wide archaeological reconnaissance survey, which would map existing and predicted archaeological sites and provide a narrative report with descriptions of sites, their relation to historic patterns of land use, economic development, social and demographic history, and events that had an impact on the community. This type of survey would include recommended bylaws and other preservation tools to protect archaeological resources. In addition, a reconnaissance survey typically includes educational and informative presentations to the community to educate residents and encourage appreciation and protection of the town's archaeologically sensitive areas.

Community Preservation Act. Lincoln has used CPA funds for several historic preservation projects, such as repairs to the Pierce House, the Lincoln Public Library, and cemetery monuments. CPA funds have also been allocated to preservation planning activities, including a preservation restriction easement, historic resource inventory work, and an assessment of the town's historic buildings.⁶

Ownership of Lincoln's Historic Resources

Lincoln is fortunate that many of its most significant historic properties are open to the public for visitation. These historic properties are owned and used by a variety of governmental and non-profit organizations.

TOWN-OWNED HISTORIC PROPERTIES

The town owns several historic properties, some of which are used for municipal purposes while others are leased to non-profit organizations. Each of the historic buildings described below is located within local or National Register districts, although they are not protected by preservation restrictions. They include:

- ❖ **Lincoln Public Library** (1883-84), 3 Bedford Road. This prominent red brick Richardsonian Romanesque/Queen Anne building with its distinctive slate roof, turrets, and arched openings was donated to the town by Lincoln native George Grosvenor Tarbell and designed by architect William G. Preston. A 1958 addition designed by Lincoln's Henry B. Hoover was removed during renovations in the late 1980s when the town added a larger addition, designed by Graham Gund. The Library has prepared a facilities survey of required maintenance issues and is steadily working through these, often with the help of CPA funding.



⁶ Town of Lincoln, *Annual Town Report* (2007), 83. Additional information about Lincoln's use of CPA funds may be found in Chapter 6, Open Space, and Chapter 7, Housing.

- ❖ **Bemis Hall** (1892-93), 15 Bedford Road. This Georgian Revival-style building was constructed with a bequest from George F. Bemis, who also established the town's Bemis Lecture Series. The building served as Lincoln's Town Hall until the 1980s. Designed by architect H. Langdon Warren, it is now occupied by the Council on Aging and is used for various community meetings, lectures, and events. Recent work on the building focused on adding an elevator to provide handicap accessibility to the upper hall as well as an emergency staircase to meet code requirements.



- ❖ **Lincoln Town Office Building** (1908), 16 Lincoln Road. Originally constructed as the Center School, this brick Colonial Revival-style building designed by J. Harleston Parker was renovated to serve as Lincoln's Town Office Building in the late 1980s, when town offices relocated from Bemis Hall.
- ❖ **John H. Pierce House** (1900), 17 Weston Road. Built for Lincoln-native John H. Pierce, the design of this grand wood-framed Georgian Revival residence was based on the façade of the Vasell-Craigie-Longfellow House in Cambridge. The Pierce family donated the house and its extensive 30-acre grounds to the town in 1930, although a family member continued to live in the house until 1964. Today, the facility is leased for private and community events, but usage has declined in recent years, and a committee is examining ways to improve its financial stability and to increase the utilization of this historic property.
- ❖ The **Codman Farm** property, 58 Codman Road, is a 19-acre parcel that includes two connected barns (dating from 1820 and 1863), an eighteenth-century barn, and an 1867 farmhouse originally designed by architect John Hubbard Sturgis. While owned by the town, the farm is operated by the non-profit Codman Community Farms.

Other historic town-owned properties include two late-nineteenth-century horse troughs, one at Five Corners and the other at the intersection of Lincoln and Codman Roads (both now converted to flower pots); the 1929 War Memorial eagle on the grounds of the Lincoln Public Library; the 1900 Lincoln Pumping Station designed by Lincoln architect George F. Newton; the nineteenth-century Kelley-Lunt House on Tower Road, now used for affordable housing; and the town's four cemeteries. The cemeteries consist of the Precinct Burial Ground or Cemetery; the Meeting House Burial Ground or Cemetery by Bemis Hall; Arbor Vitae Cemetery; and Lincoln Cemetery (also known as the Lexington Road Cemetery). The original Smith, Brooks, and Hartwell buildings of Lincoln's K-8 school complex were designed by Lincoln modernist architects, and they are documented in the town's historic resources inventory. Significant additions and alterations were made to the school buildings in the mid 1990s, including joining together the Smith and Brooks schools. In addition, the DeCordova Museum and Sculpture Park property is legally owned by the town but operated by a separate non-profit organization.

Lincoln's municipal properties are well-preserved and actively used by residents and visitors. The Town Offices, Bemis Hall, Pierce House, Codman Farm, the two horse troughs, and the War Memorial and Dallin statues have been the subjects of recent studies. The *Town of Lincoln Building Needs Assessment* (2006) reviewed the condition of each of these buildings and included repair recommendations and cost estimates. Also in 2006, the

Lincoln Reconnaissance Report by the Massachusetts Heritage Landscape Inventory Program reviewed Lincoln's two horse troughs and two statues, and recommended strategies for their preservation and documentation.

NON-PROFIT AND GOVERNMENT-OWNED PROPERTIES

Many of Lincoln's most significant historic properties are owned by non-profit groups and by the state or federal governments.

- ❖ **Historic New England (HNE)**, a regional non-profit organization established in 1910, owns the 16-acre Codman Estate at 34 Codman Road and the 1938 Gropius House at 68 Baker Bridge Road. Both properties are located within local and National Register historic districts, and the latter is also protected by a preservation restriction held by MHC. Formerly known as the Society for the Preservation of New England Antiquities, HNE owns 34 other properties in New England.
 - ◆ The **Codman Estate** is composed of five buildings, including a three-story Federal-style mansion originally constructed in 1735-1741 as a two-story Georgian house. The building was enlarged in the Federal style in 1797-99, with the design attributed to Boston architect Charles Bulfinch. The Estate also includes a greenhouse and a smaller house, stable, and barn. The landscape features of the Codman Estate include a formal Italian garden, gravel walks, and tree-lined avenues. (The adjoining town-owned Codman Farm buildings were a former part of this estate, as were nearby fields and woods held by the town as conservation land.)
 - ◆ The 1938 **Gropius House**, a Bauhaus-inspired house designed by Walter Gropius and Marcel Breuer for the Gropius family home, is one of New England's earliest modern houses, and it is one of the most intensely visited properties of the organization's holdings. The National Park Service and the National Trust for Historic Preservation recently awarded HNE with a Save America's Treasures grant for repairs to the south and west elevations of the building and restoration of the orchard and meadow to its 1950s appearance. The property received National Historic Landmark status in 2000.
- ❖ **Walden Pond and Walden Woods.** Walden Pond sits at the heart of the 2,680-acre area known as Walden Woods, located in Lincoln and Concord. About seventy-seven percent of the land is permanently protected by various entities, including the towns of Lincoln and Concord, land trusts in Lincoln and Concord, state ownership, and the Walden Woods Project. Walden Pond State Reservation is a 462-acre state park surrounding Walden Pond, listed on the National Register of Historic Places and designated as a National Historic Landmark.⁷ While the pond lies primarily in Concord, approximately ninety-five acres of the reservation are located in Lincoln. The Massachusetts Department of Conservation and Recreation (DCR) manages the property, dedicated to the preservation of the landscape and the literary heritage of Henry David Thoreau.
- ❖ **Walden Woods Project/Thoreau Institute,** Baker Farm Road. The Walden Woods Project is a non-profit organization based in Lincoln at the historic Henry Higginson House (1905-06), a Tudor Revival mansion. The Thoreau Institute's library and research collections are located in an adjoining 1998 research center. The Henry Higginson House, which is listed on the National Register, and the 1914 Higginson Stable were designed by Lincoln architect Julian Ingersoll Chamberlain.
- ❖ **DeCordova Sculpture Park and Museum.** The DeCordova Sculpture Park and Museum (historically known as the DeCordova and Dana Museum and Park) at 51 Sandy Pond Road is the former estate of the Dana

⁷ Massachusetts Department of Conservation and Recreation, "Walden Pond State Reservation," www.mass.gov/dcr/parks/walden

and de Cordova families. Julian de Cordova donated the thirty-five acre property to the town in 1930 but retained use of it during his lifetime. In 1950, Lincoln established a charitable organization to open the property as a public park and museum of art. Today, installations at the museum include art galleries in the main building and an outdoor sculpture park featuring over eighty sculptures. The museum also operates a very active educational program.



The 1882 Shingle Style house on the estate was remodeled in 1910 by de Cordova as a brick castle

with Romanesque features, and remodeled again in 1949-50 by the Lincoln architect John Quincy Adams when it became a museum. The Boston architectural firm of Kallman McKinnell & Wood, which won the design competition for Boston City Hall, designed the museum's 1998 addition. Other buildings on the property include the original caretaker's house as well as a series of studio buildings and a museum store added during the past thirty years. While the property is documented on a historic resource inventory form, it is not listed on the National Register or included within a local historic district.

- ❖ **Drumlin Farm.** Owned by the Massachusetts Audubon Society (MAS), the Drumlin Farm Wildlife Sanctuary includes a nature center and a working educational farm. Entered from South Great Road (Route 117), the property is composed of parcels owned by MAS on both the north and south sides of Route 117 near the intersection with Lincoln Road. It includes the Society's headquarters in the 1913-14 Gordon Hall, designed by Frank Chouteau Brown for Louise (Ayer) Gordon Hatheway, who donated the property to MAS. Drumlin Farm also includes four older houses that were part of the former Hatheway Estate, several barns, and the more recently built Nature Center. Portions of the land are under permanent conservation restrictions, but sections along Lincoln Road are not protected. Only two pre-1830 buildings on the property have been documented on inventory forms.
- ❖ **Minute Man National Historical Park.** Some of Lincoln's most evocative historic landscapes, buildings, and structures are located within the Minute Man National Historical Park (MMNHP). The 971-acre Park, located in Lincoln, Concord, and Lexington, includes original unpaved sections of the Battle Road (former sections of Old Bedford, Virginia, and Nelson roads in Lincoln) and portions of North Great Road (Route 2A) in Lincoln. The Battle Road was designated a State Scenic Byway in 2007. The Minute Man Battle Road trail and other ancillary trails within the park provide an unparalleled way to experience the landscape that hosted the events of April 19, 1775. The park's historic buildings and structures include the Noah Brooks Tavern (1798), the Hartwell Tavern (1732-33), the Captain William Smith House (ca. 1693), period stone walls, and restored landscapes. A Visitor Center is located in Lexington near the Lincoln line. The entire park is a National Historic Landmark and listed in the National Register of Historic Places.
- ❖ **Old Town Hall Corporation.** The Old Town Hall Corporation was originally established in the 1960s by a group of Lincoln citizens to acquire and preserve Lincoln's original Greek Revival-style Town Hall (1848)

at 25 Lincoln Road. Used not only as a town hall but also as a high school and library, the building originally stood where Bemis Hall is today. Moved twice after it was sold to make room for Bemis Hall, the building was preserved through the efforts of members of the Ropes, Chapin, and Smith families. The building ultimately served as a store and post office before it was acquired by the Old Town Hall Corporation. A post office, exchange, and office space are now located in the building. Also on the grounds of the Old Town Hall Corporation's property is a third Lincoln horse trough, originally located at the intersections of Concord and South Great Roads. The Old Town Hall property is located in the Lincoln Center local and National Register historic districts.



- ❖ **Farrington Memorial Education Center.** The Farrington Memorial, located off the Cambridge Turnpike, provides rural learning and recreation opportunities for inner-city children. Established in 1911, the Center's main brick Georgian Revival building was built shortly thereafter by Lincoln contractor R. D. Donaldson. Before it became the Farrington Memorial, the 71.4-acre property had been an important part of Lincoln's agricultural history. It was farmed for over two centuries by many generations of the Stone family, one of the earliest families to settle in the area. The property still includes a large barn and one of the town's oldest Colonial houses. Only the house has been documented on an inventory form.

Archival Resources

Lincoln is rich in archival artifacts that document its past. These resources include holdings at the Town Office Building, the Lincoln Public Library, and the Thoreau Institute of the Walden Woods Project.

The **Archives and Special Collections** at the Lincoln Public Library serves as the primary repository for Lincoln's historical records. These include architectural and site plans, photographs, drawings, maps, personal records, and manuscripts. The library's website contains a listing of all of contents of the collection, which is invaluable for researchers and others interested in Lincoln's history. Lincoln's early municipal records, such as tax, voting, and financial records, are also archived at the library, as are the records, inventory forms, and National Register nominations that are the purview of the LHC. The facility serves as a repository for some Lincoln organizations, including the Lincoln Historical Society, the First Parish Church, and the Lincoln Garden Club. In 2008, Town Meeting voted to build a new, larger archive facility at the Library to comply with state standards for the storage of town records.

The **Lincoln Historical Society** offers a number of books on Lincoln's history and architecture for purchase, many of them written by Lincoln authors. As part of its mission of collecting items of local historical interest, the Historic Society has a limited number of artifacts at the Pierce House and its manuscripts are at the Library's Archives. In addition, the Thoreau Institute of the Walden Woods Project has one of the best secondary collections of documents and other archival materials related to Henry David Thoreau and his writings. The Institute is preparing a digital version of its archives, which could serve as a model for other Lincoln groups.

Cultural Resources

MUNICIPAL BOARDS AND NON-PROFIT ORGANIZATIONS

Lincoln has over seventy-five organizations that serve the social, spiritual, economic, recreational, and cultural interests of the community. By far the largest number of these organizations focus on Lincoln's youth and programs geared to children and families, followed by conservation and historic preservation organizations. The impressive number of organizations dedicated to preserving the town's historic built environment and heritage include local non-profit organizations such as the Lincoln Historical Society, Friends of Modern Architecture (FoMA/Lincoln), and the Lincoln Minute Men, as well as the regional non-profit organization, HNE. The National Park Service has a prominent presence in Lincoln as well as in the adjacent towns of Concord and Lexington. All of these institutions have an educational and advocacy emphasis, manifested in appearances before town boards and commissions, lectures, school classroom presentations and programs, partnerships with other local and regional cultural organizations, tours, and demonstrations.

Town Cultural Services. In addition to community organizations that provide cultural services to the town, Lincoln's schools and associated groups sponsor a range of activities for children. Lincoln Sudbury Regional High School and Minuteman Career & Technical High School also offer some adult education classes on a range of subjects. Other town committees and boards that provide cultural services include:

- ❖ The Bemis Free Lecture Series was established under an 1890 bequest from Lincoln-native George F. Bemis to provide an "annual course of public lectures" that would be "of an instructive and elevating character." That initial fund was later supplemented by a bequest from John Todd. Three appointed Trustees arrange for the annual programs, which have historically included lectures by such luminaries as Isaac Asimov, Lowell Thomas, David McCord, and Robert Frost, as well as many musical programs. In recent years, however, the Trustees have expressed a concern that their available funds are inadequate in the context of today's typical lecture-fee schedule. In a number of recent instances, the Trustees have been able to collaborate with other sponsoring groups.
- ❖ The Council on Aging (COA) offers trips, lectures, games, exercise, and other programs. In 2008 they initiated the successful Lincoln Academy program of talks by residents on their careers or experiences. A monthly newsletter sent to all Lincoln households includes not only the COA's programs, but also offerings by other groups.
- ❖ The Lincoln Cultural Council, which receives state Arts Council funding, annually provides grants to support cultural programs that benefit the community.
- ❖ The Lincoln Public Library maintains a regular series of programming for children, as well as lectures, a book group, jazz music group, and other cultural programming. Many of its events are supported through the Friends of the Lincoln Library.
- ❖ The Pierce House Committee sponsors a First Day Open House for the community each New Years Day at the John H. Pierce House. The house and park are also used for other community events.
- ❖ The Recreation Commission has taken over responsibilities formerly held by the Celebrations Committee in sponsoring the town's April 19th, Memorial Day and July 4th celebrations as well as an annual Summer Concert Series.

Survey of Organizations. The Comprehensive Long-Range Plan Committee's Cultural, Historic, and Governance subcommittee conducted a survey of twelve local organizations for this Comprehensive Plan. The survey

revealed that while some of these groups regularly collaborate with each other, additional opportunities could be explored. Some organizations lease town facilities or land, and several receive partial funding from the town. Many of the groups have paid staff assisted by dedicated volunteers, paid membership programs, and operating budgets that range from modest to impressive. Many own or lease older buildings, which are maintained to the extent allowed by their budgets. Highlights of the survey include:

- ❖ Many of the organizations want to continue to improve communication with the town.
- ❖ These organizations play an enormous, sometimes under-acknowledged, role in the life of the town.
- ❖ Increased cooperation and appreciation by town boards and commissions, residents, and others served by these organizations is desired. Examples of cooperation between these groups include:
 - ◆ CCF's release of a hayfield for use by the Food Project;
 - ◆ Jointly sponsored programs on modern architecture between FoMA/Lincoln and HNE;
 - ◆ Walden Woods Project's interactions with LLCT, the LHS, Friends of the Lincoln Library, and other groups;
 - ◆ Lincoln Garden Club's assistance with the gardens/flower arrangements at the town-owned Pierce House and plantings in the horse trough-cum-flower pot at Five Corners;
 - ◆ Use of each other's buildings and equipment for special events, and participation in these events.
- ❖ Several organizations have identified and prioritized necessary repairs and improvements to their historic properties:
 - ◆ CCF identified needed repairs to three of its barns, including the 1794 Barn A, the early-nineteenth-century Barn B, and the 1876 Barn C. In 2008, the Town and CCF jointly submitted an application to the CPC and received CPA funds for the repair work;
 - ◆ HNE is currently restoring the south and west elevations of the Gropius House and restoring the adjacent meadow and orchard with a Save America's Treasures grant;
 - ◆ The National Park Service continues to maintain its collection of historic buildings, some of which may be open in the future for interpretive or commercial use, and it is planning to restore landscapes in certain areas to their 1775 appearance by removing trees;
 - ◆ First Parish Church is planning repairs and alterations to its buildings.
- ❖ Lincoln's cultural organizations provide invaluable education and advocacy programs related to the community's historic and cultural resources. Their efforts include:
 - ◆ FoMA/Lincoln's presentations before Town boards and commissions on the fate of several modern buildings, and their organization of very popular modern house tours;
 - ◆ DeCordova Museum's outreach to MetroWest schools;

- ◆ The Council on Aging's services to both seniors and all Lincoln residents who may need assistance with elderly parents and relatives.
- ❖ Parking and accessibility are issues at First Parish, St. Anne's Episcopal Church, the Lincoln Public Library, Town Offices and Bemis Hall, although the churches' parking concerns are only on Sundays and at certain events.
- ❖ Several Lincoln-based organizations – CCF, The Food Project, and Drumlin Farm – support farming activities as an essential way of maintaining Lincoln's rural character and promoting local food production. These activities include community garden plots, land leases to farmers, educational programs, and farming activities which produce income for the organization.
- ❖ The future plans of many of these organizations will substantially benefit the entire Lincoln community:
 - ◆ The Lincoln Garden Club expects to publish roadside maintenance guidelines in October 2009, for use by both private owners and the town;
 - ◆ The NPS plans to add and improve trail systems within the Minute Man National Historical Park.

NEEDS, ISSUES & CHALLENGES

Lincoln is contending with several issues that directly affect its historic and cultural resources. The most prominent threat to historic resources is the loss of buildings and their associated settings due to development pressure, and in Lincoln's case, redevelopment pressure.

Obstacles to Historic Preservation

While significant areas in Lincoln are protected by the local historic district bylaw, areas that lie outside of the historic districts remain subject to alterations that are not reviewed and may adversely affect the historic character of the buildings and their surroundings. The LHC/LHDC and individual residents have sought to create more local historic districts and establish Neighborhood Conservation Districts, but resistance from property owners and a gap in understanding the benefits of these designations remains an impediment. Development adversely affects archaeological sites, too. They remain largely unidentified and unprotected in Lincoln, and they may be lost without much awareness that they ever existed.

Lincoln's desirability as a place to live has contributed to the rise in demolitions of moderately-sized houses and their replacement with significantly larger ones. This trend not only removes historic properties, but it also affects the larger historical landscape of which Lincoln is justly proud and has worked diligently to protect. Despite demolition delay, buildings are being demolished in Lincoln. Demolition of historic buildings and structures results in a change to the surrounding cultural landscape and viewsheds, either due to the presence of a new building or the gap caused by the removal of a building from its historic setting. Like Lincoln, a growing number of communities just outside of Boston, including Cambridge, Newton, Wellesley, Concord, North Andover, and Salem, have explored and, in some cases, passed NCD bylaws and ordinances. Wellesley designated its first district in 2008.

As noted in the *Lincoln Reconnaissance Report* (2006) and MHC's *Massachusetts Preservation Plan 2006-2018*, additional identification and designation efforts are crucial steps in protecting historic properties. Communi-

ties have lost historic resources because the public was unaware of a property's significance. Recent and ongoing surveys include work by the LHC to record new properties and augment old forms, and by the Friends of Modern Architecture (FoMA/Lincoln), which has documented over sixty-six mid-twentieth century buildings. The LHC has made completing the inventory of historic buildings a high priority. In addition, the LHC and LHDC are currently working with the Town Assessors and Conservation Commission to incorporate the location and other data for all inventoried and National Register listed historic properties into the town's Geographic Information System (GIS). Lincoln currently maintains a record of its local historic districts within the GIS database and makes the information available on the town's website. Keeping the information current will be an ongoing need.

Finally, Lincoln is a good steward of its own historic properties, but the town faces expensive repairs to maintain public buildings and provide capital improvements to retain their functionality. The LHC and LHDC may need to provide assistance on fundraising and sympathetic ways to preserve the historic physical character of town-owned properties as required improvements are proposed.

Scenic Roads and Stone Walls

Traffic volume and congestion on Lincoln's narrow, winding roads and measures to address traffic concerns and roadway conditions are a significant issue for Lincoln. Communities throughout the Boston area have experienced similar growth in vehicular traffic and they are trying to address traffic issues while preserving the rural nature of their roads. Lincoln's Scenic Roads Bylaw attempts to retain stone walls and mature trees, but it is only invoked with road-related work and it applies only to areas within the public right-of-way. Stone walls, trees, and other elements that contribute to the scenic character of the roads and town are vulnerable to removal or alteration if outside of this limited boundary. A regional focus is needed to address concerns related to traffic, historic landscapes and open space preservation, and other issues that transcend town borders.

Archives

Safe storage and efficient retrieval of records, especially town records, is an issue for many communities throughout the state. In 2007, Town Meeting approved the use of CPA funds to catalogue and preserve historical public records at the Town Offices. While many of Lincoln's archival materials will be transferred to the new Library vault, which will meet current state standards for town records archives, other records will remain at the Town Offices, where inadequate vault and storage facilities continue to exist. These include records in daily use and other records legally required to remain there. Needs remain for a more efficient and usable means of storing, cataloging, accessing, and exchanging these troves of information. Identifying and implementing a cost-effective and manageable database that can be accessed on the internet is a desired means for improving retrieval capabilities. Planning for public facility improvements will need to consider both the general and archival storage of materials at the Town Offices and the steps that should be taken to ensure the preservation of these materials.

Communication and Public Education

Lincoln's historic and cultural organizations cite needs for better communication with each other, the town, and the general public. Increased communication and involvement between these organizations would result in stronger partnerships and likely help to meet some of the challenges they currently face. More formal channels of communication with town government are also needed. The survey of cultural organizations notes a desire for more integration with the public schools. One of the public meetings for this Comprehensive Plan revealed that residents would like more introductory programs on historic and cultural assets.

GOALS & RECOMMENDATIONS

Goal CH-1. Strengthen collaboration with Lincoln's cultural and historic organizations.

- CH-1.1. Establish a Council for Cultural and Historic Organizations that would be the forum for exploring mutual opportunities for town government and cultural, historical, educational, and other non-profit organizations to share resources and expertise.
- CH-1.2. Provide information about activities sponsored by cultural and historic organizations on the town's website.
- CH-1.3. Encourage partnerships between the town's cultural institutions and the Lincoln Public Schools to identify opportunities for integrating cultural programs into the existing curriculum.

DISCUSSION

A Council for Cultural and Historic Organizations, with representatives from local institutions and town boards and committees, could help to address the cooperation and communication needs identified in the survey of cultural organizations. It would provide predictable opportunities for sharing ideas, resources, and expertise among all of the participants involved in protecting and promoting Lincoln's cultural resources. Further, the proposed Council could serve as a pathway for expanding coordination beyond the town's borders and into adjoining communities.

The survey of cultural institutions highlighted several areas that would benefit from improved cooperation, including:

- ❖ Identifying opportunities for regular annual or biannual meetings with specific organizations, beginning with institutionalizing Town-Park meetings with MMNHP to develop joint management plans and to deal with shared issues and external challenges.
- ❖ Identifying and helping to implement neighborhood meetings with institutions.
- ❖ Working with the DeCordova Museum and Sculpture Park to reestablish public understanding of the unique relationship between the museum and the town and strengthen a sense of ownership and stewardship within the community. Toward these ends, the town could begin by reestablishing a report from DeCordova in the Annual Town Report.
- ❖ Developing further mechanisms for protecting the vital viewshed surrounding MMNHP, and working to abate the impact of traffic and noise on the Park experience.
- ❖ Identifying Walden Woods as a priority for documenting and preserving Lincoln's natural resources and historic assets, including working with Concord and the Thoreau Institute toward enlarging the Walden Pond National Historic Landmark designation to include surrounding areas of Walden Woods, an objective Concord has also embraced in its Long-Range Plan.

Once a Council for Cultural and Historic Organizations is established, it will be easier to develop and maintain a cultural calendar on the town's website. However, there should be a point of contact at the Town Offices with responsibility for maintaining this resource. The town's website already provides links to these organizations. Reviewing the websites of these organizations to determine whether cross-links are provided between the groups is a task that should be assigned to a collaborative group, while space could be made available through the town's

website for institutions that do not have their own websites or for organizations to post Lincoln-specific materials and information.

Federal and state mandates make it difficult for school districts to stray beyond the established curricula and fit creative, local learning options within the regular school day. Working with parent-teacher groups, encouraging use of Lincoln School Foundation and Cultural Council grants for teachers to coordinate with local organizations, and creating after-school enrichment programs are potential ways to integrate local cultural opportunities into the schools. Many cultural organizations have existing educational programs for children. For example, DeCordova works with school systems throughout the region, and Historic New England has a children’s page in its newsletter and offers children’s activities at many of its historic properties. Some organizations in Lincoln, including the Lincoln Minute Men, already participate in local school programs, although this type of partnership could be expanded. Establishing a coalition with representatives from the Lincoln School Committee and PTA, principals and teachers, and representatives from Lincoln’s cultural institutions and town boards such as the Library Trustees under the aegis of a new Council for Cultural & Historic Organization, will be essential for effective collaboration. Further, meeting with school officials to understand the existing curriculum on local history and culture would be an important first step in identifying future opportunities.

Goal CH-2. Identify, evaluate, and protect Lincoln’s cultural and historic assets.

- CH-2.1. Building on the Lincoln Historical Commission’s previous efforts, prepare a comprehensive inventory of Lincoln’s cultural and historic resources, including areas, structures, buildings, objects, and historic landscapes.
- CH-2.2. Upon completion of the comprehensive inventory, identify eligible buildings and districts for listing on the National Register of Historic Places.
- CH-2.3. Work with residents to create additional local historic districts where appropriate.
- CH-2.4. Promote the use of preservation restrictions to protect public and privately owned buildings and structures.
- CH-2.5. Explore opportunities for preserving archaeological sites.
- CH-2.6. Re-establish funding for consultant and administrative expenses in the town’s annual operating budget, as appropriate, to support historic preservation.

DISCUSSION

Lincoln has a significant number of undocumented historic resources. The town cannot plan adequately to protect them without a comprehensive town-wide historic resource inventory. For example, limited or incomplete documentation can hinder effective use of a demolition delay bylaw. Updating and completing a comprehensive town-wide inventory should be the first step in protecting Lincoln’s historic assets. Thereafter, the town should institutionalize a process for routine updates. Completing the inventory and incorporating it into the town’s GIS mapping system would help the LHC and LHDC in future local historic district and NCD designations, and also help other town boards with a role in historic preservation.

Once this inventory is complete, Lincoln will have a better understanding of its historic resources and can plan for their protection. A comprehensive historic resources inventory will provide Lincoln with the framework to identify its historic buildings and determine those worthy of designation, either through the National Register of Historic Places or through local historic districts. The inventory can also serve as a vital tool for a public

awareness campaign to encourage residents to consider historic designations. This is particularly important in Lincoln if the town continues its current policy of designating properties only with owner consent. While National Register listings are important for fostering public awareness and appreciation of a town's historic resources, designation within a local historic district provides legal authority to protect a building from inappropriate alterations or demolition. A concerted effort by the LHC, with assistance from the Lincoln Historical Society, the LHDC, and MHC, will be critical for garnering support for new historic districts. Lincoln also lacks a comprehensive archaeological inventory and has only limited knowledge of its archaeological resources. Undertaking an archaeological reconnaissance survey should be another preservation priority for the town.

Lincoln has already contributed CPA funds to draft a preservation restriction and the town holds preservation restrictions on two properties. However, a mechanism for funding the maintenance and enforcement of these restrictions and for future preservation restrictions should be sought. In addition, Lincoln should place preservation easements on its own historically significant buildings. By displaying a commitment to preserving its own historic assets, the town could serve as a model for other institutions to protect their historic buildings, too. Engaging in community outreach activities such as lectures, articles in the local newspaper, and distribution of literature on the financial and social benefits of preservation restrictions would also encourage homeowners to consider protecting their historic residences. The LHC should continue to identify some of the town's most significant buildings and meet personally with the owners to discuss preservation options.

In the past, Lincoln's annual operating budget included a small line item for the LHC's administrative and other costs. While the LHC and LHDC receive some administrative support from staff at the Town Offices, they operate without a dependable source of funds. This diminishes their ability to undertake and oversee preservation planning projects. Using CPA funds is an option, but there are competing interests for CPA revenue. There is no guarantee that any particular CPA requests will be approved from year to year. Through the Survey and Planning Grants Program, MHC provides resources for communities to undertake planning studies. These grants have funded historic resource inventories throughout the Commonwealth. Since the Survey and Planning Grants Program requires a local match, however, Lincoln would still need to invest local resources in preservation planning.

Goal CH-3. Promote stewardship of Lincoln's cultural and historic resources.

- CH-3.1. Make information on Lincoln's cultural and historic character, buildings, districts, cemeteries, and other heritage treasures widely available to residents and visitors in formats that are attractive, accurate, and easily understood.
- CH-3.2. Expand the collections and finding aids for the newly integrated archives and records management initiative spearheaded by the Lincoln Public Library and the Town Clerk's Office.
- CH-3.3. Support stewardship by collaborating with existing local organizations and providing funding from local and non-local sources.

DISCUSSION

A comprehensive cultural resources inventory could be an excellent source for public education programs. The LHC is already planning to place its existing historic resource inventory on the town's website. Once a comprehensive inventory is completed, the website will be even more informative. Many communities have developed interactive websites for the public to learn more about local history and resources. For example, the Marlborough Historical Society recently instituted an excellent interactive website, www.historicmarlborough.org. Scanning and photographing documents and fragile or valuable artifacts for online exhibits is another way

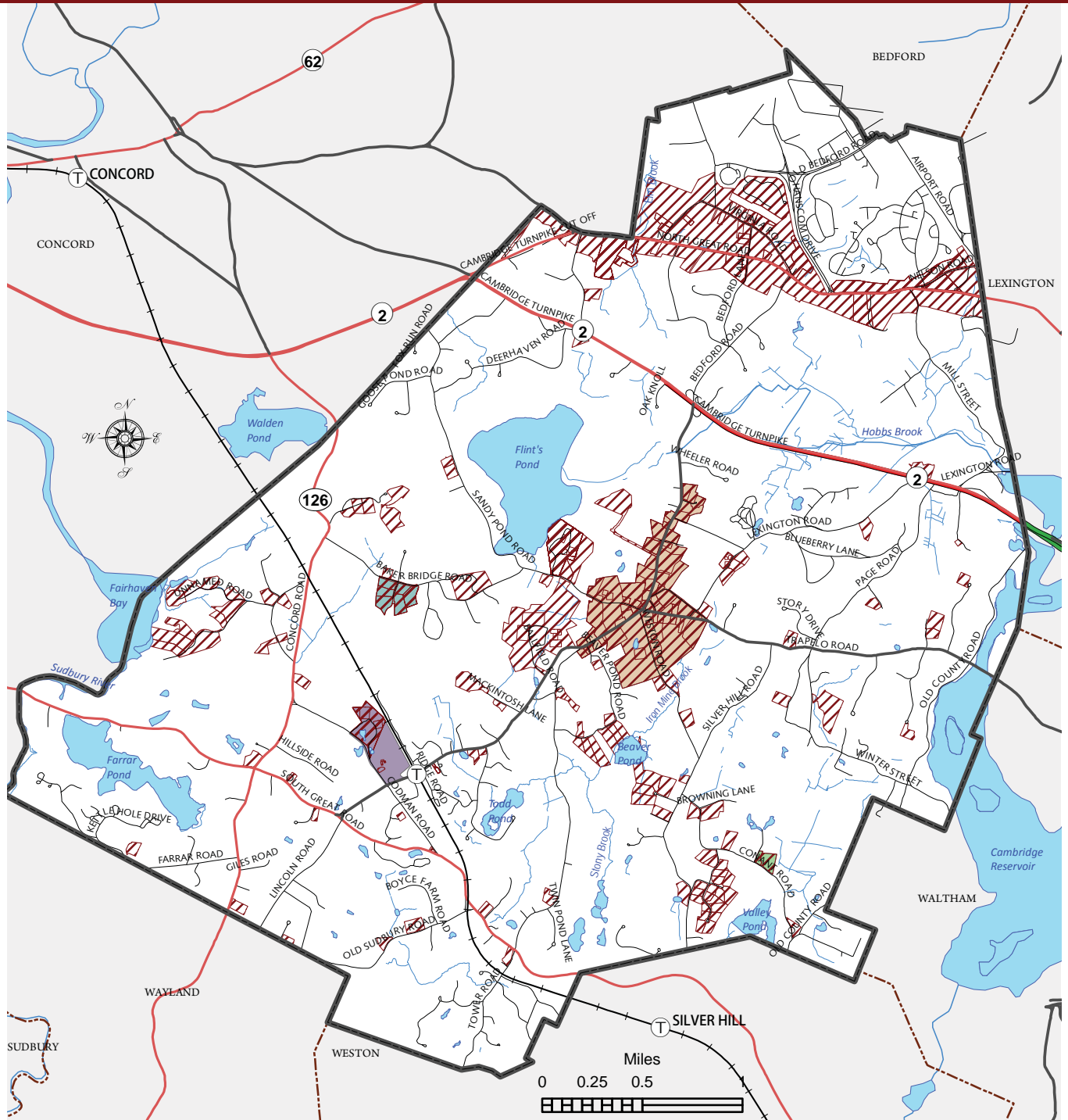
that communities provide outreach. Other forms of literature, such as walking tour brochures and neighborhood guides, interpretive displays at historic sites, historic plaque programs, and historic district signage are all means to inform the public about Lincoln’s rich heritage.

Lincoln recognizes how important it is to improve its archival storage capacity. The town is building a new archives vault at the Library to replace a smaller vault, but the town still needs to implement a more efficient and usable means of storing, cataloging, accessing, and exchanging archival information. Developing and implementing a cost-effective and manageable database that can be accessed on the internet would be an important means for improving retrieval capabilities.

Minute Man National Historical Park, Walden Woods, the Gropius House, the Codman Estate, Drumlin Farm, the DeCordova Museum and Sculpture Park, the Flint Homestead and farm, and the extraordinary legacy of conservation land demonstrate that Lincoln is a historic community situated within a most historic region of America. With this comes responsibilities, but while Lincoln appreciates historic preservation, its preservation efforts have not matched its conservation land efforts. These should be seen as complementary objectives. Approaches for educating the public and promoting stewardship should include:

- ❖ Using the town’s website to provide inventories, National Register documents, and information about the town’s buildings and their interrelationships to each other and the land;
- ❖ Providing accessible, documented records of historic cemetery stones with inscriptions and photographs;
- ❖ Publishing studies that provide an understanding of land use and historically significant landscapes, including conservation lands, Walden Woods, and Minute Man National Historical Park;
- ❖ Adding studies such as the *Know Your Town* and historic *Coming Together* booklets to the town’s website;
- ❖ Providing handouts and other materials for current and new residents and visitors to inform them about the cultural and historic character, districts, and heritage treasures of Lincoln;
- ❖ Actively promoting preservation and educational opportunities for learning more about the town’s history and agricultural heritage through historic house and farming sites;
- ❖ Funding expansion of the collections and finding aids for the newly integrated Town/Library Archives initiative, and developing ways to highlight and make available those collections through the internet; and
- ❖ Securing funding to support an annual program on stewardship, potentially operated under the auspices of the existing Bemis Lecture Series.

LINCOLN COMPREHENSIVE PLAN



Community Opportunities Group, Inc.

MAP 4.1 HISTORIC RESOURCES

Sources: MassGIS, Lincoln Conservation Department, USGS, U.S. Bureau of the Census, Community Opportunities Group, Inc.

April 2009

Legend

ROADWAYS

- Limited Access Highway
- Multi-Lane (Not Limited Access)
- Other Numbered Highway
- Major Road, Collector

MBTA Stations

Railroad

Open Water

River or Stream

Listed in MACRIS

Historic Districts

- Codman Historic District
- Cory-Brown-Hunt Historic District
- Lincoln Center Historic District
- Woods End Historic District

LINCOLN PLANNING BOARD



The Built Environment

OVERVIEW

Lincoln's zoning policies and its successful efforts in land conservation and historic preservation over the last four decades have preserved its rural beauty and small town character and thus contributed to making it one of the more desirable western suburbs in which to live. As a result, Lincoln attracts an affluent population with the capacity to purchase, renovate, expand and sometimes demolish existing homes to create newer, larger homes to satisfy their needs. Over time, this trend toward building larger homes and the natural desire to do so near conservation lands could have the unintended consequences of adversely affecting the town's attractive preserved character. In addition, some current building and land management practices may adversely affect the natural settings that have distinguished Lincoln from average suburban development.



Key Findings

- ❖ Lincoln's built environment - its buildings, structures, objects, roads and fields - is inextricably linked with its open space and underlying natural environment.
- ❖ Unlike many "traditional" New England villages, Lincoln's visual character is defined more by the relationships of its buildings to the landscape than by any specific architectural style, building, or building pattern.
- ❖ Lincoln's built environment has design elements that repeat throughout the community:
 - ◆ The pattern of *undulating woodlands* edging the town's roadways and the varied arrangement of buildings placed within these trees. With a few notable exceptions, specific architectural styles of the buildings located in these areas do not dominate the landscape.
 - ◆ The *view from the roads*. Lincoln presents a variety of building-to-road associations, from the traditional farmhouse set close to the road with its associated outbuildings, fields and stone walls, to the historic country estates set within or at the back of a meadow or maintained lawn.

- ◆ *Lincoln's roadways.* Meandering and mostly curbless, Lincoln's scenic roadways are defined by their stonewalls, adjacent vegetation, and low posted travel speeds.
- ◆ *The relationship between the built and the unbuilt:* the combination of permanently protected land and low density development that allows the landscape to be the dominant, organic form.
- ❖ Lincoln has adopted zoning and other bylaws such as its Big House Bylaw, Demolition Delay Bylaw, Local Historic District Bylaw, and Neighborhood Conservation District Bylaw to preserve its rural character.

Key Challenges

- ❖ Despite the town's efforts, Lincoln is losing its small, older homes to major alterations, teardowns and mansionization. Identifying and implementing effective methods to encourage the updating and reuse of small housing units and discourage mansionization will be an ongoing challenge due to Lincoln's high land values.
- ❖ Lincoln has an informal policy of requiring owner approval before placing any building in a local historic district, and while the town recently adopted a neighborhood conservation district bylaw, no districts have been designated. Lincoln needs to find ways to more fully utilize these crucial tools for protecting the built environment.
- ❖ As Lincoln looks at strategies to preserve the important characteristics of its built environment, it is tempting to try to reduce critical relationships to ratios within a bylaw. However, with large lots and low densities, the usefulness of dimensional requirements alone in forming and controlling the built environment is limited. It may take non-traditional and non-zoning techniques to address these characteristic relationships effectively and to avoid unintended results, such as mimicking established patterns and existing features rather than achieving organic complementary growth.
- ❖ Contemporary lifestyles have led to a desire for multi-bay garages and structures for indoor recreation, such as enclosed courts and swimming pools. The design and scale of these structures can have a significant impact on the appearance of a residence and on the surrounding neighborhood, comparable to that of the construction of a new home.
- ❖ The design and placement of new residential development has potential consequences for Lincoln's expansive conservation parcels, which provide some of the town's most impressive scenic vistas. Improper scale and location of homes can encroach visually into the protected land, significantly compromising the public viewshed, privatizing the protected lands, and negatively affecting the conservation interests being protected.

EXISTING CONDITIONS & TRENDS

Lincoln is one of the few towns within fifteen miles of a major American city that has retained much of its traditional beauty and rural historic character. This has been achieved largely as a result of citizen and municipal initiative and resources. Lincoln is a remarkably scenic place with a well-preserved built environment, set in a varied and beautiful natural landscape that has been enhanced by human design and stewardship. The ravages that twentieth-century development brought to most American suburbs have been muted in Lincoln, thanks to the forethought, persistence, and creativity of its residents. Moreover, Lincoln is fortunate to have some of the twentieth century's notable examples of new design and construction that actually complement its natural

and historic setting. The overall scenic character of the town is exceptionally high, especially given its proximity to Boston. Lincoln's achievements have greatly increased the quality of life and property values of its residents. Ironically, its success may also bring the greatest future risks to Lincoln's remarkable visual character.

Lincoln's built environment is inextricably linked with open space and the natural environment, and for the most part it is thoughtfully integrated into the town's setting. In general, properties have few if any visible delineations, thereby giving the land a communal sense. The boundary demarcations that do exist are composed mainly of low stone walls that still allow vistas into and from each property. Front and rear yards are open, demonstrating less concern with protecting privacy than is seen in many other communities. Instead of erecting six-foot stockade fences, Lincoln residents seem more likely to rely on shrubs and trees to distinguish between public and private land and screen properties from view.

Unlike many "traditional" New England villages, the visual character of Lincoln is defined more by the relationships of its buildings to the landscape and less by any specific style of architecture, building, or building pattern. Lincoln's built environment consists of a varied architectural palette that ranges from the vernacular architecture of rural barns to houses built in the mid-twentieth century International Style. While this rich mosaic of form and style is reason enough for intrigue and admiration, of equal or greater note is the interplay between Lincoln's predominantly residential buildings and the land, which together define and articulate the overall visual character of the town. Lincoln's natural landscape patterns knit together its architecture with a composition of fields, meadows, and woodlands. This relationship between building and setting provide the foundation for Lincoln's pastoral nature, and in it can be seen two key aspects of the town's history: its agricultural patterns and historic country estates. While Lincoln is no longer rural in the traditional sense, neither is it traditionally suburban. The predominant patterns of its past persist even though the ways of life they originally served do not. Thus, Lincoln's built environment and natural landscapes represent a mix of new, old, formal, and informal architectural styles and building-to-space relationships.

Defining Key Relationships

One of the most characteristic and defining aspects of the built-to-natural landscape relationship in Lincoln is the pattern of undulating **woodlands** edging the town's roadways and the varied arrangement of buildings placed within these wooded areas. In most of Lincoln, there is no apparent, predictable pattern to this relationship, and this landscape variety allows disparate architectural expressions to coexist harmoniously. Even within Lincoln's more traditional residential subdivisions built during the last quarter of the twentieth century, the developments present a more organic design, with curvilinear street patterns and extensive use of vegetation than the repetitive, rectilinear lots and houses seen in other suburbs. Within a more standardized suburban relationship defined by uniform setbacks and a repetitive arrangement of dwelling units, Lincoln's varied palette of architecture would not be as successful. While Lincoln's zoning prescribes minimum setbacks, the large lot area requirement provides an opportunity to vary house settings within the lot, greatly reducing the potential for monotony.

The variety that defines many of Lincoln's building-to-lot relationships extends also to its building-to-road pattern. In the absence of a regimented, standardized arrangement of houses on their lots, the "**view from the road**"—rather than being a repetitive pattern created by uniform setbacks—presents a **variety of building-to-road associations**, from the traditional farmhouse set close to the road with its associated outbuildings, fields and stone walls, to the historic country estate set within or at the back of a meadow or maintained lawn. The views from these roads are constantly changing as the landscape forms change. The overall composition unfolds through views which, at times, are contained by stone walls or woodland edges, then open to longer vistas across

a meadow, farmed landscape, or an open field. The views in Lincoln are never static; they open and close, creating an element of surprise and a sense of discovery.

Not only are the views from the road a defining characteristic of Lincoln’s built environment, but so are the **roadways** themselves. Meandering and curbsless with adjacent vegetation and low, posted travel speeds, the exception for roadways in most communities is the rule in Lincoln. Existing access cuts along these roadways are traditionally understated, with narrow entrance widths. Even when addressing transportation and public safety concerns, Lincoln has used a “light touch” for its roads and thus preserved an integral part of its rural landscape character. This approach also has been applied to the town’s extensive network of roadside paths, which are often separated from the roads with a landscaped strip. In lieu of integrated sidewalks, the paths provide safe pedestrian travel while preserving the existing roadway character. In many cases, the paths are set behind stone walls and not visible from the road. Lincoln has also maintained the rural nature of its roadways by avoiding the contemporary steel guardrail systems seen in other communities; instead, it has relied on its existing concrete post and cable guardrails and wooden bollards with no horizontal rails.

Finally, the **natural setting** of Lincoln is itself a dominant element within the built environment. Environmental constraints are form-givers, and Lincoln’s wetlands, which account for almost thirty percent of the town’s total land area, have played a vital role in shaping and ultimately preserving its character. These wetland configurations have modulated building patterns, establishing edges and backdrops for development.

Ultimately, what has evolved from Lincoln’s early established built and natural settings are harmonious relationships between buildings, open spaces, and the natural environment, which have been fostered, protected, and emulated over the years. Today, these relationships create a landscape that residents appreciate and that continues to draw new people to the community. Viewed in its entirety, these relationships form a large part of what many call Lincoln’s “rural character,” a character that sets Lincoln apart from other communities and, in addition to town’s legacy of land conservation, plays a key role in its very high real estate values.

PATTERNS

Perhaps the most important, fundamental quality that contributes to Lincoln’s rural character is its patterns of buildings, roads, and spaces that appear unplanned or “organic” in their organization. This suggests an informality and spontaneity that have evolved and responded to changing economic conditions. This pattern of the built environment is so inextricably linked with the natural environment that it is difficult to say where one ends and another begins.

- ❖ **Agricultural Patterns.** Lincoln’s early agricultural heritage produced a vernacular architectural “style” and pattern of buildings associated with agriculture that has been preserved over the years. Today, one can see farm buildings “huddled” on the road, with edges defined by walls built with stones cleared from the field. The continued relative presence of agriculture not only contributes to Lincoln’s visual character but also has helped establish a set of values with respect to patterns of development and the placement of buildings. Many of these buildings would not be allowed under current zoning due to their small front setbacks, but since they pre-date zoning, they are grandfathered. If one were destroyed by a natural cause or fire, the owner would be permitted to rebuild if construction began within one year. The maintenance of this historic development pattern provides a critical connection with Lincoln’s agricultural past. Furthermore, preservation of the outbuildings associated with farms, particularly outbuildings no longer in agricultural use, will serve to maintain Lincoln’s rural identity.



- ❖ **Historic Country Estates.** A second important relationship is the development pattern established by the town's historic country estates, which emerged during the late 19th century after Lincoln's agricultural beginnings. These large, architect-designed homes are displayed against large, open, and maintained landscapes of lawn and plantings or open meadows. Though this arrangement is formal, in Lincoln they sit within a larger, more informal context of either wetlands or conserved lands.
- ❖ **Wooded Uplands.** A third pattern can be found in Lincoln's wooded uplands where the building-to-site relationships vary by location, although there are some general similarities. The specific architectural styles of the buildings located in these areas do not dominate the landscape. There is an informality in the layout of roadways (in many instances, these wooded house lots share a common drive) as well as in the relationship of the houses to the road. Actual building setback distances are varied, but for the most part, houses are set back from the street behind a front border of trees and vegetation. More often than not the maintained landscape is minimal compared to the total lot area, allowing the natural character to dominate.
- ❖ **Conventional Subdivisions.** Farmhouses and historic country estates capture what many people think of when they imagine Lincoln. However, for those who live in some of the town's mid-century homes, it is also

a place of pleasant, relatively conventional neighborhoods. From 1950 until the early 1970s, a considerable amount of land in Lincoln was transformed from woodlands to subdivisions. These postwar-era neighborhoods have fairly regimented setbacks, regular lots, and cul-de-sac or dead-end streets. They can be seen in South Lincoln in areas such as Hillside Road, Boyce Farm Road, and Giles Road, in North Lincoln on Silver Birch Lane and Acorn Lane, and along the east side of town, on Huckleberry Hill Road and Tabor Hill Road.

- ❖ **Open Space.** Perhaps the most important pattern for Lincoln is the relationship between the built and the unbuilt: the combination of permanently protected land and low density development that allows the landscape to be the dominant, organic form. Lincoln’s lot sizes are varied, and even where pockets of higher-density residential or commercial exist, they sit within or are framed by an envelope of open space.

The above relationships, while not exhaustive, constitute a framework for Lincoln to understand and plan for growth and change in its built environment. By understanding the elements that contribute to its often elusive sense of place and rural character, Lincoln may be able to identify tools and approaches that will help to preserve what is valued most, discourage what is liked least, and encourage the continuation of the critical patterns that make the town what it is while allowing room for inevitable and necessary growth and change. Lincoln residents have had a passion for preserving the town’s special qualities, and historically they have been willing to pay the short-term price of conservation. The town’s ability to absorb more development without eroding this framework is a critical question.

As Lincoln looks at potential ways to manage future growth, it may be tempting to try to reduce critical relationships to ratios within a bylaw. These characteristic relationships can be documented through tools such as visual preference documents and design guidelines. However, codifying them could prove counterproductive if new development simply mimics established patterns and existing features and is not organic. Establishing “typicals” could result in a forced repetition that would erode the rural nature of Lincoln’s character. By contrast, requiring new homes to conform to the land rather than changing the land to fit a particular house would help to extend the “organic” quality of Lincoln’s built environment to new development. Opportunities for spontaneity and creativity are essential. It will take non-traditional and non-zoning techniques, combined with zoning, to address these characteristic relationships effectively.

Regulatory Framework

Lincoln has approached regulating its built environment through the conventional mechanism of zoning and newer approaches that speak to specific concerns, such as its demolition delay and neighborhood conservation district bylaws. While the town’s local historic district bylaw seeks strict preservation of individual buildings and their architectural details, other regulatory tools are concerned more with the overall visual character of an area. The overall goal should be to create a tapestry of regulations and guidance documents that reinforce what is special about Lincoln while still allowing room for growth and creative change.

ZONING

Zoning is often the principal form-giving tool in a town. Since Lincoln adopted its first zoning bylaw in 1929, its residential zoning has gradually required larger lots, wide frontages, substantial front, side and rear setbacks, and modest building heights. In addition, while the R-2, R-3, and R-4 districts allow a variety of housing types, about 97 percent of the town is located within the R-1 district, which allows only single-family homes. Many structures built prior to zoning do not meet Lincoln’s current dimensional standards. The overall visual effect of these non-conforming structures is a varied rural landscape throughout most of Lincoln. In addition to conven-

tional single-family lot development, however, the zoning bylaw does allow denser housing development and cluster development, which preserves open space and moderately increases overall housing density.

An important addition to Lincoln's R-1 district is the "Big House Bylaw," which town meeting adopted in order to regulate the construction of oversized residences, often referred to as "big houses" or "McMansions." The Big House Bylaw evolved from a 1998 study that described these "too large" homes on "too small" lots as conspicuous in relation to their natural surroundings and adjacent houses.¹ It requires site plan review under Section 17.7 of the Zoning Bylaw for all new dwellings to be constructed on vacant land, or when the gross floor area of a home and accessory buildings exceeds the greater of 4,000 sq. ft. or eight percent of the lot area, or 6,500 sq. ft. Although the Planning Board considers the relationship of the proposed structure to the surrounding natural and built environment through site plan review, the established criteria are very general, providing little guidance to harmonize new construction with the context of the surrounding area. Many details regarding building placement, architectural detail and landscaping are not addressed or are addressed only generally within the zoning review process. However, Lincoln has established other regulatory devices to attend to more nuanced aspects of the built environment.

DEMOLITION DELAY

Since 1997, approximately forty-five properties have been the subject of demolition permit applications in Lincoln.² Recognizing that a proliferation of teardowns could threaten the town's visual character, Lincoln adopted a demolition delay bylaw in 2000. The bylaw applies to buildings listed in the National or State Register or within close proximity to National or State Register properties, or listed in the Inventory of Historic Assets of the Commonwealth. Due to a significant increase in applications for demolition permits, town meeting recently increased the delay period to 12 months. According to the Lincoln Historical Commission, in 2007 alone, eight demolition requests were granted, and two demolition requests were delayed under the bylaw.³ Demolition delay provides a *temporary* stay on a proposed demolition, but only for buildings deemed historically or architecturally significant by the LHC. If the LHC determines that a building is "preferably preserved," it can work with the property owner to save the structure or agree on a mitigation plan. Buildings not determined to be significant can be demolished once the LHC issues a decision.

NEIGHBORHOOD CONSERVATION DISTRICTS

Recognizing that some areas of Lincoln should be protected even if they do not warrant the same degree of regulation as a local historic district, Lincoln approved a neighborhood conservation district (NCD) bylaw in 2006.⁴ To date no districts have been designated. NCD has become an increasingly popular tool for communities to guide development in an area that exhibits special characteristics and meaning to the community. Unlike a local historic district bylaw adopted under M.G.L. c. 40C, which establishes a rigorous review and decision process for any alterations to a building's exterior architectural features, the NCD typically focuses more on general neighborhood characteristics such as the siting and scale of buildings, the relationship of buildings to each other and to the street, and the relationship between the built and natural environment.⁵ NCD is appropriate for

¹ Article 7 Zoning Bylaw Study Committee, *Report to the Town of Lincoln* (March 1998), 3.

² Mark Whitehead, Lincoln Town Planner, List of Lincoln Teardowns 1997-2007.

³ Town of Lincoln, *2007 Annual Town Report*.

⁴ See Chapter 4, Cultural and Historic Resources, for additional discussion of Lincoln's four local historic districts.

⁵ Rebecca K. Bicksler, *Neighborhood Conservation District Study for the City of Urbana, Illinois*, Department of Community Development, Planning Division, July 2006.

an area that may not be considered historically significant but has unique characteristics that could be diluted through inappropriate development.⁶

NCD bylaws vary widely from town to town. In Lincoln, the NCD bylaw is intended to encourage preservation of existing buildings within a designated area and to ensure that new construction, renovations, and additions complement both the existing buildings and the overall neighborhood form. The bylaw states that buildings within an NCD are not to be “frozen in time ... but should be able to grow and change to meet the needs of current and future owners and of current and future times, while conserving the neighborhood’s distinctive qualities as changes occur.”⁷ Residents of Brown’s Wood have submitted a petition for neighborhood designation. This mid-twentieth century neighborhood of modernist houses is defined not only by the striking architectural minimalism of its buildings, but also by their naturalized settings and roadway patterns. While Lincoln’s local historic district bylaw explicitly exempts landscape features from review, the NCD bylaw does not. Creating NCD review guidelines that permits the review of landscape and hardscape features is vital to preserving the neighborhood’s unique character.

ROADWAY REGULATIONS

Lincoln has designated about half the roadways in town as scenic roads under its Scenic Roads Bylaw (General Bylaws, Article XVII).⁸ In Massachusetts, local scenic roads bylaws are subject to M.G.L. c. 40, s. 15C, the Scenic Roads Act, which grants fairly limited jurisdiction to Planning Boards over work affecting trees and stone walls within the public right of way. Like most scenic road bylaws, Lincoln’s does not include specific design criteria. Recognizing the important role of scenic roads in preserving the town’s rural character, the Lincoln Garden Club recently completed the *Report on Lincoln Roadsides*, which is scheduled for publication in October 2009.⁹ The report recommends guidelines for road maintenance and improvements and identifies key entrance gateways that need improvement.

Lincoln has taken a novel approach to managing the appearance of its roadways by establishing specific design criteria for public way access permits under Article VI, Section 3A of the town’s General Bylaws. The criteria stem from roadway planning work that Lincoln commissioned in 1996, and they pertain to all town roads, not just those designated as scenic.¹⁰ Lincoln’s Ad Hoc Traffic and Roadside Committee is currently drafting roadway design principles for a major roadway improvement project, incorporating traffic calming features that would be consistent with the town’s rural character.¹¹

⁶ Larson Risher Associates, *Neighborhood Conservation District Study for the Town of Brookline*, Department of Planning and Community Development, September 2005.

⁷ Lincoln Neighborhood Conservation District Bylaw, 1.

⁸ Commonwealth of Massachusetts, Department of Conservation and Recreation (DCR), Heritage Landscape Inventory Program, *Lincoln Reconnaissance Report*, Freedom’s Way Landscape Inventory, 11.

⁹ Lincoln Garden Club, Draft Report on Lincoln’s Roadsides, April 8, 2008.

¹⁰ Vanasse Hangen Brustlin, Inc., *Roadway Design Guidelines* (1996).

¹¹ Lincoln Ad Hoc Traffic and Roadside Committee, *Memorandum on Roadway Design Principles*, May 11, 2008, revised June 4, 2008, September 16, 2008.

NEEDS, ISSUES & CHALLENGES

Character-Defining Features

Teardowns and Mansionization. Ironically, Lincoln's past success in preserving its historic buildings and landscapes poses a threat to its future character. One of the central characteristics of Lincoln's rural character is the scale and settings of many of its homes, especially the way they sit within their sites and the landscape, conforming to the land rather than changing the land to fit the house. However, the town's pristine rural character greatly enhances the value of its homes, often resulting in the land having more value than the modest house that sits upon it. While not unique to Lincoln, the teardown and "mansionization" trend could have serious physical consequences for Lincoln's built environment. The loss of modest housing stock and the potential erosion of its established visual character are critical concerns.

Demolition delay can influence the fate of an older home, but it is not intended to regulate all demolition cases and it is not always successful. Lincoln's demolition delay bylaw applies to buildings deemed historically or architecturally significant, much like the demolition delay bylaws in most towns. However, many of Lincoln's modest homes may not meet the criteria for significance. The buildings most at risk are the less obvious historic structures that form the connective tissue so fundamental to the character of the town. While Lincoln has an exceptional collection of architecturally significant buildings, most of its buildings are more vernacular in design and they are no less important to Lincoln's sense of place and visual character. In particular, Lincoln's 20th century modernist residences, built as modest, affordable residences by today's standards, are at significant risk for demolition. The aging of this housing stock combined with contemporary living preferences, which generally trend toward larger homes, make these buildings seem "obsolete" to many homeowners.

Even when a delay is imposed, the Lincoln Historical Commission has only 12 months to work with an owner to explore alternatives to demolition. This requires diligent effort by volunteers to seek realistic alternatives that both would appeal to a property owner and comply with Lincoln's zoning. Many communities have discovered that a 12-month delay period is not enough time for the complicated process that may be required to save a structure, including building relocation, searching for a new owner, and mitigation. In the past two years, several Massachusetts towns have extended their delay period to 18 months, yet just a few years ago, communities were amending their original six-month delay periods to one year. The challenges associated with administering demolition delay and the mixed results of demolition delay bylaws raise questions about the effectiveness of this tool for the problem it intends to address.

Concord, Lexington, Weston, and Wayland share Lincoln's concerns about teardowns and mansionization, as evidenced by their master plans and in some cases changes to their development regulations. Each has responded in a different way. For example, Weston created a design guidelines booklet, *Preserving Weston's Rural Character*, which highlights the town's rural design aesthetic and provides examples of "what to avoid." Lexington continues to experience a high rate of demolition and rebuild projects, including 64 last year and about 400 homes since 2000. Like Lincoln, Lexington recently increased its demolition delay period to 12 months. The Lexington Historical Commission also has conducted an education and outreach process to work with owners of houses defined as "preferably preserved" under the town's demolition delay bylaw, which applies only to homes listed in Lexington's cultural resource inventory.¹² Waltham just adopted a six-month demolition delay

¹² Town of Lexington, *Annual Town Report* (2007), 68; Article 15 Annual Town Meeting Warrant (2007); and Lexington Historical Commission, August 2007 (letter to Cultural Resource Inventory property owners).

ordinance in January 2008, five years after the City Council originally considered the idea but tabled it because of local opposition.¹³

Unlike the temporary effect of demolition delay, local historic district and neighborhood conservation district bylaws allow communities to prohibit teardowns. Communities such as Cambridge, Boston, Lowell, Amesbury, Newton, and North Andover also have recognized the important role of neighborhood conservation districts. While their ordinances and bylaws use different naming conventions (e.g., Neighborhood Preservation Districts and Architectural Conservation Districts), the regulations, guidelines and overall approach are the same: they are design-based and focus on the physical elements considered by each neighborhood to be worthy of preservation. Wellesley just established its first Neighborhood Conservation District, the Denton Road NCD, in April 2008. Lincoln's NCD bylaw is an important first step, but it will not be effective until residents of a neighborhood request and Town Meeting actually approves such a district.

A building or structure does not have to be demolished to have a negative impact on the aesthetic of an area. Inappropriate alterations through renovation, expansion, or poor maintenance can be as damaging as outright demolition. Moreover, the design and scale of accessory structures can have a significant impact on the appearance of a residence and on the surrounding neighborhood, comparable to that of the construction of a new home. Lincoln's present zoning did not anticipate market interest in large accessory outbuildings.

Accessory Structures. Contemporary lifestyles have led to a desire for multi-bay garages and structures for indoor recreation, such as enclosed courts and swimming pools. The design and scale of these structures can have a significant impact on the appearance of a residence and on the surrounding neighborhood, comparable to that of the construction of a new home. Historically, accessory buildings were either agricultural structures, like traditional barns, or were designed as smaller, architecturally similar, simplified versions of their associated main houses and located at the rear of the property. Some communities have set design guidelines for accessory structures in their local historic districts regulations and design review bylaws. They also limit the size of accessory structures by establishing size thresholds within their zoning, such as restricting an accessory structure to no more than twenty-five percent of the gross floor area of buildings on the lot or if not within a building, no more than twenty-five percent of the unenclosed area of the lot. Lincoln's present zoning did not anticipate market interest in large accessory outbuildings. The town regulates accessory uses, but it does not specifically address size or design requirements for accessory structures. Lincoln regulates the placement of accessory structures by requiring them to be located a specific distance from the street and side and rear lot lines, but in a less restrictive way than for principal structures. These setbacks requirements alone have limited if any value for controlling the effects of a large accessory structure on adjacent properties or views from the road. The Big House Bylaw does include accessory structures within the site plan review process, but this only affects construction that is subject to the bylaw.

Inappropriate Renovations of Older and Historic Structures. In Lincoln, it is often the relationship of a building with its landscape that contributes most significantly to the town's visual character. A building or structure does not have to be demolished to have a negative impact on the aesthetic of an area. Inappropriate alterations through renovation, expansion, or poor maintenance can be as damaging as outright demolition. Additions that

¹³ "Six-month demolition delay OK'd," *The Daily News Tribune* [online], 16 January 2008; and "In Waltham, little protection for this old house," *Boston Globe* [online], 9 December 2007.

are out of scale or inappropriately located in relation to the original structure can permanently alter an older or historic building and the surrounding streetscape. Poor maintenance of vegetation, poorly sited parking areas and garages, high-glare exterior lighting, and landscaping with incompatible plantings can have similar effects. Designating neighborhood conservation districts for specific neighborhoods and publishing design guidelines would help the town manage the impact of renovations and expansion of its older buildings.

Historic Country Estates. Historic country estates often have large unprotected land holdings, and the division of these properties into smaller, conforming lots can result in the loss of very valuable, character-defining assets. This typically occurs when the property cannot be maintained by a subsequent generation or a property is divided to accommodate subsequent generations. In either case, the essential balance can be compromised as a large parcel with one or two buildings, scaled to the size of the large lot it originally was sited on, is subdivided into a series of smaller lots with multiple buildings. The impacts on the visual character of a town such as Lincoln can be considerable and a challenge to mitigate. Lincoln has considered the possibility that some of its estate properties, now owned by non-profit institutions, might be developed in the future.¹⁴ The town does not have the kind of “great estates” zoning that exists in a handful of communities in Massachusetts, but it does have a tested, successful process for establishing special overlay districts to control and facilitate redevelopment so that it is compatible with the town’s interests.

Roadways. Routine maintenance and minor renovation of local roads can have a positive or negative impact on Lincoln’s scenic and historic character. Continued implementation of its standards for roadway design, maintenance and improvements will help to ensure that Lincoln’s local roads remain functional and beautiful. Plans for upgrading, expanding or relocating state roads, principally Route 2, have long been a source of concern. In its current condition and alignment, Route 2 does not contribute to Lincoln’s scenic character, with the exception of a few small historic structures located along the highway. Future alterations including widening, realignment and construction of sound barriers, jersey barriers, and other features that could further degrade the visual quality of Route 2 and significantly alter the character of adjacent scenic and historic areas.

Lincoln’s scenic roads bylaw only applies to work within the public right-of-way. Alterations to or removal of character-defining features such as stone walls, vegetation and trees, as well as driveways and walkways, that are located outside of the right-of-way are not subject to review, and the scenic roads bylaw also cannot protect scenic vistas as seen from the road. These elements of Lincoln’s existing bylaw reflect weaknesses in the state Scenic Roads Act, which would need to be updated by the legislature in order to serve as a more effective tool for protecting the scenic features of designated roads. In the past decade, some Massachusetts towns have adopted overlay districts to regulate development within a locally prescribed area along scenic ways. These bylaws, generally known as scenic corridor overlay districts, can encourage sensitive alterations and expansions of existing site features, as well as controls on new development, that impact scenic roadways.

Design Guidance

Many communities regulate the impact of development on visual character by implementing regulatory and policy tools such as design guidelines and educational tools, such as local pattern books and visual preference documents. In Lincoln, guiding the design of new buildings and development to maintain the town’s existing rural aesthetic is critical. Documenting the town’s key built environment relationships, which are as much about variety as architectural expression, in a pamphlet or booklet that can be used by developers and property owners would be an important first step in this process. There are many design and visual preference models available,

¹⁴ Vanasse Hangen Brustlin, Inc., and Community Opportunities Group, Inc., *At-Risk Properties Analysis* (2005).

including those prepared in other local towns such as Weston and Boxborough, and commercial and mixed-use guidelines prepared in Concord, Bedford, and Wayland.

New Development

Residential Development. Lincoln has benefited in the past by being able to view certain new development as a challenge more than a threat. Its success with steering new, well-sited and well-designed development to appropriate locations has brought Lincoln national recognition. While large, available undeveloped sites are rare because of Lincoln’s existing development pattern and land preservation efforts, it is important to realize that Lincoln is by no means built out to its maximum capacity under current zoning. As population and development pressures increase, sites currently developed at lower-than-allowed density and back lots could be redeveloped. In addition, it is possible that some adjoining low-density properties could be assembled into a larger development site. Moreover, it is difficult to make a reasonable estimate of Lincoln’s future development capacity because even though most of the town is in a single zoning district, Lincoln has a successful track record of using overlay districts to create interesting, higher-density developments. The need for continued vigilance will be important for continuing Lincoln’s past success at managing land development. Otherwise what were thought to be stable, rural neighborhoods could transition into poorly planned and designed new developments.

It is important to realize that Lincoln is by no means built out to its maximum capacity under current zoning. As population and development pressures increase, sites currently developed at lower-than-allowed density and back lots could be redeveloped.

New Construction Bordering Conservation Land. The design and placement of new residential development has potential consequences for Lincoln’s expansive conservation parcels, which provide some of the town’s most impressive scenic vistas. This beauty can attract residential construction along conservation land borders, with homes placed to take advantage of views. Improper scale and location of homes can encroach visually into the protected land, significantly compromising the public viewshed, privatizing the protected lands, and negatively affecting the conservation interests being protected. A development checklist for site plan review and a visual preference document could provide guidance for applicants as well as for the Planning Board when considering new construction in sensitive locations. Further, some communities have used overlay districts to protect significant viewsheds. Protective overlay districts could supplement the underlying zoning district by adding regulations for road corridors with significant views, development patterns, or roadway characteristics worthy of protection, as well as for construction occurring in close proximity to conservation lands. The regulations for these types of districts could establish additional setback requirements or require an additional review process beyond what is normally required in the underlying district.

Commercial Development. As a matter of policy, Lincoln has deliberately limited commercial and office development to small-scale projects, notably Lincoln North and the Mall at Lincoln Station. However, several large-scale commercial and office developments are located in adjacent communities, sometimes close to the Lincoln town line. Pressure for commercial and office development will continue to mount from both outside and inside the community as economic, transportation, and energy factors evolve. Efforts to promote smaller-scale commercial facilities in South Lincoln have begun to encourage a more easily walkable, transit-oriented village center. These efforts should be continued, first to reinforce long-standing town planning objectives and second, to reduce the threat of inappropriate nonresidential development elsewhere. Lincoln does have some precedent for allowing office development in locations outside South Lincoln, such as the large professional

office compound in North Lincoln. The At-Risk Properties Committee also considered options for commercial uses when it studied six parcels located throughout the town in 2005.¹⁵

Additional Considerations

Government Facilities. Expansion or new construction of municipal facilities, state and federal facilities, utility corridors, roads and highways can significantly affect Lincoln's built environment and landscapes. Locating compatible, well-designed municipal facilities in existing activity centers will help to ensure that they continue to support the diverse character of these areas and set a good example for private development by avoiding construction on open land. While Lincoln has less control over development by state and federal agencies and private utilities, the town should continue to coordinate closely with them so that future construction projects address local concerns and standards. The future of Route 2, Hanscom Field, and Hanscom Air Force Base (HAFB) are obvious examples.

Lincoln owns several architecturally significant buildings that serve as municipal facilities, including the Town Office Building, Bemis Hall, Pierce House, and the Lincoln Public Library. Historically, Lincoln has been a conscientious steward for its historic buildings; if a building became obsolete for its original purpose, the town reused it to meet other public needs. Today, these buildings contribute significantly to the historic appearance and civic nature of the town center. However, they may once again face obsolescence due to a variety of factors: inadequate space, lack of access for people with disabilities, insufficient parking, and in some cases, deteriorating conditions. It is highly likely that a number of existing town buildings will need to undergo substantial renovation and/or expansion over the course of the next several years, and this along with the relocation of any municipal facilities will have to be carefully planned and designed to fit in with the character of the town.

Utility Lines. While utility poles and lines are an unsightly but accepted part of the American landscape, the advent of cable television, fiber optics and other wire-based services has the potential for increasing the intensity of visual pollution. Lincoln has preserved its rural characteristics, yet one glaring omission to this aesthetic is the town's network of power and utility lines along its scenic roadways. In many other industrialized nations, utilities are almost always placed underground to save on long-term maintenance, reduce storm damage, and protect the character of cities, towns, and the countryside. Lincoln should investigate a long-term strategy for control of utility lines and, as a long-term solution, the burial of overhead utilities in scenic and historic districts and landscapes. However, burying existing overhead utilities is an expensive proposition and the utility companies rarely agree to absorb the cost.

Communication Towers. The experience of European countries shows that communications towers can be unobtrusive if thoughtfully and creatively designed and if carefully located, sized, and screened to avoid impacts on scenic landscapes and historic areas. In response to a court case that permitted the construction of a tower with no local input, Lincoln adopted a Wireless Communications Facilities Overlay District in 1997 and identified specific areas where towers would be permitted with site plan review. Although there are limits to local authority and regulations that can be superceded by federal and state dictates, continuing to craft local regulations that ensure careful location and design of communication towers will help protect the character of Lincoln's built environment and landscape.

¹⁵ Ibid.

NIGHT LIGHTING

Poorly located, glaring, overly bright exterior night lighting can undermine the rural character of a town. Excessive and intrusive lighting detracts from the beauty of the night sky and the woodlands landscape, as well as the privacy and comfort of adjoining residences. A desire for participation in the national Dark Sky Initiative was identified in the Heritage Landscape Inventory Program's *Lincoln Reconnaissance Report* (2006).¹⁶ Strengthening and clarifying Lincoln's existing exterior lighting regulations and standards with greater specificity may ease tensions around interpretations and enforcement. Mounting a public education campaign about new non-light polluting exterior fixtures will also help to reduce this problem in the future.

Lincoln may want to revisit its established assumptions about density and land use, and use targeted zones of increased density to increase housing diversity, lessen pressures on open space, and create and reinforce the viability of Lincoln's commercial center. The key will be to incorporate the principles of smart growth without undermining Lincoln's rural character.

Sustainable Development

In an era of heightened sensitivity about global warming and man-made impacts on the natural environment, Lincoln and its residents are presently focusing on adopting sustainable development practices. Sustainable development is a very broad term, and not everyone interprets it the same way. One of the most widely accepted definitions is from the World Commission on Environment and Development's 1987 report entitled *Our Common Future*. The report states that sustainable development is development that "meets the needs of the present generation without compromising the ability of future generations to meet their own needs."¹⁷ Sustainable development is an umbrella term that covers many issues from energy independence to food security to endangered species to pollution. Some sustainable development issues cannot be addressed at a local level. However, there are many ways sustainable development can be practiced within smaller communities such as Lincoln.

- ❖ **Green Building Programs.** "Green buildings" is a commonly used term for buildings that help to protect the environment by meeting environmental and energy performance standards. The criteria range from construction materials to designing buildings for energy efficiency and water conservation, landscaping practices, the siting and orientation of buildings, and building projects that involve reuse and infill development over new construction on vacant land.
- ❖ **Smart Growth.** The term "smart growth" has become common in discussions about future development in American communities. The smart growth movement was spurred by the collective realization that the typical development pattern of isolated land uses and low-density development serviced solely by the automobile – which many identify as "sprawl" – poses acute economic, aesthetic, environmental, and social costs on communities and households, and is, in short, unsustainable. Smart growth presents an alternative pattern that focuses new growth in already established or otherwise appropriate areas and steers development away from undisturbed land or important natural and cultural resources. Smart growth also promotes a form of development that is more compact than conventional development, is mixed-use, and is well-connected to

¹⁶ Massachusetts Department of Conservation and Recreation, *Lincoln Reconnaissance Report: Freedom's Way Landscape Inventory* (June 2006), 9.

¹⁷ UN Documents Cooperation Circles: Gathering a Body of Global Agreements, *Our Common Future, From One Earth to One World*, "An Overview by the World Commission on Environment and Development," <http://www.un-documents.net/wced-ocf.htm> [accessed 25 November 2008].

other areas by alternative forms of transportation, notably transit and pedestrian facilities. Some Lincoln residents refer to smart growth as “smart evolution.”

Lincoln is renowned for its innovative approaches to planning for and protecting open space. While increasing density is a principal of smart growth, the increase in density can serve several purposes: the preservation of open space in other areas, the creation of livable, walkable community centers, the avoidance of traditional suburban patterns, and the creation of more diverse housing options for residents in a way that minimizes impacts and enhances quality of life. These objectives of smart growth suggest that Lincoln may want to revisit its established assumptions about density and land use, and use targeted zones of increased density to increase housing diversity, lessen pressures on open space, and create and reinforce the viability of Lincoln’s commercial center.

Efforts to allow an increase in density may be as controversial in Lincoln as in many other communities in Eastern Massachusetts. Still, the town has recognized controlled density as a tool for preserving threatened land and resource areas and for meeting other community planning objectives. Many years ago, Lincoln recognized South Lincoln as an area that could absorb more growth by zoning a portion of it as the R-4 Planned Community Development District (Lincoln Woods), adjacent to the B-1 retail and B-2 service business districts. More recently, Lincoln established the South Lincoln Overlay District as an umbrella for planned development districts, and also created the first planned development district in South Lincoln for redevelopment of the Mall at Lincoln Station. Allowing more compact development and a wider variety of uses, and a wider variety of sizes and types of housing, may require Lincoln to create additional planned development districts in South Lincoln in the future. The key will be to incorporate the principles of smart growth without undermining Lincoln’s rural character.

GOALS & RECOMMENDATIONS

Goal BE-1. Preserve key aspects of Lincoln’s rural roots and agricultural heritage, its varied architecture, and the prominence of its natural land formations.

- BE-1.1. Update, clarify, and strengthen Lincoln’s regulations and review procedures governing demolition and renovation requiring significant demolition.
- BE-1.2. Encourage the creation of Neighborhood Conservation Districts in appropriate areas.
- BE-1.3. Expand protection of scenic roadways, vistas from roadways, and other elements that enhance the character of a rural and agrarian environment.
- BE-1.4. Encourage owners of private property with historic or scenic vistas to keep the view open and visible to the public.

DISCUSSION

Lincoln’s longstanding culture of thoughtful planning has resulted in a community that retains much of its historic rural character. However, the town’s desirability and the resulting development pressures are threatening this character. Building demolition and inappropriate construction adjacent to conservation lands and along scenic roadways are affecting the visual character of the town. While Lincoln has adopted many of the protective regulations available to communities, in some cases its regulations need to be reviewed and strengthened.

Demolition. The modest housing that still stands in Lincoln is often viewed as obsolete by contemporary standards and is frequently threatened by demolition to make way for larger homes. Lincoln has adopted a

demolition delay bylaw, but the review process applies only to buildings deemed historically or architecturally significant by the Lincoln Historical Commission (LHC). Moreover, like most demolition delay bylaws, Lincoln's does not address the size, style, or placement of the new structure. A review of existing regulations and review procedures might consider Lincoln's primary concerns about teardowns: is it the loss of the building or the appropriateness of what is built afterward and its effect of the surrounding area? If protecting and preserving the existing structures is Lincoln's primary concern, the town may consider clarifying or changing the criteria that determine whether a demolition permit will be granted. To do this, Lincoln will need to think about the buildings with architectural or cultural significance that have been lost, and how the current criteria provide a loophole for that type of building or structure. However, if the town is concerned primarily with the form and appearance of new structures, these issues are best addressed in other recommendations discussed below, such as creating a Visual Preference Guide (VPG) or modifying the review criteria and review process for new development.

Neighborhood Conservation Districts. Lincoln has designated four historic districts under its local historic district bylaw. While this is an important tool for protecting historic structures from inappropriate alterations and demolition, Lincoln has areas that merit protection but not necessarily at the level of a local historic district. The Neighborhood Conservation District (NCD) bylaw may be a better alternative for preserving rural character in many parts of the town. Furthermore, this type of district allows review of landscape features, which play a prominent role in so many of Lincoln's neighborhoods. Designating Brown's Wood will be an important first step in encouraging other neighborhoods to consider this alternative preservation tool. Community education and outreach on the benefits and importance of NCDs will be critical for building support within neighborhoods. The experience of other communities that have successfully designated NCDs could be explored.

Scenic Roads and Vistas. Lincoln's ability to preserve the character of its scenic roadways and adjoining vistas is limited under the present Scenic Roads bylaw. This is largely due to weaknesses in state law. However, Lincoln could take steps to strengthen the Scenic Roads bylaw by adopting administrative regulations with documentation and design criteria, ideally based on the Lincoln Garden Club's recently published *Report on Lincoln's Roadsides*. Furthermore, creating scenic road overlay (zoning) districts along specific streets would help to protect character-defining features located outside of the right of way (and therefore exempt from the Scenic Roads bylaw). Several Massachusetts communities have adopted scenic overlay districts, which typically include all land within a specified distance from the centerline of the road. Within these districts, all new construction and non-agricultural land disturbances – such as driveways – require site plan review, which in turn is governed by a series of design and scenic preservation review criteria. Educational initiatives to promote Lincoln's scenic vistas would also help to encourage stewardship of these important rural features. Of course, Lincoln should continue its efforts to acquire conservation restrictions and focus on landowners whose properties contribute to the town's inventory of scenic views.

Goal BE-2. Preserve rural character achieved by recent public and private efforts in Lincoln to conserve open space and to place land in permanent conservation.

- BE-2.1. Increase non-disturbance setbacks on lots contiguous to Lincoln's conservations lands.
- BE-2.2. Consider establishing scenic overlay districts as a means to protect land features bordering conservation lands.
- BE-2.3. Require site plan review by the Planning Board of any development on lots contiguous to Lincoln's conservations lands.

DISCUSSION

Lincoln has a long and successful history of preserving its open lands. However, this success has had unintended consequences. The scenic quality of Lincoln has made it one of the most desirable communities in the Commonwealth. Many are drawn to Lincoln's rural ambiance and most particularly to its open spaces. Pressure to construct new homes with views over the town's conservation land has increased, resulting in significant visual impacts on the very areas that residents appreciate – and often, areas that were acquired and protected at taxpayer expense. Reviewing Lincoln's existing regulations to identify ways to strengthen them with new conservation zoning tools will be critical for ensuring the protection of Lincoln's rural character in the future.

- ❖ **Conservation Overlay Districts.** Lincoln could create a special overlay district for open spaces that meet criteria specified in the zoning bylaw. In the dimensional regulations of other zoning districts, the town could establish a deeper minimum setback requirement and place limits on the size of accessory structures abutting the conservation overlay district.
- ❖ **Scenic Overlay Districts.** As noted above, Lincoln could consider creating protective overlay districts for scenic roads or viewsheds. These districts would supplement the regulations of the underlying zoning district for road corridors determined to have significant views, development patterns, or roadway characteristics that are deemed worthy of protection. The *Lincoln Reconnaissance Report*, prepared by the Massachusetts Heritage Landscape Inventory Program, recommended that Lincoln examine the use of overlay districts as a means to protect land features bordering conservation lands. This study and other recent reports such as the Lincoln Garden Club's *Report on Lincoln's Roadsides* offer relevant recommendations that support the goal of preserving Lincoln's rural character.
- ❖ **Site Plan Review.** To better control the integration of new development and significant redevelopment adjacent to existing conservation lands, Lincoln might consider amending its site plan review criteria to include a review of the relationship of new structures to adjacent open space or conservation land. It might also consider providing greater clarity and definition as to what constitutes significant redevelopment.

Goal BE-3. Encourage new structures to fit within the landscape and to respect Lincoln's unique New England character.

- BE-3.1. Create a Visual Preference Guide that articulates and illustrates key visual characteristics and preferred building-to-land relationships as an aide to residents, homebuilders, and developers.
- BE-3.2. Review the Zoning Bylaw and remove regulatory barriers to allowing buildings to conform to the landforms, particularly with respect to overall height on sloped sites.
- BE-3.3. Strengthen regulations that govern massing, scale, and issues of adjacency of principal and accessory structures to ensure they fit within context of surrounding neighborhoods.
- BE-3.4. Support educational programs sponsored by local organizations that work to protect the town's identity.

DISCUSSION

Visual Preference Guide. A Visual Preference Guide (VPG) could be a useful tool for articulating Lincoln's preferred development form and style to developers and homeowners. A VPG incorporates graphics as well as text and represents a variety of building forms. It would be used by property owners, developers, homebuilders, town staff, and boards with permitting authority, and ultimately the VPG would have to be integrated within

Lincoln's development review process. Creating a VPG requires careful consideration. Below are some issues and choices to consider:

- ❖ **Process.** Since much of the content of a VPG deals with issues of aesthetics, differing opinions about preferred development form and style could potentially cause problems for the eventual acceptance of the document. The process for creating a VPG needs to include soliciting ideas from many stakeholders. This is especially true for those who will use the document, including town departments, local developers and homebuilders, and homeowners. Lincoln may want to consider forming a committee that includes as many stakeholders as possible to guide the development of the document.
- ❖ **Form, Content, and Document Creation.** A VPG can take many forms: a simple brochure, a book, or a CD, or even a website. The form of the document is closely related to the content. A VPG can use photographs, drawings, text, or all of the above to communicate design concepts. Lincoln could create a purely visual document, using photographs organized thematically and displayed as a book or electronic document. Alternatively, the town could create a bound document with photos, other graphics, and text to explain concepts more formally. The content Lincoln chooses to include will also influence another important decision: the author of the document. A VPG could be created by volunteers, perhaps organized by a core committee of authors and guided by an advisory committee. Some tasks could be assigned to a consultant, too, such as production of architectural drawings and other graphics, and text to explain design concepts. These products could be assembled and organized by a core committee. A final option is to hire consultants to create the entire document, maintaining an advisory committee to ensure that the product is representative of Lincoln and its preferred aesthetic.
- ❖ **Implementation & Authority.** Creators of the VPG will need to determine how the document will fit into Lincoln's development review process. For example, the VPG could function as a purely informational document that developers and homeowners receive before they apply for permits. The purpose of this kind of document would be to communicate preferred outcomes of development projects, and rely on the willingness of the developer to integrate them into a project. If Lincoln wanted to use the VPG in a more formal way, the town would need to consider amending its site plan review bylaw or, at the very least, the Big House Bylaw. Another way to integrate the VPG into the development review process involves establishing a Design Review Board to review projects according to the VPG, which would serve as design guidelines, and to advise and make recommendations to the Planning Board.
- ❖ **Supporting Strategies.** In addition to developing a VPG, Lincoln could amend the site plan review bylaw by adding criteria that determine whether new construction (including accessory structures) is visually and environmentally responsive to its surrounding landscape. Reviewing the Zoning Bylaw for impediments to designing buildings that conform to landforms, e.g., how maximum building height is measured on sloped sites, guidelines or review criteria for building placement and orientation, setbacks for principal and accessory structures, and regulating the scale of accessory structures will be important for ensuring that new structures do not create a visually discordant impact on Lincoln's rural landscapes.
- ❖ **Public Education.** Adopting regulatory tools in concert with public education would further strengthen Lincoln's efforts to protect its rural character. Continuing and expanding existing educational endeavors, such as the Lincoln Garden Club's lectures and workshops on preserving the town's stone walls and FOMA's walking tours of Lincoln's mid-century architecture, would foster awareness and appreciation of the built environment. In addition, completing a comprehensive town-wide historic resources inventory would

enhance Lincoln's ability to identify and protect its historic structures and landscapes. Integrating the inventory with the town's GIS maps would provide an invaluable tool during the development review process.¹⁸

Goal BE-4. Encourage environmentally sensitive building and landscape practices for all future development and significant redevelopment.

- BE-4.1. Consider incorporating energy and environmental performance standards in Lincoln's development regulations.
- BE-4.2. Increase public outreach and access to information about environmentally responsible design, using the town's website, newspaper articles, coordination with groups that sponsor public education programs, and other means.
- BE-4.3. Encourage higher-density development in designated areas, such as the Lincoln Station area, to preserve open space elsewhere.

DISCUSSION

Lincoln is renowned for its long history of innovative techniques to protect open space. Today, Lincoln needs to focus on innovative techniques to encourage sustainable development. There are several opportunities to incorporate energy and environmental performance standards in Lincoln's development regulations. Consulting with other communities could help to identify the right standards for Lincoln because the town may be able to benefit from the successes and failures experienced elsewhere.

Leadership in Energy and Environmental Design (LEED) is a program of the U.S. Green Building Council, a non-profit industry consortium founded in 1993. LEED publishes environmental and energy performance standards for new construction and reconstruction projects. A number of Massachusetts cities and towns have established environmental standards or guidelines for buildings, sometimes by adopting LEED. Normally the standards are voluntary, but special permit approval for larger-scale projects sometimes requires evidence that a project meets or will meet all or as many applicable LEED standards as possible. Until recently, LEED applied only to commercial, industrial, mixed use and multifamily developments. In January 2008, LEED published a "LEED for Homes" rating system tailored to single-family dwellings. The rating system provides points for eight review criteria, and depending on the number of points assigned under each criterion, a home may be eligible for a basic certification or a silver, gold, or platinum certification:

- ❖ Innovation and design process
- ❖ Location and linkages
- ❖ Sustainable sites
- ❖ Water efficiency
- ❖ Energy and atmosphere
- ❖ Materials and resources

¹⁸ See also, Chapter 4, Cultural & Historic Resources.

- ❖ Indoor environmental quality
- ❖ Awareness and education

Lincoln may want to decide whether to require or encourage applicants to incorporate “green” features in their projects: single-family homes, which represent the vast majority of buildings constructed in the town, or other types of buildings, such as commercial or multifamily. While a basic level of LEED single-family home certification does not seem to impose onerous demands on homebuilders, the town should consult with builders who typically work in Lincoln in order to understand the impact from their point of view. Further, since LEED standards are industry-driven, they may not meet Lincoln’s expectations. Owing to intensive marketing by the U.S. Green Buildings Council, LEED has been successfully “branded” as the nation’s green buildings initiative. It is so common to fuse “LEED” with “green buildings” that LEED is almost a form of monopoly. With this in mind, town officials – such as the Conservation Commission, the Planning Board, and the Building Inspector – may want to review LEED standards for single-family homes and consider whether they are the best approach for Lincoln.

Some LEED standards could work to Lincoln’s advantage as the town seeks to reduce the use of chemical pesticides and herbicides, too. For example, one of the “prerequisite” LEED standards for basic single-family home certification is the exclusion of invasive plantings from landscaping plans. Additional points can be gained for other landscaping features that conserve water. Some of the standards used to rate building design and construction could add to the cost of a home, and this may lead to unintended consequences for other goals of the Comprehensive Plan. It may be appropriate to consider applying many LEED standards to homes that have to comply with the Big House Bylaw, but limit the types of standards that apply to smaller dwelling units, small renovation projects, or small, one- to four-unit buildings that include affordable housing. An advantage to this approach is that Lincoln already has an established review process under the Big House Bylaw, and layers of permitting procedures need to be considered. However, any decision to mandate environmental and energy performance standards for single-family homes should be reviewed with the Building Inspector and Town Counsel in order to determine whether the requirements would exceed local authority under the State Building Code.

In communities with a design review bylaw or design review criteria built into the process for site plan approval, design review committees and architects have sometimes found it difficult to make LEED or “LEED-like” building standards compatible with the community’s design guidelines. It is important to note that since there is far more experience with green building standards for nonresidential and multifamily construction than single-family homes, conflicts between some of the rating criteria for environmental and energy performance and the criteria for design review have surfaced with these kinds of developments. Lincoln does not see much nonresidential or multifamily activity, but the town hopes to attract some additional commercial space and housing in the South Lincoln village area. The implications of requiring or encouraging proponents to address LEED standards will need to be considered for each type of project.

Incorporating green building standards within the town’s regulatory review process should be part of the larger effort to preserve the character of Lincoln. Site design that is sympathetic to existing landscape features and natural resources, utilization of sustainable building material, and energy efficient systems are all features that should be encouraged for new construction. Furthermore, promoting “smart evolution” that encourages development to locate in already established areas, such as South Lincoln, away from undisturbed areas would also protect the town’s natural resources.

Open Space

OVERVIEW

Lincoln has established a nationally renowned model program of land stewardship. Caring for public and privately-owned land, avoiding encroachments on wetland resource areas, thoughtful landscaping and sustainable forestry, supporting local farms, and putting wildlife interests first seem to have been broadly accepted as Lincoln's way of life. These ideas, however, can easily be jeopardized by contemporary practices such as mansionization, poorly considered siting, and redevelopment of older residences or new residential construction that involves clearance of once-undisturbed areas to make way for very large homes with lawns and manicured yards. As new housing development and housing re-sales continue to bring new people into



the community, there is no guarantee that Lincoln's future population will be as committed to conservancy. Increased public awareness and a continued commitment to stewardship will be needed in order to protect the conservation values that inspired so many open space acquisitions in the past.

Key Findings

- ❖ Today, Lincoln's open space inventory includes more than 4,000 acres of land.
- ❖ More than half of all wetlands in Lincoln – approximately 1,417 acres – are protected by deed or conservation restriction, in addition to the regulatory protections afforded by M.G.L. c.131, s. 40 and the Lincoln Wetlands Bylaw.
- ❖ Lincoln has approximately 2,900 acres of conservation land, including 2,230 acres owned by the town or a non-profit land trust, and 630 acres of privately-owned land protected by conservation restrictions or Agricultural Preservation Restrictions (APRs).
- ❖ Approximately eighty percent of all protected open space in Lincoln is open to the public for passive recreation, such as hiking, wildlife observation, canoeing, horseback riding and similar low-impact activities.
- ❖ Local governments – including the Towns of Lincoln and Concord and the City of Cambridge – own approximately 684 acres of land with no perpetual restrictions against a change in use.

- ❖ Today, Lincoln has 574.8 acres of active farmland, including 412 acres protected in perpetuity through conservation deeds, conservation restrictions, or Agricultural Preservation Restrictions (APRs). Overall, the farmland is fairly evenly distributed throughout the town.
- ❖ About forty-five percent of the town and two-thirds of its open space inventory are forested.
- ❖ Including the town's churches, Lincoln has approximately 449 acres of institutional open space.
- ❖ Lincoln has approximately seventy-two miles of trails and ten miles of roadside paths. Nearly seventy percent of the trails run through protected open space owned by the town, the LLCT and other organizations, and federal and state parks.

Key Challenges

- ❖ Lincoln's institutional properties seem fairly secure because the organizations that own them are unlikely to close their doors, relocate, or dispose of their land. However, most have no legally binding protection against a change in use.
- ❖ Most of Lincoln's open space trails are not accessible to people with disabilities.
- ❖ Lincoln has a land stewardship program that is considered a model. It requires staff, equipment and facilities, and effective management, and Lincoln makes a noteworthy commitment to meeting these needs. The long-term management and monitoring of conservation land will be increasingly challenging because the tasks are time-consuming and specialized. With a trend of decreased community involvement, these responsibilities may not be able to be carried out predictably by volunteers, even those as devoted and knowledgeable as Lincoln's conservationists.
- ❖ Lincoln has had the luxury of a fairly slow rate of population growth and the presence of many long-time residents who understood, practiced, and promoted Lincoln's conservation ethic. As new housing development and home re-sales continue to bring new people into the community, there is no guarantee that Lincoln's future population will be as committed to conservancy even though many households are attracted to the town because of its open space.

EXISTING CONDITIONS & TRENDS

Lincoln residents describe their town as “an oasis compared to other areas.” They say that Lincoln's abundant “land, trees, and open space” attest to a history of “good work and land planning,” and they cite Lincoln's safe drinking water, trails, and rural character as critically important to their quality of life. At a public meeting for this Comprehensive Plan, residents signaled considerable support for continuing to protect land that supports conservation values, including farms, scenic vistas, the beauty of Lincoln's roads, water resources, wildlife habitat, and unique natural features. Lincoln residents care deeply about the quality of the natural and built environment, and they have traditionally been willing to invest in land acquisitions and stewardship. As one resident said when responding to an open space survey in 2007, “Protecting conservation land is vital – and we should expend our resources there.”

In fact, Lincoln has a long tradition of public and private actions to protect open space. Owing to efforts by the Lincoln Land Conservation Trust (LLCT) and the Rural Land Foundation (RLF), Lincoln is nationally recognized as a leader in land conservation. Lincoln has acquired or otherwise protected numerous parcels of

conservation land through outright purchase, donations, and concessions resulting from development reviews and the local permitting process. In addition, the LLCT owns several properties and helps to protect privately-owned land by holding conservation restrictions. Much of the open space that exists in Lincoln today results from a culture of conservation that generations of residents have shared and passed down to newcomers. This same culture influenced private landowners to make charitable gifts of land to the town and the LLCT. It also contributed to Lincoln's decision in 2002 to adopt the Community Preservation Act (CPA), a local option for generating funds for open space, affordable housing and historic preservation, and some types of recreation facilities. Since then, Lincoln has used CPA funds to acquire and manage land and to replenish its Conservation Fund.

Lincoln has impressive tracts of conservation land, well-preserved agricultural landscapes, and non-profit institutions that own large amounts of open land. Organizations such as the Massachusetts Audubon Society, Walden Woods Project, the Carroll School, the DeCordova Museum and Sculpture Park, and the Farrington Memorial have helped to keep Lincoln a place that looks much the way it did many years ago. Lincoln is remarkable for the degree to which it has absorbed growth and change with relatively little impact on its visual character. Active farming still thrives in Lincoln, and the town has lost very few acres of agricultural land in the past thirty years. Residents appreciate the chance to buy locally grown produce and eggs, and many people hope that in the future the town will have even more agricultural activity. The town has instituted a model stewardship program and made a significant commitment to ensuring its success. Leasing farmland is one of the many tools Lincoln uses to take care of its open space and promote appreciation for the town's agricultural legacy.

Lincoln still has privately-owned land that could be developed. Many of these lands are forested, used recreationally, or are in active agricultural use, while others are simply vacant land holdings that meet the current needs of private property owners. It also has public land that could be converted to other uses, including land owned by the town. As the remaining tracts of unprotected land become available for purchase, Lincoln may find it more difficult to build consensus about the best course of action for the town as a whole. While residents value the conservation ethic that has always distinguished Lincoln from other Boston-area suburbs, the town has competing needs: more types of housing, recreation and other community facilities, school building improvements, and tax revenue to pay for the services that people expect town government to provide.

Open Space Inventory

Today, Lincoln has more than 4,000 acres of *open space*: land used for conservation, the preservation of scenic resources, community character, and unique or heritage landscapes, watershed protection, and outdoor recreation.¹ The town's efforts to save land from development can be seen in the size and characteristics of its open space inventory, for more than eighty percent of Lincoln's open space is protected in perpetuity. Most of the parcels are protected by conservation deeds, that is, fee simple ownership by the town, with parcels designated for conservation purposes under Article 97 of the Massachusetts Constitution, or by a land trust, the National Park Service, U.S. Fish and Wildlife Service, or Massachusetts Department of Conservation and Recreation (DCR). Lincoln also has made extensive use of conservation restrictions and Agricultural Preservation Restrictions (APR) to protect open space, mainly through its partnerships with the LLCT, which holds a majority of the conservation restrictions in town, and the RLF. The City of Cambridge also owns some protected watershed land in Lincoln, although the vast majority of Cambridge's property is not subject to use restrictions.

¹ Unless otherwise noted, all open space classifications, acreage, and features reported in this chapter are based on the following sources: Town of Lincoln, *Open Space and Recreation Plan* (March 2008); Lincoln Conservation Department, FY2008GIS_Files.mdb and FY2007GIS_Files.mdb [CD-ROM]; Lincoln Assessor's Office, FY2008 Parcel Database; and recorded field observations by Dodson Associates and Community Opportunities Group, Inc.

Cambridge is not the only entity that owns a large amount of unprotected open space. Many of the open spaces considered intrinsic to Lincoln's rural beauty also have no legal protection against a future change in use, even though the probability of conversion is very low. While Lincoln has done more than any community in the Commonwealth to protect and manage open space, it still has some important properties that could be developed in the future. It also hosts established facilities that control many acres of unrestricted land, notably the 661-acre HAFB and Hanscom Field compound north of Route 2A.

PROTECTED OPEN SPACE

Conservation Land. Lincoln has approximately 2,900 acres of conservation land, including 2,230 acres owned by the town or a non-profit land trust and an additional 630 acres of privately-owned land protected by conservation restrictions or APRs (Map 6.1).² The geographic distribution of conservation land varies considerably in Lincoln, with the largest parcels concentrated on the west side of town. A virtually uninterrupted conservation greenbelt extends from the Sudbury River to Route 2, west of Bedford Road and Lincoln Road, where a combination of historic estates, farms, and early public open space acquisitions help to explain the presence of several large, contiguous parcels. A large portion of the land in this area was acquired in 1969, when Lincoln purchased nearly 600 acres from five property owners for a total acquisition cost of \$1.8 million.³ The major western holdings include:



- ❖ Approximately 151 acres of privately-owned conservation land with public trail easements surrounding Farrar Pond and Farrar Pond Village;
- ❖ The Mount Misery conservation area, located between South Great Road and Concord Road, including 234.1 acres of woodlands, trails, and agricultural fields;
- ❖ The former Codman estate, on the opposite side of Concord Road from the Mount Misery land and extending across the MBTA railroad tracks. This collection of fairly large parcels, owned variously by the town and the LLCT, contains a combined total of about 263 acres of conservation land. Some of the land is managed as active farmland by the Codman Community Farms, Inc.;
- ❖ The Adams Woods property, with sixty-eight acres of conservation land owned primarily by the town, accessible from Old Concord Road;
- ❖ The Baker Bridge Fields, with 103 acres of town-owned conservation land leased for agricultural use between Baker Bridge Road and Concord Road;

² Note: some of the conservation land is protected both by deed and a conservation restriction. The 630 acres of conservation-restricted land includes only parcels that are not also protected by conservation deeds.

³ Jo Springer, "Historical Land Uses and Land Ownerships of Mt. Misery, Lincoln, Massachusetts" (1981), 26.

- ❖ The Pine Hill conservation area between Concord Road and Sandy Pond Road, including 108± acres of protected woodlands and scenic vistas to the west and north;
- ❖ Approximately 260± acres of forested watershed land surrounding Flint's Pond; and
- ❖ The eighty-two acre Bergen-Culver conservation area between Lincoln Road and Baker Bridge Road, abutting the Codman land to the west and the school complex on Ballfield Road to the northeast.

North of Route 2, Lincoln has two large conservation areas:

- ❖ West of Bedford Road, the town-owned Tanner's Brook (Elm Brook) conservation land includes 110± acres between Brooks Road and Sunnyside Lane; and
- ❖ East of Bedford Road, the Ricci Farm conservation land includes 182.1 acres between North Great Road (Route 2A) and Route 2.

The conservation lands located south of Route 2 and east of Bedford Road and Lincoln Road generally consist of smaller parcels and a more fragmented pattern of open space, but this section of town was already quite developed by the time Lincoln began to acquire open space in the late 1950s. Another difference is that while the town owns most of the conservation land to the west, the LLCT owns more land to the east. Noteworthy examples of the conservation land found on the east side of town include:

- ❖ Fifty-seven acres of the former Wheeler Farm, adjacent to Bedford Road and Route 2, preserved by the Rural Land Foundation's first limited development project in 1965 and owned in fee by the LLCT;
- ❖ Flint's Fields, privately-owned land protected by conservation restrictions and an APR, located on both sides of Lexington Road and partially abutting the Wheeler Farm open space;
- ❖ The Osborne conservation land, composed of 36.5 acres owned by the LLCT off Page Road;
- ❖ More than ninety acres of contiguous conservation land in the vicinity of Weston Road, Conant Road, and Silver Hill Road, including the twenty-five acre Silver Hill Bog, forty-seven acres in the Pigeon Hill conservation area, and a twenty-acre holding known as Browning's Fields;
- ❖ The 55.2-acre Beaver Pond conservation area, located about one-third of a mile west of Browning's Fields, with trail access from Tower Road through the adjacent twelve-acre Todd property;
- ❖ The Stony Brook conservation area, with slightly less than fifty acres of conservation land along the Stony Brook's southern course through Lincoln;
- ❖ The 32.2-acre Umbrello land off Tower Road in South Lincoln; and
- ❖ Sixty-nine acres of private conservation land owned by Roy S. MacDowell, off Old Sudbury Road, under a conservation restriction held by the Massachusetts Audubon Society.

Other Protected Land. Lincoln's inventory of protected open space includes portions of federal and state parks and a federal wildlife area:

- ❖ Approximately 333 acres of the 971-acre Minute Man National Historical Park, owned and managed by the National Park Service, located along both sides of North Great Road in North Lincoln;
- ❖ At the southwestern edge of town, a 13.8-acre segment of the Great Meadows National Wildlife Refuge, which encompasses more than 3,400 acres of land in seven towns, mainly in Sudbury and Wayland; and
- ❖ Ninety-five acres of the 462-acre Walden Pond State Reservation, a state park in Lincoln and Concord, managed by the Department of Conservation and Recreation (DCR).



UNPROTECTED OPEN SPACE

Public Land. Local governments – including the Towns of Lincoln and Concord and the City of Cambridge – own approximately 684 acres of land with no perpetual restrictions against a change in use (Map 6.2). Nearly all of this land is located on the east side of town. Some of the properties support a public facility, which means they have both land and buildings. Aside from the absence of preservation restrictions on the buildings, the land itself makes an important contribution to Lincoln’s identity and rural character. The most visible properties include:

- ❖ Lincoln’s municipal buildings in the town center – the Town Office Building, the Pierce House, the Lincoln Public Library, and Bemis Hall – surrounded by approximately thirty-two acres of grounds, open fields, and woods;
- ❖ The 54.4-acre Lincoln Public Schools and recreation complex on Ballfield Road;
- ❖ Twenty parcels with a combined total of 516.4 acres of land, protecting the drinking water supplies of Lincoln, Concord and Cambridge.

Land Owned by Private Organizations. Two non-profit organizations with a long-standing commitment to conservation and open space own unprotected land in Lincoln. Significantly, the Massachusetts Audubon Society’s headquarters and flagship sanctuary, Drumlin Farm, are largely unprotected. Of the Society’s 225.6 acres in Lincoln, one twelve-acre parcel on Old Sudbury Road is protected by a conservation restriction. The Walden Woods Project on Baker Farm Road, which includes eighteen acres in Lincoln, is largely unprotected, too, with the LLCT holding conservation restrictions on two parcels with a combined total of six acres.

Chapter 61A-61B Land. Many Eastern Massachusetts suburbs have very little agricultural land today because most of it has been developed. In Lincoln’s case, there is very little unprotected agricultural land because the town took steps long ago to acquire Chapter 61A land and other farm land and to promote agricultural activity. Although Lincoln has a total of 337.6 acres of land under Chapter 61A-61B agreements, only 134 acres remain unprotected. The largest include:

- ❖ 54.4 acres on Trapelo Road, owned by the DeNormandie family;
- ❖ 26.6 acres on Old Sudbury Road, owned by the MacDowells;

- ❖ 8.3 acres on Beaver Pond Road, owned by the Kumlers; and
- ❖ 8.6 acres on Old Winter Street, owned by the Levins.

Open Space Characteristics

Lincoln's open space meets many needs: preserving the town's rural character and agricultural heritage, protecting wildlife habitat, wetlands, and water supplies, managing growth, and maintaining property values. The larger conservation areas, watershed lands, and parks clearly serve more than one purpose, as evidenced by the multiple uses that co-exist on the Mount Misery land and the Minute Man National Historical Park. This is as the authors of Lincoln's original and subsequent open space plans intended. Still, many of the town's individual parcels or tracts of open space seem to address a primary public interest, and much like Lincoln's varied pattern of conservation land, the geographic distribution of open space uses differs throughout the town. Both the amount of open space and the uses of the land contribute greatly to the natural environment and physical form of Lincoln's neighborhoods.

AGRICULTURAL LAND

Lincoln's most important heritage landscapes are its farms. Like so many small towns in Massachusetts, Lincoln began as a farming community and gradually lost much of its agricultural land to farm abandonment, residential development, and transportation improvements. Until c. 1950, Lincoln had about 3,700 acres of land in agricultural use: dairy farms, a mink farm, orchards, fields cultivated for a variety of produce, and extensive pasture on approximately forty farms and estates. The suburbanization of Boston-area towns after 1950 accelerated the loss of farmland throughout the region, particularly in communities along and adjacent to Route 128. By 1976, the amount of agricultural land in Lincoln had declined to 638 acres.⁴ Due to sustained efforts by the town and its non-profit partners, Lincoln has managed to preserve most of the agricultural land that still existed thirty-two years ago. Today, Lincoln has 574.8 acres of active farmland, including 412.0 acres protected in perpetuity through conservation deeds, conservation restrictions, or Agricultural Preservation Restrictions (APR).⁵ Overall, the farmland is fairly evenly distributed throughout the town.

Privately-owned non-institutional land makes up eighteen percent of Lincoln's protected farmland and more than half of the unprotected farmland. The vast majority of the protected land is owned by the town or the LLCT, much of it licensed to or used informally by local farmers and agricultural organizations. Indeed, one of the remarkable characteristics of agriculture in Lincoln is the presence of so many small farming operations on local, state, federal, and land trust property. A noteworthy agricultural preservation project is the Codman Community Farm, a working farm located on a portion of the former Codman estate. The Codman family left the land and farm buildings to the town, but Codman Community Farm, Inc. (CCF), manages the property. A private, non-profit corporation governed by a board of directors, CCF was formed specifically to ensure that the Codman's farm would remain in active agricultural use. The land is used for crop production, pasture, and community gardens, and the farm also has a variety of livestock and a farm stand.⁶ There does not appear to be a formal lease agreement between the town and CCF.

⁴ Town of Lincoln Conservation Department, "Agricultural Land 1900-1950," GIS Feature Class [CD-ROM], March 2008; *Open Space and Recreation Plan* (2008), 44.

⁵ Conservation Department, "Agricultural Land," GIS Feature Class [CD-ROM], March 2008.

⁶ Codman Community Farms, Inc., <http://www.codmanfarm.org/index.html>.

ESTATES AND INSTITUTIONAL OPEN SPACE

Another type of heritage landscape of great importance to Lincoln is the family estate. These properties feature relatively large buildings (often more than one), typically separated from the road by formal grounds with generous lawns and sculpted gardens, surrounded by agricultural land and forests. Several of Lincoln's nineteenth century estates and summer homes still serve as private residences. However, Lincoln's historic appeal to well-to-do people left a Gilded Age footprint that has made the town attractive to non-profit institutions such as private schools, museums, and other charitable organizations.



The Carroll School, Pierce House, Farrington Memorial, Minuteman Career & Technical School, the Walden Woods Project, the DeCordova Museum and Sculpture Park, and Massachusetts Audubon Society exemplify the range of educational, public, and charitable organizations currently operating in Lincoln, in many cases occupying buildings that originally served as mansions. Including the town's churches, Lincoln has approximately 449 acres of institutional open space.

Lincoln's institutional properties seem fairly secure because the organizations that own them are unlikely to close their doors, relocate, or dispose of their land. However, most have no legally enforceable protection against a change in use. The Massachusetts Audubon Society's headquarters, the Carroll School, and the Walden Woods Project, all housed within former estates on substantially unprotected landscapes, have institutional interests and significant capital investments that will most likely keep them in Lincoln. Still, town officials have raised concerns about the fate of other institutional properties, notably the 71.4-acre Farrington Memorial south of Route 2. In 2005, Lincoln examined the development potential of six key properties deemed to be "at risk" of a change in use. Three of the at-risk properties were institutional uses, including the Farrington Memorial.⁷

OPEN FIELDS

Lincoln has a wonderful collection of open landscapes mainly because of its agricultural history and the prevalence of family estates. In addition to active agricultural land, there is a noteworthy inventory of upland grasslands that contribute to Lincoln's scenic beauty and often function as habitat for common and rare species. The 4.1-acre Smith-Andover field in Lincoln Center, protected in perpetuity, is a fine example of managed grasslands. The extensive grasslands at Hanscom Field are typical of the ground cover found within and adjacent to airport runways and taxiways, and alongside major highways. The land within Lincoln serves as habitat for a variety of common and uncommon species, including two birds classified as threatened or endangered in Massachusetts. Although the land is not protected open space, Massport, which owns the airport, has been implementing a grassland management plan since 2004. As part of that effort, the agency has provided more grassland habitat on Virginia Road.⁸ These are vitally important open spaces, both for resident wildlife and the visual relief they offer from the airport's hardscape.

⁷ Vanasse Hangen Brustlin, Inc., and Community Opportunities Group, Inc., *At-Risk Properties Analysis* (2005).

⁸ Massachusetts Port Authority (Massport), *L.G. Hanscom Field Grasslands Management Program* (January 2004), reprinted in *Draft 2005 L. G. Hanscom Field Environmental Status and Planning Report*, EOE No. 5484/8696 (November 2006), Appendix F; Open Space and Recreation Plan (2008), 29.

Lincoln has worked very hard to preserve agricultural lands and the way of life they represent. While Lincoln is not the only Massachusetts town that leases conservation fields to farmers, the Conservation Commission has been unusually attentive to possible conflicts between agriculture and wildlife. Local policies dating to the late 1990s and the conditions many farmers must meet today exemplify Lincoln's consciousness of the ways in which land use can support or frustrate the interconnectedness of natural and man-made systems. Delayed cutting of fields, Integrated Pest Management, and vegetated buffers to shield wetlands from erosion and to preserve habitat diversity have been standard requirements in Lincoln for many years. As a rule, the town gives primacy to protecting endangered or threatened wildlife and does not allow farming on public land when doing so would jeopardize critical habitat.⁹



FORESTS

The sheer number of open fields and the enduring presence of working landscapes make Lincoln memorable to many people, but the town would not be what it is without its forests. About forty-five percent of the town and two-thirds of the open space inventory are forested, so the woods play an important part in shaping Lincoln's identity.¹⁰ Throughout the town, a medley of fields, stone walls, and woodlands defines the view from the road and makes Lincoln a visually interesting community. Much of the open space west of Bedford Road and Lincoln Road, generally within the watersheds of Flint's Pond and the Sudbury River, is forest-covered land. There is considerable forest cover in North Lincoln between Route 2 and Hanscom Air Force Base (HAFB) as well. It not only helps to protect drinking water supplies, but also provides critical wildlife habitat for a wide range of mammals, birds, rodents, amphibians, and insects. The forests provide passive recreation opportunities, too, for many of the town's extensive conservation trails cross through wooded tracts of land.

Wetlands. Lincoln's conservation land plays a crucial role in protecting wetland resources and the wildlife that depends on them. Many of the LLCT's conservation parcels on the east side of town coincide with a chain of wooded swamps and shrub swamps in a glacial valley that runs generally from north to south. To the west, the Mount Misery land contains a beautiful display of bordering vegetated wetlands along the Beaver Dam Brook while shallow marshes cover portions of the Baker Bridge Fields. The marshes and shrub swamps along the western edge of town provide some of Lincoln's most attractive views. Over half of the wetlands in Lincoln are protected by deed or conservation restriction in addition to the regulatory protections afforded by M.G.L. c.131, s. 40 and Lincoln's Wetlands Bylaw. A black gum swamp, rare in Massachusetts, is a protected resource area within the Minute Man National Historic Park.

⁹ Lincoln Conservation Commission, "Good Conservation Practices for Leased Fields" [Electronic Version], November 1997.

¹⁰ University of Massachusetts Amherst, Resource Mapping Project, "Land Use," MassGIS, and *Open Space and Recreation Plan* (2008), 20.

Open Space and Neighborhood Design

Lincoln has considerable experience with protecting open space as part of the approval process for housing developments. In some cases, land has been protected in order to comply with zoning regulations that require a set-aside of open space. One example, Farrar Pond Village, is located in Lincoln's only Open Space-Residential Development (R-3) District. For qualifying sites, the R-3 District offers a modest density bonus in exchange for preserving seventy percent of a site as protected open space. The Farrar Village Conservation Trust owns the conservation land surrounding the townhouses while the Farrar Pond Conservation Trust owns the land along the edge of the pond and provides public access easements to the water.¹¹ Farrar Pond Village illustrates many of the benefits of cluster development because it capitalizes on density, compact design, and sensitive site planning to preserve a large amount of land. It relies upon rural design principles to accommodate suburban density.



A second example, Battle Road Farm, required the town to consider a number of public interests with an emphasis on the creation of affordable housing. During the 1980s, Lincoln acquired a forty-seven acre tract of land between Hanscom Drive, Old Bedford Road, and Virginia Road in North Lincoln, opposite Hanscom Field. A portion of the land was rezoned to allow the construction of a large office building known as Lincoln North. Town Meeting agreed to place the rest of the site – roughly thirty acres – in a different planned development district that provides for a much higher density of housing than Lincoln has authorized in other locations. The economic rationale for the higher density was affordable housing. Battle Road Farm is an award-winning development and an intriguing plan because even though it has a relatively small amount of open space, the building styles, placements, and orientation approximate a village development pattern organized around common land. These design choices give the site an open feel that masks Battle Road Farm's average density of five units per acre. Slightly more than five acres of the site were placed under a permanent conservation restriction.¹²

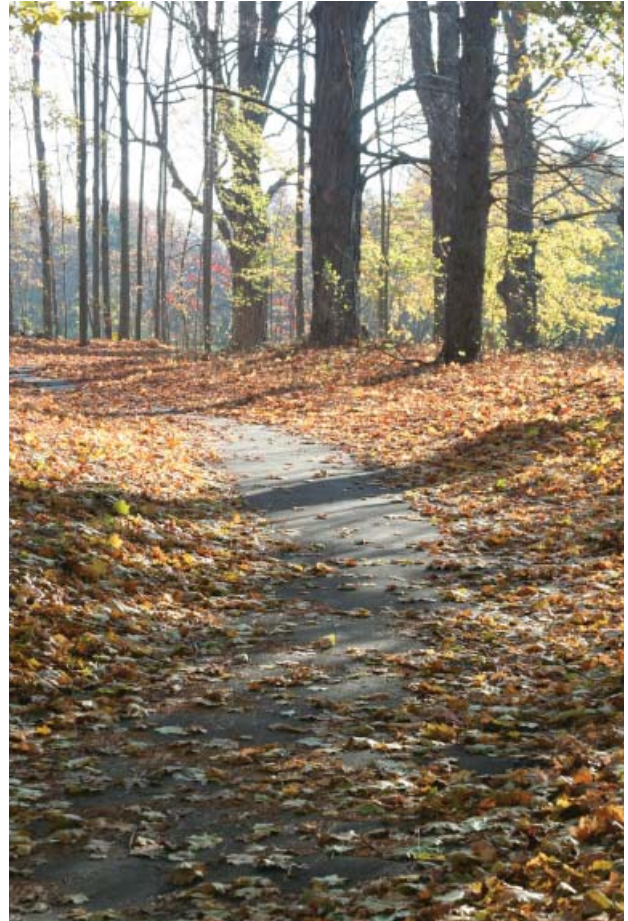
Not all of Lincoln's development-sponsored open space has involved density trade-offs. Another example of open space by design can be seen in the RLF's Wheeler Farm development. By applying the principles of limited development, the RLF created just enough large single-family house lots to pay for the land acquisition cost and transferred all of the remaining land – 56.6 acres – to the LLCT. Lincoln also has approved many cluster developments under its R-1 zoning regulations, which do not offer any density incentives but require less open space than the standard that Farrar Pond Village was required to meet.

¹¹ Lincoln Conservation Commission, *Open Space Plan* (1977), 18.

¹² U.S. Department of Housing and Urban Development, "Battle Road Farm: Lincoln, Massachusetts," *Affordable Housing Design Advisor*, <http://www.designadvisor.org/gallery/battle.html>; Keen Development Corporation, "Battle Road Farm," and Lincoln Conservation Department, "CL_All Conservation Land," GIS Feature Class, March 2008.

Passive Recreation

Approximately eighty percent of all protected open space in Lincoln is open to the public for *passive recreation*, e.g., hiking, wildlife observation, canoeing, and similar low-impact activities.¹³ Lincoln also has a riding ring at the Browning's Fields on Weston Road. The ring is used by a local equestrian club that provides riding lessons and training on the proper care of horses, and sponsors an annual horse show.¹⁴ However, one of the most impressive features of Lincoln's open space is the renowned network of trails and roadside paths that traverse the town (Map 6.3). According to the most recent *Open Space and Recreation Plan* (2008), Lincoln has about seventy-two miles of trails and ten miles of roadside paths. Nearly seventy percent of the trails run through protected open space owned by the town, the LLCT and other organizations, and the federal and state parks. About twenty-four miles of hiking trails cross private land, most secured by trail easements.¹⁵ Lincoln encourages residents to use the trails by sponsoring walking tours guided by the Conservation Department. Due to the presence of such a well-planned system, it is possible to walk the entire west side of town and nearly all of Lincoln on off-road trails. Bicycling is also permitted on some of the conservation trails. However, most of the open space trails are not accessible to people with disabilities. This challenge exists in all communities, and Lincoln is no exception.



The roadside paths that run alongside most of Lincoln's major roads are less intrusive than conventional sidewalks due to the town's careful approach to managing roadside vegetation. Nearly all of the roadside paths permit walking, bicycling, and horseback riding. The roadside paths connect with conservation trails in numerous locations. It is clear that Lincoln residents appreciate and use the roadside path network. An opinion survey conducted by the Open Space Plan Committee in January 2007 shows that more respondents cited a need for additional roadside paths and maintenance of existing paths than any other type of outdoor recreation facility. Moreover, of the six types of facilities that earned high need ratings in the survey, roadside paths commanded the highest overall priority ranking.¹⁶ Residents value this resource so much that say they will invest in maintaining and expanding the roadside paths network, not only for its recreational appeal but also its contribution to the character of Lincoln's roads.¹⁷

¹³ See Chapter 10, Community Services and Facilities, for information about Lincoln's active recreation facilities.

¹⁴ Town of Lincoln, *2007 Town Report*, Report of the Lincoln Conservation Commission, 119.

¹⁵ *Open Space and Recreation Plan* (2008), 34, 40; Lincoln Conservation Department, "Trails," GIS Feature Class, March 2008.

¹⁶ *Open Space and Recreation Plan* (2008), 85.

¹⁷ Lincoln Comprehensive Long-Range Plan Committee, "June 19, 2007 Group Exercise Notes," and "Open Space Notes: February 9, 2008," on file in Lincoln Planning Department.

Open Space Planning, Acquisition, and Stewardship

Lincoln is well-known for its achievements in open space protection and stewardship. Over the past decade, the Lincoln Conservation Commission and LLCT have instituted a land stewardship program that is proving quite effective. Today, Lincoln has baseline documentation on all conservation land owned or controlled by the town or the LLCT. All of the deeds and conservation restrictions have been located, reviewed, verified, scanned, and catalogued; the lands have been mapped and photographed, and their natural resource characteristics have been inventoried. The Conservation Department and LLCT monitor all of the conservation properties at least once a year, using the baseline documentation as a guide.

The Conservation Department includes the seven-member Conservation Commission and four professional staff whose responsibilities range from administration and enforcement of wetlands protection laws to conservation planning, public education, and land management, monitoring and assessment. The full-time land manager and part-time ranger work almost exclusively in the field. Their duties include land maintenance, trail clearing and blazing, public education, and enforcing rules and regulations for use of Lincoln's conservation land. Many outside of Lincoln would be surprised to hear that the Conservation Commission has a staff of four. Some towns have difficulty funding the services of a part-time conservation agent, and in Massachusetts there are towns as small as Lincoln that provide no professional support to their conservation commissions. However, Lincoln has understood for many years that acquiring open space is not the end point in land conservation; rather, it marks the beginning of a public commitment to care for an irreplaceable asset. By any standard, Lincoln's stewardship program is powerful testimony to the value that townspeople place on environmental quality and resource protection.

The LLCT and RLF play instrumental roles in conservation land planning and management, but their roles are not the same. For example, the LLCT owns a considerable amount of conservation land and holds conservation restrictions on many parcels of open space. It also partners with the Conservation Commission for acquisition planning, stewardship, and conservation advocacy programs. The LLCT also relies heavily on volunteers and has an unusually strong track record in building public support for open space. The RLF is a different type of organization, both in structure and mission. It often participates in conservation projects by functioning as a developer and a land disposition agent, transferring land to be preserved to the LLCT or the town and recovering its investment through lot sales. Unlike the LLCT, the RLF does not hold large tracts of conservation land. One of its most sophisticated and interesting land disposition projects resulted not only in a large amount of protected open space (a portion of the Codman estate, now owned by the town), but also Lincoln's first moderate-income housing development, Lincoln Woods, and the South Lincoln Mall commercial center. By establishing local conservation and development capacity, Lincoln has assembled far more effective tools than zoning to control the fate of significant properties.

Lincoln has other town committees and non-profit organizations that contribute to its conservation objectives as well. In 2002, Lincoln adopted the Community Preservation Act (CPA), a state law that allows participating cities and towns to impose a surcharge on property tax bills, receive matching funds from the state, and invest the combined local and state revenue in open space, historic preservation, and affordable housing, and in some cases recreation facilities. Acting on recommendations from the Community Preservation Committee (CPC), Town Meeting has committed approximately twenty-five percent of Lincoln's CPA revenue to conservation purposes, including land acquisitions, open space planning, and maintaining the town's Conservation Fund.¹⁸ In addition, the Board of Selectmen recently appointed Lincoln's first Agricultural Commission to encourage

¹⁸ 2007 Annual Town Report, 83; Motions, 2008 Annual Town Meeting Warrant, 5-6.

farming and promote farm-friendly policies. Non-profit organizations such as the renowned Massachusetts Audubon Society, the Walden Woods Project, and the Food Project also share Lincoln's conservation ethic.

Regional Trends

A striking fact about Lincoln's region is that most of the town's immediate neighbors do not have an open space and recreation plan.¹⁹ Until recently, Lincoln also operated without a current plan, but Lincoln never stopped attending to its open space needs. The town continued to acquire land and more importantly, to take care of the land it already owned. While the number of towns focusing on stewardship has increased in the past decade, it is significant that Lincoln's first open space plan, written more than thirty years ago, recognized the management obligations and challenges that come with public land ownership.²⁰

Lincoln has an undeniable impact on other communities in the Boston metropolitan area. Its conservation land and parks draw visitors from the region, and residents have traditionally supported the idea that Lincoln's open space should contribute to meeting regional needs. These needs are periodically documented in the Statewide Comprehensive Outdoor Recreation Plan (SCORP), which the state is required to prepare in order to remain eligible for grants from the federal Land and Water Conservation Fund. Like its predecessors, the most recent SCORP, *Massachusetts Outdoors 2006*, evaluates statewide and regional needs for outdoor recreation facilities and predicts future demand. Major issues in the SCORP that relate to Lincoln include resource protection, stewardship, education and information, partnerships, access, maintenance, innovative tools for land protection, and the protection and development of trails. The state's findings have to be considered in the context of the region as a whole, but some of the findings may be useful to Lincoln's own long-term open space and recreation planning.

The SCORP divides Massachusetts into seven regional recreation planning areas. Lincoln falls within the Northeastern Region, which includes most of Middlesex County and Essex County. The Northeast Region ranks second statewide for total population, fifth for total acres of open space and second for total number of parcels held as open space. According to the SCORP and the most recent edition of the Commonwealth's open space inventory, Lincoln, Concord, Bedford, and Carlisle have significant municipal and non-profit open space holdings.²¹ For the Northeast Region overall, open space used for conservation and passive recreation purposes exceeds that of other regions. Recreation activities equally popular in the Northeast Region and the state as a whole include swimming, walking, sightseeing, hiking, and fishing, but activities notably more popular in the region include baseball, sunbathing, horseback riding, off-road vehicle driving, snowmobiling, boating (motorized), surfing, soccer, tot lots, and hockey (pond). Lincoln provides for some of these pursuits.

The Northeast Region's less popular activities include road biking, cross-country skiing, and running. However, cross-country skiing at the Mount Misery conservation land and biking appear to be quite popular. The authors of the SCORP also found that return trips to agricultural areas, trails and greenways, and wildlife conservation areas in the Northeast Region were lower than the statewide average, yet these kinds of resources are particularly strong in Lincoln. The SCORP reports a high level of satisfaction with the region's wildlife conservation areas and agricultural resources, and some dissatisfaction with the lack of bikeways. As for activity needs, the region's residents place the highest priority on road biking, playground activity, swimming, walking, golfing,

¹⁹ Division of Conservation Services, "Open Space and Recreation Plan Status," 3 July 2008, <http://www.mass.gov/envir/dcs/openspace/default.htm>.

²⁰ Lincoln Conservation Commission, *Open Space Plan* (1997), 51-53.

²¹ MassGIS, "Protected and Recreational Open Space," July 2008, <http://www.mass.gov/mgis/osp.htm>.

and basketball, and moderate priority on tennis, fishing, and mountain biking. These activities point to needs for more playgrounds, neighborhood parks, and golf courses, and better access to agricultural lands, lakes and ponds, rivers and streams, and coastal beaches.²² In some cases, these needs correlate with needs identified in a survey that Lincoln conducted for its new *Open Space and Recreation Plan*.²³

Just as visitors from the region use Lincoln's open space for passive recreation opportunities, local residents use facilities in other towns. This is aided by connections between Lincoln's trail systems and trails in neighboring towns. Lincoln residents often use conservation lands and canoe landings in Concord, Sudbury, and Wayland and conservation lands in Weston. Residents of both towns use Cat Rock and Ogilvie Town Forest, located on the Lincoln/Weston border. Many Lincoln residents enjoy the Great Meadows National Wildlife Refuge in Sudbury and Concord as well as the Minute Man National Historical Park, which is crossed by several of Lincoln's trails that connect to Walden Pond State Reservation and The Battle Road path. Lincoln wants to make more connections between its trails and open spaces and those of neighboring communities, yet coordination for open space and trails planning between adjacent towns is fairly limited and not systematic.

NEEDS, ISSUES & CHALLENGES

Stewardship of Conservation Land

Lincoln has established a model land stewardship program. It requires staff, equipment and facilities, and effective enforcement, and Lincoln makes a noteworthy commitment to meeting these needs. The long-term care, maintenance, and monitoring of conservation land are challenging because the tasks are time-consuming and specialized. These responsibilities cannot be carried out predictably by volunteers, even those as devoted and knowledgeable as Lincoln's conservationists. The town's willingness to fund a professionally staffed stewardship program increases the likelihood that Lincoln will be able to protect the conservation values that inspired so many open space acquisitions in the past.

The public education components of stewardship will become even more important in the future. Lincoln has had the luxury of a fairly slow rate of population growth and the presence of many long-time residents who understood, practiced, and promoted Lincoln's conservation ethic. As new housing development and housing re-sales continue to bring new people to town, there is no guarantee that Lincoln's future population will be as committed to conservancy even though many households are attracted to the town because of its open space. Caring for public and privately-owned land, avoiding encroachments on wetland resource areas, thoughtful landscaping and sustainable forestry, supporting local farms, and putting wildlife interests first seem to have been broadly accepted as Lincoln's way of life. These ideas can be jeopardized by contemporary practices such as mansionization or redeveloping older residences to the point of clearing once-undisturbed areas on existing lots in order to accommodate very large homes and manicured yards. Intensive commercial development also tends to place significant demands on natural landscapes and can reduce the quality and quantity of water resources. Further, when private land under conservation restrictions changes hands, new owners often do not realize their legal obligations. In short, Lincoln will most likely find that it needs to devote more effort to public education than in the past. Even without much new growth, Lincoln will not be immune to the effects of new interests and different values that come with a change in the make-up of a community's population.

²² Massachusetts Executive Office of Energy and Environmental Affairs, *Massachusetts Outdoors 2006*, 78-85 passim.

²³ *Open Space and Recreation Plan* (2008), 82-83.

Importance of Small Open Space Parcels

Although Lincoln still has a few substantial parcels of unprotected open space, the combined efforts of the town, the RLF, and the LLCT have helped to secure and protect most of the largest land holdings. Lincoln's tradition of acquiring conservation land, taking care to identify and map priority open space, and working with land owners may increase the town's ability to respond if the remaining large parcels are threatened by unwanted development. In addition, Lincoln has some land use mechanisms in the Zoning Bylaw to work with developers in the event that neither the town nor the LLCT can obtain site control over desirable open space.

While the size of a potential acquisition affects its value as conservation land, the importance of small open space parcels to the character and quality of life in established neighborhoods should not be overlooked. Despite Lincoln's low-density development pattern, it is a maturely developed suburb with some neighborhoods that have little protected open space. It also has some historic family estates, residential properties with surplus land, and institutional uses that contribute an open feel to the neighborhoods around them. As smaller, sometimes isolated pockets of land become available for development, it will be important to consider neighborhood-level needs for open space and recreation areas even when the parcels have little ecological significance. At the same time, Lincoln may find it increasingly difficult to separate neighborhood needs for open space from the routine opposition of abutters to new development.

Caring for public and privately-owned land, avoiding encroachments on wetland resource areas, thoughtful landscaping and sustainable forestry, supporting local farms, and putting wildlife interests first seem to have been broadly accepted as Lincoln's way of life. These ideas can be jeopardized by contemporary practices such as mansionization or redeveloping older residences to the point of clearing once-undisturbed areas on existing lots in order to accommodate very large homes and manicured yards.

Effective Use of Zoning

Lincoln's zoning provides ways to protect open space as part of the land development process. For example, the town has a voluntary cluster development option for tracts with at least 160,000 sq. ft. of land in the R-1 District, Open Space Residential Development (OSRD) by special permit in the R-3 District, a Planned Community Development (PCD) in the R-4 District, and open space requirements in some of the North Lincoln Planned Development Districts. Each of these regulatory tools has some mechanism for setting aside and preserving open space while accommodating residential uses. The open space must be conveyed to the town, a non-profit land trust, or a homeowners association.

The open space regulations in Lincoln's Zoning Bylaw tend to mirror the evolution of open space zoning in the United States since the mid-1960s. They were clearly intended to meet diverse needs and in some cases, unique site conditions. Setting aside thirty-five percent of a four-acre site as open space suggests different expectations and involves different land development techniques than setting aside seventy percent of a twenty-five acre site as open space in exchange for a density bonus. The former is a reservation of open space by design, that is, a tool for flexible site planning that includes open space; the latter is an incentive for developers to save a large amount of land. These techniques as well as the use of overlay districts have served the town's needs very well to date. Because the existing cluster/OSRD development provisions were added to Lincoln's Zoning Bylaw incrementally, Lincoln might consider clarifying the use terms in a more consistent way.

Conservation, Passive Recreation, and Active Recreation Needs

Lincoln has an outstanding conservation record, but it does not seem to address the wide variety of recreation interests identified by its own population with the same vigor. People appreciate having access to open space and passive recreation in Lincoln, yet they have no choice but to travel to other towns to use facilities such as indoor swimming pools and health clubs. Residents seem to want more local active recreation options, notably a recreation center, a fitness center, an indoor pool and a skating rink, but it is not clear how a small town like Lincoln would finance these facilities – not only the capital cost of construction, but also ordinary operating costs. It is difficult to tell whether expanding Lincoln’s active recreation facilities falls into the category of a “want” or a “need,” for even though residents say they want more recreation choices, they rate conservation land and stewardship as higher priorities.²⁴

In all towns, an assessment of open space and recreation needs depends in part on the particular group of residents who happen to respond to a survey or attend a public forum. However, some ideas appear as recurring themes in Lincoln regardless of the number of participants or their mode of participation, and a preference for conservation ranks at the top. Still, at a meeting to consider goals for this comprehensive plan, some residents urged the town to “remember active recreation,” to consider the possibility of converting some existing conservation land to recreation fields, and provide a recreation center for children and the community as a whole.²⁵ These are important needs, and they may be particularly important to young families and residents of Lincoln regardless of age. An inter-local agreement with Concord – as Lincoln has done to provide Board of Health inspection services for many years – or with another nearby community may be the most realistic near-term way to address resident demand for active recreation facilities.

GOALS & RECOMMENDATIONS

Goal OS-1. Preserve, protect and expand conservation, agricultural, and recreational lands.

- OS-1.1. Continue efforts to protect existing conservation land and open space from development.
- OS-1.2. Evaluate the effectiveness of Lincoln’s existing bylaws, regulations, and policies to protect open space, and strengthen them as appropriate.
- OS-1.3. Protect lands of conservation and recreation interest, such as private farms, Chapter 61 lands, view corridors, buffers and scenic vistas, outstanding natural features, and fields appropriate for recreational use.
- OS-1.4. Provide incentives to farmers on private property to place conservation or agricultural preservation restrictions on non-protected agricultural land.
- OS-1.5. Maintain open communication among conservation organizations and continue to explore funding, land acquisition, or limited development opportunities.
- OS-1.6. Partner with adjacent towns, the state, and regional non-profit organizations to promote mutual conservation and recreation interests.

²⁴ *Open Space and Recreation Plan* (2008), 86-87. See also, Lincoln Comprehensive Long-Range Plan Committee, “June 19, 2007 Group Exercise Notes,” on file in the Lincoln Planning Department.

²⁵ Lincoln Comprehensive Long-Range Committee, “Open Space Notes: February 9, 2008,” on file in the Lincoln Planning Department.

DISCUSSION

Lincoln's impressive open space inventory and the roadside paths and trails convey a long-standing commitment to preservation, stewardship, and recreation. Few Massachusetts communities can claim the success that Lincoln has had in protecting open space, and it is difficult to think of any town that has done as much to make its land open and usable to local and regional residents. The most important step Lincoln can take to address this Comprehensive Plan's open space goals and recommendations is to implement the new *Open Space and Recreation Plan* and prepare timely updates of the plan in the future.

Most of Lincoln's conservation land was protected through outright purchase or donation. This will probably remain the preferred technique to protect high priority parcels in the future. However, Lincoln also has established some zoning regulations to encourage or require reservations of open space in new developments. As part of a comprehensive review of the existing Zoning Bylaw, Lincoln could consider updating its regulations and providing for additional ways to preserve open space. Potentially useful mechanisms may include cluster development by right, subject to site plan review, and additional zoning tools such as transfer of development rights (TDR) and backlot development. Some communities in Massachusetts have adopted special regulations to protect vistas, unique natural features, and corridors, too, usually by establishing overlay districts with incentives to locate development away from critical resource areas.²⁶

Farming remains an important component of Lincoln's culture, rural character, and economy. Continuing to encourage owners of private agricultural land to place conservation restrictions or APRs on their property will help Lincoln maintain its impressive tradition of agriculture. CPA funds could be used to purchase restrictions or to acquire the land in fee under a leaseback agreement with the farmer. In addition, the newly formed Agricultural Commission will need to receive adequate support to carry out its responsibilities.

Communication and cooperation between the town, adjacent communities, and non-profit conservation organizations is critical to protect open space resources of regional significance. This will require continued collaboration with the LLCT and RLF to protect the town's remaining priority open spaces, and enhanced communications with non-local conservation groups in order to facilitate joint action. Toward these ends, Lincoln could host annual forums, monthly discussion groups, and other systematic ways to promote mutual conservation and recreation interests.

Goal OS-2. Promote active stewardship of existing agriculture and conservation land.

- OS-2.1. Maintain the Conservation Commission's Property Baseline Inventory and Monitoring Program.
- OS-2.2. Encourage best land management practices, such as farming or recreation field maintenance practices compatible with natural resources, ecologically sound woodlot management, and scientifically sound management of existing open farm ponds.
- OS-2.3. Support long-term land stewardship with local resources, grants, stewardship fees, and other funding sources.
- OS-2.4. Establish and enforce policies for addressing violations of conservation restrictions and regulations governing the use of conservation land.

²⁶ These ideas are discussed in more depth in Chapter 2, Land Use, and Chapter 5, The Built Environment.

DISCUSSION

These recommendations need to be implemented by carrying out the actions identified in Lincoln's *Open Space and Recreation Plan* (2008). The town's exceptional baseline inventory and monitoring program requires continued financial support both from the town and the LLCT. Enhancing Lincoln's existing staff and volunteer capacity through college and university partnerships should be considered. Though large non-profit charitable organizations sometimes make grants available for inventory and stewardship programs, usually they favor awarding seed grants to establish new programs over grants to extend or enhance existing ones. Lincoln's most likely source of continued funding for its stewardship programs will remain its own taxpayers. In addition, the town should consider establishing stewardship fees and a special revenue fund for stewardship revenues, although the existing Conservation Fund may be appropriate for this purpose as well. The fees could be as simple as a "flat fee" for each conservation restriction or a fee structure based on an analysis of the town's cost to monitor and manage its land. Some of the large non-profit conservation organizations charge stewardship fees that represent a percentage of the market value of the land. For cities and towns, fees need to bear some rational relationship to the actual cost of a service.

Lincoln has taken countless steps to protect open space and care for its conservation land, but the town's population is changing and not all residents will be equally informed about the place of conservation and stewardship in Lincoln's community culture. Public education tools that reach people in a wide variety of locations and settings could help to increase local knowledge of the town's conservation agenda and how individuals can be part of it. The Conservation Department makes good use of the town's website, but the website needs some redesign to make it more user-friendly. Conservation displays at the library, the entrance to town hall, the Mall at Lincoln Station, and school buildings also could be considered, and displays with photographs of residents working on trails projects or participating in farm tours would communicate the message that people can make a difference. Similarly, residents who already use environmentally protective landscaping practices on their own property may be willing to allow their yards to be photographed for a display board.

Land stewardship requires a consistent commitment to environmental awareness and oversight. New regulations and policies that promote ecologically responsible land management practices, including farming, landscape maintenance, and woodlot management may need to be considered. Furthermore, continued monitoring of existing conservation lands and lands with conservation restrictions will be critical to ensure that public use or encroachments by abutters do not harm natural resources. The town will continue to need adequate capacity to enforce conservation restrictions and the rules and regulations for use of conservation land.

Goal OS-3. Maximize recreational opportunities on recreation and conservation land.

- OS-3.1. Provide for multiple uses of recreation and conservation land, and multiple recreation uses of conservation trails.
- OS-3.2. Maintain and evaluate opportunities to expand the roadside path and trail network.
- OS-3.3. Maintain current recreation facilities and provide new facilities to meet evolving community needs.

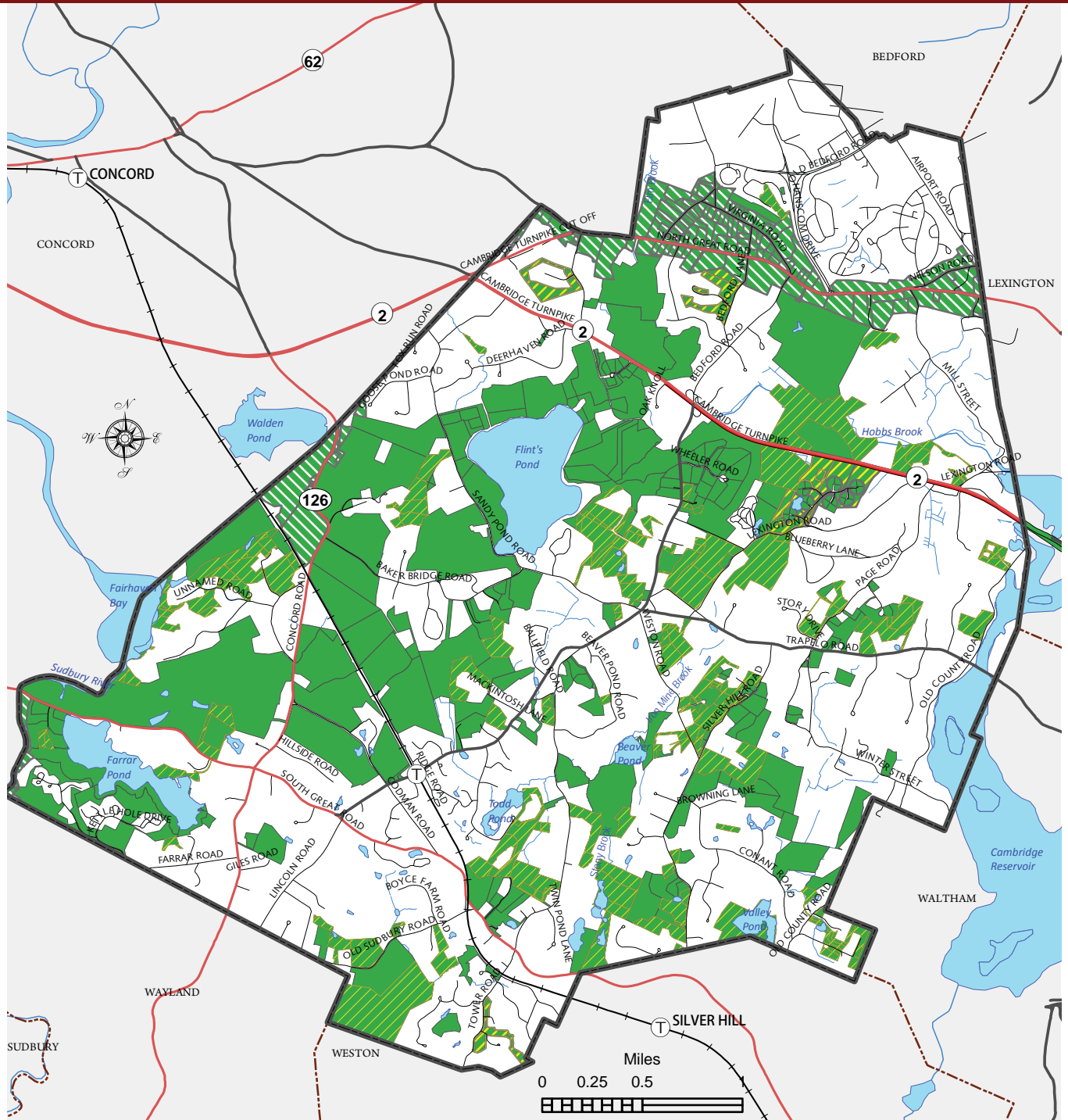
DISCUSSION

Lincoln's renowned roadside paths and conservation trails are a model for other towns. Maintaining existing trails and constructing new ones require volunteers and staff, but Lincoln is a small town and it does not have unlimited resources. Moreover, some of Lincoln's trails cross privately owned land, and not all of the trails are

protected by conservation restrictions or easements. A trails master plan helps to focus on priorities, and one should be developed collaboratively with adjacent towns, other government agencies, and non-profits.

Lincoln's commitment to open space sometimes makes it difficult for the town to meet other community interests, notably active recreation, or land and facilities designed for intensive recreation uses. The town has unmet needs for playing fields, both additional fields and maintenance of existing fields. Some residents say that Lincoln's conservation program has been so successful that it is hard to find unrestricted land suitable for active recreation, and they think more should be done to make public land available for purposes in addition to conservation. Further, Lincoln's interest in promoting mixed-use development around Lincoln Station means that eventually, the town will need to look at other possibilities for land currently occupied by the DPW garage on Lewis Street. This is an example of an area that would be suitable for multiple uses, including recreation fields, more than for conservation land. A working group with representatives of the Planning Board, Conservation Commission, Housing Commission, Recreation Committee, and town staff should participate in a joint land and facilities needs analysis and land suitability study. This involves reviewing town parcels that are not protected by a conservation restriction and all unprotected privately owned parcels, and making suitability determinations for buildings and facilities identified in the needs analysis.

LINCOLN COMPREHENSIVE PLAN



Community Opportunities Group, Inc.

MAP 6.1 PROTECTED OPEN SPACE

Sources: MassGIS, Lincoln Conservation Department, USGS, U.S. Bureau of the Census, Community Opportunities Group, Inc.

April 2009

Legend

ROADWAYS

- Limited Access Highway
- Multi-Lane (Not Limited Access)
- Other Numbered Highway
- Major Road, Collector

- MBTA Stations
- Railroad
- Open Water
- River or Stream

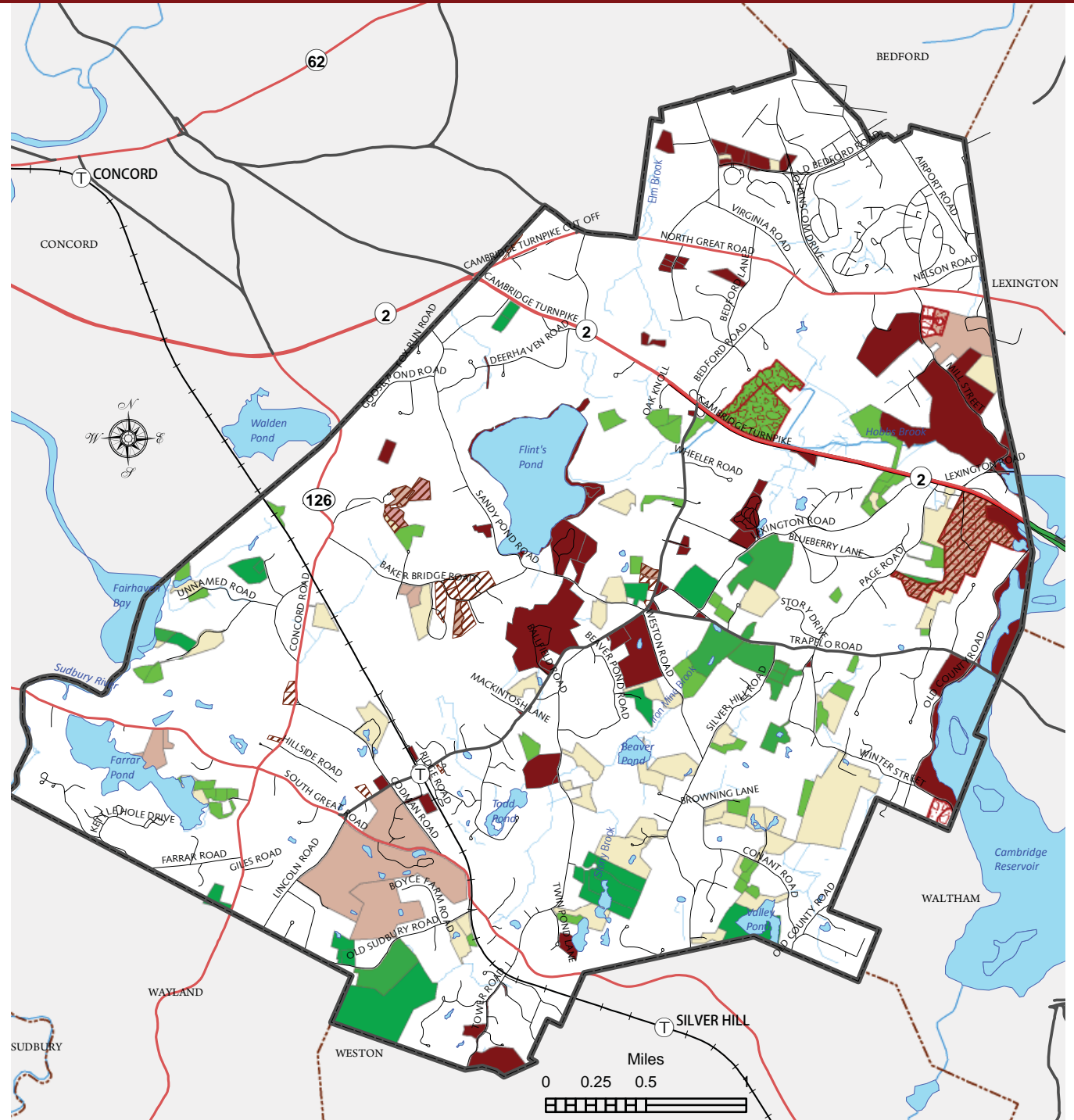
PROTECTED LAND

- Local (Public, Non-Profit, Private)
- Conservation Restrictions
- Federal and State Open Space

LINCOLN PLANNING BOARD



LINCOLN COMPREHENSIVE PLAN



Community Opportunities Group, Inc.

MAP 6.2 UNPROTECTED OPEN SPACE

Sources: MassGIS, Lincoln Conservation Department, USGS, U.S. Bureau of the Census, Community Opportunities Group, Inc.

April 2009

Legend

ROADWAYS

- Limited Access Highway
- Multi-Lane (Not Limited Access)
- Other Numbered Highway
- Major Road, Collector

- MBTA Stations
- Railroad
- Open Water
- Institutional Uses
- "At-Risk" Properties

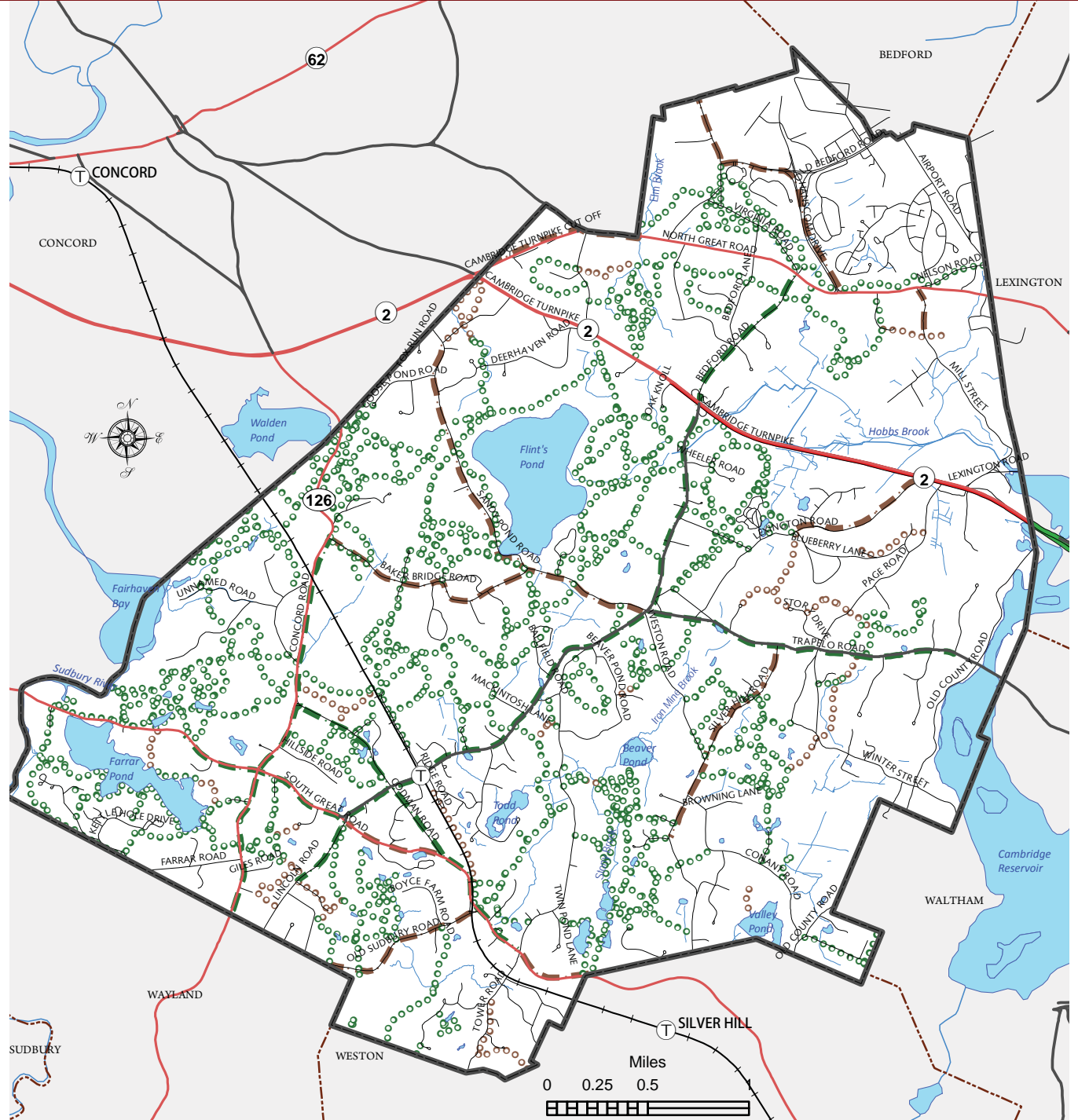
LANDS OF CONSERVATION-RECREATION INTEREST

- Residential
- Vacant Land
- Chapter 61A
- Public
- Non-Profit, Institutional

LINCOLN PLANNING BOARD



LINCOLN COMPREHENSIVE PLAN



Community Opportunities Group, Inc.

MAP 6.3 TRAILS & ROADSIDE PATHS

Sources: MassGIS, Lincoln Conservation Department, USGS, U.S. Bureau of the Census, Community Opportunities Group, Inc.

April 2009

Legend

- | | | |
|---------------------------------|-----------------|--------------------------------|
| ROADWAYS | Ⓣ MBTA Stations | Existing Trails |
| Limited Access Highway | Railroad | Public Trail |
| Multi-Lane (Not Limited Access) | Open Water | Roadside Path |
| Other Numbered Highway | | Proposed/Planned Trails |
| Major Road, Collector | | Public Trail |
| | | Roadside Path |

LINCOLN PLANNING BOARD



Housing

OVERVIEW

Lincoln was historically an economically and demographically diverse community and residents have long enjoyed the social and educational benefits that such a community provides. However, housing prices have increased dramatically over the last three decades, mainly due to rising land values. Since undeveloped land is scarce and expensive, there has been a recent increase in the demolition of smaller homes to fulfill the market demand for newer, larger homes. Over time, this could lead to reduced diversity in the town's population. There is already evidence that some of Lincoln's elderly, and young families who could use starter homes, are being priced out of the market. In addition, if developers were to take full



advantage of state-mandated housing requirements under Chapter 40B, which allow a them to bypass local zoning regulations, it could threaten the character of Lincoln and compromise it's long history of careful planning by allowing large-scale development inconsistent with Lincoln's goals.

Key Findings

- ❖ Lincoln's Census 2000 housing inventory includes 2,905 housing units. About 2,000 of these units are in residential Lincoln, with the remaining units at Hanscom Air Force Base (HAFB).
- ❖ Lincoln has very high home values. The average single-family home value exceeds \$1 million, and the average value of new homes is nearly \$2 million.
- ❖ There are relatively few rental units in Lincoln. In 2000, about 281 housing units were renter-occupied.
- ❖ Recent population estimates for Lincoln indicate that since 2000, the number of residents 25-44 years old has declined significantly and the number of residents 55-64 years old has increased.
- ❖ About ninety-seven percent of the town's land is in one zoning district, Single-Family Residence 1, which requires a minimum lot size of 80,000 sq. ft. for new development. Of the total area, however, a signifi-

cant percentage of the house lots were created before 1955 and are smaller, grandfathered non-conforming properties.

- ❖ From 1997 to 2007, Lincoln issued 111 residential building permits for new residences and forty-nine demolition permits – in most cases to make way for the construction of a new, larger house. On average, the replacement homes are more than twice the size of the homes that were torn down.
- ❖ Residential land use per capita in Lincoln is the highest in its region at 0.54 acres per person. The town’s development density – 160 housing units per square mile – is the lowest in the region.
- ❖ Many of Lincoln’s households are small, yet its homes are quite large. Fifty-eight percent of Lincoln’s households consist of one or two people, yet fifty-one percent of the housing units have eight or more rooms.
- ❖ Through its own efforts, Lincoln exceeded the state’s ten percent affordable housing minimum during the 1990s and has done so again since 2000.

Key Challenges

- ❖ Lincoln’s very high home values and limited supply of vacant, developable land will continue to exert redevelopment pressure on older, modest housing stock. Also, the town’s high property values will continue to make some affordable housing techniques – such as buy-down programs – difficult to implement.
- ❖ The state’s affordable housing policies and preferences are not always predictable, which make it hard for communities to plan for affordable housing development.
- ❖ Lincoln’s large detached single-family homes provide few options for seniors. In the next five years, the number of over-65 households in Lincoln is projected to increase from twenty-nine percent to thirty-four percent as the nation’s population continues to age.
- ❖ The town will need to maintain consensus over how far Lincoln should go to provide affordable housing for moderate and middle income households.
- ❖ Maintaining support for affordable housing may be increasingly challenging for Lincoln as the town’s population continues to change.
- ❖ Like all Massachusetts municipalities, Lincoln will need to continue to monitor and to add to its Subsidized Housing Inventory if it wants to avoid comprehensive permit developments under Chapter 40B.

EXISTING CONDITIONS & TRENDS

Lincoln took an activist role in providing affordable housing even before the legislature enacted Chapter 40B in 1969. The Lincoln Foundation, a private organization formed in 1968, developed the 125-unit Lincoln Woods housing cooperative on a portion of the Codman Estate in the mid-1970s. The Lincoln Housing Commission, created by the town in 1979, has been instrumental in Lincoln’s efforts to plan for and create affordable housing throughout the town. In addition to affordable units, Lincoln has taken steps to create several types of housing in order to meet the needs of its residents. While Lincoln remains a single-family home suburb, it has historically been receptive to fresh ideas about housing. Today, however, the town faces many housing challenges. As one of the most desirable suburbs in the Boston metropolitan area, Lincoln finds it difficult to

discourage tear-downs, to create a variety of housing and more affordable housing, and to provide housing for people with disabilities. Enlisting support from new residents to ensure that Lincoln remains affordable to more than a narrow demographic band may be one of Lincoln's greatest challenges. Effective communication about the needs of different households, promoting a variety of methods to meet those needs, and reaching consensus about local government's responsibilities will remain very important. Furthermore, Lincoln's relationship with HAFB will change if the "privatized" military housing located there is made available to civilians.

Housing Inventory

Lincoln has the signature characteristics of Boston's affluent western suburbs. Its homes tend to be spacious, expensive, and designed for traditional households, and Lincoln is well endowed with historic estates. However, Lincoln also has an unusual housing inventory with a mix of architectural styles, and it has both recognizable neighborhoods and a development pattern with remarkably few conventional subdivisions. The types, ages, and styles of homes in Lincoln tell a story about the town's physical evolution and culture. The same qualities shed light on Lincoln's place in the suburban housing market and the types of households that Lincoln attracts today. In addition, a portion of HAFB lies within Lincoln's geographic boundaries, and virtually all of the military housing is located in Lincoln. Except for Lincoln's long-standing agreement with the Department of Defense to operate the public schools at HAFB, the town has always thought of the housing there as separate from the town. Nevertheless, even though the military housing is not under Lincoln's jurisdiction, it is part of the town's official housing inventory for census purposes and the military families legally reside in Lincoln.

According to the federal census and other sources, Lincoln's total housing inventory increased 12.9 percent, or 235 units, between 1990 and 2000 (Table 7.1). Most of this increase stemmed from new construction of single-family homes and to a lesser extent, condominiums. Since 2000, Lincoln has experienced intense demand for very large single-family homes, and the town's built fabric is changing. Lincoln's desirability and high land costs all but guarantee that new homes will sell at the high end of the regional housing market and that older homes will be altered or demolished and rebuilt to make way for the large residences that affluent homebuyers seem to expect. Excluding approximately 850 housing units at HAFB and the land controlled by the Department of

Table 7.1
Total Housing Inventory by Units in Structures, 1990-2008

Housing Type	Federal Census (Actual Count)			Current Estimate	
	1990	2000	Change	2008	Change
Single-Family Units*					
Residential Lincoln	1,361	1,516	155	1,624	108
Hanscom AFB	98	52	-46	N/A	N/A
Two-Family Units					
Residential Lincoln	42	35	-7	37	2
Hanscom AFB	53	21	-32	N/A	N/A
Multi-Family Units†					
Residential Lincoln	418	511	87	540	35
Hanscom AFB	742	776	34	N/A	N/A
Total Housing Units					
Residential Lincoln	1,821	2,056	235	2,201	145
Hanscom AFB	893	849	-44	N/A	N/A

Sources: U.S. Department of Commerce, Bureau of the Census, 1990 Census of Population and Housing, Summary File 3, Table H020, Census 2000, Summary File 3, Table H30; and Claritas, Inc. (2008).

*Includes single-family residences with a business.

† Figure includes single-family attached dwellings, mobile homes, and accessory apartments. Local officials estimate that 81 of Lincoln's multi-family units are accessory apartments.

Defense, Lincoln has roughly 2,200 housing units, or 160 units per square mile, which is about twenty-seven percent of the average housing density for Middlesex County as a whole.

AGE OF HOUSING

Lincoln has a noteworthy collection of historic homes. While most of its oldest residences can be seen from the roadways that radiate from the center of town – Trapelo Road, Bedford Road, Sandy Pond Road, Lincoln Road, and Weston Road – they are scattered in outlying areas, too, along South Great Road, Concord Road, and Old Sudbury Road, as shown in Map 7.1. Lincoln developed in periods that can be gleaned from the age of its homes and the character of its roadways. Residences dating to the eighteenth century and early nineteenth century in and around the

town center contribute to the record of Lincoln’s agricultural past. In the late nineteenth century, new residences filled in around farms as affluent families from Boston arrived in search of a pastoral spot near the city. Many of these residences are grand and quite beautiful, such as the Pierce House, now owned by the town. Housing development continued within and extended from the same areas from the turn of the century to World War II, as evidenced by the age and styles of homes along portions of Tower Road, Beaver Pond Road, and Bedford Road just north of Route 2.

After World War II, subdivision activity spread throughout the Boston area in response to three conditions: the new regional highway system, unprecedented growth in household formation rates associated with the “Baby Boom,” and federal housing policies that favored new homes outside the nation’s cities. When access to Boston was enhanced by the construction of Route 2 and the Massachusetts Turnpike, growth rates skyrocketed during the 1950s in Lincoln and all of the surrounding towns. Another factor that contributed to Lincoln’s post-war housing growth rate was the construction of military housing at HAFB. The postwar period also introduced some of Lincoln’s unique contemporary houses and neighborhoods, such as Brown’s Wood, a community of twenty-three contemporary homes around Laurel Drive and Moccasin Hill Road, designed and developed as a cooperative.¹ Today, less than fifteen percent of Lincoln’s housing inventory was built prior to 1940, and nearly half of its homes were built during the thirty years following World War II. This has important consequences for the definition of “historic,” for some of Lincoln’s most significant residential architecture is contemporary.

PHYSICAL AND FINANCIAL CHARACTERISTICS OF HOUSING UNITS

In general, Lincoln’s housing is in good to excellent condition. The housing is relatively new, and residents have the means to maintain and improve their homes. Data from the assessor’s office indicate that only a handful

Table 7.2
Estimated 2008 Housing Inventory by Age of Structures

Year Built	Lincoln	Percent	Hanscom AFB	Percent
1939 or Earlier	321	14.6%	0	0.0%
1940 to 1949	164	7.5%	55	6.5%
1950 to 1959	367	16.7%	104	12.2%
1960 to 1969	269	12.2%	303	35.7%
1970 to 1979	402	18.3%	199	23.4%
1980 to 1989	160	7.3%	102	12.0%
1990 to 1998	249	11.3%	82	9.7%
1999 to 2008	269	12.2%	4	0.5%
Total (2008)	2,201	100.0%	849	100.0%

Sources: Claritas, Inc., and Community Opportunities Group, Inc.

¹ Commonwealth of Massachusetts, Department of Conservation and Recreation (DCR), Massachusetts Heritage Landscape Inventory Program, *Lincoln Reconnaissance Report: Freedom’s Way Heritage Landscape Inventory* (2007), 3. See also, Massachusetts Cultural Resource Information System (MACRIS), <http://mhc-macris.net/>.

of the housing units in Lincoln are substandard or in poor condition.² Furthermore, Lincoln has virtually no overcrowded units: a housing industry term for a dwelling unit too small for the size of the household that lives in it.³ Sudbury is the only other community in the immediate region with no evidence of overcrowding.⁴ The key reason that problems such as overcrowding do not exist in Lincoln is that the town has comparatively large housing units. This is due, at least in part, to the large percentage of single-family homes in Lincoln's housing inventory, the high cost of land, and the affluence of Lincoln homeowners. More than half of Lincoln's housing units have eight or more total rooms and four or more bedrooms, which makes its homes somewhat smaller than those of Weston and Sudbury yet larger than the homes in Bedford, Concord, Lexington, Waltham, and Wayland.⁵

Single-Family Homes. Lincoln's single-family homes vary in size and amenities depending on their age. Table 7.3 shows that Lincoln's oldest and newest houses are also its largest, both in total floor area and number of rooms. Of the 1,509 single-family homes reported in Table 7.3, there are obvious size differences between houses constructed since 2000 and those constructed in the decades just before and after World War II. In general, homes constructed between 1900 and 1969 are smaller in floor area, and they occupy slightly smaller parcels than homes built before or afterward. Many of the lots just meet Lincoln's two-acre minimum lot requirement, and Lincoln has a fairly large number of non-conforming single-family properties.

Table 7.3
Single-Family Homes by Age, Size, and Land Consumption, 2008 (Excluding Hanscom AFB)

Year Built	Total Homes	Total Land Area (Acres)	Average per Dwelling Unit				
			Land per House	Gross Floor Area	Net Living Area	Number of Rooms	Number of Bedrooms
Pre-1800	32	68.2	2.13	6,360	3,701	10.6	4.7
1800-1849	22	43.2	1.96	7,216	3,889	9.6	4.0
1850-1899	62	137.3	2.21	6,004	3,435	9.4	4.4
1900-1944	270	540.5	1.98	4,938	2,830	8.3	3.7
1945-1969	666	1,352.4	2.01	4,696	2,937	8.3	3.7
1970-1999	394	1,061.6	2.69	6,969	4,246	9.5	3.9
2000-2007	63	160.0	2.54	9,087	5,556	11.7	4.1

Source: Harald M. Scheid, Regional Tax Assessor, "FY 2008 Lincoln Data Extract" [Electronic Version], 18 April 2008; and Community Opportunities Group, Inc. Note: Table 7.3 omits some of Lincoln's single-family homes, such as farmhouses associated with Chapter 61A land and housing units owned by the town or a non-profit organization.

Lincoln's prestige, natural beauty, limited developable land, and large-lot zoning contribute to the high value of its housing, but its housing values also correlate with the age and size of the dwelling units. Table 7.4 reports land and building values for single-family homes, grouped in the same housing age ranges reported above. On average, Lincoln's oldest and newest homes have the highest values. Together with house size, the building-to-land value ratios in Table 7.4 provide useful indicators of the risk of future demolition. Especially indicative are those categories in which the value of the land exceeds the value of the building itself.

² Harald M. Scheid, Regional Tax Assessor, "FY 2008 Lincoln Data Extract" [Electronic Version], to Community Opportunities Group, Inc., 18 April 2008.

³ An overcrowded unit has a household size equal to 1-1.49 people per room; a severely overcrowded unit, 1.5 or more people per room.

⁴ U.S. Department of Commerce, Bureau of the Census, Census 2000, Summary File 3, Table H20, "Tenure by Occupants per Room," American FactFinder, <http://www.census.gov>.

⁵ Census 2000, Summary File 3, Table H26, "Tenure by Rooms," and Table H42, "Tenure by Bedrooms."

Table 7.4
Single-Family Home Values, 2008 (Excluding Hanscom AFB)

Year Built	Assessed Value				Building-to-Land Value Ratio
	Land	Yard Items	Building	Total	
Pre-1800	\$599,678	\$21,409	\$646,734	\$1,267,822	1.08
1800-1849	\$581,123	\$18,182	\$827,277	\$1,426,582	1.42
1850-1899	\$600,239	\$20,840	\$600,360	\$1,221,439	1.00
1900-1944	\$524,372	\$10,006	\$381,715	\$916,093	0.73
1945-1969	\$516,458	\$6,714	\$337,037	\$860,209	0.65
1970-1999	\$581,781	\$6,972	\$678,513	\$1,267,266	1.17
2000-2007	\$654,892	\$8,495	\$1,289,527	\$1,952,914	1.97

Source: Harald M. Scheid, Regional Tax Assessor, "FY 2008 Lincoln Data Extract" [Electronic Version], to Community Opportunities Group, Inc., 18 April 2008. (See note, Table 7.3.)

Condominiums. Lincoln’s housing inventory includes 400 condominiums. Farrar Pond Village, one of the town’s early experiments with planned residential development, contains a mix of garden-style and townhouse units built during the mid- to late-1970s, with housing values ranging from \$480,000 to \$665,000.⁶ The buildings are contemporary in design, with clusters of four, five and six units per structure nestled inconspicuously in a wooded area south of Farrar Pond. Residents have views to a large open field and Farrar Pond. In addition, there is a small townhouse development on Todd Pond Road, built during the 1960s and Lincoln Ridge, a 65-unit condominium complex adjacent to Farrar Pond Village. Another innovative condominium development is Lincoln’s award-winning Battle Road Farm, created roughly a decade after Farrar Pond Village. Battle Road Farm includes 120 two- and three-bedroom townhomes south of Hanscom Field on land acquired by the town in the mid-1980s. Most of the buildings are four-unit farm houses. Forty-eight of the units qualify as affordable housing under Chapter 40B, but Battle Road Farm did not require a comprehensive permit because Lincoln created a special zoning district for it. Since Battle Road Farm is a mixed-income development, the unit values vary widely, from \$175,000 to \$490,000.⁷

Lincoln Ridge Estates is a small condominium conversion development formerly known as Ridge Road Apartments. Constructed ca. 1965 as garden-style apartments, the Lincoln Ridge Estates condominiums are the smallest two-bedroom condominiums in Lincoln, with 772 sq. ft. of living area and an average assessed value of about \$220,000.⁸ In addition, Lincoln recently approved an age-restricted condominium development, Minuteman Commons, on Virginia Road. Minuteman Commons has thirty-two garden-style condominiums in four three-story buildings. Eight of the units are affordable and listed on the Chapter 40B Subsidized Housing Inventory.

Rental Units. Lincoln does not have many rental units. Lincoln Woods, a 125-unit mixed-income housing cooperative on Wells Road, is a short walk from Lincoln Station. Constructed 1974-1975, Lincoln Woods illustrates Lincoln’s historic commitment to affordable housing. In 1972, the Rural Land Foundation acquired seventy-one acres of the Codman Estate and set aside land for moderate-income housing and the retail center known as the Mall at Lincoln Station. The twenty-acre site reserved for housing was rezoned and conveyed

6 Ibid.

7 U.S. Department of Housing and Urban Development (HUD), "Battle Road Farm, Lincoln, Massachusetts," Affordable Housing Design Advisor, <http://www.designadvisor.org/gallery/battle.html>; Massachusetts Department of Housing and Community Development (DHCD), Town of Lincoln Subsidized Housing Inventory, 31 March 2008; and Scheid, "FY 2008 Lincoln Data Extract."

8 Scheid, "FY 2008 Lincoln Data Extract."

to the Lincoln Foundation, a non-profit entity created four years earlier as a local housing development and finance organization. Lincoln Woods residents are required to purchase a share in the cooperative and also pay monthly rent. The development is currently financed by MassHousing and governed by a board of directors.⁹ All 125 units are listed on the Chapter 40B Subsidized Housing Inventory even though just over half qualify as low- or moderate-income rental units. Monthly rents for the market-rate units currently range from \$1,230 to \$1,906, depending on the size of the unit.¹⁰ According to the state, the affordability restriction for Lincoln Woods expires in 2032.¹¹ Recently the board of directors hired a consultant to prepare a strategic plan for Lincoln Woods because the cost to purchase shares in the cooperative had become prohibitive for many prospective tenants. The board is exploring options to convert the cooperative to an economically sustainable financial structure while preserving affordability.

The Lincoln Housing Commission has created rental units on Sunnyside Lane and Tower Road, and at the Pierce House and Codman Farm House. The Sunnyside Lane units include a state-owned building that Lincoln controls under a long-term lease, an accessory apartment that was recently added to it, and two new modular units built on adjacent land that Lincoln acquired from the state in 2003.¹² In addition, local officials estimate that Lincoln has eighty-one accessory apartments, or small units created within detached single-family dwellings or accessory structures on the same lot. Ever since 1972, Lincoln has allowed accessory apartments under zoning regulations that have been liberalized several times in order to encourage this type of housing.¹³ Lincoln also has a few two-family homes and two three-family buildings, all constructed between the turn of the century and the mid-1970s, and most located in the vicinity of South Lincoln.¹⁴

Property Taxes. Lincoln homeowners pay fairly high property taxes. The cumulative effects of Proposition 2 ½ overrides and Lincoln's long-standing commitment to excellent schools can be seen in the town's state rank for average single-family tax bill, which has hovered between second and third out of 351 cities and towns for at least twenty years. Lincoln's average tax bill has increased by forty-five percent in current dollars, and about twenty percent in 2000 constant dollars, since Fiscal Year (FY) 2000.¹⁵ Though Lincoln property taxes are very high in absolute numbers, the residential tax burden in Lincoln is fairly typical of affluent suburbs in Eastern Massachusetts. The average tax bill as a percentage of family income in Lincoln is just above the midpoint for the immediate region (Table 7.5).

TENURE

Eighty-six percent of Lincoln's households own the home they live in. Owner-occupancy has increased since 1990 due to a combination of new-home construction, condominium conversion, and market absorption of for-sale units that were temporarily rented during the recession of the late 1980s. As of the most recent federal census, more than half of Lincoln's renter-occupied units were detached single-family homes and townhouses,

9 Town of Lincoln, *Consolidated Housing Plan* (2003), 24; MassHousing, *Housing List: Spring 2008*, 105.

10 Boston Apartments Online, <http://www.bostonapartments.com/lincolnwoods.htm>.

11 DHCD, Subsidized Housing Inventory.

12 *Consolidated Housing Plan*, 25-26, and Town of Lincoln, *Annual Town Report* (2007), 122.

13 Ibid; Town of Lincoln Zoning By-law (updated 24 March 2007), i-vii, and Section 14.3; and Mark Whitehead to Community Opportunities Group, Inc., 21 May 2008.

14 Scheid, "FY 2008 Lincoln Data Extract."

15 Massachusetts Department of Revenue (DOR), Division of Local Services, "Average Single-Family Tax Bill," 1988-2008, Municipal Data Bank, <http://www.dls.state.ma.us/mdm.htm>.

**Table 7.5
Family Incomes and Property Taxes as a Percentage of Family Income, 2008**

Town or City	Occupied Housing Units	Owner-Occupied Units	Pct. Owner-Occupied	Median Family Income	Avg. Single-Family Home Value	Avg. Single-Family Tax Bill	Tax Bill Pct. of Income
Bedford	4,793	3,853	80.4%	\$131,314	\$534,795	\$6,086	4.6%
Concord	5,950	4,774	80.2%	\$137,691	\$944,487	\$10,125	7.4%
Lexington	11,083	9,110	82.2%	\$135,459	\$701,925	\$8,788	6.5%
LINCOLN*	2,084	1,787	85.7%	\$158,033	\$1,053,265	\$10,870	6.9%
Sudbury	5,496	5,064	92.1%	\$165,152	\$683,843	\$9,758	5.9%
Waltham†	23,588	10,717	45.4%	\$82,031	----	----	----
Wayland	4,546	4,165	91.6%	\$135,541	\$652,315	\$9,772	7.2%
Weston	3,728	3,236	86.8%	\$228,083	\$1,362,448	\$14,537	6.4%

Source: Massachusetts Department of Revenue, Division of Local Services, "Average Single-Family Tax Bill," 2008, Municipal Data Bank; Claritas, Inc., and Community Opportunities Group, Inc.

*Statistics exclude Hanscom Air Force Base.

†Average single-family tax bill statistics not reported for Waltham and most other cities in the Commonwealth.

i.e., units typically developed as for-sale housing rather than for rental. By contrast, virtually all of the housing units at HAFB are renter-occupied because the units there were built and managed as housing for military personnel and their families.

POPULATION AGE

The age of Lincoln residents is an important indicator and predictor of current and future housing needs. Mirroring changes in the make-up of the Commonwealth’s population and that of the nation, Lincoln’s population is aging. The “Baby Boom” generation – people born between 1946 and 1964 – is approaching retirement age, and most “Echo Boomers” have progressed from school-age children to young adults. Table 7.6 shows that since 1990, the number of people between 25 and 44 has declined significantly in Lincoln while the population of mature workers makes up a noticeably larger share of the total population. Continued growth among persons over 65 may suggest needs for more housing options for seniors and more services to support the “aging in place” population.

Housing Development ZONING

Lincoln regulates housing development through zoning and subdivision control, yet regulation alone does not explain the town’s success with managing growth and protecting its rural character. Lincoln’s land use innovations also reflect its partnerships with the Rural Land Foundation, the Lincoln Foundation, and Lincoln Housing Commission. These partnerships enabled Lincoln to pursue zoning initiatives for developments such as Farrar Pond Village, Lincoln Woods, and Battle Road Farm. The town’s four residential use districts, unique overlay districts, and special housing regulations include:¹⁶

- ❖ **Single-Family Residence (R1)**, which applies to ninety-seven percent of the town. This district provides for detached single-family homes on lots with at least 80,000 sq. ft. of land and 120 feet of frontage. By special permit, Lincoln allows single-family cluster developments on parcels with a minimum of 160,000 sq. ft. of land.

¹⁶ For more information about Lincoln’s zoning requirements, see Chapter 2, Land Use & Zoning.

Table 7.6
Change in Age Distribution of Lincoln Residents, 1990-2008 (Excluding Hanscom AFB)

Age Cohort	1990 Census		Census 2000		2008 Estimate		2000-2008 Change
	Number	Percent	Number	Percent	Number	Percent	
Age 0-4	287	6.4%	350	6.8%	364	6.7%	14
Age 5-17	638	14.1%	974	18.9%	1,026	18.8%	52
Age 18-24	265	5.9%	169	3.3%	425	7.8%	256
Age 25-34	522	11.6%	308	6.0%	302	5.5%	-6
Age 35-44	849	18.8%	827	16.1%	469	8.6%	-358
Age 45-54	674	14.9%	1,001	19.4%	1,051	19.2%	50
Age 55-64	581	12.9%	639	12.4%	867	15.9%	228
Age 65-74	444	9.8%	498	9.7%	521	9.5%	23
Age 75-84	208	4.6%	319	6.2%	343	6.3%	24
Age 85+	47	1.0%	67	1.3%	95	1.7%	28
Total Population	4,515	100.0%	5,152	100.0%	5,463	100.0%	311

Sources: Bureau of the Census, 1990 Census of Population and Housing, Summary File 1, Table P011; Census 2000, Summary File 1, Table P11; Claritas, Inc., Site Reports, and Community Opportunities Group, Inc.

- ❖ **General Residence (R2)**, a small district of about twenty-four acres along Ridge Road. In this district, Lincoln allows single-family dwellings under the rules that apply in the R-1 District, and two-family and multi-family dwellings by right, subject to site plan review. Buildings with two or three units require at least 10,000 sq. ft. of land per unit, and buildings with four or more units, 8,000 sq. ft. per unit.
- ❖ **Open Space Residential Development (R-3)**, created in the early 1970s to facilitate the Farrar Pond Village condominium development.
- ❖ **Planned Community Development (R-4)**, created in the early 1970s for Lincoln Woods.
- ❖ The **North Lincoln Overlay District**, established in 1986, requires a preliminary development and use plan submission to the Planning Board before Town Meeting can place any land within the district. Town Meeting's actions involve amending the Zoning Map to create a Planned Development District (PDD, a sub-district of the overlay) and approving the development concept shown on the preliminary plan. Lincoln has created Planned Development Districts for Battle Road Farm, Lincoln North (an office building), Minuteman Commons, and The Groves. A similar process for creating sub-districts applies in the **South Lincoln Overlay District**.
- ❖ In the R-1 District, Lincoln allows **accessory apartments** by special permit in single-family homes or accessory buildings on a lot of at least 40,000 sq. ft. Accessory apartments must meet some eligibility standards, e.g., a maximum floor area of 1,200 sq. ft., an owner-occupancy requirement for the principal residence or the apartment, and a one-accessory-unit-per-lot restriction. The single-family home altered to accommodate an accessory apartment must be at least ten years old. The Board of Appeals can grant a special permit for more than one unit in exchange for protected open space. Further, a smaller unit (900 sq. ft.) can be created in a home that does not meet the ten-year age standard *or* a unit that exceeds 1,200 sq. ft. if the owner agrees to rent the unit to a low- or moderate-income tenant for at least five years. Lincoln waives the low- or moderate-income requirement for units occupied by family members.
- ❖ In 2005, Lincoln adopted **inclusionary zoning** for any residential development with six or more housing units. The bylaw requires approximately fifteen percent of the total number of units in a development to be

affordable. The units may be provided within the development, in another location in Lincoln, through a donation of developable land, or payment of a fee in lieu of creating affordable housing.

- ❖ The **Big House Bylaw**, adopted in 2003.

TRENDS IN RESIDENTIAL LAND USE

In most cases, Boston’s west suburbs have experienced relatively little new housing growth in the past decade. For more than thirty years, housing and employment have moved from Boston’s inner-core and Route 128 suburbs to outlying towns. This phenomenon has been documented by the Massachusetts Audubon Society in *Losing Ground: At What Cost?* and smart growth organizations, and it can be seen in a comparison of Lincoln’s region with the state’s high-growth towns along I-495 (Table 7.7). Although the information is dated, the most recent land use statistics for all communities in Massachusetts show that between 1971 and 1999, Lincoln experienced a 23.2 percent increase in the amount of land used for residential development, including HAFB. A similar increase in rate of residential land use change occurred in Bedford, while Sudbury witnessed the region’s largest increase, at 32.1 percent. In contrast, the I-495 towns with very high rates of population growth have absorbed the brunt of demand for new housing in Eastern Massachusetts, resulting in a rapid loss of farms and forested land. Residential land consumption per capita tends to be higher in these towns due to their predominantly low-density zoning. To be clear, the residential acres indicated in Table 7.7 exclude land in conservation and are based on the 1999 aerial flyover that is a sequel to previous flyovers occurring in 1951, 1971, and 1985. Nevertheless, it is important to note that when HAFB is excluded from Lincoln’s housing inventory and land area, the residential land use pattern in Lincoln consumes more land per person than any town in the region except Dunstable.

Table 7.7
Residential Land Use Change, 1971-1999

City/Town	Total Land Area	Residential Acres		Absolute Change	Percent Change	1999 Residential Land Per Capita
		1971	1999			
Lincoln’s Region						
Bedford	8,782.8	2,187.2	2,702.8	515.6	23.6%	0.215
Concord	15,801.7	3,845.4	4,840.8	995.3	25.9%	0.285
Lexington	10,535.3	4,807.7	5,149.1	341.4	7.1%	0.170
LINCOLN						
<i>Including HAFB</i>	9,154.0	2,367.4	2,917.4	550.0	23.2%	0.362
<i>Excluding HAFB</i>	8,800.9	2,259.0	2,777.0	518.0	22.9%	0.539
Sudbury	15,587.0	4,378.3	5,783.9	1,405.5	32.1%	0.343
Waltham	8,165.6	3,017.8	3,364.9	347.2	11.5%	0.057
Wayland	9,773.9	3,668.5	4,080.4	411.9	11.2%	0.311
Weston	10,804.1	4,391.5	4,820.7	429.2	9.8%	0.420
<i>Regional Total</i>	88,604.4	28,664.0	33,660.1	4,996.1	17.4%	0.200
High-Growth Towns						
Bolton	12,801.4	805.9	1,892.4	1,086.5	134.8%	0.456
Boxborough	6,630.2	627.2	1,482.9	855.7	136.4%	0.305
Dunstable	10,626.2	532.5	1,526.7	994.2	186.7%	0.540
Franklin	17,136.9	2,679.1	5,674.5	2,995.5	111.8%	0.192
Hopkinton	16,844.3	1,596.3	4,346.1	2,749.8	172.3%	0.326
Mansfield	12,946.4	1,910.2	4,109.5	2,199.3	115.1%	0.183
Westford	19,489.7	2,727.7	6,234.4	3,506.7	128.6%	0.300

Source: MassGIS, Land Use Summary Statistics; U-Mass Donohue Institute, MassBenchmarks, “Total Population 1930-2000 and Estimates for 2001-2006” [Electronic Version], State Data Center; and Community Opportunities Group, Inc.

Lincoln's small households play an important part in these statistics. Compared with all other towns in the region, excluding Waltham, Lincoln's households and families are smaller, on average, with fewer children per family and a relatively large percentage of "empty nester" homeowners. About fifty-eight percent of all households in Lincoln consist of single people living alone or couples living without children. In addition, Lincoln adopted two-acre zoning in 1955. Although the town has taken many steps to promote a variety of housing since then, most of its growth has consisted of single-family residences on two-acre-plus lots. Overall, the use of land for housing town-wide is overwhelmingly dictated by large lots which, in turn, make it challenging to preserve or promote a variety of house sizes in Lincoln's neighborhoods.

Building Permits. From 1997 to 2007, Lincoln issued building permits for 111 new housing units, including eighty-one single-family homes and the thirty-two condominiums at Minuteman Commons. However, most residential building permits have been for additions to existing dwellings, as is the case in all towns. For each new construction permit, Lincoln issued permits for 1.5 to as many as ten additions and alterations, depending on the year. In the same period, Lincoln witnessed the demolition of forty-nine older homes – in most cases to make way for new, larger single-family residences.¹⁷ Except for the two years of permit activity for Minuteman Commons, the average construction cost per dwelling unit more than doubled between 1997 and 2007.¹⁸

New Growth Revenue. Proposition 2 ½ allows municipalities to increase each year's tax levy by 2.5 percent of the prior-year levy plus the value of "new growth," or the value of property improvements not included in the previous year's tax base, such as new construction and major renovations. New growth revenue trends shed light on changes in the size and composition of a community's tax base because the value of residential growth is reported separately. For more than ten years, tax revenue from residential growth has provided ninety percent or more of Lincoln's total new-growth revenue. In FY 2008, new growth revenue declined statewide and in Lincoln, echoing troubled conditions in the housing market.

Housing Market

Lincoln is a buy-up suburb that attracts second- or third-time homebuyers, often from nearby communities. This can be detected in the town's very high housing sale prices and the mortgage records of recently sold homes. Lincoln's single-family home sale prices are the region's second highest (second to Weston). The sales figures in Table 7.8 show that since 1998, the median single-family home sale price in Lincoln has increased eighty-eight percent in current dollars and about forty-four percent in constant dollars. Of the surrounding towns, only Weston had a higher increase in median sale price both for single-family homes and condominiums, yet prices in Lexington and Waltham increased nearly as much in the single-family home market. On average, about fifty-six single-family homes and twenty-five condominiums sell each year in Lincoln, or roughly three percent of the single-family home inventory and six percent of the condominium inventory. Unlike the increase in median sale price, the average number of sales in Lincoln was among the *lowest* compared with surrounding towns. Average condominium sales were higher in Bedford, Concord, Lexington, Waltham, and Wayland, but lower in Weston and Sudbury. The modest increase in single-family home sales between 2006 and 2007 is consistent with trends throughout the Greater Boston area. However, the 24.6 percent increase in single-family sale prices and the 11.5 percent increase in condominium sale prices in the same period make Lincoln region-

17 Lincoln Planning Department, "Permit Log, 1977-2007" [Electronic Version], 7 November 2007, and "List of Teardowns, 1997-2007" [Electronic Version], 11 December 2007. Four of the demolished houses were removed in connection with The Groves.

18 Bureau of the Census, "Residential Building Permits, Lincoln, Massachusetts, 1997-2007," Annual Reports, Building Permits by County or Place Data Retrieval System, <http://www.census.gov/const/www/permitsindex.html>.

Table 7.8
Single-Family and Condominium Sale Prices in Lincoln, 1998-2008

Year	Single-Family Home Sales			Condominium Sales		
	Median Sale Price		Number of Sales	Median Sale Price		Number of Sales
	Current Dollars	Real 2008 Dollars		Current Dollars	Real 2008 Dollars	
2008	1,045,000	\$1,045,000	49	\$310,000	\$310,000	22
2007	1,117,500	\$1,148,510	56	\$435,000	\$447,071	18
2006	904,250	\$955,867	52	\$390,000	\$412,262	23
2005	1,155,000	\$1,260,917	55	\$438,000	\$478,166	21
2004	930,000	\$1,049,661	55	\$406,250	\$458,521	26
2003	983,723	\$1,139,888	54	\$360,000	\$417,149	33
2002	852,700	\$1,010,308	50	\$389,500	\$461,493	23
2001	874,305	\$1,052,112	50	\$385,000	\$463,297	25
2000	770,000	\$952,970	71	\$330,000	\$408,416	23
1999	596,300	\$762,532	71	\$297,000	\$379,795	22
1998	555,000	\$725,490	58	\$268,000	\$350,327	33

Source: The Warren Group (2009).

ally unique. In the Boston metro area as a whole, single-family sale prices for 2007 remained at 2006 levels and condominium prices rose by only 4.7 percent after a precipitous drop the previous year.¹⁹

AFFORDABLE HOUSING

Chapter 40B. In November 1969, the legislature adopted a law to address the economic and fair housing consequences of exclusionary zoning in the suburbs. When less than ten percent of a community’s housing units are affordable to and occupied by low- and moderate-income households, M.G.L. c.40B, ss. 20-23 (“Chapter 40B”) allows eligible developers to seek a comprehensive permit if at least twenty-five percent of their proposed housing units comply with state affordability requirements. A comprehensive permit consolidates all local permits into one process administered by the Zoning Board of Appeals. It overrides zoning and other local regulations that impede the construction of affordable housing. In communities that do not meet the ten percent statutory minimum, a developer can appeal a denied or conditionally approved permit to the state Housing Appeals Committee (HAC).

The Massachusetts Department of Housing and Community Development (DHCD) maintains the Chapter 40B Subsidized Housing Inventory, or the official roster of affordable units throughout the state. According to DHCD

Table 7.9
Lincoln’s Chapter 40B Subsidized Housing Inventory (SHI)

Location	SHI Units	Type	Expiration of Affordable Housing Restriction
Lincoln Woods	125	Rental	2032
Battle Road Farm	48	Homeownership	Perpetual
The Groves (Apartments)	30	Rental	Perpetual
Minuteman Commons	8	Homeownership	Perpetual
Tower Road	2	Rental	Perpetual
Codman Farm	2	Rental	Perpetual
Pierce House	1	Rental	Perpetual
Old Concord Turnpike	2	Homeownership	Perpetual
Sunnyside Lane	4	Rental	Perpetual
Greenridge	1	Homeownership	Perpetual
Total	223		

Sources: DHCD Subsidized Housing Inventory, Town of Lincoln.

¹⁹ Massachusetts Association of Realtors, Year-End Reports, 2006 and 2007, Single-Family and Condominium Sales [Electronic Versions], <http://www.marealtor.com/content/>.

and information from the town, Lincoln currently has 221 low- and moderate-income units on the Subsidized Housing Inventory, or 10.6 percent of its Census 2000 year-round housing units.²⁰ The current inventory is shown in Table 7.9. It is important to note that when DHCD calculates Lincoln's percentage of affordable units, the housing at HAFB is omitted from the denominator.

Lincoln recently added nine group home units to the Subsidized Housing Inventory, which will bring the total to 232 low- and moderate-income units. The Lincoln Housing Commission estimates that Lincoln will most likely need five to seven more affordable units by 2010, when the next federal census occurs, in order to remain at or above the ten percent statutory minimum.²¹ The town's post-2010 percentage of affordable units is difficult to predict because in concert with the U.S. Department of Housing and Urban Development (HUD), the Bureau of the Census has been evaluating how units in assisted living residences and continuing care retirement communities should be classified. If the assisted living units in developments such as The Groves are classified as institutional quarters, similar to nursing homes, Lincoln may not need as many new affordable units in order to stay above the ten percent minimum.

CPA Housing Activities. Lincoln adopted the Community Preservation Act (CPA), M.G.L. c.44B, in March 2002. CPA allows cities and towns to impose a surcharge on property tax bills and invest the funding in open space, historic preservation, and affordable housing. All of Lincoln's neighbors have adopted the CPA as well. Since 2002, Lincoln has appropriated CPA funds for several proposals from the Housing Commission: acquisition of land and construction of affordable units on Sunnyside Lane, condominium buy-down subsidies, funding for Lincoln's municipal affordable housing trust, an update of the town's Consolidated Housing Plan, and acquisition assistance for group homes.²²

NEEDS, ISSUES & CHALLENGES

Communities control the make-up of their population by the steps they take to control housing growth. Recognizing this, Lincoln has pursued innovative ways to create many types of housing: affordable housing, elderly housing, and a variety of housing at market-rate prices. While Lincoln's track record is impressive, it also illustrates the challenges that small towns face when they try to diversify their housing stock. Many challenges are internal, such as opposition from neighborhoods affected by a zoning change or opposition within town government, but it is very difficult for communities to plan for affordable housing because the state's administrative policies under Chapter 40B continue to change. Lincoln historically has placed high value on housing affordability because residents believed in the importance of an economically and culturally diverse population. Diversity remains very important to Lincoln, as evidenced by the town's vision statement, but today, residents also recognize that creating affordable housing will help to protect the town from Chapter 40B comprehensive permits.

Chapter 40B

Among the strategies Lincoln has considered to increase the number of units on the Subsidized Housing Inventory is buying down the purchase price of existing homes in exchange for affordable housing deed restrictions. As noted in Lincoln's *Consolidated Housing Plan* (2003), this approach to creating affordable housing makes

²⁰ DHCD, Subsidized Housing Inventory, September 2008.

²¹ Lincoln Housing Commission, *Lincoln Housing Plan: Interim Report*, March 2009.

²² Annual Town Report (2008), 83; Annual Town Meeting 2008, Proposed Motions, 4.

good use of existing housing, and it can help to preserve smaller, older homes that are threatened by teardowns. It also is ideally suited for creating first-time homebuyer units.²³ Due to the high cost of housing in Lincoln, a buy-down program would be expensive. A more difficult barrier to overcome is that DHCD has not been very receptive to “counting” on the Subsidized Housing Inventory pre-existing units made affordable with buy-down subsidies. This is because the state favors new housing production, i.e., net growth in a community’s total housing inventory.

Lincoln’s accessory apartment bylaw encourages affordable accessory apartments through special permit incentives. It may be possible to better tailor these regulations to create small units that qualify for the Subsidized Housing Inventory. This would allow affordable housing to be scattered unobtrusively within the existing fabric of the town. However, DHCD’s current guidelines for “counting” affordable accessory apartments on the Subsidized Housing Inventory require communities to appoint a local program administrator and establish a state-approved affirmative marketing plan for accessory apartments in order to prove compliance with the federal Fair Housing Act. The Housing Commission did submit an initial program application for DHCD approval but was denied. These administrative framework and documentation procedures may be difficult for small towns like Lincoln.

Although Lincoln currently meets the Chapter 40B ten percent statutory minimum, the percentage of affordable units “resets” with each decennial census. If the total housing count increases but the number of affordable units fails to keep pace with growth, a city or town could fall below the ten percent mark – as happened in Lincoln after Census 2000. Chapter 40B is a “big stick” approach and for most towns, it is not the preferred way to meet housing needs. A comprehensive permit trumps local zoning, which means that a community’s customary land use regulations do not apply. Lincoln has a history of promoting site-sensitive, generally low-density development, and its residents are keenly aware of the threat of Chapter 40B. A large-scale comprehensive permit development would likely not accord with Lincoln’s low-density development pattern. Still, Chapter 40B presents opportunities to build consensus about locally-initiated, contextually-sensitive affordable housing that meets the needs of a region’s present and future populations. Lincoln has risen to this challenge in the past. At issue is whether Lincoln will be able to maintain its traditional activism as its own population continues to change. A second issue is whether the state’s method of calculating Lincoln’s percentage of affordable units will change if privatization at HAFB makes some of the units there available for non-military occupancy.

Chapter 40B is a “big stick” approach and for most towns, it is not the preferred way to meet housing needs. A comprehensive permit trumps local zoning, which means that a community’s customary land use regulations do not apply. Moreover, the number of affordable units that Lincoln is required to provide could change if privatization of housing at HAFB makes some of the units there available for non-military occupancy.

Teardowns, Mansionization, and Loss of Modest Housing Stock

Lincoln lost forty-five single-family homes to tear-downs in the past ten years. Demolition delay is a worthwhile strategy for saving older homes of architectural significance, and recent amendments have strengthened Lincoln’s bylaw. However, this method does not work in all cases, and some argue that it does not work in many cases. Developers and homeowners seeking to replace a small, older housing unit with a large home often decide to wait for the demolition period to expire. In addition, the demolition delay only affects homes determined

23 Town of Lincoln, *Consolidated Housing Plan* (2003), 15.

to be “significant”, which makes sense if the goal is historic preservation, but not if the intent is to preserve Lincoln’s housing diversity in general.

Housing for Seniors

Lincoln’s preference for large-lot, low-density housing development imbues the town with its much-loved rural aesthetic. However, the same policy makes it difficult to create choices for people who do not want or need large homes on large lots. This is particularly true for the town’s aging population, which is growing. One way to address the housing needs of the elderly is to create new living arrangements that better meet the needs of people for whom a large single-family home does not make sense, such as creating denser housing with a range of unit types (for example, first floor units) and services, and providing some means of getting around other than driving. Another approach involves bringing support services to the elderly where they currently live, i.e., strategies that allow them to remain in their existing homes. Since there will always be some residents who want new housing arrangements and some who want to remain in their existing homes, a responsive strategy requires both approaches.

Two of Lincoln’s age-restricted developments – Minuteman Commons and The Groves – include affordable units that helped Lincoln meet the ten percent minimum under Chapter 40B. Ever since Congress amended the Housing for Older Persons Act in 1995, age-restricted housing has proliferated nationally and throughout Massachusetts.²⁴ An age-restricted development is subject to a deed restriction that limits who can purchase and live in the housing units. Today, many developers in the Boston metropolitan area have “over-55” units they cannot sell. Minuteman Commons reportedly had similar problems, although the issues there seem to have been resolved. Age-restricted housing appeals to many communities because it has no direct impact on public schools, but Lincoln may have to decide whether it makes sense to encourage the production of housing that could be difficult for elderly homeowners to sell in the future. Similarly, as the market for age-restricted housing contracts over time, Lincoln and other communities may face tough choices about lifting the restrictions in order to ensure that the units can be sold and resold, and thereby retain their market value.

Housing for People with Disabilities

CMARC, a non-profit organization that owns and manages several group homes in Lincoln’s region, recently purchased a residence on Concord Road and operates it as a group home for adults with mental disabilities. The project came at the heels of a study conducted jointly by the Lincoln Housing Commission, the Affordable Housing Trust, and the Lincoln Foundation.²⁵ A group home is a private residence for unrelated people with special needs, and towns often consider them attractive because each bedroom counts as an affordable housing unit on the Chapter 40B Subsidized Housing Inventory. Providing special needs housing makes sense in Lincoln because it provides a stable, supportive environment for people who otherwise could not live in the community – including the adult children of Lincoln residents and those who may have grown up in the community.

To facilitate the acquisition, Lincoln contributed \$500,000 of CPA funds to CMARC in exchange for a perpetual affordable housing restriction and guarantees that the house would be used continuously as a group home. Although the Lincoln Housing Commission released its study months before CMARC actually purchased the house, not all residents knew about it, and some thought the town could have communicated more openly and effectively with the neighborhood about the project. However, like all housing, these dwellings are protected from use restrictions under the state Zoning Act as well as by federal and state laws that prohibit housing

24 Bonnie Heudorfer, *Age-Restricted Active Adult Housing in Massachusetts* (CHAPA, 2005), 7.

25 Lincoln Housing Commission, et al., “Group Homes in Lincoln,” (undated), <http://www.lincolntown.org/>.

discrimination. As a result, Lincoln town officials could not release specifics about the location of the group home until CMARC had entered into a purchase and sale agreement with the seller.

Initial opposition to group homes is often common in small towns and suburbs. The reasons cited include concerns about public safety, property values, and traffic. When managed properly, however, they are usually very compatible with established neighborhoods. If CMARC's residence and another group home established by the Edinburg Center on Bypass Road are successful, Lincoln may find it easier to sponsor group homes in other neighborhoods in the future.

Social Housing Policy

Lincoln's housing needs will continue to include affordability for moderate and middle income families. Plans and studies prepared for Lincoln in the past and a 2008 survey of residents suggest that most residents perceive moderate-income housing as socially important and a public benefit. On balance, residents and the town's leadership endorse the basic recommendations of the Moderate Income Housing Committee in 1968 and its successors, despite some disagreement about how far Lincoln should go to provide moderate- and middle-income housing affordability or for whom. Creating affordable housing is challenging under the best of circumstances and often it requires considerable patience, as demonstrated by the Lincoln Housing Commission's years of experience with the project at Sunnyside Lane. As Lincoln continues to develop and its population changes, it may become more difficult for town officials to build support for future housing initiatives unless new residents share similar values and ideas about local government's responsibility to reduce housing barriers.²⁶

Creating affordable housing is challenging under the best of circumstances and often it requires considerable patience. As Lincoln continues to develop and its population changes, it may become more difficult for town officials to build support for future housing initiatives unless new residents share similar values and ideas about local government's responsibility to reduce housing barriers.

GOALS & RECOMMENDATIONS

Goal H-1. Provide for a variety of housing types to encourage diversity of Lincoln's population.

- H-1.1. Create higher-density housing, including a modest amount of additional multi-family housing, in the Lincoln Station area.
- H-1.2. Consider development incentives such as M.G.L. c. 40R (smart growth) to achieve Lincoln's housing goals.
- H-1.3. Encourage retention or creation of smaller homes in order to maintain a range of housing stock available to smaller households and those in early or later stages of life.
- H-1.4. Consider removing zoning obstacles to preserving smaller homes by allowing them to be relocated to another lot with an existing residence for use as an accessory dwelling unit.
- H-1.5. Encourage accessory apartments to provide more options in current housing stock.

²⁶ See also, Appendix A, Past Plans and Studies, and *Lincoln Citizens' Needs and Interests* (February 2008), 29-33.

DISCUSSION

Lincoln Station. The Lincoln Station area is a prime location to provide the types of housing for which Lincoln has identified a need, including smaller units with some access to facilities and services without reliance on a car. Denser housing arrangements that include some multi-family units are inherently less expensive than single-family dwellings, even without market intervention. However, Lincoln should ensure that new housing development around Lincoln Station includes affordable units that will “count” on the Subsidized Housing Inventory. Lincoln has instituted affordability restrictions and incentives for developers to build more affordable units in certain zoning districts and also has a town-wide inclusionary zoning bylaw that applies to residential developments with six units or more. The Lincoln Station area lies under a zoning overlay district that will allow for great flexibility toward the production of affordable housing in a planned, higher-density development. (*See Chapter 2, Land Use.*)

Chapter 40R. A state housing production law, M.G.L. c. 40R, encourages communities to create overlay districts for higher-density housing development in designated “smart growth” locations. The state defines areas eligible for Chapter 40R zoning as areas near transit stations; areas of concentrated development, including town and city centers, and other existing commercial districts in cities and towns; or areas served by existing infrastructure, existing underutilized facilities and/or transportation facilities, or with other characteristics that make them suitable for higher-density, mixed-use zoning.

Under Chapter 40R, a proposed overlay district must be approved by DHCD before it is adopted by town meeting. At least twenty percent of the housing units in a Chapter 40R zoning district must be affordable for households earning no more than eighty percent of the area median income (in Lincoln’s case, the Boston metropolitan area median income). In addition, the affordable units must be deed restricted for at least thirty years. Chapter 40R further requires minimum densities for different housing types: eight units per acre for single-family homes, twelve units per acre for two and three family buildings, and twenty units per acre for multi-family dwellings. Housing developed under Chapter 40R must be allowed by right, but communities can require site plan approval and establish enforceable design guidelines.

By law, communities that adopt a DHCD-approved Chapter 40R district become eligible for a zoning incentive payment. The payment amount is based on the number of units made possible by the new zoning. In addition, communities are supposed to receive a bonus payment each time a building permit is issued for an eligible Chapter 40R housing unit. It is not clear how long the state will have funds to make Chapter 40R incentive payments, however. Still, Lincoln’s interest in allowing some increased housing density around Lincoln Station could make Chapter 40R an appropriate tool to consider.

Retention or Creation of Smaller Homes. The demolition of smaller homes and replacement with much larger, more expensive homes diminishes housing opportunities. Lincoln still has some smaller homes that would be appropriate for young families or older residents who no longer need or want a large house to maintain. Expanded efforts to preserve the remaining inventory of small houses could help Lincoln achieve its housing goals. Toward this end, Lincoln will need to weigh the following options and their advantages and difficulties:

- ❖ **Consider removing zoning obstacles to preserving smaller homes by allowing them to be relocated to another lot with an existing residence for use as an accessory dwelling unit.** Lincoln’s commitment to environmental protection could be very compatible with Nantucket’s approach to demolition delay. Nantucket, like Lincoln, subjects all residential demolition permits to review. As a last-resort measure to save homes, Nantucket allows a tear-down candidate to be relocated to another property and also allows two res-

idential buildings on a single lot when essential to avoid demolition. This policy makes a logical connection between demolition delay, reducing generation of construction debris, and zoning. To embrace this type of strategy, Lincoln would have to be open to allowing the relocation of demolition candidates to another lot with an existing residence. A strategy like this could help Lincoln retain small homes and provide low-cost or affordable units. For example, a small house preserved through relocation may be suitable as an elderly cottage housing opportunity (ECHO) unit (*see Goal H-2*). Lincoln would need to revise its accessory housing bylaw in order to implement this approach. While removing a small house from its context is not best way to meet historic preservation objectives, it would address an important housing need.

- ❖ **Discourage replacement of lower-price housing with higher-price units by adjusting the review process for demolition/replacement.** Discouraging demolition and mansionization by adjusting the town’s current demolition delay bylaw might be considered, but it may not achieve the desired result. The town’s land values are so high that builders or homeowners will often opt to wait out the expiration of a demolition delay period and endure the “Big House” site plan review process. Other communities have had mixed success with demolition delay, and communities with very high housing values have had less success than most. In the past few years, several communities have increased their original delay period from six months to one year and in a few cases, two years. Unfortunately, the more restrictive the delay period, the more likely it is that the bylaw will be vulnerable to a takings claim. The most effective tool for preserving smaller, older homes will continue to be local historic districts, neighborhood conservation districts, and preservation restrictions.
- ❖ **Explore the possibility of tax incentives to preserve smaller homes and creative affordable units.** In general, Massachusetts communities have very little authority to offer property tax incentives. In most cases, the types of tax relief that assessors can grant are explicitly defined and limited by state law. However, some communities on Cape Cod have obtained “home rule” permission from the legislature to reduce or waive property taxes for investment property owners and homeowners with accessory apartments if they rent units to low-income tenants. Lincoln could consider taking a similar step, but instead of defining low-income housing as the public interest served by tax relief, the public interest would be preservation of smaller, lower-price housing units. The town will need to understand that by granting tax relief to one property owner, the “lost” or waived tax obligation will essentially be redistributed among the rest of the community’s taxpayers.

Accessory Dwellings. Lincoln’s accessory apartment regulations are fairly permissive by suburban standards, but Lincoln’s commitment to population and income diversity has deep roots. The town’s willingness to allow accessory apartments in an accessory structure is somewhat unusual, and its provision for more than one accessory unit on a lot is rare. Many towns prohibit these options. To take some additional steps to encourage accessory apartments, Lincoln could consider the following options:

- ❖ Allow accessory apartments by right in the R-1 District, subject to a series of requirements that would have to be met by the applicant and site plan review under Section 17 of the Zoning Bylaw, perhaps by adding a new section for a “minor” or simplified site plan review procedure. Reasonable minimum requirements could be very similar to Lincoln’s present bylaw, with some exceptions:
 - ◆ The minimum lot area should conform to the R-1 standard, 80,000 sq. ft., with an exception for approved R-1 Cluster developments;
 - ◆ For “by right” use regulations, Lincoln may want to consider limiting accessory apartments to the interior of a single-family home, with no change to the character of the existing residence; and

- ◆ There should be regulations governing the location of parking for the accessory unit, e.g., no front yard parking, and a buffer of at least 10 feet along the property line closest to the driveway.
- ◆ The existing maximum apartment floor area of 1,200 sq. ft. is reasonable and should be retained. Among other advantages, it offers the possibility of creating housing suitable for a small family. The homeowner would still have to demonstrate that the property's septic system was adequate to support both the existing dwelling and the accessory unit.
- ❖ By special permit from the Board of Appeals, Lincoln could continue to allow accessory apartments on lots with at least 40,000 sq. ft., or in accessory buildings on the same lot as the owner's single-family residence. The same affordability options that exist today could be retained, too. Lincoln will want to weigh the advantages and disadvantages of DHCD's current policies for affordable accessory apartments. Of course, state policies may change in the future in ways that make it easier to place affordable accessory apartments on the Subsidized Housing Inventory.

Residents may be concerned that accessory apartments will proliferate if allowed by right, but this has not been the case in other towns...with with the flexibility to have small, relatively inconspicuous units in single-family homes, Lincoln would receive the public benefit of housing choices at a very small scale.

Residents may be concerned that accessory apartments will proliferate if allowed by right, but this has not been the case in other towns. In most cases, homeowners create accessory units because of needs in their own families, such as housing an elderly parent or an adult child with a disability. The needs that lead people to create an accessory apartment eventually change, but with the flexibility to have small, relatively inconspicuous units in single-family homes, Lincoln would receive the public benefit of housing choices at a very small scale.

Goal H-2. Provide more housing and/or services to accommodate the needs of individuals who may be under-served by Lincoln's existing housing stock.

- H-2.1. Determine the need, availability, and cost of in-home services to assist the elderly and people with disabilities so they are able to remain in their own homes if they choose.
- H-2.2. Conduct outreach and provide information to elderly taxpayers about available programs such as reverse annuity mortgages or work in lieu of property taxes, which might allow them to remain in their own homes for as long as possible.
- H-2.3. Determine the need for additional age-restricted (55+) housing beyond Lincoln's existing developments, including options such as an elderly cottage housing opportunity (ECHO) program.
- H-2.4. Continue to study needs for supportive housing to serve adults with disabilities, particularly adult children of Lincoln residents.

DISCUSSION

In-Home Services. Creating new living arrangements will be an important part of Lincoln's housing efforts, but the town also could consider how to extend the utility of homes already occupied by people with unique or special needs. This requires supportive services to help aging residents and people with disabilities stay in their

homes. Sometimes it requires accessibility alterations such as ramps, widening interior doorways, and redesigning kitchens and bathrooms, too. For the elderly, these strategies are collectively known as “aging in place.” Aging in place models are very expensive, and this is one reason that centralized facilities such as assisted living residences have become popular. However, there are some possibilities that could be explored, such as an adult day care program supplemented by in-home services. If Lincoln wants to develop a local program of its own, the most efficient approach will most likely involve a purchase-of-services contract with an existing human services provider. Regardless of the approach that Lincoln decides to pursue, in-home service programs require funding, and often they require multiple sources of funding. Agencies that provide grants or operating subsidies for these types of services will require a needs analysis and a business plan.

Outreach and Information for Elderly Taxpayers. Lincoln’s existing senior services could be expanded to include information about financial matters related to homeownership. The Board of Assessors already provides basic information about statutory options to reduce or defer a senior homeowner’s tax liability. However, there are other financial mechanisms to help older homeowners continue to afford their homes. Some products, such as reverse mortgages, may be appropriate for the elderly. Due to the vast array of products and providers, it is important for residents considering them to obtain advice from qualified professionals. Local governments usually provide referral services rather than direct counseling because each senior household has unique needs, and financial counseling can involve liability issues. As a first step to disseminating information, the town would have to determine how many residents actually need this kind of assistance. Outreach could be conducted through the Council on Aging, direct mailings, seminars, and printed and electronic materials posted on the town’s website or made available at the town offices

Needs for Additional Age-Restricted Housing. There is general consensus among realtors, developers, lenders, and housing policy analysts that deed-restricted housing for the “active adult” population has been overbuilt. What determines the appropriateness of housing for “over-55” households is not a legally enforceable age restriction, but the design and location of the units – sometimes called “age-targeted” housing. By examining ways to retain small homes and increase housing diversity in general, Lincoln will be able to attend to the housing needs of its seniors. Lincoln also could consider allowing elderly cottage housing opportunity (ECHO) units: small, free-standing, accessible, and energy-efficient units located on lots with existing single-family homes. This type of unit could be allowed by revising Lincoln’s accessory apartment bylaw and perhaps by allowing small homes slated for demolition to be moved to a lot with an existing residence, although septic considerations may be a constraint. (*See Chapter 2, Land Use.*)

Disability Housing. The Lincoln Housing Commission and other local organizations will continue to evaluate needs for supportive housing that serves adults with disabilities. Data appropriate for a disability housing needs study can be obtained from several public sources, including the Massachusetts Department of Mental Retardation (DMR), Department of Mental Health (DMH), Department of Public Health (DPH), Massachusetts Rehabilitation Commission (MRC), Massachusetts Office on Disability (MOD), and DHCD. Local needs also can be estimated by working closely with the Lincoln Public Schools and Lincoln-Sudbury Regional School District.

Goal H-3. Maintain Lincoln’s long-standing commitment to provide affordable housing that meets local needs.

H-3.1. Continue to seek affordable housing opportunities throughout the town, using techniques such as scattered site development, condominium buy-downs, and group homes.

- H-3.2. Ensure that affordable housing is included in residential and mixed-use developments in the Lincoln Station area.
- H-3.3. Support the Lincoln Housing Commission in setting local targets and strategies to provide affordable housing.

DISCUSSION

In addition to preserving smaller homes and encouraging accessory apartments, Lincoln has other options to distribute affordable housing throughout the town. For example, Lincoln could consider allowing the conversion of existing single-family homes to up to four multifamily units by special permit and site plan review from the Planning Board. When regulated properly, multifamily conversions provide smaller, more affordable units without changing the visual quality of an area. Lincoln would need to amend the Zoning Bylaw by adding a conversion provision, which should define an eligible property, establish a minimum lot area per unit that would have to be met, establish a cap on the size of any building expansion associated with the project, and impose design standards to ensure that the altered building will be compatible with neighboring single-family homes. A conversion bylaw should require at least one unit to be affordable or accessible to people with disabilities. (By law, a project with at least three housing units is already required to provide an adaptable unit.) Lincoln may also want to consider encouraging multifamily conversions in the Lincoln Station area, where the town has already determined that some higher-density housing makes sense. However, multifamily conversions could be allowed in other areas of town and provide affordable housing on a scattered-site basis, too. Again, septic considerations will have to be evaluated and may be a constraint.

Condominium buy-downs are an expensive way to provide affordable units due to the subsidy required to close the gap between market-rate and affordable prices. However, buy-downs make sense in communities with very little land available for new development and they also provide a way to reuse existing housing to meet social objectives.

Condominium buy-downs are an expensive way to provide affordable units due to the subsidy required to close the gap between market-rate and affordable prices. However, buy-downs make sense in communities with very little land available for new development and they also provide a way to reuse existing housing to meet social objectives. Although DHCD has approved at least one condominium buy-down program as a source of units for the Subsidized Housing Inventory in another community, it has disapproved applications from other towns because buy-down programs do not increase the overall housing inventory of a town.

The Lincoln Housing Commission currently manages several rental units and it has ‘bought down’ a number of condominiums for resale. Although the Commission cannot spend money without Town Meeting approval (aside from a modest revolving fund) and it has no eminent domain powers, it has been instrumental in leading Lincoln’s planning efforts for housing affordability, including the Consolidated Housing Plan (2003) and an update that is currently underway. The Commission has enjoyed cooperation from other town boards and local organizations, and its planning and capacity-building work should continue. Among the vital roles the Commission will play in the future include continuing its outreach and public education on housing needs and building a broader constituency for affordable housing. The Lincoln Foundation, instrumental in developing both Lincoln Woods and Battle Road Farm, continues to hold and enforce deed restrictions on affordable units

in several developments in town. It works closely with the Housing Commission in pursuit of additional affordable housing opportunities. The Affordable Housing Trust (AHT) was established by a vote of Town Meeting in 2006 to hold funds designated for affordable housing. The AHT has the flexibility to respond to market opportunities to acquire land or buildings for this purpose. Town Meeting has authorized the appropriation of significant CPA funds into the trust, and the trust may also hold monies gifted to the town for affordable housing purposes. It works together with the Housing Commission to fund affordable housing opportunities.

Goal H-4. Maintain local control over affordable housing development.

- H-4.1. Review, refine, and update Lincoln’s Affordable Housing Plan.
- H-4.2. Continue to prevent hostile comprehensive permits by ensuring that Lincoln meets the ten percent statutory minimum affordable housing under M.G.L. c. 40B.
- H-4.3. Propose, shape, and support positive changes to state legislation that would align with Lincoln’s affordable housing goals without posing a threat to its rural character.

DISCUSSION

Affordable Housing Plan. The Lincoln Housing Commission produced a Consolidated Housing Plan in 2003. The plan served at least two purposes: to fulfill Lincoln’s obligations as a member of the West Metro HOME Consortium (administered by the City of Newton) and to provide a plan that qualified as a Housing Production Plan under DHCD’s Chapter 40B regulations. After following through on several initiatives in the 2003 plan, the Housing Commission recently issued an interim report and announced plans to complete a full update of the plan in 2011. A new look at local and regional housing needs and the local resources available to support those needs will be critical as Lincoln works to keep its Subsidized Housing Inventory above ten percent. To conduct a housing services needs analysis, the Housing Commission could sponsor a summit of local and regional service providers in an effort to gather data, explore service delivery models, and identify possibilities that would be feasible in Lincoln. The Commission also could conduct a community survey, working collaboratively with the Council on Aging, staff at The Groves, and local churches.

Chapter 40B. If Lincoln follows through on the housing initiatives discussed in this chapter, Chapter 40B comprehensive permits should not be a threat to the town. Since a comprehensive permit is usually not the preferred way to provide affordable housing, monitoring existing affordable units and planning to produce more units will remain very important. The Lincoln Housing Commission keeps good records of the town’s Subsidized Housing Inventory and works closely with the Planning Department to estimate the impact of new housing on Lincoln’s status under Chapter 40B. Remaining above the ten percent threshold will give Lincoln autonomy to craft and implement its own creative approaches to housing and ensure that future development is compatible with the goals of this Comprehensive Plan.

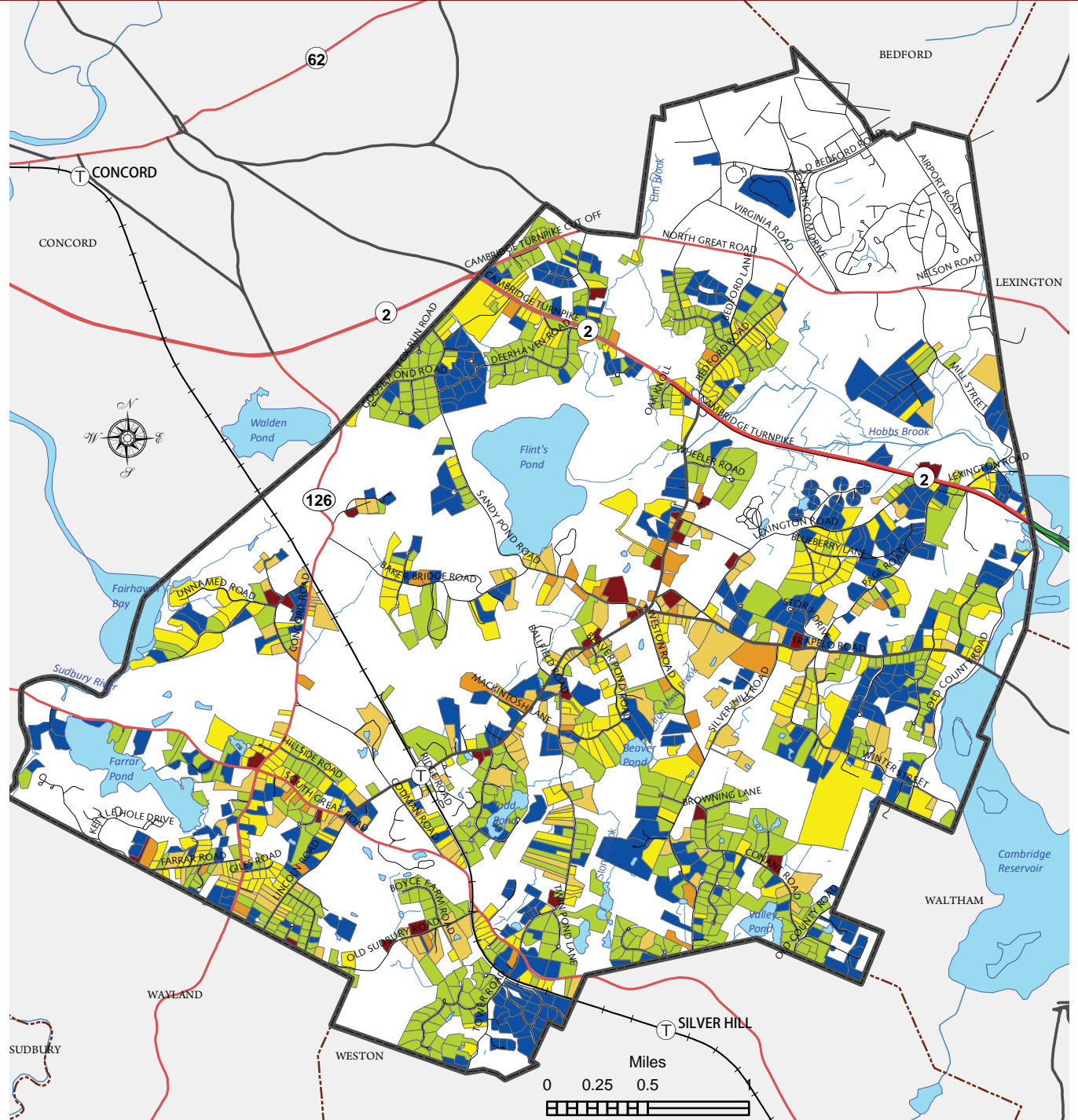
State Legislation. Despite numerous petitions to modify or rescind Chapter 40B, the legislature has historically resisted pressure to amend the statute. Since it is unlikely that Chapter 40B will change in the near future, Lincoln could focus on working with other towns, the Massachusetts Municipal Association (MMA), and the Metropolitan Area Planning Council (MAPC) to promote more municipal sensitivity in DHCD’s Chapter 40B regulations and guidelines. Often what people believe to be statutory requirements are actually policy directives established and enforced at the agency level. For example, the practice of “counting” all units in a mixed-income rental development on the Subsidized Housing Inventory is a matter of DHCD policy – one that could change to the detriment of many towns, including Lincoln, if DHCD decided to amend its regulations. (All 125 units at Lincoln Woods and all 30 senior apartments at The Groves are listed in the Subsidized Housing Inventory.)

Communities like Lincoln are primarily concerned about the scale and character of housing developments that could be forced upon them by a Chapter 40B comprehensive permit. In 2001, DHCD adopted regulations that allow a Zoning Board of Appeals to deny a comprehensive permit for a project that exceeds a specified size threshold, but the small-town thresholds are considered high. Expressed in Lincoln terms: under DHCD's "large-scale" project rule, a development the size of Lincoln Woods would not be too "large" for any site in Lincoln, regardless of location, yet Lincoln Woods makes sense precisely because of its location in a village business area with access to the train station.

Another regulatory issue of importance to Lincoln involves the criteria the Housing Appeals Committee (HAC) considers in deciding whether to uphold the denial of a comprehensive permit. As part of developing MAPC's MetroFutures regional plan, there has been considerable discussion about exempting communities from Chapter 40B if they adopt realistic zoning for the creation of affordable housing. Anyone looking at Lincoln's housing history would be hard-pressed to say the town has failed to provide zoning incentives for affordable housing because Lincoln Woods, Battle Road Farm, Minuteman Commons, and The Groves did not require comprehensive permits. In each case, Lincoln Town Meeting provided the zoning required to facilitate these developments. By amending its Chapter 40B regulations, DHCD could provide more guidance to HAC about the conditions that warrant upholding a Zoning Board of Appeals decision. Sustained effort over many years should be one of those conditions. Only a handful of communities would qualify for a finding of "sustained effort," and Lincoln is one of them.

A third regulatory issue that affects Lincoln is the "site approval" or "project eligibility" process for Chapter 40B developments when a community is very close to the ten percent minimum. Developers seeking comprehensive permits have to meet some requirements described broadly in the statute and more specifically in DHCD's regulations. One of the requirements is a project eligibility determination by a state or federal housing subsidy program. Under current state policy, a community that falls short of the ten percent minimum by only a few units can still be exposed to a large comprehensive permit development as long as a housing subsidy program, such as MassHousing, issues a project eligibility determination for the project. DHCD could address this by establishing regulations that limit a community's obligation to the number of units required to reach ten percent. To avoid conflicts with the statute, this would have to be handled at the project eligibility stage, i.e., before a developer becomes eligible to apply for a comprehensive permit.

LINCOLN COMPREHENSIVE PLAN



Community Opportunities Group, Inc.

MAP 7.1 AGE OF HOUSING STOCK

Sources: MassGIS, Lincoln Conservation Department, USGS, U.S. Bureau of the Census, Community Opportunities Group, Inc.

April 2009

Legend

- | | | | |
|-----------------------------------|-----------------|-------------------|---------------|
| ROADWAYS | Ⓣ MBTA Stations | YEAR BUILT | ● 1930 - 1953 |
| — Limited Access Highway | —+— Railroad | ● 1680 - 1800 | ● 1954 - 1974 |
| — Multi-Lane (Not Limited Access) | ● Open Water | ● 1801 - 1870 | ● 1975 - 2007 |
| — Other Numbered Highway | | ● 1871 - 1929 | |
| — Major Road, Collector | | | |

*Note: Map does not include all of the town's condominiums.

LINCOLN PLANNING BOARD



Economic Development

OVERVIEW

Lincoln's economy is a part of the larger Boston regional economy, which serves as a major asset for local residents, yet this very fact causes ambivalence about the best economic development direction for the town. The local employment base includes small retail, professional services, government, non-profit organizations, agriculture, and home-based businesses. Lincoln has traditionally framed its conversations about economic development in terms of land use, zoning, and tax base expansion while maintaining its quality of life as its guiding principle. Despite a history of spirited debates about commercial development, there has only been broad agreement about the desirability of a village center at Lincoln



Station and some rare instances of agreement about other locations. As a result, Lincoln relies almost exclusively on residential property taxes to pay for local government services. The town continues to face pressure to find other sources of revenue to meet its financial needs.

Key Findings

- ❖ Lincoln's population is exceptionally well educated. Overall, many of its employed residents have very high earnings and as a result, median households have high incomes.
- ❖ Excluding military employment at Hanscom Air Force Base (HAFB), Lincoln has a small employment base that supports approximately 1,330 private-sector jobs and 1,760 total jobs.
- ❖ Compared with the urbanized area around Boston, Lincoln's employment base includes larger percentages of jobs in education, the arts, cultural institutions and advocacy organizations, and smaller percentages in the construction trades, retail, health care, transportation, and utilities.
- ❖ Lincoln has approximately 190 employer establishments, including for-profit businesses, non-profit organizations, and government agencies.
- ❖ Unofficial estimates place the number of non-profit organizations in Lincoln at ninety-seven.
- ❖ Lincoln's economy includes several farms that provide locally grown produce to local and regional consumers. The total amount of productive agricultural land in Lincoln today is 547 acres.

- ◆ Lincoln has zoned approximately twenty-seven acres for commercial uses, including eighteen acres in the South Lincoln business area and nine acres in a planned development district in North Lincoln. An additional twenty-three acres may be available for business or mixed-use development in South Lincoln if Town Meeting decides to create more planned development districts there in the future.

Key Challenges

- ❖ While there is general support for providing opportunities to develop more businesses and housing in the Lincoln Station area, there is opposition to allowing commercial development in other parts of town.
- ❖ Maintaining Lincoln's land use policies and financial sustainability needs will require close collaboration between the Planning Board, Board of Selectmen, Finance Committee and other town officials, and an open and inclusive process for building consensus with residents.
- ❖ Lincoln's 547 acres of productive agricultural land include 158 acres with no protection against a change in use. Since the town is committed to preserving its agricultural heritage and farming as an important part of the local economy, Lincoln needs to be prepared to respond to the possibility that one or more of these properties may be offered for sale in the future.
- ❖ Non-profit organizations play a very important part in Lincoln's economy. Many but not all of these organizations provide jobs in Lincoln and they also attract people to the community. Working with non-profit groups to coordinate special events with local businesses and providing "wayfinding" information to help steer patrons to the Lincoln Station area could be a useful economic development activity in Lincoln. Strong partnerships between non-profit organizations, for-profit businesses, and local government require leadership, commitment, and resources, and Lincoln may want to consider having a "point person" or special committee to focus on economic development.

EXISTING CONDITIONS & TRENDS

In most suburbs, a comprehensive plan's economic development element focuses on ways to retain, attract, and grow businesses for the tax revenue and jobs they bring. Building a local employment base involves zoning land for commercial and industrial uses and providing the infrastructure and utilities that turn vacant land into construction-ready sites. Sometimes it involves business recruitment through marketing and financial incentives, too. Throughout the Boston area, commercial development usually consists of a downtown and suburban commercial pockets along major roads, with industrial uses next to highways and at the outer edges of town. In the region's older industrial centers, historic mills can still be seen along waterways, yet often the mills lay vacant if they have not been converted to other uses.

Owing to its history, setting, and political culture, Lincoln is not one of these communities. It has a long history of spirited debates about the merits and drawbacks of commercial development, but with the exception of seizing an unusual opportunity in North Lincoln some twenty years ago, the town has not pursued economic growth by zoning for commercial uses or actively recruiting businesses. Indeed, Lincoln has taken a different approach. Lincoln brings several assets to the development and preservation of its own local economy: its extraordinary people and entrepreneurship, its still-strong rural character in a location not far from Boston, and its commuter rail service and access to interstate highways. Its economy is part of the Boston regional economy, and this works to Lincoln's advantage because most of its residents are employed in Boston, Cambridge, and other inner-core cities and economic centers.

A town's economy is shaped by its location and land use pattern, the characteristics of its resident population and those who work in the community, and most importantly by the neighboring and regional economy. The zoning regulations that a town adopts can influence, restrict, enhance, or impede the evolution of its economy. Its regulations can also create consequences, both positive and negative, for people within the town and for adjacent towns. Communities that do not provide for all the work and consumption needs of their residents send their consumer demands and labor to neighboring communities or to the larger regional economy. This generates income for businesses in other communities and provides labor for their enterprises, but also adds traffic to their streets. Such spillovers are unavoidable, and they will probably increase as services such as retail and health care become more specialized. Each community, including Lincoln, makes a unique contribution to the larger regional economy.

Lincoln's small businesses provide some goods and services for local consumers, but the vast majority of consumer spending by residents occurs elsewhere.¹ Most Lincoln residents work elsewhere, too, because the town's highly skilled labor force is more reflective of the regional employment base than the local employment base. In addition, the local employment base is very small because Lincoln has chosen to evolve as a predominantly residential community. In addition to its small businesses and many self-employed entrepreneurs, Lincoln has numerous non-profit organizations that provide local employment and attract consumers to the community. Institutions such as the Massachusetts Audubon Society, the DeCordova Museum and Sculpture Park, the Gropius House and Codman House, Codman Farm, and the Carroll School provide services to the region and bring traffic and visitors to Lincoln. Furthermore, the town's conservation land and working farms attract visitors from surrounding communities as well. They come by car, bicycle or train to cycle, hike, ski in the winter, walk their dogs, or engage in farm work at Lindentree Farm or the Food Project. Some of people who visit Lincoln's non-profit institutions, farms, and open space also purchase goods at local stores. Overall, the composition of Lincoln's economy makes the town an educational, cultural, and recreational destination, not a commercial destination. While most of the economic activities that draw people to Lincoln do not generate tax revenue for the town, they provide jobs and services, and in many cases they contribute to preserving the town's high property values.

Labor Force Characteristics

A community's labor force consists of its local residents 16 years of age and over, employed or looking for work. A *labor force participation rate* represents the ratio of civilians in the labor force to all civilians 16 and over. Lincoln's labor force of 2,586 represents a sixty-five percent participation rate, which is about average for the Boston metropolitan area.² The unemployment rate in Lincoln usually falls well below that of the region, and its residents tend to remain employed even under weak economic conditions.³

Lincoln has an exceptionally well-educated population. Forty-nine percent of its adults hold graduate or professional degrees, which places Lincoln ahead of the surrounding communities and the Boston metropolitan area for *educational attainment*. Residents tend to be employed as scholars and industry professionals in science and technology, and as educators, design professionals, healthcare practitioners, and specialists in business and

1 Claritas, Inc., Site Reports, and Community Opportunities Group, Inc.

2 Ibid.

3 Ibid, and Commonwealth of Massachusetts, Department of Labor and Workforce Development; U.S. Department of Commerce, Bureau of the Census, Census 2000, Summary File 3, Table P43, "Sex by Employment Status for the Population 16 Years and Over," 1990 Census of Population and Housing, Summary File 3, Table P070, "Sex by Employment Status," [Electronic Versions], American FactFinder, <http://factfinder.census.gov>.

financial operations.⁴ Given Lincoln’s very high level of educational attainment and the concentration of its labor force in high-wage occupations, it is not surprising that residents have comparatively high annual earnings from employment. Though not quite as high as the wage and salary income of Weston or Sudbury residents, the average for Lincoln residents is 1.65 times that of employed people throughout the Boston metropolitan area.⁵

Table 8.1 compares the percentage of Lincoln’s labor force employed in each major industrial class with the percentage of the labor force with jobs in the same industries throughout the Boston area and in the state as a whole. The comparison is expressed in employment-by-industry ratios, or *industry quotients*. When an industry quotient approximates 1.00, it means that the industry employs the same proportion of Lincoln residents as the proportion of residents from a larger geographic comparison area. For Lincoln, the very high industry quotients in the finance, professional, scientific and management, and education and health care industries speak to the education and skill levels of its residents.

**Table 8.1
Lincoln Civilian Labor Force: Industry Quotients (2000)**

Class of Industry	Lincoln Residents Employed by Type of Industry	Industry Quotient	
		Lincoln Compared with State	Lincoln Compared with Boston Metro
Construction	115	0.81	0.88
Manufacturing	156	0.47	0.61
Wholesale Trade	45	0.53	0.56
Retail Trade	239	0.83	0.89
Transportation, Utilities	40	0.37	0.39
Information	108	1.12	0.95
Finance, Insurance, Real Estate	337	1.59	1.35
Professional, Scientific, Management	516	1.73	1.41
Education, Health Care, Social Services	706	1.15	1.15
Arts, Entertainment, Recreation	126	0.72	0.74
Other Services	69	0.61	0.62
Public Administration	111	1.01	1.03

Source: Census 2000, Summary File 3, Table P49, “Sex by Industry for the Employed Civilian Population 16 Years and Over,” and Community Opportunities Group, Inc.

About half of Lincoln’s labor force works for employers in Boston, Cambridge, Waltham, Bedford, Concord, Burlington, Lexington, Newton, or within Lincoln. Residents also commute to jobs all along Route 128 and west to employment centers within the I-495 corridor and beyond.⁶ Federal census data suggest that a small percentage of Lincoln residents work locally, but due to the increasing popularity of telecommuting, the town probably has a larger daytime population than one might imagine. In addition, Lincoln has an unusually large percentage of self-employed residents. In the Boston metropolitan area, about nine percent of the labor force

⁴ Claritas, Inc., and Census 2000, Summary File 3, Table P36, “Sex by Educational Attainment for the Population 25+ Years,” Census Tract 3602 (Lincoln, excluding Hanscom AFB)

⁵ Census 2000, Summary File 3, Table PCT47, “Median Earnings in 1999 by Work Experience in 1999 by Sex for the Population 16+ Years with Earnings in 1999,” Census Tract 3602.

⁶ Census 2000, Summary File 3, “MCD/County to MCD/County Worker Flow Files,” Census 2000 Special Tabulations, <http://www.census.gov/mp/www/spectab/specialtab.html>; and Summary File 3, Table P39, and 1990 Census, Summary File 3, Table P049, “Means of Transportation to Work for Workers 16 Years and Over,” Census Tract 3602. See also, Chapter 9, Transportation & Circulation.

Table 8-2
Employment in Lincoln by Industry, Wages, and Location Quotients (2007)

Class of Industry	Number of Employers	Average Employment	Average Weekly Wage	Lincoln Compared with Boston Metro
Total	192	1,759	\$1,243	
Construction	12	29	\$1,097	0.41
Wholesale Trade	8	16	\$1,838	0.24
Retail Trade	6	50	\$566	0.32
Transportation and Warehousing	5	46	\$643	0.81
Information	4	39	\$1,375	0.64
Finance and Insurance	10	44	\$2,164	0.32
Real Estate, Rental & Leasing	9	12	\$931	0.43
Professional & Technical Services	54	191	\$2,829	1.03
Administrative & Waste Services	8	44	\$3,150	0.41
Educational Services	4	515	\$1,197	3.02
Health Care & Social Assistance	11	94	\$581	0.36
Arts, Entertainment, Recreation	7	101	\$570	3.54
Accommodation & Food Services	3	9	\$274	0.07
Other Services	44	371	\$590	5.84

Sources: Massachusetts Department of Labor and Workforce Development, ES-202, Lincoln, Massachusetts, and Boston-Cambridge-Quincy New England City and Town Area (NECTA); and Community Opportunities Group, Inc.

is self-employed, with roughly three percent owning an incorporated business and six percent working as sole proprietors. By contrast, just over twenty-three percent of Lincoln's labor force is self-employed. The average household income from self-employment in Lincoln is more than twice that of the region.⁷

Employment and Wages

A community's employment base is made up of the wage and salary employees of local establishments: for-profit businesses, non-profit organizations, and government agencies. The employment base statistics published by government agencies exclude self-employed individuals, which is important because in Lincoln, many residents work for themselves. Still, the size and composition of an employment base and the wages paid by local industries can enhance or constrain the job opportunities available to residents of a community and other towns nearby. Lincoln has a small employment base with a limited mix of jobs. The total number of public- and private-sector wage and salary jobs (1,759) is sixty-eight percent of the number of people in Lincoln's labor force today, i.e., 0.68 jobs for every one resident in the labor force. Lincoln employers draw workers from a large area. About twenty-two percent of the local employment base consists of people who live in Lincoln. The town attracts a small percentage of workers from adjacent communities. Another sixteen percent come from Boston, Cambridge, Somerville, Bedford, Chelmsford, Maynard, and Arlington. The remaining sixty-two percent travel from more than 100 communities in Eastern Massachusetts.⁸

An employment base can be described by the distribution of jobs by class of industry, but on its own this information has limited value. Comparing the percentage of a community's jobs in each industry with the percentage of jobs in the same industry in a larger area helps to illustrate a local economy's unique characteristics and poten-

⁷ Census 2000, Summary File 3, Table P60, "Self-Employment Income for Households," and Table P69, "Aggregate Self-Employment Income for Households."

⁸ Census 2000, MCD/County to MCD/County Worker Flow Files. See also, Chapter 9, Transportation and Circulation.

tial strengths and weaknesses. The device for expressing this type of comparison, a *location quotient*, is similar to the industry quotients for Lincoln’s resident labor force reported in Table 8.1. The difference between industry quotients and location quotients is that the former focuses on what a community’s residents do for work and the latter focuses on the industries that provide jobs within a community, regardless of where the employees live. Table 8.2 reports location quotients for employers by industry in Lincoln. Relative to the Boston metropolitan area, Lincoln’s employment base is concentrated in education, the arts, and “other” or unclassified services. Lincoln residents work in some of these industries, locally or in other communities. Some industries in Lincoln pay fairly high wages relative to other communities in the region, such as wholesale trade, professional services, and education.

Table 8.3
Lincoln Tax Levy, FY 1999-2008

FY	Total Tax Levy	Residential	Percent Total	Commercial	Industrial	Personal Property	Percent Total
1999	\$12,812,114	\$12,272,833	95.8%	\$361,061		\$178,221	4.2%
2000	\$13,430,590	\$12,866,034	95.8%	\$391,168		\$173,388	4.2%
2001	\$13,564,223	\$13,028,274	96.0%	\$375,613	\$5,587	\$154,748	4.0%
2002	\$14,713,033	\$14,173,439	96.3%	\$380,861	\$8,183	\$150,550	3.7%
2003	\$15,630,931	\$15,091,427	96.5%	\$384,282	\$11,674	\$143,548	3.5%
2004	\$16,823,429	\$16,257,277	96.6%	\$392,825	\$18,645	\$154,682	3.4%
2005	\$17,513,552	\$16,827,429	96.1%	\$472,545	\$23,050	\$190,528	3.9%
2006	\$18,859,651	\$18,099,792	96.0%	\$512,293	\$41,113	\$206,453	4.0%
2007	\$19,626,567	\$18,843,965	96.0%	\$512,626	\$36,924	\$233,052	4.0%
2008	\$19,829,190	\$19,021,180	95.9%	\$495,236	\$34,419	\$278,355	4.1%

Source: DOR, Municipal Data Bank.

Average monthly employment in Lincoln declined from 2,051 jobs in 2001 to 1,721 in 2006, or a sixteen percent decrease, and the total number of establishments declined by about five percent. Considering only private-sector jobs, employment declined from 1,607 to 1,315 and the number of private establishments, from 192 to 183. In 2007, employment increased by a modest thirty-eight jobs, with no change in number of establishments. While these statistics imply that Lincoln’s employment base is contracting, they say very little about changes occurring within the economy as firms in some sectors decline and others grow. Focusing exclusively on net employment changes would neglect a substantial fraction of gross job flows that occur as some firms add workers and others shrink. Analysis of job creation and job destruction – or *job churning* – tells more than a simple net change in jobs. For every one job lost from Lincoln’s employment base between 2001 and 2006, 1.07 jobs turned over or were reallocated within the local economy. In Lincoln, the professions with the highest incidence of job reallocation included finance and insurance and educational services.⁹

EMPLOYER CHARACTERISTICS

It is hard to document the number of employers and self-employed people in Lincoln. The town is so small that some of its employment statistics are protected as confidential due to the limited number of establishments and employees in a given industry. Public and proprietary sources provide fairly consistent estimates, however: 170 to 190 employers, including the town itself. Several of Lincoln’s employers are small establishments with five to ten employees – from churches and non-profit charitable organizations to gift shops and banks – but

⁹ Massachusetts Department of Labor and Workforce Development, ES-202, Lincoln, Massachusetts, and Boston-Cambridge-Quincy New England City and Town Area (NECTA); and Community Opportunities Group, Inc.

smaller, one-to-four-person establishments are more common. Lincoln's smallest businesses are one- or two-person operations, located in the Lincoln Station area, in single-family homes throughout the town, and in the handful of older commercial and mixed-use buildings on South Great Road, Route 126 and Route 2. These *microbusinesses* include architects and engineers, interior designers, psychologists, social workers, attorneys, photographers, custom woodworkers, publishers, auto mechanics, and others.

The town's larger employers are its major institutions: the Carroll School, the DeCordova Museum and Sculpture Park, the Massachusetts Audubon Society, and the Lincoln Public Schools. Non-profit organizations with tax-exempt 501(c)(3) status are an important component of Lincoln's economy. According to a national source that maintains a database of Internal Revenue Service (IRS) records, Lincoln currently has ninety-seven non-profit organizations.¹⁰ Lincoln's large institutional employers and most of its very small employers and self-employed people provide the economic infrastructure that enables some residents to work locally. In addition, they provide Lincoln with a daytime population that helps to support the town's few commercial businesses.¹¹

Tax Base

Lincoln's tax base reflects its land use pattern. Ninety-six percent of the town's tax levy is generated by residential uses and about four percent by commercial uses, including taxes on personal property. In Fiscal Year (FY) 2005, the town for the first time adopted a split tax rate instead of charging a uniform rate for all types of property. Lincoln's current tax rate is \$10.32 per thousand for residential property and \$13.55 for commercial, industrial and personal property. Table 8.3 reports the total amount of property tax revenue and distribution of tax revenue by land use class in Lincoln from FY 1999 to 2008.

COMMERCIAL AND INDUSTRIAL DEVELOPMENT

The \$808,000 in commercial, industrial, and personal property taxes reported in Table 8.3 represents a very small number of nonresidential taxpayers. In nearly all cases, "nonresidential taxpayers" exclude private residences with a home office or another type of accessory business.¹² Lincoln has twenty commercial and industrial parcels with a combined total of about forty-three acres, but it has no industrial uses. The industrially taxed parcels in Lincoln are owned or leased by utility companies. The largest commercial project, a 138,000 sq. ft. office building known as Lincoln North, is located off Old Bedford Road in North Lincoln and in a setting barely visible to most Lincoln residents. The most well-known commercial property in Lincoln is small by the standards of most towns: a mixed commercial area around Lincoln Station, owned by the Rural Land Foundation. Most of Lincoln's other commercial properties are concentrated in the Lincoln Station area, too. Isolated pockets of non-conforming businesses (two garden centers selling nursery stock and three gas stations) exist on South Great Road, Route 2 and Concord Road.¹³

10 GuideStar, www.guidestar.org/.

11 "Employment and Wages (ES-202)," 2006; Lincoln Business List, retrieved from InfoUSA; and Susan Brooks, Lincoln Town Clerk, Business Certificates List, [Electronic Versions].

12 Classification for tax purposes depends on the highest and best use of the property. Since a home located in a residential zoning district cannot be converted to a business, its highest and best use is a single-family residence. The presence of an at-home office is an accessory use and for appraisal purposes, it does not materially affect the value of the property. By contrast, a mixed-use building is one in which all or a portion of the market value is based on the capitalized value of income from leases. In these cases, the property is classified either as primarily residential or primarily commercial. Lincoln currently has five mixed residential and commercial properties and several others with a mix of commercial and agricultural uses.

13 Harald M. Scheid, Regional Tax Assessor, "FY 2008 Lincoln Data Extract" [Electronic Version], to Community Opportunities Group, Inc., 18 April 2008.

Zoning

Lincoln has three basic nonresidential use districts: B-1, the Retail Business District, B-2, the Service Business District, and B-3, the Selected Light Industrial District.

- ❖ The **B-1 District** applies to the site occupied by The Mall at Lincoln Station and land on the opposite side of Lincoln Road. It also includes the former town hall on Lincoln Road, just south of the present town office building. B-1 is the more permissive use district, for it allows a limited set of business uses as of right, subject to site plan review, and requires a special permit for a restaurant. It includes a total of 8.7 acres of land.¹⁴
- ❖ The **B-2 District** includes land in the South Lincoln business area as well, generally land along both sides of Lewis Street. The only uses allowed of right in the B-2 District are residential uses permitted in the General Residence (R-2) District. Business uses such as offices, service businesses, and light manufacturing require approval from the Zoning Board of Appeals, and restaurants require approval from the Planning Board. This district includes 8.6 acres of land.
- ❖ Lincoln has zoning regulations for an **Industrial District (B-3)**, but the town has not placed any land in the district.

These three districts reflect the basic recommendations of Lincoln’s first master plan, but they do not fully represent the town’s approach to commercial zoning. Over time, Lincoln has used *overlay districts* as the preferred mechanism for guiding major development and for accommodating substantive changes to the Zoning Bylaw. Lincoln currently has special overlay districts in North Lincoln and South Lincoln. The regulations establish the process that applicants must follow in order to propose developments that need greater dimensional flexibility or more use privileges than the underlying use districts allow. The process culminates in a town meeting warrant article to establish a planned development district and approve a preliminary development and use plan, which in turn establishes what can be done on the parcel. Together, the two conventional use districts, the South Lincoln Overlay District, and commercial land in a planned development district in North Lincoln provide twenty-seven acres of business-zoned land and another twenty-three acres that could include some business uses if Town Meeting decides to create additional planned development districts in South Lincoln at some point in the future.¹⁵



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¹⁴ Unless stated otherwise, the land area for each zoning district is derived from the Town of Lincoln’s digitized zoning map, supplied courtesy of the Conservation Department.

¹⁵ The South Lincoln Overlay District covers approximately 41 acres of land, including all of the B-1 District in South Lincoln, all of the B-2 District, and the General Residence (R-2) District. The South Lincoln Planned Development District 1, for the Mall at South Lincoln, includes 3.9 acres for which B-1 is the underlying zoning. The North Lincoln Planned Development District for the Lincoln North office building includes 9.2 acres.

Lincoln recently considered three development proposals that would increase local employment and generate additional tax revenue for the town: the commercial development at Lincoln Station and The Groves, which Town Meeting approved as planned development districts in 2006, and an office building proposed for land near the Lincoln/Waltham line, located in an existing residential neighborhood. This proposal did not go forward.¹⁶

- ❖ Renovations at The Mall at Lincoln Station began in September 2007. Ten months before groundbreaking (November 2006), Town Meeting established a planned development district (PDD) within the South Lincoln Overlay District to facilitate the project, which the Rural Land Foundation had been discussing with town officials for several years.¹⁷ In 1999, for example, the South Lincoln Business Area Planning Committee issued a report and recommendations for the evolution of South Lincoln as a village district, organized by quadrant. The Committee's work formed the basis for the South Lincoln Overlay District, created in 2004 as the "parent" zoning for future planned development districts in South Lincoln.¹⁸
- ❖ Also in 2006, Town Meeting approved a new planned development district in North Lincoln. The Groves, a 197-unit New England Deaconess senior residence compound, includes independent living and semi-independent living units for people over 62 years. As a managed residential community, the NEDA "Abundant Life" development will employ a recreation director, geriatric specialists, and food services, housekeeping, and maintenance staff.
- ❖ In 2007, Leggat McCall Properties approached the town about rezoning 8.6 acres off Winter Street and Old County Road for a 200,000 sq. ft. office building. A traffic analysis prepared for the town indicated that Leggat McCall's plans, coupled with the four million sq. ft. of office and retail development already permitted in Waltham and Weston, would generate significant traffic impacts.¹⁹ Opposition from residents, doubt about the fiscal benefits of Leggat McCall's project, and community-wide concerns about unwanted traffic made it very unlikely that Town Meeting would support a zoning change. The developer's purchase and sale agreement expired and the project was abandoned.²⁰

NEEDS, ISSUES & CHALLENGES

Although some exceptions exist under state law, cities and towns have considerable statutory and home rule authority to regulate residential, commercial, and industrial development. By long-standing policy, Lincoln has confined commercial development to a handful of places. The desire for more activity around Lincoln Station led Town Meeting to establish an overlay district there in 2006, a move that enabled redevelopment of the Mall at Lincoln Station. The overlay district creates a process for considering more commercial uses, mixed uses, and residential uses in the same area.

However, there is considerable disagreement in Lincoln on the pros and cons of allowing more commercial development in other parts of town. Many residents have misgivings about locating commercial uses in or near established neighborhoods. They believe that high costs to neighbors would outweigh any anticipated gains to

16 See also, Chapter 2, Land Use & Zoning.

17 Town of Lincoln, Special Town Meeting, 4 November 2006.

18 Town of Lincoln, Report by the South Lincoln Business Area Planning Committee (1999).

19 VHB, Inc., "At-Risk Property Study-Transportation," 10 March 2008, 2-3.

20 See also, Chapter 2, Land Use & Zoning.

the town from such a commercial rezoning, and that estimating the net fiscal impact of commercial growth should account for the possibility that abutting residential property values will decline. In this case, they believe Lincoln should take steps to protect abutters, such as requiring commercial developers to compensate residents who stand to lose from a zoning change that may reduce the value of their homes. Other residents think Lincoln should be more receptive to commercial development outside the Lincoln Station area, mainly as a way to increase the tax base. They say the town needs more sources of recurring, predictable revenue in order to manage the rate of growth in residential property tax bills. Accordingly, they believe Lincoln should not close the door to proposals for commercial or mixed uses in areas currently zoned for residential development, and they cite projects such as Lincoln North and The Groves as examples of successful local initiatives.

Mixed-Use and Commercial Development

Lincoln has evolved largely as residents intended when they made a series of zoning decisions between 1929 and 1955. These decisions culminated in zoning for large-lot residential development and limited business development. The Town subsequently acquired many acres of conservation land. When other Boston area suburbs were zoning large amounts of land along highways such as Route 2 for commercial or industrial uses, Lincoln took a reserved stance and sought to protect the town and its neighborhoods from excessive commercial growth. This land use policy framework was largely endorsed in Lincoln's first and second planning reports, and it continues to have broad support today. The early planning studies demonstrate that even then, residents recognized the tension between preserving local character and the need to develop alternatives to the residential property tax in order to fund increasingly costly town services.

Conversations about commercial development would be more productive if discussion focused on outcomes and impacts, particularly because commercial uses are not homogenous; some would harm the quality of life in residential neighborhoods, and others would co-exist inconspicuously with nearby homes.

Nevertheless, other than in South Lincoln, the town chose not to designate specific areas of the town to be rezoned in advance for commercial development, opting instead to consider development proposals on a case-by-case basis. Development proposals having merit have historically been handled through overlay districts that are not general in nature, but fairly specific in the use and design elements that must be approved by a two-thirds vote at Town Meeting and honored by the Planning Board as it works out the details prior to granting the necessary special permits. This process requires a high degree of public consensus to complete successfully, and it gives the town significant leverage with developers to shape their proposals to Lincoln's benefit. This approach resulted recently in successful developments at Lincoln Station, The Groves, and Minuteman Commons, as well as in earlier efforts at Battle Road Farm and Lincoln North. On the other hand, it also resulted in the disapproval of an earlier proposal by the Marriott Corporation for senior housing known as Brighton Gardens as well in the abandonment of a commercial development prospect on the Arshad property at the Lincoln/Waltham boundary on Winter Street. With respect to the latter, it became clear that potentially severe traffic impacts on the Winter Street/Old County Road neighborhood would preclude the necessary support from town boards and Town Meeting to secure the approval of an overlay district.

A combination of Lincoln's fiscal challenges, unmet capital improvement needs, and aging population have led some to question whether Lincoln should reassess its long-standing ideas about commercial development.

Rather than a change from past practice, Lincoln is considering an institutionalization of past practice. There does seem to be more agreement about the financial, economic, and social advantages of mixed-use development, with or without some commercial uses, and Lincoln has opportunities to consider both mixed uses and free-standing commercial uses. The town has to reach agreement about what it wants to accomplish, however. Conversations about commercial development would be more productive if discussion focused on outcomes and impacts, particularly because commercial uses are not homogenous; some would harm the quality of life in residential neighborhoods, and others would co-exist inconspicuously with nearby homes.

In the past few years, developers and communities throughout the Greater Boston area have decided to redevelop obsolete or underutilized commercial space and construct new commercial space. Retail developments have burgeoned along Route 128 in communities with direct highway access, from Dedham to Reading, sometimes coupled with office space and housing. In Lincoln's area, Waltham and Weston recently approved a combined total of more than four million sq. ft. of commercial space. Some of the region's newest projects relied on the willingness of city councils and town meetings to adopt special legislation such as Chapter 40R, which offers financial incentives to communities in exchange for allowing higher-density housing by right, and Chapter 43D, the Expedited Permitting Law. In addition, local efforts to rejuvenate downtowns, village centers, and neighborhood business areas are underway in Wayland, Needham, Wellesley, and many other communities in the Boston region. The renovation of the Mall at Lincoln Station is consistent with these trends. Like other village centers, Lincoln Station competes to some degree with commercial areas in adjacent towns, larger-scale developments along major highways, and the growing use of the internet for consumer purchases.

LINCOLN STATION

The Lincoln Station area has some advantages that many town centers lack. As the financial and environmental costs of private vehicle commutes become unacceptable to many, Lincoln Station could draw more commuters from Lincoln and adjacent towns. In addition, many Lincoln residents work at home during all or a substantial portion of the week, and they could provide the kind of loyal customer base that small businesses need. The business mix at Lincoln Station will largely determine the size of the district's market area, which primarily includes the town itself, along with portions of neighboring towns and in some cases, national markets. For example, local residents, nonresidents employed in Lincoln, and commuters passing through Lincoln to non-local destinations generate sales for the grocery store, other shops around Lincoln Station, and gas stations. Specialty shops and "destination" areas, including facilities owned by non-profit organizations and town's conservation land, also draw non-local people to Lincoln, and local landscaping firms service both local and regional customers.

The amount of retail and restaurant space that can be supported in a setting like the Lincoln Station area could be estimated with a retail market study, but no community should tailor its zoning policies to assumptions about market demand.

- ❖ Retail is a highly dynamic environment. The industry's health and well-being hinges upon the ability of retailers to adapt to changing consumer demands. For example, national and regional grocery chains that had only one large building product to offer not long ago have created an alternative that is much smaller and designed to compete with high-end specialty food markets in wealthy suburban areas.
- ❖ The amount of retail space that a small town can support depends heavily on the presence of similar retail establishments and the size of population centers in nearby communities.
- ❖ What Lincoln can theoretically support in the Lincoln Station area is not the same as the amount of space that a particular type of business would have to own or lease in order to obtain financing. A survey con-

ducted for this Comprehensive Plan indicates that Lincoln residents would like to have more retail opportunities in town, particularly a pharmacy. However, wanting a pharmacy and having the disposable income to support one do not mean that a pharmacy is a bankable enterprise in Lincoln.

- ❖ Growth in internet sales continues to have a profound impact on the retail industry. The amount of store-front space devoted to retail will change in the future.

Lincoln needs to decide how much business development it wants to encourage around Lincoln Station, given all of the other goals the town wants to meet there – in terms of architectural design, the public realm, village-scale development, water conservation, walkability, housing mix, tax revenue, and so forth – and communicate these expectations clearly to proponents of planned developments. Most importantly, the town needs to be receptive to more housing near the train station. Disputes over commercial uses outside the Lincoln Station area had a significant impact on discussions about economic development during this Comprehensive Plan process. However, the town has not yet been asked to wrestle with a “live” planned development proposal for higher-density housing in the South Lincoln business area or its potential economic and fiscal impact. The small businesses currently operating around the train station may find it very difficult to survive in the future unless the area includes more housing and ironically, more businesses. It is not clear that Lincoln’s appetite for density will be consistent with the density that may be required to maintain a vital business district at Lincoln Station.

POLICY OBJECTIVES

Like many towns, Lincoln has historically framed its conversations about economic growth in terms of zoning, and tax base expansion. Except for general agreement about the desirability of a village business center around Lincoln Station, there has rarely been majority consensus about the appropriateness of other locations for commercial or industrial development. The Lincoln North office project is a noteworthy exception. In the late 1980s, Lincoln had an opportunity to gain control of a forty-seven acre tract of land near the airport, and Town Meeting agreed to acquire the property. The disposition planning for this site culminated in the offices at Lincoln North, which currently generates about \$300,000 in real estate tax revenue, and Battle Road Farm, Lincoln’s award-winning mixed-income housing development. This development also resulted in a protected open space buffer along the adjacent Minute Man National Park.

Over time, Eastern Massachusetts suburbs have instituted zoning that separates land uses, yet in Western Massachusetts, many small towns have decided against limiting or prohibiting businesses in residential areas. They like the random mix of homes, farms, and small businesses that they currently have, for this mix is often characteristic of rural communities. In addition, they worry about turning healthy small businesses into nonconforming uses: the effect of zoning changes to prohibit uses that legally exist today. Underneath these two approaches to land use regulation lie different ideas about the meaning of “quality of life,” about the responsibility of local government to protect private interests, and different expectations about the character and size of businesses seeking to locate. Lincoln needs to consider whether or to what extent it is willing to accept either mixed uses or commercial development on sites beyond those currently zoned for business. It also needs to weigh the anticipated tax revenue gains from commercial development in other parts of town with the potential impact, positive or negative, on nearby homes and the vitality of businesses near the train station.

EMPLOYMENT BASE

Lincoln may need to think about setting goals for the size and composition of its employment base. While goals for commercial development typically focus on location and sizes and types of business establishments, goals for an employment base are different. They are more likely to center on wages, quality of employee benefits and working conditions, compatibility with characteristics or needs of the local labor force, and an integrated

approach to economic development and affordable housing. Lincoln's ability to realize employment base goals will depend on conditions in the regional economy, demand from firms to locate in the town, and the capacity of existing and new firms to grow. For nearly all communities, meeting economic development goals involves building on local assets. For Lincoln, these include its human capital and entrepreneurship, reflected both in the number of home-based businesses and in the number of self-employed residents, the number of non-profit organizations located in Lincoln, regardless of their size, and the town's agricultural businesses.

Agriculture

Lincoln has been committed to agricultural preservation and productive farming for decades. The town has acquired agricultural land in order to protect it from development and leases just under ten percent of its total conservation land inventory to farmers. Income from these leases helps to offset Lincoln's cost to take care of its conservation land, but in addition, food produced on Lincoln's leased land and its small, privately owned farms benefit local and non-local residents seeking local sources of food and organic crops. While agriculture is not a key revenue generator in Lincoln or any other town that still has productive farms, it supports a way of life that has been extremely difficult to maintain in Eastern Massachusetts for well over fifty years. Compared with other towns in the Boston metropolitan area, Lincoln is poised to provide locally grown food better than most. To Lincoln residents, preserving and supporting productive agriculture is a crucial aspect of planning for sustainable development. In the future, the town may find it more difficult to preserve the 158 acres of farmland that still have no protection against a change in use. This represents twenty-nine percent of Lincoln's total inventory of productive agricultural land.²¹

Home Occupations

Lincoln's zoning requirements for home occupations are fairly standard, yet in most communities, the standard rules for home occupations contain vague or ambiguous descriptions of an allowable home business. In many cases, this is because the regulations governing at-home employment have not been updated for years. Lincoln allows home occupations as an accessory residential use by right in all districts except B-1, which prohibits residential uses. The town attempts to regulate home occupations by defining a series of intensity and impact thresholds that separate the permitted accessory use from that which requires a special permit from the Zoning Board of Appeals. Specifically, a permitted home occupation has to meet all of these standards [from Section 6.1(f) of the Zoning Bylaw]:

- ❖ It must be clearly incidental and subordinate to use of the premises for a residence;
- ❖ It is limited to one person employed or otherwise involved in conducting the business on the premises, except for residents of dwelling;
- ❖ Prohibited impacts include offensive noise, vibration, smoke, dust, odors, heat, glare, or unsightliness, and traffic that is inconsistent with traffic typically associated with a single-family residence;
- ❖ Prohibited activities include public display of goods, posting signs that do not comply with Lincoln's sign regulations for residential areas, outdoor storage of materials or equipment, which includes parking of more than one commercial vehicle, other exterior indications that a home occupation exists on the property, and any variation from the residential character of the property;

²¹ Town of Lincoln, Open Space Committee, *Open Space and Recreation Plan* (2008), 44.

- ❖ It must provide adequate off-street parking spaces for employees and for visitors, and the parking cannot substantially alter the appearance of the premises as a single family residence;
- ❖ The parking needed to serve employees, clients, customers, or patients on a regular basis must not exceed spaces for four vehicles.

The Zoning Board of Appeals has authority to allow more than one non-resident employee and more than four parking spaces on the premises.

These standards and special permit waiver provisions are common, yet Lincoln's bylaw contains wording that has the potential to create administrative and enforcement problems: a permitted home occupation is defined as a "professional office, studio, laboratory, and workshop accommodating *occupations customarily conducted in Lincoln...*" [emphasis added]. While the Zoning Board of Appeals also has authority to allow an occupation not customarily conducted in Lincoln, subject to certain requirements, it takes little imagination to see that many types of home occupations conducted today could not have been customarily conducted twenty years ago simply because new technologies have changed the way people work.

Aside from needing to update some of the terminology used in its home occupation bylaw, Lincoln's approach to home occupations is about as permissive as that of any other town. For many at-home entrepreneurs, their challenges have less to do with zoning than organizational capacity, ease of networking and business-to-business collaboration, working relationships with town hall, access to promotional opportunities, access to adequate utilities, notably telecommunications, and opportunities to move into low-cost commercial space as their business grows. According to a study recently published by the Bureau of the Census, home-based businesses now account for nearly half of all businesses operating in the United States. Technology, the high cost of transportation and child care, and personal needs such as workplace flexibility or additional income have converged to create a nearly invisible system of employment.²² In some towns, the growing number of home occupations has begun to generate controversy as neighbors find themselves with businesses in their own back yards. It seems unlikely that home occupations will spawn serious land use conflicts in Lincoln, however, simply because of the types of occupations held by so many Lincoln residents.

A local economic development committee could act as an advocate for home-based employment in Lincoln and help to maintain an accurate inventory of home entrepreneurs. While the Town Clerk is required by law to maintain an index of business certificates filed by local businesses, in nearly all communities the index is difficult to maintain due to competing demands placed on town clerk departments. Unless motivated business owners update their business certificates every four years, the Town Clerk has no way of knowing whether a business still operates. Moreover, the statute does not require businesses operating in the owner's name to file a certificate at all. Many consultants working as sole proprietors, writers, artists, musicians, family day care providers, and others use their own name as the name of their business. These kinds of microbusinesses do not appear on a city or town clerk's business list, yet in Lincoln, they may be far more numerous than the town realizes.

Tax Levy

The property tax levy is the amount of revenue a community collects from real and personal property taxes. In Massachusetts, Proposition 2 ½ allows communities to increase the tax levy by 2.5 percent of the prior year's levy plus "new growth," or revenue from an increase in assessed valuation due to real property improvements not reflected in the previous year's tax base. Despite the small number of commercial properties in Lincoln, the

²² Bureau of the Census, *Characteristics of Businesses: 2002*, Survey of Business Owners (2006).

town's FY 2008 residential tax rate of \$10.32 was lower than that of all adjoining towns. This has historically been true as well.²³ The average homeowner tax bill is high by state standards despite Lincoln's low tax rate, and this is partially because Lincoln's home values are so high. However, the primary determinants of a community's tax bills are town meeting appropriations for local government services and the amount of money generated by non-tax revenue sources. The tax rate is set by dividing total appropriations, minus non-tax revenues, by a community's total assessed valuation. Throughout Eastern Massachusetts, towns with high property values and high household wealth tend to have relatively low tax rates and high residential tax bills.

Communities wishing to exceed the levy limit under Proposition 2 ½ must approve an *override* by ballot vote at a town election. They also can vote to exempt debt service from the levy limit, i.e., without permanently lifting the base upon which each year's 2.5 percent increase is calculated. Lincoln has passed several overrides and debt exclusions since Proposition 2½ went into effect in 1981. Proposition 2½ overrides seem to be affordable to most residents of Lincoln because the town is so affluent, yet not everyone would agree. Lower-income households spend a much higher proportion of their incomes on housing, so property taxes consume a higher proportion of their incomes than is the case for households with higher incomes. As a result, raising the tax rate is a more serious issue for lower-income households and those with fixed incomes.²⁴

Town officials familiar with the town's finances are very concerned with the town's ability to maintain services in an environment where costs largely outside of town control are rising rapidly and thus, about the long-term consequences of Proposition 2 ½ overrides. Property taxes have become an increasing burden to a significant and growing portion of the population as residents continue to age.²⁵ If Lincoln remains committed to preserving a population with diverse incomes, it will need to find ways to pay for community services that permit homeowners at different income levels to live in and pay taxes to the town. Given the constitutional and statutory constraints on municipal taxation policy and the limited range of tools available to assessors to provide relief to struggling taxpayers, the issue of retaining the economic diversity of the community may become one of Lincoln's greatest challenges.

Non-Profit Organizations

Non-profit organizations abound in Lincoln. Many of them contribute to the town's employment base, and they provide services valued by Lincoln's own residents and people from other communities. The town does not have organized or systematically collected data to measure or track the economic impact of these organizations. However, the prestige of some non-profits in Lincoln suggests that their economic impact extends well beyond Lincoln's borders. Some towns with a large base of non-profit organizations and institutions have taken steps to forge partnerships between these groups, the for-profit business community, and local government. This kind of collaboration can be seen in a few small towns in Berkshire County, for example, where the arts and a variety of cultural, environmental advocacy, and outdoor recreation organizations make up a significant part of the economy.

Lincoln could pursue opportunities to increase the economic benefits of its non-profit sector through similar means. An example of a partnership activity might involve coordinating special events sponsored by non-profit organizations with promotional and sales events in South Lincoln and farm tours already supported

23 DOR, Division of Local Services, "Tax Rates," 1981-2008, [Electronic Version], Municipal Data Bank.

24 Bureau of the Census, *Housing of Lower-Income Households*, Statistical Brief 94-18, September 1994.

25 For a detailed review of Lincoln's financial condition, fiscal policies, and near-term fiscal challenges, see Chapter 12, Lincoln Town Finances.

by the town. A simpler example would involve providing unobtrusive “wayfinding” signage between the larger non-profits and Lincoln Station, keeping promotional literature about stores in the Lincoln Station area at the reception desks or front offices of non-profit facilities and similarly, providing informational literature about the non-profits in business establishments. In communities with active partnerships engaged in these kinds of activities, there is typically a town committee, such as an economic development commission, to coordinate local government’s role. Lincoln does not have an economic development commission or committee today, but the town could establish one.

Some towns with a large base of non-profit organizations and institutions have taken steps to forge partnerships between these groups, the for-profit business community, and local government. Lincoln could pursue opportunities to increase the economic benefits of its non-profit sector through similar means.

Some have suggested that Lincoln should seek a payment in lieu of taxes (PILOT) from its non-profit organizations. This practice is common in cities with large tax-exempt educational and charitable institutions, but it is much less common in small towns. Currently Lincoln receives PILOT revenue from the state for land and facilities at Hanscom Civilian Airport and Walden State Reservation,²⁶ but none of the non-profits provides PILOT revenue. PILOT is a voluntary action by tax-exempt organizations, and it requires a negotiated agreement between the host community and the non-profit. Lincoln officials have considered requesting non-tax payments from local non-profits, but the town determined that most of the non-profits are too small to generate much revenue. Many towns in the Boston metropolitan area have explored PILOT agreements, too. Like Lincoln, they eventually abandoned the idea because the very small amount of revenue involved did not justify the level of effort by local officials or the strain placed on municipal and non-profit relationships.

GOALS & RECOMMENDATIONS

Goal ED-1. Develop the Lincoln Station area as a higher-density mixed-use village that complements and reinforces the vitality of Lincoln’s existing small businesses, consistent with smart-growth principles and Lincoln’s core values.

- ED-1.1. Create a Lincoln Station Area Planning Committee appointed by the Planning Board to undertake an initial study of the opportunities, factors and constraints that would inform the necessary steps toward incenting desirable development in the area.
- ED-1.2. Review and build upon the Report to the Lincoln Planning Board by the South Lincoln Business Area Planning Committee that was the outcome of the 1998 charrette, and prepare a report that adjusts, refines, or adds to its recommendations to apply to current conditions.
- ED-1.3. Prepare a needs analysis and feasibility study to determine what commercial activities would best serve the town’s interests.
- ED-1.4. Develop realistic economic goals and evaluate the fiscal impact of enacting any recommendations to increase the density of development in the area.

²⁶ Town of Lincoln, Schedule A Year-End Revenues and Expenditures Report, 2006-2008 [Electronic Versions].

- ED-1.5. Prepare a comprehensive development plan including the infrastructure required to encourage desirable development.

DISCUSSION

In light of general consensus that the primary location for higher-density mixed-use development is the Lincoln Station area, town government should consider appointing a task force to identify and examine the town's options for economic development in this area. As discussed in Chapter 2, Land Use, Lincoln Station needs a comprehensive development plan. Part of this planning process should include establishing realistic economic goals for the South Lincoln business area. For example, an economic development plan might include a needs analysis and feasibility study for a flexible office and business services cooperative for very small businesses and at-home entrepreneurs.

In addition, the town should explore the feasibility of a Business Improvement District (BID) at Lincoln Station. A BID is a type of special revenue district that allows communities to impose a surcharge on properties within the district in order to finance infrastructure or utility improvements, and sometimes improvements on private property. A majority of business property owners would have to agree to nominate the area for BID designation and also to create the BID. Many towns have found it difficult to build property owner support because of concerns about the surcharge, so communications with the business community will be very important. District Improvement Financing (DIF) is another potentially useful tool for financing infrastructure needs, such as wastewater disposal, to facilitate development around the train station.

Goal ED-2. Provide for economic development that respects Lincoln's rural character and adds to the quality of local residential life by providing goods and services desired by residents, jobs and livelihoods for Lincoln residents, and tax revenue that support the town services that are important to Lincoln residents.

- ED-2.1. Create an Economic Development Committee with members appointed by the Board of Selectmen to identify and assess Lincoln's economic development opportunities and advise the Board of Selectmen, Planning Board, and other town boards about economic development policy.
- ED-2.2. Consider opportunities for new mixed uses or commercial uses that can be developed and operated for the benefit of the town.

DISCUSSION

In light of unresolved tensions about commercial development in Lincoln, town government needs an appointed body to identify and examine the town's options for economic development. Some of these options may require additional planned development districts in the Lincoln Station area or new types of zoning in other parts of the town, but zoning is not the only tool for economic development. Lincoln needs to take a creative approach both to defining "economic development" and identifying ways to achieve its goals. An economic development committee could include designees of existing boards such as the Planning Board and Finance Committee, but it needs representation from a wide set of interests: Lincoln's for-profit businesses, non-profit organizations, farmers, at-home business owners, developers or realtors with knowledge of demand for commercial, mixed-use, and non-profit institutional space in Lincoln and the immediate region, and citizens at large. Some projects that should be assigned to an economic development committee include the following:

- ❖ **Business Inventory.** Lincoln currently has very little data about the characteristics of its businesses, particularly its home-based businesses. An economic development plan or strategy should be informed by accurate, timely data and a trends analysis. Although numerous public and private data sources provide

business statistics, they are rarely complete, often inaccurate or out-of-date, and sometimes industry- or membership-driven, which in turn creates a risk of bias. Moreover, many business databases and statistics collections omit non-profit organizations and sole proprietors.

- ❖ **Public Participation.** Lincoln should continue to hold community conversations about its economic future. The town's appetite for economic development is cautiously limited, as suggested by the mostly negative response to Leggat McCall's proposal on Winter Street and the results of a survey conducted for this Comprehensive Plan. On one hand, survey respondents indicated a desire for more retail opportunities but virtually no interest in new commercial office developments; on the other hand, many respondents expressed frustration with the wording of survey items and the lack of information about the choices they were asked to evaluate. Since economic development is a controversial subject in Lincoln, the town needs to communicate with residents clearly, openly, and often. This task should be delegated to a new committee that represents many types of interests.
- ❖ **Fiscal Impact of Commercial Development.** Lincoln needs to be prepared to address resident concerns about the possibility of negative impacts on home values from new commercial development. While there is no current literature in juried publications about the impacts of commercial land uses on residential areas, local assessors frequently work with adjustment factors to increase or decrease home values based on external conditions such as high traffic volumes. This type of analysis is more difficult than many people realize because the characteristics of commercial developments vary significantly, and large scale does not always correlate with negative impact. If the town plans to consider more commercial development opportunities, within or outside of South Lincoln, some attention should be given to the process and local assumptions used to forecast net tax revenue.
- ❖ **Sole Proprietor and Microbusiness Support.** Interest in home businesses and small, locally owned businesses suggests that Lincoln residents may be receptive to types of business development that impose few if any impacts on neighborhoods. A study of needs and opportunities for self-financed business start-ups and business expansion, such as sole proprietors and microbusinesses providing health care, educational services, social services, and personal services, could be valuable to the town's near-term economic development planning.
- ❖ **Building Partnerships.** Lincoln would benefit from a more organized arrangement for working with its businesses, non-profits, and farms. Collaborative programs could include marketing and promotions, special events, planning, employee training and professional development, and public-private financing for services such as "wayfinding" signs and publications. Good models for these types of partnerships exist in several Berkshire County and Essex County communities (as discussed under ED-1).
- ❖ **Revenue Enhancement.** The economic development committee could work with the Town Administrator, Finance Committee, and Board of Assessors to identify opportunities to enhance revenue from nonresidential and non-tax sources and also protect very small businesses from a tax burden they cannot manage. Timely reviews and adjustments of user fees (which Lincoln already does every year), the feasibility of converting some general fund services to municipal enterprises, and the advantages and disadvantages of impact fees should be explored.
- ❖ **Mitigation.** The economic development committee should serve in an advisory capacity to the Planning Board and Board of Selectmen about appropriate, realistic ways to mitigate the impacts of economic developments, both within and outside of the Lincoln Station area.

Goal ED-3. Retain and capitalize on Lincoln’s cultural, educational, environmental, and other non-profit charitable organizations as a vital part of the local economy.

- ED-3.1. Encourage partnerships between non-profit organizations and local businesses for special events, programs, and other forms of joint marketing that would be mutually beneficial for them and of interest to Lincoln residents.
- ED-3.2. Support non-profit organizations by including their programs and activities on a community-wide calendar maintained on the town’s website.
- ED-3.3. Encourage non-profit organizations to provide a variety of educational and enrichment opportunities for Lincoln’s youth, both in and outside of the classroom.

DISCUSSION

Opportunities to implement these recommendations are discussed above and in Chapter 4, Cultural and Historic Resources.

Goal ED-4. Promote local businesses and home-based businesses as a source of local, “zero-commute” employment.

- ED-4.1. Periodically evaluate the needs of local businesses, such as business services, expansion space, communications technology, networking, or supportive policies from town government.
- ED-4.2. Review the town’s zoning regulations in order to identify and remove barriers to, and to encourage, at-home employment.
- ED-4.3. Encourage local businesses to collaborate and coordinate with the town’s non-profit organizations and institutions to address mutual interests, such as planning and cross-promotions of special and seasonal events, and wayfinding for visitors to the Lincoln Station area.

DISCUSSION

Working at home has increased locally, regionally, and nationally over the past decade. Home-based businesses and telecommuters have become very common, particularly in affluent suburbs due to the educational and occupational characteristics of their residents and proximity to major employment centers. Work-at-home employment provides the private benefits of jobs, income, and convenience, and the public benefits an employed daytime population without the environmental and aesthetic impacts that people often associate with large industrial and office developments. Since the prevalence of at-home employment is a fairly recent phenomenon, its long-term impacts are difficult to determine. Various surveys by the Bureau of the Census, the Bureau of Economic Analysis, and the Small Business Administration have begun to focus more on the social and economic consequences of working at home. Lincoln should try to develop a better understanding of its existing home-based farm and non-farm employment because the town has so little information about this “silent” layer of the local economy.

Lincoln also has very little information about its local businesses, i.e., businesses that operate in designated commercial areas or as non-conforming uses. Any attempt to analyze the Lincoln Station area’s retail and office market will hinge on quality data about the businesses that already exist in town, not only the types of businesses but also their trade areas, competition, rents, barriers and opportunities to business development, factors that could enhance the prospects of success in their present locations, and their anticipated future space needs.

Encouraging home-based employment is consistent with many aspects of this Comprehensive Plan, yet in some communities, growth in home occupations has begun to generate neighborhood complaints. At times, ambiguous zoning bylaws have made it difficult for building inspectors to enforce zoning requirements, and residents with home offices or workshops do not have a clear sense of what their communities will allow. As part of a general update of the Lincoln Zoning Bylaw, the Planning Board should evaluate the existing home occupation regulations and determine whether they need to be revised. This process should include consultation with the Building Inspector, residents with home-based businesses, the (proposed) Economic Development Committee, and the Town Clerk.

Goal ED-5. Continue to encourage agriculture as a way of life and a source of local employment and food.

- ED-5.1. Adopt a right to farm bylaw.
- ED-5.2. Support and collaborate with local and regional organizations to promote agri-tourism in Lincoln and increase the base of loyal customers for Lincoln agricultural products.
- ED-5.3. Continue the Conservation Commission’s agricultural leasing program and explore opportunities to expand it, where appropriate.

DISCUSSION

The Conservation Commission and local organizations have worked successfully to promote active agriculture and protect land for agricultural use, as evidenced by the farms that continue to operate on public and private land. Although Lincoln has done far more than most towns to preserve agriculture as part of the local economy, there are steps the town could take to reinforce and enhance its existing actions. For example, the state recently produced a “model” right to farm bylaw as a guidance document for farm-friendly communities seeking to establish a local agricultural policy. The model bylaw contains a declaration of support for agriculture and agricultural practices that sometimes generate complaints in suburban communities, a process for resolving grievances about farm operations, and a requirement that prospective buyers be notified of the town’s pro-farming policy before they purchase or lease property. The purpose of the advance notice is to inform new residents and business owners that the community tolerates agricultural impacts that some may consider a nuisance, such as dust, odors, noise, and slow-moving equipment on public ways. While Lincoln residents seem to hold the town’s agricultural establishments in very high regard, there is no guarantee that future residents will have the same appreciation for farming. The model bylaw or a similar one would convey Lincoln’s position on agriculture and institute a clear process for addressing grievances.

Lincoln’s recently appointed Agricultural Commission and the proposed Economic Development Committee (below) should work with the Conservation Commission and Lincoln’s non-profit institutions to explore ways to expand the base of support for Lincoln’s farm businesses. By building upon existing efforts to promote local farms, the town may be able to develop more formal agri-tourism and eco-tourism programs and increase visitorship to Lincoln in ways that benefit the farms, non-profits with compatible missions, and small businesses in the Lincoln Station area. Some communities in Essex County, Worcester County, Franklin County, and Berkshire County have formed successful agri-tourism/eco-tourism partnerships that sponsor special events, recreational and educational programs, and a variety of direct marketing enterprises.

Transportation & Circulation

OVERVIEW

Through decades of planning, regulation, and investment, Lincoln has worked to preserve and enhance its scenic roadsides, vistas, and rural appearance, and it has established an impressive network of trails and roadside paths. However, increased traffic volumes coupled with the absence of sidewalks or paths except on major roads, has created an increasingly unsafe environment for local drivers, walkers, and bikers. Enhanced traffic calming, traffic enforcement, and non-vehicular modes of transportation have become necessities. Improving the paths and trails for bikers and encouraging shared motor vehicle use will help to increase mobility for residents and enhance Lincoln's sense of community. Although these goals present substantial challenges due to the town's dispersed development pattern, limited funds, and lack of viable local transportation options, they deserve further study consistent with Lincoln's history of thoughtful, innovative planning.



Key Findings

- ❖ Lincoln has about sixty-three miles of roadways, the majority of which are local roads. Lincoln's major roadways include Route 2, Route 2A, Route 126/Concord Road, and Route 117/ South Great Road.
- ❖ In 2000, 2,555 Lincoln residents commuted to other cities and towns for work. A total of 881 commuters from other communities traveled to Lincoln for work, bringing the total number of daily commuters to 3,436.
- ❖ Eighty-three percent of Lincoln residents traveled by car and five percent by train, although only twenty-four percent of all Lincoln commuters work in Cambridge or Boston, the primary destination of the train. Less than one percent of Lincoln residents commuted by bicycle, and eleven percent worked from home – a much larger percentage than the regional average. The town's carpool participation rate was less than surrounding towns.
- ❖ Available data show that traffic volumes on Route 2 and Route 128/I-95 have not increased in recent years. However, planned developments along the Route 128/I-95 corridor could cause a significant increase in trips to and from the new sites.

- ❖ Major developments already approved in communities around Lincoln, notably Waltham and Weston, will add almost 59,000 trips to connecting roads. Traffic increases will have a continuing impact on many of the regional roadways serving Lincoln’s area, such as Great South Road (Route 117), Routes 2 and 2A, and Winter Street.
- ❖ The number of traffic accidents in Lincoln has decreased over the past few years. Of accidents that did occur, most were along the town’s major roadways, including Route 2 and 2A, Bedford and Lincoln Roads, Route 117, and to a somewhat lesser extent, Route 126.
- ❖ Lincoln has seventy-two miles of trails and ten miles of roadside paths. These trails and paths connect at key points and are owned and maintained by a variety of municipal, non-profit, and private entities.
- ❖ Lincoln’s transportation-disadvantaged populations include people between the 5 and 18 years old and those 65 and over, lower income people, and people with disabilities. The town’s age-based transportation disadvantaged population increased by 311 people between 1990 and 2008, and as of 2000, Lincoln had about 348 people with physical and sensory disabilities that could preclude them from driving. Demographic estimates for 2008 show that about fifteen percent of the town’s households have low or moderate incomes.

Key Challenges

- ❖ Lincoln has seen traffic volumes increase in recent years. This can create an unsafe environment for pedestrians using roadways without roadside paths and for drivers to get out of their driveways.
- ❖ Lincoln’s low-density development pattern and historically rural nature mean that there are few transportation options other than the car. However, the town is fortunate to have a commuter rail station linking it to Cambridge and Boston. Lincoln could work to increase ridership among a target group of resident commuters.
- ❖ Lincoln’s roadside paths need ongoing maintenance. Whether the town will be able to adequately care for this infrastructure will depend on its other transportation priorities and adequate revenue to pay for capital improvements.
- ❖ Although Lincoln’s paths and trails could be enhanced to accommodate more diverse uses, such as high-speed cycling and mountain biking, increasing the diversity of uses can cause user conflicts and possible degradation of trails. Lincoln will continue to program its trails and paths for uses that are desired, compatible, and sustainable.
- ❖ Increasing mobility for Lincoln’s seniors and people with disabilities remains a challenge due to the town’s dispersed development pattern, limited funds, and lack of local transportation options.
- ❖ Regional transportation issues pose probably the most significant challenges for Lincoln, and consequently, the town will continue to be involved in several regional organizations that address these concerns.
- ❖ Many of Lincoln’s roadways require significant maintenance and even reconstruction. Having initiated a Roadway Paving Program in 2008, Lincoln has taken important steps to address this problem. As roadway maintenance efforts continue, Lincoln will continue to balance preserving the rural aesthetic of Lincoln’s roads with public safety and budgetary challenges. Since there is a concern that repaving and other roadway improvements may lead to increased speeds, the town plans to respond through increased monitoring and enforcement. Additional traffic calming measures may also be considered.

- ❖ Route 2 is a major presence in the town, and the proposed upgrade of the Crosby's Corner section will affect its immediate vicinity as well as peripheral roadways while under construction.. Residents and public officials will continue to stay involved and aware of all plans for this roadway, whether proposed or underway.
- ❖ Overall, Lincoln residents are highly protective of the town's low-density development pattern and the privacy and autonomy this brings. At the same time, they want solutions to transportation inconveniences, namely increased traffic and congestion. Understanding the relationships and tradeoffs between land use and transportation will be critical to having a meaningful public discussion about real transportation options in Lincoln in the future.

EXISTING CONDITIONS & TRENDS

Few aspects of life in Lincoln are untouched by transportation. Although Lincoln is a small suburb, its transportation system is developed and complex, and represents an important part of the town's past, present, future. The original roadways that once connected the town center to farmsteads still remain, and they provide the foundation of Lincoln's road network today. Lincoln is unique in that it has preserved a roadway design based on a distinctly rural aesthetic that makes travel along its streets and roads a beautiful experience. Also, Lincoln's network of roadside paths and trails is a remarkable amenity not found in most communities. While in many towns a sense of place is imparted only through buildings and open space, in Lincoln the roadways and paths play an equal if not greater role in communicating the town's aesthetic and social values.

Major highways cut through Lincoln, too, and they raise concerns faced in most communities. Lincoln is also served by commuter rail, an amenity that has no doubt played a role in the town's development and the socio-economic makeup of its population, and it also serves as a major source of opportunity for the town's future development. Today, Lincoln's transportation system incorporates influences from its very early days as a farming community, and from the railway era, the post-war highway boom, and up to the present day.

Despite Lincoln's transportation assets, it has important challenges. A transportation system - especially the amount of vehicle traffic it carries - is a major determinant of a town's quality of life. In the past twenty years, Lincoln and the surrounding communities have experienced modest yet constant population growth due to their convenient access to major highways and proximity to commuter routes and the commuter rail system. This access, combined with Lincoln's attractive, rural character, makes the town an especially desirable place to visit and live. In addition, development beyond Lincoln's boundaries has generated more traffic on local roadways, all of which has put pressure on its transportation infrastructure. As development continues both locally and regionally, providing a safe, adequate, and equitable transportation system while maintaining Lincoln's unique sense of place will be a major challenge for the town.

Roadways

Lincoln's origins as an agricultural community can be seen in many aspects of its town form, including the roadways. As in many small towns in Massachusetts, Lincoln's roadway structure still retains the framework of a system of agricultural roads that radiate from a modest town center that evolved after its succession from Concord, Lexington and Weston in 1754. This occurred after citizens petitioned the state legislature on the grounds that travel distances to and from various churches on Sunday were to onerous. With minor realignments, Lincoln's radial road network remains remarkably intact, and new subdivisions and larger infrastructure projects have gradually filled in and overlaid this framework. Its street pattern, coupled with sensitive treatment

of its town center and the roads themselves, has left Lincoln with a vivid sense of the feel and function of its original roadway network. This adds immeasurably to the authenticity and appeal of the town today.

While the historic transportation and land use pattern has been retained over the years, Lincoln is not unfamiliar with the forces and effects of regional transportation infrastructure. Route 128/I-95 nearby connects Lincoln to the culture and economy of the greater Boston area and beyond. For Lincoln, and for many other small towns along Route 128, this connection is undoubtedly a source both of affluence and prosperity, but also congestion and growth pressures. Although Route 128 poses indirect forces on Lincoln, the highway does not actually run through town. Instead, it skirts along Lincoln's eastern edge, providing access via the Trapelo Road exit just beyond the town line. Route 2A traverses the town running east and west across its northern third and Route 2 forms the boundary between the area known as North Lincoln and the rest of town. Both of these roads, but Route 2 in particular, have been the focus of over three decades of highway planning and public process, aspects of which continue to this day.

Lincoln residents have wrestled with the presence of Route 2 for years. Route 2, which extends from Boston to Petersburg, NY, was built between 1929 and 1933. In the 1950s, when massive highway construction projects were being planned throughout the country, state transportation authorities identified a segment of Route 2 for inclusion in plans for an "Inner Belt" highway system around Boston's first-ring suburbs. One part of the proposal called for an expansion and re-alignment Route 2 between Route 27 in Acton and Route 128 in Lexington. Although plans for Boston's Inner Belt were cancelled in the early 1970s, planning for changes to Route 2 continued. Some alternatives would have changed both the function of the roadway – whether it would become a limited access expressway, stay a locally accessible arterial, or some combination of the two – and its alignment through Lincoln. A so-called "northern alignment," which would have curved northward from Crosby's Corner and skirted the southern boundary of the Minute Man National Historic Park, was favored by some Lincoln residents.¹ Various alternatives were carried through a prolonged environmental review and public process that involved numerous Lincoln town officials and residents, but the state abandoned plans for substantial changes to Route 2, including the northern alignment, in 1978.²

In the early 1990s, MassHighway and area towns reached agreement on a strategy of on-line improvements without additional travel lanes. The Crosby's Corner intersection on the Lincoln/Concord line presented safety issues because Route 2 turns through an angle at traffic lights at the foot of a hill. Also, as traffic increased it became increasingly unsafe to have a large number of direct access points to the highway from individual houses and residential side streets between Bedford Road in Lincoln and Sandy Pond Road in Concord. A further problem was the lack of width to provide median barriers and breakdown lanes. A major design exercise by MassHighway with input from Lincoln resulted in the Crosby's Corner project, which will reconstruct the highway, replace the angle with a curve, create a grade-separated intersection with an underpass for local traffic, reduce the grades, widen the right of way to add barriers and breakdown lanes, and create new service roads for access to properties. Initially, ten homeowners agreed in principle to have their houses taken to facilitate the project, and ultimately, seven Lincoln homes on the north side of Route 2 were taken by the state. Others will be affected by it, both positively and negatively. Lincoln will need to adjust some of its services to the new street pattern and ensure that routes for pedestrians and cyclists are linked to the new underpass. This project is scheduled for construction in 2010-2013.

1 Skidmore, Owings & Merrill (Route 2 Consultant Team), "Memorandum to Route 2 Participants, 12 June 1973," Lincoln Public Library Archives, Route 2 Studies (1973).

2 Town of Lincoln, Land Use Conference Committee, *Route to Tomorrow: Challenges and Choices*, (October 1983), and Anthony J. DiSarcina, P.E., ASCE, to Community Opportunities Group, Inc., 6 June 2008.

FUNCTIONAL CLASSIFICATION OF ROADWAYS

Route 2 is Lincoln's only *principal arterial*: a roadway designed to support regional mobility at relatively high speeds. In the hierarchy of functional classifications used in transportation planning, the purpose of arterials is to move goods and people efficiently over long distances. While Route 2 has absorbed a considerable amount of attention over the years, Lincoln has other major roadways, too. They are not as heavily traveled as Route 2, but they provide access to neighboring communities and the greater region, delivering traffic between roadways higher and lower in the hierarchy. These roadways include:³

- ❖ State Route 126 (Concord Road), located on the westerly side of town, is a major north-south urban principal arterial roadway that provides access to Concord to the north and Wayland to the south.
- ❖ Route 117 (South Great Road), North Great Road (Route 2A), Trapelo Road, Bedford Road south of Route 2, and Lincoln Road function as urban minor arterials. These roads provide crucial linkages between principal arterials and collector streets.
- ❖ Lexington Road, Codman Road, Winter Street, Tower Road, Old Bedford Road, Bedford Road north of Route 2, and Virginia Road are examples of urban collectors: roads that carry traffic between local and neighborhood-level streets and the arterial road network.

All other roads in Lincoln fall into the category of local streets, or roads designed to serve a community's homes and businesses and guide traffic to the collector and arterial system. Map 9.1 illustrates the physical relationships between these roadways, commuter rail service, and Lincoln's network of trails and roadside paths.

BRIDGES

Lincoln neither owns nor maintains any roadway bridges. However, the Lincoln Department of Public Works (DPW) is responsible for several of the roadside path bridges over brooks and streams throughout town. According to the DPW Superintendent, these bridges are in fair to poor condition and they require maintenance.⁴

Journey-to-Work

The Bureau of the Census reports journey-to-work data for states, counties, and municipalities as part of the decennial census. Two types of commuting patterns are available for each city or town: where employed residents travel *to* for work, and where non-residents travel *from* to the community. According to Census 2000, Lincoln's total employed population included 3,983 people, and approximately fourteen percent worked locally

Table 9.1
Functional Classification of Lincoln's Roadways

Functional Classification	Centerline Miles	Percent Total
Principal Arterial	3.09	4.9%
Urban Principal Arterial	2.63	4.2%
Urban Minor Arterial	11.16	17.8%
Urban Collector	7.87	12.6%
Local	37.88	60.5%
Total	62.63	100.0%

Source: Massachusetts Executive Office of Transportation, Office of Transportation Planning, "2007 Road Inventory" (June 2008), MassGIS.

³ Note: the "urban" designation attached to the functional class of Lincoln's roads does not mean that the roadways look "urban." Urban and rural roadway classifications refer to differences in population density between metropolitan and non-metropolitan areas.

⁴ Chris Bibbo, Superintendent of Public Works, to Community Opportunities Group, Inc., 9 June 2008.

while twenty-seven percent worked in Bedford and seventeen percent in Boston.⁵ However, these figures include the population living at Hanscom Air Force Base (HAFB), which helps to explain the very large percentage of people reporting Bedford as their place of employment. For Lincoln’s own 2,555 residents commuting to non-local jobs, it appears that most traveled to Boston, Cambridge, neighboring towns, and the employment centers near I-90 and Route 128/I-95.

Lincoln is a destination for workers from other communities, too. In 2000, 2,432 people reported Lincoln as their place of employment, including nearly twenty-three percent who also live in the town – most being residents of Lincoln itself, not HAFB. The remaining seventy-seven percent, or about 1,900 people, commuted from other locations. Approximately five percent commuted from Boston, the second highest generator of local workers. Many others commuted from Cambridge, Somerville, or one of the nearby communities such as Waltham, Bedford, Arlington, or Maynard. Together, the journey to work data illustrate that on a typical weekday, as many as 6,400 workers use the local and regional transportation networks to travel within, from, and to Lincoln for work.

Table 9.2
Journey-to-Work Data for Lincoln Residents (Including HAFB)

Location of Employment	Number of Residents	Percent Employed Residents
Bedford	1,083	27.2%
Boston	669	16.8%
Lincoln	547	13.7%
Cambridge	291	7.3%
Waltham	138	3.5%
Concord	133	3.3%
Burlington	95	2.4%
Lexington	64	1.6%
Wellesley	49	1.2%
Newton	38	1.0%

Source: Census 2000, MCD/County to MCD/County Worker Flow Files. Note: (1) Other towns and cities not listed each comprise less than one percent.

Table 9.3
Journey-to-Work Data for Lincoln Employees (Including HAFB)

Location of Residence	Number of Residents Employed in Lincoln	Percent Total Employment in Lincoln	Location of Residence	Number of Residents Employed in Lincoln	Percent Total Employment in Lincoln
Lincoln	547	22.5%	Quincy	33	1.4%
Boston	109	4.5%	Billerica	32	1.3%
Cambridge	67	2.8%	Littleton	31	1.3%
Somerville	56	2.3%	Sudbury	31	1.3%
Bedford	55	2.3%	Lowell	29	1.2%
Chelmsford	55	2.3%	Belmont	28	1.2%
Maynard	52	2.1%	Stow	28	1.2%
Arlington	50	2.1%	Lexington	27	1.1%
Waltham	46	1.9%	Boxborough	26	1.1%
Worcester	39	1.6%	Watertown	25	1.0%
Acton	38	1.6%	Wellesley	24	1.0%

Source: Census 2000, MCD/County to MCD/County Worker Flow Files. Notes: (1) Other towns and cities not listed each comprise less than one percent of the total.

MODE SHARE

In addition to collecting data on *where* people work in relation to where they live, the Bureau of the Census collects data on *how* people commute between work and home, or what *mode* of transportation they use. This is

⁵ U.S. Department of Commerce, Bureau of the Census, Census 2000, Census Transportation Planning Package, Census of Housing and Population, Part 3, 2003.

referred to as a *mode share* or *modal split*. Like most rural or suburban towns in the United States, Lincoln residents commute primarily by car. In the last decennial census, eighty-two percent of Lincoln residents reported that they traveled by car to work. Of those who drove, approximately seventy-seven percent of all commuters traveled in single-occupant vehicles and only five percent in multiple-occupant vehicles, e.g., carpools.

Lincoln's mode share for single-occupant automobile travel is similar to the regional mode share. However, the percentage of residents who traveled in multi-person vehicles in Lincoln is slightly smaller than the regional mode share of about seven percent.⁶ This may be because more residents in communities along Route 128 participate in ridesharing and carpooling programs, such as those offered by the 128 Business Council. However, despite a heavy reliance of single-occupancy vehicles, Lincoln is the only town in the region with a reported decrease in the number of registered vehicles between 1997 and 2002.⁷

Table 9.4
Mode Shares in Lincoln and Region (Including Hanscom AFB)

Mode	Lincoln Mode Share		Regional Mode Share	
	Number	Percent	Number	Percent
Single-Occupant Automobile	2,650	77.3%	58,369	76.7%
Multiple-Occupant Automobile	168	4.9%	5,096	6.7%
Bus	20	0.6%	1,970	2.6%
Rail	149	4.3%	2,797	3.7%
Walk	145	4.2%	3,037	4.0%
Bicycle	8	0.2%	284	0.4%
Work at Home	285	8.3%	4,240	5.6%
Other	4	0.1%	345	0.5%
Total	3,429	100.0%	76,138	100.0%

Source: Census 2000, Census Transportation Planning Package, Part 3 – CT, MA, RI, May 2004. Note: Lincoln includes Hanscom.

Table 9.5
Comparison of Lincoln Census Tracts and Boston Metropolitan Area by Mode Share

Mode	Tract 3601		Tract 3602		Region	
	Number	Percent	Number	Percent	Number	Percent
Single-Occupant Automobile	1,104	77.3%	2,046	80.1%	1,167,914	68.2%
Multiple Occupant Automobile	135	9.5%	65	2.5%	140,848	8.2%
Public Transportation						
Bus	24	1.7%	9	0.4%	82,710	4.8%
Subway or Commuter Rail	10	0.7%	122	4.8%	148,491	8.7%
Other	0	0.0%	0	0.0%	6,283	0.4%
Motorcycle	0	0.0%	0	0.0%	838	0.0%
Bicycle	9	0.6%	0	0.0%	9351	0.5%
Walked	127	8.9%	24	0.9%	90,054	5.3%
Other Means	13	0.9%	9	0.4%	8630	0.5%
Worked at Home	6	0.4%	280	11.0%	57,815	3.4%
Total	1,428	100.0%	2,555	100.0%	1,712,934	100.0%

Source: Census 2000, Summary File 3, Table P30. Note: Mode share data for Lincoln and the region and for Lincoln's two census tracts differ slightly because due to reporting methodology.

6 Census 2000, Census Transportation Planning Package, Part 3 – CT, MA, RI, (May 2004).

7 Mass Stats, [http://merlot.caliper.com/maptitude/MassStatsNETVersion/\(S\(yrorkp55nydors55ospxvj45\)\)/map.aspx](http://merlot.caliper.com/maptitude/MassStatsNETVersion/(S(yrorkp55nydors55ospxvj45))/map.aspx).

With such a large percentage of Lincoln residents traveling by car to get to work, it follows that few use transit. In Lincoln, the main source of public transportation is the MBTA commuter rail. In 2000, just over four percent of Lincoln residents traveled by rail for work, compared to 3.7 percent of regional commuters. Another significant feature of the mode share data is that compared to neighboring communities, a larger percentage of Lincoln residents work at home.

While mode share statistics for Lincoln as a whole shed light on local travel patterns, breaking the numbers down by *census tract* provides another dimension to the data. Lincoln includes two census tracts, one composed of HAFB and Hanscom Field (Tract 3601), and the other composed of the rest of town (Tract 3602). Examining mode share for these very different areas shows that most of the people who walked to work in Lincoln lived (and presumably worked) at HAFB, and that most of those who took the train did not. Also, the data show that Lincoln's large percentage of work-at-home people is attributable to the population primarily *outside* of HAFB: eleven percent of the residents in Tract 3602 reportedly worked at home in 2000, which is a very large percentage compared with neighboring towns or the Boston metropolitan area as a whole.

Vehicular Traffic Volumes

Traffic volume counts indicate how heavily a road is used. Typically, traffic volume data represent the number of vehicles that pass a certain point within a 24-hour hour period. The Massachusetts Highway Department (MassHighway) counts traffic for selected roads throughout the state from traffic stations or points along the roadway. Some roadways are counted continuously on a year-round basis. Others are counted for a certain period every few years, and some are done on a case-by-case basis when a construction or rehabilitation project necessitates data collection. For this reason, traffic counts for roadways in and around Lincoln are available only for certain years.

Table 9.6 presents available traffic counts for major routes in and near Lincoln. The data indicate that although Route 2 and Route 128/I-95 are heavily traveled roads, they do not appear to be experiencing an increase in traffic volumes. Route 2 volumes have ranged between 42,000 vehicles per day to slightly more than 50,000 over the years, depending on the counting location. The Route 128/I-95 traffic stations with multi-year data also showed decreases in traffic volumes. For the stations south of Route 2 along Route 128, it is not clear whether traffic has increased, decreased, or remained stable. The most recent data indicate these segments of the roadway carry between 172,000 and 180,000 vehicles per day.

Traffic volumes are not recorded consistently for local roads. Often, they are produced for a particular study or project. In 1999, Lincoln's Traffic Management Committee conducted a study that recorded *peak hour traffic* on roads considered to be the most heavily affected by growth in traffic volumes.⁸ At the time, a particular safety concern was whether residents had ample time to exit their driveways. As a rule, motorists entering traffic require a 200 ft. line of sight and about five seconds to merge safely into traffic. The data from 1999 (Table 9.7) showed that due to high traffic volumes, people living on some of Lincoln's roads did not have enough time to exit their driveways safely.

Stack-ups at intersections are another consequence of increasing traffic volumes on local roads, and it has become common at some junctions in Lincoln during the peak period. Stack-ups and increasing traffic in general could reflect a rise in non-local trips (drivers from other cities or towns who pass through Lincoln on their way to other destinations) or growth in local trips. Lincoln residents sense that the increasing traffic and congestion

⁸ Peak hours are defined as 6:30am – 9:30am and 3:30pm – 7:00pm.

they see in town, especially during peak period, stems primarily from non-local traffic. While regional growth and development undoubtedly play a role in Lincoln's traffic patterns, the absence of current data makes it impossible to determine whether the cars on Lincoln's roads are local or non-local. Lincoln's traffic mitigation efforts may need to be geared to reducing vehicle trips and speeds within the town as much as "taming" traffic that originates elsewhere.

Table 9.6
Average Daily Traffic: Major Routes

Route/Street	Town	Location	Average Daily Traffic				
			1997	1998	1999	2000	2001
Route 2	Lincoln	At Lexington Town Line	47,600			50,100	
Route 2	Lincoln	West of Bedford Road					
Route 2	Concord	West of Route 126					
Route 2	Concord	0.2 km East of Concord Rotary	46,879	47,407	47,161	47,011	46,354
Route 128/I-95	Lexington	North of Route 2A	174,215	172,102	174,219	169,897	
Route 128/I-95	Lexington	North of Route 2	166,778		177,815		
Route 128/I-95	Lexington	South of Route 2	173,120	177,105	179,104	180,605	
Route 128/I-95	Waltham	North of Winter Street	173,637	174,337	178,835		
Route 128/I-95	Waltham	South of Winter Street	169,712	170,766	176,956	178,343	172,230
Route/Street	Town	Location	Average Daily Traffic				
			2002	2003	2004	2005	2006
Route 2	Lincoln	At Lexington Town Line		47,600			48,700
Route 2	Lincoln	West of Bedford Road					44,400
Route 2	Concord	West of Route 126					42,800
Route 2	Concord	0.2 km East of Concord Rotary	47,595	47,137		45,754	45,662
Route 128/I-95	Lexington	North of Route 2A			159,000	171,800	159,735
Route 128/I-95	Lexington	North of Route 2					154,500
Route 128/I-95	Lexington	South of Route 2					
Route 128/I-95	Waltham	North of Winter Street					
Route 128/I-95	Waltham	South of Winter Street					

Source: Executive Office of Transportation, Massachusetts Highway Department, Traffic Volume Counts, Route Traffic Volume Count Listing, <http://www.mhd.state.ma.us/default.asp?pgid=content/traffic01&sid=about#para>.

Table 9.7
Peak Hour Traffic Volumes on Lincoln's Major Roadways

Roadway	Peak Hour Volume	Avg. Distance Between Cars (seconds)	24 Hour Volume
Route 2A	1,822	2	20,695
South Great Rd. – Rt. 117	1,374	3	12,391
Lincoln Road	1,065	3	10,530
Trapelo Road	869	4	7,644
Concord Road – Rt. 126	710	5	7,314
Bedford Road. South	641	6	6,242
Bedford Road North	528	7	4,516
Sandy Pond (between 5 Corners and Baker Bridge)	376	10	N/A
Codman Road	325	11	3,154

Source: Town of Lincoln, Traffic Management Committee Report (August 2000).

TRAFFIC ACCIDENTS

MassHighway collects data on the number, type, and location of traffic accidents from the Registry of Motor Vehicles. In 2004, 2005, and 2006, motorists were involved in 150, 167, and 144 traffic accidents in Lincoln, respectively. With the exception of one death in 2004, the accidents involved no fatalities. Recently, MassHighway changed its traffic accident reporting system by adding data that allow accidents to be mapped.⁹ Though available only for 2005 and 2006, the data show that most accidents in Lincoln occur along its major roadways, including Route 2 and 2A, Bedford and Lincoln Roads, Route 117, and to a somewhat lesser extent, Route 126 (Map 9.2). On roadways such as Bedford Road and Lincoln Road, accidents seem to occur at intersections with local roads rather than along an uninterrupted stretch of road. The same is not true for Routes 117 and 2, where accidents occur both at intersections and along the open road. These data also show clusters of accidents at two major intersections: Five Corners and Crosby's Corner.

Public Transportation

The Massachusetts Bay Transportation Authority (MBTA) Commuter Rail Station, located on Lincoln Road in South Lincoln, is the primary source of public transportation in Lincoln. Trains run between Fitchburg and Boston's North Station, offering fifteen inbound boarding times in Lincoln on a typical weekday. The frequency of train stops in Lincoln varies, but weekday service is limited to five stops in Lincoln between 6:30 am and 9 am, and five trains departing from North Station between 4:30 pm and 7 pm that make stops in Lincoln.¹⁰



Travel time between Lincoln Station and Boston is approximately 28-36 minutes. Over the past several years, daily boarding volumes have fluctuated at Lincoln's commuter rail station. In February 2003, 2004, and 2005, there were 300, 219, and 226 average daily inbound Lincoln passengers respectively on a typical weekday.¹¹

Like most suburban commuter rail stations, Lincoln's is primarily a park-and-ride facility. Three parking lots provide a total of approximately 170 parking spaces: a commercial property on which the MBTA has rights to fifteen spaces, a town-owned, unpaved lot with about forty-two spaces, and a town-owned paved pay lot with 101 spaces.¹² In 2002, the Central Transportation Planning Staff (CTPS) conducted a park-and-ride lot

⁹ Note: Due to limitations of MassHighway Crash Data, not all accidents can be mapped. For 2005, 89 percent of reported accidents are represented on the map. In 2006, 69 percent of reported accidents were represented. However, of the accidents not represented on the map, most also occurred along major roadways and at the key intersections described above.

¹⁰ Massachusetts Bay Transportation Authority, <http://www.mbta.com/schedules> and [maps/rail/lines.com](http://www.mbta.com/maps/rail/lines.com).

¹¹ Massachusetts Bay Transportation Authority, *MBTA Ridership and Service Statistics* ['The Blue Book'], Tenth Edition, Revised 2006 (2006).

¹² Mark Whitehead to Community Opportunities Group, Inc., 10 June 2008.

utilization survey and found that Lincoln station's parking lot was between fifty percent and eighty-five percent utilized during peak period. By contrast, the next four stations to the west (Concord, West Concord, South Action, and Littleton), all of a size similar to Lincoln's station, were fully utilized. The next two stations to the east (Silver Hill and Hastings) are much smaller, with only a few spaces each, and they were less than fifty percent full, and the next station eastward (Brandeis-Roberts) was also less than half full.¹³ In the fall and winter of 2003-2004, the Lincoln Police Department conducted its own survey of the Lincoln station parking lot and found that on average, only forty percent of the spaces were used.¹⁴

Lincoln Station is not accessible to people with disabilities and the station lacks passenger facilities such as a shelter and public restrooms. Although there are no plans to address accessibility issues at or make general improvements to Lincoln Station, the MBTA has started a five-year improvements project for the Fitchburg Line which will enhance train service in general. Since the Fitchburg Line is the oldest commuter line in the MBTA system and it experiences the most service delays, the current project will seek to increase travel speeds, which are predicted to improve on-time reliability from eighty-three percent to ninety-five percent. The improvements also will focus on providing an enhanced passenger experience through amenities such as wireless internet access. The improvements project began a design and development phase in 2008 and all construction is scheduled for completion by 2012.¹⁵

In addition to commuter rail service, the MBTA provides paratransit service (THE RIDE) to elderly or disabled Lincoln residents. There is no local bus service in Lincoln, but the MBTA's Route 76 travels to HAFB from the Alewife Red Line station.

Bicycle and Pedestrian Facilities

One of the most notable aspects of Lincoln's transportation system is its network of trails and roadside paths. Lincoln has nearly eighty miles of trails, including ten miles of roadside paths.¹⁶ The roadside paths provide a safe, pleasant route for walking and low-speed biking along Lincoln's roadways, which typically have little or no shoulder space. The paths can be seen along stretches of major local routes, the longest segment running next to Lincoln Road and continuing on Bedford Road above Route 2. Other paths follow the eastern side of Trapelo Road, Codman Road, Great South Road (Route 117), an Concord Road (Route 126). Together, the paths provide access to most parts of town. Lincoln also has designated



13 Boston Metropolitan Planning Organization, *The 2004 Congestion Management System Report*, Chapter 5 (2004), <http://www.bostonmpo.org/bostonmpo/resources/reports.htm#cms>.

14 Town of Lincoln, Police Department, *Lincoln Police Department Survey*, Sep. 03 – Feb 04, "Commuter Lot Utilization," (2004). Note: the Police Department Survey considered the total number of spaces at the Lincoln MBTA to be 99.

15 The Metropolitan Bay Transportation Authority, About the MBTA, "The Fitchburg Commuter Rail Line Improvement Project," http://www.mbta.com/about_the_mbta/t_projects/.

16 Town of Lincoln, Open Space Committee, *Open Space and Recreation Plan* (March 2008).

crosswalks throughout town. The crosswalks at the school complex on Lincoln Road and along Sandy Pond Road are slightly elevated to serve as traffic calming features and protect pedestrian safety.

Lincoln's roadside paths provide a remarkable transportation and recreational amenity, but some residents think the paths suffer from poor maintenance and underutilization. According to the Lincoln Department of Public Works (DPW), the roadside paths are indeed neglected. Some have had virtually no maintenance for years, leaving various paths in poor condition. The town-wide paving program that began in 2008 will include some roadside path improvements.¹⁷ However, while the roadside paths provide a safe route for walkers and some bicyclists, they do not accommodate higher-speed bicyclists. Lincoln's 1986 *Report of the Roadside Path Committee* found that high-speed cyclists do not use path system. Instead, they opt for the narrow travel lanes on roadways.¹⁸ Lincoln's road-and-roadside-path structure successfully provides pedestrians and some cyclists with a safe route of travel, but its design conflicts with the needs of high-speed cyclists.

Lincoln's conservation trails system is extensive. The town owns about thirty miles of trails and the state owns another 5.5 miles. Approximately twenty-four miles of trails cross private land. The remaining trail segments are owned by non-profit organizations, land trusts, and other municipalities.¹⁹ Just under half of all trails in Lincoln are maintained by the Lincoln Land Conservation Trust (LLCT). The town maintains about thirty-three percent, excluding roadside paths maintained by the DPW. The remaining trail segments are maintained by the state and other municipalities.²⁰

Regional Transportation Organizations

Regional forces greatly affect local transportation conditions. Below are the key organizations working within Lincoln's region to address regional transportation needs.

METROPOLITAN AREA PLANNING COUNCIL (MAPC) AND BOSTON METROPOLITAN PLANNING ORGANIZATION (MPO)

The Metropolitan Area Planning Council (MAPC) is the regional planning agency serving 101 cities and towns in the Boston area. MAPC researches and compiles plans and recommendations on many issues of regional significance, including transportation, and also provides technical assistance and advocacy to its member communities. MAPC also presents initiatives from Lincoln and other communities to the state, specifically to request funding for transportation and transit-oriented projects. In the past several years, there have not been any requests for infrastructure funding before the MAPC, although there have been many project-related issues that have been brought before MAPC as an overseer of regional development initiatives.²¹

MAPC is one of seven member agencies of the Boston Metropolitan Planning Organization (MPO), the largest of the thirteen regional transportation planning organizations in Massachusetts. The MPO carries out federally-mandated transportation planning responsibilities and also employs technical staff to prepare plans and studies

17 Chris Bibbo, Superintendent of Public Works, to Community Opportunities Group, Inc., 9 June 2008.

18 Town of Lincoln, Roadside Path Committee, "Report of the Roadside Path Master Plan Committee," November, 1986, (1986), 4.

19 Town of Lincoln, 2007 GIS Database: Transportation/Trails, (2007).

20 Ibid.

21 Metropolitan Area Planning Council (MAPC), "About MAPC," http://www.mapc.org/about_mapc.html.

in support local and regional decision-making.²² In addition to its affiliation with the Boston MPO, the MAPC works with cities and towns through eight sub-regional organizations. Lincoln's subregion is the Minuteman Advisory Group on Interlocal Coordination (MAGIC), which also includes Action, Bedford, Bolton, Boxborough, Carlisle, Concord, Hudson, Lexington, Littleton, Maynard, Stow, and Sudbury. MAGIC reviews and comments on developments of regional significance and maintains a subregional priority list of transportation improvements which is used to advocate for state funding.²³

While MAGIC is not currently evaluating any projects that relate directly to Lincoln, MAPC is conducting a transportation planning process for development along the Route 128 corridor between Route 3 and I-90. Lincoln is one of four communities within the study area, which contains approximately fifteen current, proposed, and potential development sites. An initial meeting in 2008 focused on economic development, traffic, and other opportunities and challenges in the study area. Representatives of the four towns signed a memorandum of understanding, committing to cooperate on measures such as increasing transit options, creating mitigation banks for developers, developing shared zoning bylaws to standardize traffic mitigation, and generally coordinating the planning on along the study area.²⁴ The next steps include identifying funds for a corridor study and planning process for the 128 Central area, and for state representative and senators from the four communities to form a caucus and consider a Route 128 corridor planning item for the Transportation Bond Bill.²⁵

128 BUSINESS COUNCIL

Established in 1987, the 128 Business Council is the first Transportation Management Association (TMA) in Massachusetts.²⁶ The Council works to reduce congestion on local and regional roadways, particularly Route 128, by providing employees of member businesses alternative transportation options and information. The Council currently operates six shuttle bus routes serving businesses, residential complexes, office parks, and colleges in Waltham, Lexington, Needham, Newton, Weston, Woburn, Burlington, and North Lexington. In addition to fixed-route bus service, the Council offers transportation demand management services such as carpool and vanpool ride-matching. Currently no Lincoln businesses or organizations participate in the 128 Business Council's programs, but it is possible that some Lincoln residents participate in ride-matching services. Raising awareness of The Council's services could help reduce the number of single-occupancy vehicle trips generated by Lincoln residents.

ROUTE 128 CENTRAL CORRIDOR COALITION

The Route 128 Central Corridor Coalition, composed of representatives from the four communities within the Route 128 corridor between Route 3 and I-90, including Lincoln. Together, these municipalities contain approximately fifteen current, proposed, and potential development sites.²⁷ The Coalition, working with the MAPC, seek regional solutions to the cumulative impact of planned development along the corridor.

22 Boston Metropolitan Planning Organization, "Detailed Information About the MPO," <http://www.bostonmpo.org/bostonmpo/mpo/whatde.htm>.

23 Mark Racicot, MAPC, to Community Opportunities Group, Inc., 6 June 2008.

24 Connie Paige, "Taming traffic on Route 128: Communities join to face the future," *The Boston Globe*, July 27, 2008.

25 MAPC, "128 Central," http://www.mapc.org/transportation/policies_process.html.

26 The MetroWest/495 Transportation Management Association also operates near Lincoln, but its catchment area is limited to Framingham, Hopkinton, Marlborough, Natick Southborough, Sudbury, and Westborough.

27 MAPC, "128 Central," http://www.mapc.org/transportation/policies_process.html.

Transportation Disadvantaged Populations

Transportation systems provide different levels of access to different sectors of the population. Age, income level, and level of physical ability affects a person’s *mobility*, or ability to get around. It is easy to see how these factors might affect one’s mobility in a town like Lincoln, where most transportation is auto-based. Traveling by car or truck is expensive, and it requires drivers be of a certain age and physical ability. A person who is younger or older, has limited financial means, or has a disability will most likely have far less mobility than others. Groups with characteristics that limit their mobility are known as *transportation-disadvantaged populations*.²⁸ In terms of age, they include people 5 and 18 years old and those 65 and over. According to federal census data and available estimates, these populations have moderately increased in Lincoln since 1990. In addition to the populations shown in Table 9.8, the aging of the “Baby Boom” population (the cohort now between about 45 and 64 years old) will create more needs for transportation options, such as paratransit services and housing close to goods and services, connected by well-maintained, accessible walkways.

Table 9.8
Change in Lincoln’s Transportation Disadvantaged Populations by Age, 1990-2008

Age Cohort	1990 Census		Census 2000		2008 Estimate		2000-2008
	Number	Percent	Number	Percent	Number	Percent	Change
Age 0-4	287	6.4%	350	6.8%	364	6.7%	14
Age 5-17	638	14.1%	974	18.9%	1,026	18.8%	52
Age 65-74	444	9.8%	498	9.7%	521	9.5%	23
Age 75-84	208	4.6%	319	6.2%	343	6.3%	24
Age 85+	47	1.0%	67	1.3%	95	1.7%	28
Total Population	4,515	100%	5,152	100.00%	5,463	100%	311

Source: Bureau of the Census, 1990 Census of Population and Housing, Summary File 1, Table P011; Census 2000, Summary File 1, Table P11; Claritas, Inc., Site Reports, and Community Opportunities Group, Inc.

People with lower incomes often depend on access to public transportation more than other groups. Current demographic estimates for Lincoln indicate that about fifteen percent of the town’s households have moderate incomes. Although income is not necessarily a barrier to car ownership or use, the costs of driving disproportionately affect lower-income people. They are more vulnerable to unexpected increases in gas prices and auto-related maintenance costs, all of which threaten both mobility and economic stability.

Another transportation-disadvantaged group is the population with disabilities. While the MBTA’s THE RIDE program serves Lincoln, people with disabilities have few other convenient transportation options. The Lincoln Council on Aging provides free rides for the elderly to medical and other appointments, shopping, and COA activities. According to Census 2000, 13.4 percent of Lincoln’s population reported some type of disability. Among them, eleven percent had a sensory disability and twenty-one percent had a physical disability, both of which could affect a person’s mobility.²⁹

28 Statistics in this section include Hanscom Air Force Base population.

29 Bureau of the Census, Census 2000, Summary File 1, Table P41, <http://factfinder.census.gov>.

NEEDS, ISSUES & CHALLENGES

Major Planned Developments

A community's internal dynamics clearly relate to long-range transportation planning needs, but what happens in the greater region is equally as if not more important. In particular, development trends in nearby communities have the potential to place significant burdens on another town's roadways. Lincoln's location along the rapidly evolving Route 128 corridor makes development trends nearby all the more important for addressing long-term transportation issues. Table 9.9 shows that today, approximately four million sq. ft. of development are at various stages in Lincoln's area, mainly in Waltham and Weston. In addition, a significant amount of development is occurring in other towns nearby, outside the area reported in Table 9.9. The projects range in size from fairly small developments, such as supermarkets and restaurants, to larger, more complex projects, such as the 3.24 million sq. ft. mixed-use Northwest Park development in Burlington. Ultimately, these projects will have a significant impact on many roadways in Lincoln's region. Most of these projects will affect regional roads that cross Lincoln, including Route 117, Routes 2 and 2A, and Winter Street.

Lincoln has taken an active approach to transportation planning, especially for its own roads, roadside paths, and trails. Through investment, development guidance and control, Lincoln has preserved and enhanced its beautiful roads and established a unique network of roadside paths and trails that serve as models for other communities. Due to issues such as traffic congestion, safety, transportation equity, and the growing awareness that private vehicle emissions are the nation's largest contributor to transportation-related greenhouse gases,

Table 9.9
Traffic Generation Potential of Development in Adjacent Communities

Project	Development Summary	Daily Traffic	Peak Hour Traffic (AM and PM)	Possible Lincoln Impacts
Related Development (Polaroid Redevelopment); Rte. 117 near Rte. 128	450 ksf office & 1.24 MSF retail	25,780	1,040 & 2,605	Route 117 & Winter Street
Boston Properties (Waltham Office Center); Totten Pond Road at Winter Street	355 ksf office & 74 ksf retail	10,615	690 & 1,185	Winter Street & Trapelo Road
Equity Office; 175 Wyman Street Wyman Street at Rte. 128	335 ksf office	3,380	495 & 455	Winter Street, Trapelo Road & Route 2
Opus Development; 40 Green Street between Rte. 117 and Rte. 20	360 ksf office, 30 ksf storage, & 180 ksf retail	8,655	621 & 911	Route 117 & Winter Street
Boston Properties; Fourth Avenue Third and Fourth Avenues	199,500 sf office	2,270	325 & 300	Winter Street, Trapelo Road, & Route 2
Northland Investments; Main and Moody on the Common	267 apartments & 42 ksf retail	3,085	80 & 280	Route 117
Boston Properties- Jones Road Office Development; Rte. 117 and Jones Road	114 ksf office	1,470	210 & 205	Route 117
Mass Broken Stone; Rte. 20 and Rte. 117 in Weston	350 ksf office	3,500	510 & 470	Route 117
Totals	2,163.5 ksf office, 1,536 ksf retail, 267 apartments, & 30 ksf storage	58,755	3,971 & 6,411	

Source: Vanasse Hangen Brustlin, Inc., 2008, based on projects in the permitting process or already permitted as of March 2008.

Lincoln realizes that other imperatives will direct its transportation policy in the future. Among Lincoln’s key transportation challenges are the consequences of increasing traffic volumes and traffic speed.

Traffic Safety and Congestion

Increasing traffic volume continues to challenge Lincoln’s existing transportation infrastructure. Along with a lack of sidewalks or roadside paths in many places, traffic volumes and speed can contribute to creating an unsafe environment for pedestrians using roadways without roadside paths and for drivers to get out of their driveways. Further, the problems associated with increasing traffic and excessive speeds are compounded by the character of Lincoln’s roads and intersections: tree-lined, with curves and undulations, often resulting in limited sight lines. Since Lincoln wants to keep the historic, rural nature of its roads, efforts will continue to control traffic to protect the safety of all roadway users.

...Allowing commercial development in any other area of Lincoln [outside of Lincoln Station] could potentially have significant impacts on local roads and neighborhood streets depending on the type, scale, and density of development and its regional appeal. Accordingly, Lincoln will have to exercise great care in evaluating the tradeoffs among land use, tax revenue enhancement and transportation issues to be sure that the greater good is being served.

Increased traffic volumes during the morning and evening peak hours are a particular problem. It is clear from Table 9.7 that two local roads – Lincoln Road and Trapelo Road – are presently carrying more traffic than Concord Road (Route 126), a state-numbered highway. Together, the traffic data for Lincoln Road, Trapelo Road, Route 2A, and Route 117 support the notion that a fair amount of east-west commuter traffic is responsible for much of the congestion on Lincoln’s roads. The total daily volume of 51,260 on these four roads exceeds that handled on Route 2. Furthermore, the volume of traffic carried on these four roads exceeds the number of Lincoln commuters in single-occupancy vehicles (2,120 round trips) by a factor of twelve. Allowing higher-density development in the Lincoln Station area may have only minor impact on traffic congestion unless it becomes a regional destination. However, allowing commercial development in any other area of Lincoln could potentially have significant impacts on local roads and neighborhood streets depending on the type, scale, and density of development and its regional appeal. Accordingly, Lincoln will have to exercise great care in evaluating the tradeoffs among land use, tax revenue enhancement and transportation issues to be sure that the greater good is being served.

Alternative modes of transportation are often posed as a way to mitigate traffic congestion. Suggestions include shuttle bus service, carpooling, public transportation, telecommuting, and improved pedestrian and bicycle facilities. Due to the town’s low-density land use pattern and because there are few services within walking distance of most households, however, Lincoln residents will probably continue to drive for the vast majority of trips. Any future commercial development in Lincoln should be encouraged or required (depending on a project’s size) to prepare and adhere to a Transportation Demand Management (TDM) plan for employees.

Regional Collaboration

Since most transportation is regional in nature, expanding Lincoln’s transportation options will need to involve regional collaboration. As a small town along the Route 128/I-95 corridor, Lincoln is acutely affected by the development and traffic patterns of the greater region. This is challenging because it means that traffic congestion in Lincoln is caused in part by traffic from neighboring towns. However, a regional connection also presents

opportunities to build regional capacity to address issues that are larger than any one city town. Regional solutions are not an option; they are the *only* effective and long-term way to address significant issues such as congestion, pollution, and safety on major roadways.

Lincoln has proven itself a willing partner in regional transportation initiatives. By participating in MAGIC sub-regional meetings and the Route 2 Corridor Advisory Committee (CAC), providing leadership on HATS, and more recently, initiating the creation of the 128 Central Corridor Coalition, local officials have taken the right steps toward increasing the town's ability to address its pressing transportation issues and needs. In addition, it will be important to build a constituency within town for regional transportation initiatives. While some may feel that the best way to deal with non-local traffic is to attempt to divert it from Lincoln's roadways, these measures will only go so far. Moreover, they will not do anything to address issues such as congestion on major roadways and pollution. The larger scope of transportation dynamics, issues, and solutions needs to be brought into the public discourse as Lincoln plans for its future.

Roadway and Roadside Path Maintenance and Use

Lincoln's 2008 Town-Wide Paving Program will begin to address some of the most pressing maintenance issues that have resulted from years of inadequate attention to local roads. In addition, the program will focus on integrating the town's Roadway Design Guidelines, which promote the rural character of Lincoln's roads through guidance on the design and construction on different types of roadways.³⁰ The Guidelines were adopted by the Board of Selectman in 1997. Although Lincoln works to balance both the aesthetics and logistics of roadway maintenance, the current program may leave some needs insufficiently addressed. This is especially true of the roadside paths, which are less likely to receive immediate attention than neglected roadways.



Keeping both roadways and roadside paths at a level that allows for efficient and comfortable movement by drivers, bicyclists, and pedestrians will remain challenging for Lincoln. In addition, some residents have said that roadside paths and trails are underused. Whether this is empirically true, it will be important to increase the constituency for maintaining and expanding roadside paths and trails. To increase the overall visibility, popularity, and relevance of the paths, Lincoln will need to think of creative ways to encourage residents to take advantage of this unique resource.

Mobility for Transportation Disadvantaged Populations

Since Lincoln is an auto-based town, particular attention must be paid to groups who may face barriers to car use or driving. In many communities, there is a growing awareness that older residents have a difficult time getting from place to place when their sole means of transportation is an automobile. Many older residents have difficulty driving, for physical or other reasons. Today, there are more elderly residents and fewer people to take care of them, and this has forced the issue of mobility for seniors into public dialogue. In addition, some Lincoln residents may face barriers to auto use due to income or a disability. Although each of these groups has transportation needs that require special attention, generally increasing transportation options, including non-

30 Vanasse Hangen Brustlin, Inc. *Roadway Design Guidelines*, 1997.

motorized forms of transportation such as walking and biking, will benefit everyone in some way, and also align with some of the recommendations for mitigating roadway congestion. Additionally, efforts must be made to make the limited non-auto transportation options accessible. This means working with the MBTA to make the Lincoln Station fully accessible to persons with disabilities.

HAFB and Hanscom Field

HAFB generates 10,400 average vehicle trips per day using Hanscom Drive. HAFB lies within a network of major state routes: Route 95/128 on the east, Route 2A on the south, Route 62 on the northwest and Route 4/225 on the northeast. Direct access to HAFB is limited to Vandenburg Gate from Hanscom Drive and Hartwell Gate from Hartwell Avenue. Areas of particular concern are the Bedford Road/Route 2A intersection and Hanscom Drive/Route 2A intersection. According to the *Hanscom Air Force Base Pre-BRAC Community Advance Planning* report (2005), these are two of the most congested intersections. At least 64 percent of the base traffic enters through the Lincoln access. Traffic issues will continue to be problematic, with Operational Level of Service (LOS) approaching 80 seconds of delay at signalized intersections and 50 seconds of delay at unsignalized intersections during peak hours.³¹ HAFB has taken steps to provide traffic mitigation through staggered work times and other TDM practices and works closely with Lincoln to monitor conditions. Changes in land use at HAFB, either through Base closure or realignment, may change the amount of traffic generated along this corridor.

Hanscom Field is a separate facility that is owned and operated by Massport serving general aviation including small aircraft and regional charters. There have been past efforts to expand the commercial use of this property, and any intensity of development that may occur may change the amount of traffic generated along this corridor.

GOALS & RECOMMENDATIONS

Goal TC-1. Increase the safety of Lincoln’s roadways.

- TC-1.1. Implement traffic-calming measures to manage vehicle speeds and reduce the amount of cut-through traffic through certain areas of town.
- TC-1.2. Control traffic speed through speed limit regulation and enforcement in a manner guided by a balanced traffic management program.
- TC-1.3. Institute public education and outreach to encourage traffic safety and awareness for users of Lincoln’s roads, roadside paths, and trails.
- TC-1.4. Continue to coordinate with state and regional transportation agencies regarding Route 2 improvements, including the Crosby’s Corner project, and provide active participation in the 128 Central Corridor Coalition.
- TC-1.5. Assess and, if necessary, improve parking in the center of town.

DISCUSSION

Traffic Calming. Traffic calming is a well-known approach to slowing traffic through physical and non-physical interventions. Discouraging travel on local or residential streets directs cars toward more major roadways, which

31 Mark Whitehead, Town Planner, March 2009.

suggests that traffic calming is an effective solution for reducing what many refer to as “cut-through” traffic. Many types of traffic calming techniques exist today. Some are as simple as narrowing travel lanes and striping pavement to create the perception of narrow lanes. Others involve substantial amounts of design, engineering, and construction, such as speed tables, chicanes, and roundabouts. In addition, making a road one-way is also a form of traffic calming that may be appropriate in some parts of town, although difficult to achieve in rural settings. Since there are many techniques and some may not be appropriate in Lincoln, traffic calming interventions must be selected through an evaluation of a specific roadway’s issues and the advantages and



disadvantages of using a particular type of intervention. Synchronizing general roadway improvements, such as paving, with the evaluation and installation of traffic calming devices can be an efficient and effective way to bring these techniques into a town’s mainstream roadway engineering policy and planning, as long as they are integrated with the town’s preference for maintaining the rural character of its roads.

Lincoln has begun to make substantial progress in this area. The Ad Hoc Traffic and Roadway Design Committee (AHTRC) was charged by the Board of Selectmen to examine approaches to traffic calming in order to inform a town-wide repaving project approved in 2008. Traffic calming considerations will be applied only to roadways included in the study area. However, the AHTRC also recommended to the Board of Selectmen that the town establish a permanent Lincoln Roadway and Traffic Mitigation Committee with broad representation, which would likely encourage traffic calming for other roadway projects in the future.³² In its roadway design principles, the AHTRC identified two key traffic-calming concepts that will be important to keep in mind as Lincoln moves forward:

- ❖ Initiatives to promote safe and appropriate use of roadways should reflect a combination of sound roadway engineering, roadway and roadside design, road user education, and traffic law enforcement.
- ❖ Roadway installations designed to calm traffic should be considered with regard to the specific context of the locale and the desired traffic management objective, balancing rural character, public safety, and maintenance with anticipated outcomes.
- ❖ Given Lincoln’s recent experience with traffic calming policy and planning, next steps should include:
- ❖ Support the work of the AHTRC and further discussion of establishment as a permanent committee;
- ❖ Identify specific areas or roadways in Lincoln with speeding issues for further study; and
- ❖ Continue with public education and outreach efforts about traffic calming in Lincoln.

³² Ad Hoc Traffic and Roadside Committee (AHTRC), Recommendations to Board of Selectmen (Memorandum), 18 December 2008; Addendum 23 January 2009.

Traffic Speed and Enforcement. Evaluating and enforcing speed limits could help to address concerns about traffic speed. While lowering speed limits across the board may seem logical, instituting a blanket speed limit is problematic for a few reasons. First, roadways are not homogenous. They serve different functions and form a hierarchy that accommodates different types of vehicular traffic. Efforts to guide traffic away from some roads, such as neighborhood-level streets, will not work unless drivers have more efficient options on other roads. Accordingly, the “default” speed limits in Massachusetts are set by M.G.L. c. 90, s. 18, which provides that in the absence of posted speed limits, vehicles must not exceed the following:

- ❖ 20 mph in a school zone;
- ❖ 30 mph in a thickly settled area or business district, for a distance of one-eighth of a mile;
- ❖ 40 mph on an undivided highway outside of a thickly settled area or business district, for a distance of one-fourth of a mile; or
- ❖ 50 mph on a divided highway outside of a thickly settled area or business district, for a distance of one-fourth of a mile.³³

Second, changing speed limits requires a traffic study conducted jointly with MassHighway and review and approval by MassHighway before it can be instituted by the town. The results apply only to the roadway segment included in the study. Establishing a speed limit in a different area requires a separate study and could result in a different speed limit, depending on the speed of existing traffic in that area. Some communities have found that traffic studies can result in a higher speed limit than the existing posted limit.

Appropriate speed limits and adequate enforcement are essential for managing speed on local roadways. While a “one-size-fits-all” approach to regulating travel speeds is inappropriate, it makes sense to study and establish speed limits in priority areas and focus enforcement efforts in critical traffic locations. Lincoln could make speed limit regulation and enforcement a consideration when identifying roadways for a traffic calming study. Any move toward possible speed limit adjustments needs discussion with the Lincoln Police Department.

Route 2. Although the possibility of a substantial relocation project for Route 2 is no longer under consideration, the highway remains a major factor in Lincoln. MassHighway is moving forward with improvements to Crosby’s Corner, a project that promises to improve safety and traffic flow. Lincoln residents have been very involved with proposed projects along Route 2 for a long time, exerting considerable influence over the roadway’s development. Residents and the town will need to remain involved in Route 2 planning and monitoring. Local officials will continue to work with the Route 2 CAC, MassHighway, and neighboring towns on Route 2, and to advocate for timely, responsible compliance with all environmental requirements concerning Route 2 improvements.

Parking (and in particular, free parking) is an inefficient use of land that visually detracts from the built environment and encourages auto use. Any unnecessary parking increases should be avoided. Expanding the supply of parking should be initiated only upon clear evidence of a shortage, and with careful consideration of how to manage the negative externalities associated with increased parking and auto use.

³³ MassHighway, Traffic and Safety Engineering, “Speed Limit Regulations,” <http://www.mhd.state.ma.us/default.asp?pgid=content/traffic/speedReg&sid=about>.

Parking in Lincoln Center. Although most of the time there is not a high demand for parking in Lincoln Center, parking can become scarce when events are held at the Library, Bemis Hall, or the First Parish Church. Permanent parking facilities should never be expanded to meet irregular demand, but Lincoln may want to survey and evaluate its parking needs for the center of town during all times of the day, month, and year, and plan for how to meet them. Some improvements may simply be procedural. For example, if overflow parking goes to the First Parish Church for events at Bemis Hall and this causes safety concerns, the town could adopt a strategy to manage vehicular and pedestrian traffic between these two sites when the need arises. If there is a documented need for parking in Lincoln Center, the town will need to work closely with property owners and residents to determine how to meet that need. Since parking (and in particular, free parking) is an inefficient use of land that visually detracts from the built environment and encourages auto use, any unnecessary parking increases should be avoided. Expanding the supply of parking should be initiated only upon clear evidence of a shortage, and with careful consideration of how to manage the negative externalities associated with increased parking and auto use.

Goal TC-2. Encourage the use of both motorized and non-motorized modal alternatives for intra- and inter-town transportation.

- TC-2.1. Improve the attractiveness, of and access to, Lincoln's pedestrian and bicycle infrastructure, including roadway shoulders.
- TC-2.2. Explore feasibility of expanding bicycle access to the trail network in coordination with the Conservation Commission.
- TC-2.3. Explore ways of increasing availability of motorized transportation alternatives, such as ridesharing and shuttle service, and investigate mechanisms to fund them.



DISCUSSION

Pedestrian & Bicycle Infrastructure. Just as Lincoln's roads need to be well-maintained for vehicular use, its other transportation infrastructure, namely the roadside paths, needs to be maintained for non-vehicular use. Lincoln's roadside paths are a great amenity to residents. However, it is generally recognized that the paths are both poorly maintained and underused, and it is likely that the former begets the latter. While Lincoln's town-wide paving program will address some of the roadside paths, residents must develop and maintain vigorous advocacy to ensure as much attention to roadside path maintenance in the future. The more Lincoln can include roadside paths in its paving programming and budgeting and give them equal footing with roadways, the more likely it is that their condition will at least remain constant, if not improve. Maintaining the paths will improve their attractiveness and make them more accessible to a variety of users.

In considering bicycle and pedestrian infrastructure, focusing on roadways makes sense. Pedestrians are often forced to travel on roadside shoulders where roadside paths are lacking. Cyclists also travel on roadways and not roadside paths in order to avoid pedestrian or slower-moving bike traffic. The town's attention to maintaining its roadways, and in particular the edges of the roads, will be important for ensuring the comfort and safety of cyclists. As with the roadside paths, residents should focus on developing and maintaining a strong cycling and

pedestrian constituency, and communicate to the town and DPW that maintaining the shoulders of roadways is essential to pedestrian and bicycle safety.

Bicycle Access to Trails. Opening Lincoln’s trail system to as many forms of non-motorized transportation as possible is a noble objective. Still, just as user conflicts occur along roadways, there will be conflicts along the trails and paths. Providing a network of safe, attractive paths for bicyclists is important for Lincoln, first because the town’s path system could accommodate more than pedestrian use, and second because Lincoln’s roadways leave little room for cyclists. Most of Lincoln’s seventy-two miles of trails are not accessible to some types of cyclists, and consideration should be given to whether they should be upgraded to do so. However, making trails bicycle-accessible raises a few issues. First, opening trails for bicycle uses means that pedestrians, horseback riders and bicyclists will have to cooperate and share the limited path space, adhering to a set of rules or protocol. Second, upgrading trails for bicyclists may mean a change in character or nature of the trail, and will involve additional resources for design, construction, and maintenance. Finally, making substantial changes to the trails and paths may be complicated because of the many owners and stewards involved, and in some areas changing the paths may be inappropriate due to conflicts with the town’s conservation objectives. In light of these issues, Lincoln might consider the following:

- ❖ Undertake a planning process for bicycle paths and trails that:
 - ◆ Inventories and assembles the owners and maintenance-providers for various trails and path segments, including the DPW, Conservation Commission, non-profit organizations such as the Lincoln Land Conservation Trust, real estate trusts, and various private owners, to discuss changes to trail design;
 - ◆ Selects and designates bicycle routes for speed cyclists and mountain cyclists;
 - ◆ Establishes design criteria for routes for speed and mountain bikers; and
 - ◆ Solicits public input, possibly through a bicycle advisory group, on all of the proposed changes.
- ❖ With the help of the DPW and Conservation commission, develop a general idea of design, construction, and maintenance costs for various trail changes and upgrades. This will help trail proponents create a feasible plan of action from the outset.
- ❖ Work with the Recreation Department and other town boards and groups to develop trail and path usage guidelines for walkers, bicyclists, and other users of the resource. The town’s Conservation Commission has issued a *Trail Guide for Bicycles* leaflet and provides conservation rules for trail usage in its Trail Map. These efforts may be expanded to establish a set of rules or guidelines for the many potential users of town trails.
- ❖ Determine a public outreach plan to communicate the rules to town residents. This might include posting information on the town website or developing signage to be posted along trails and paths.

Motorized Transportation Alternatives. Promoting non-motorized forms of transportation should be central to any efforts to reduce the negative consequences of auto use, but roadway infrastructure forms the basis of Lincoln’s transportation system. Most Lincoln residents will continue to use vehicles to travel, both locally and regionally. For this reason, Lincoln should focus on reducing the number of single-occupancy vehicle (SOV) trips generated by its own households.

School Transportation. An obvious form of non-SOV and non-private auto transportation is the public school busing system. School bus ridership has declined in nearly all towns, but not always for the same reasons. Many communities lack a continuous sidewalk system that safely and efficiently delivers walkers to school, yet even in communities with a good pedestrian network, more parents are driving children to school. The results include severe traffic congestion around public school grounds, not to mention the difficulties faced by school authorities as they try to plan for an adequate number of buses to transport a community's children. In Fiscal Year (FY) 2004, the state ended a long-standing policy of reimbursing local schools for a portion of the cost of student transportation. Since then, school systems throughout the Commonwealth – including Lincoln – have charged a school bus user fee for children in grades K-6 living within two miles of the public school they attend, and for all children in grades 7-12.³⁴ Though parents have been driving children to school for decades, the volume of traffic associated with parent transportation has increased dramatically.

The first step Lincoln should take to identify potentially effective solutions involves consulting with parents to determine why so many of them drive their children to school. Although the reasons may seem obvious, there could be many more factors in play than are evident on first glance. The National Center for Safe Routes to School has developed a model questionnaire that can be used to survey parents about their children's mode of transportation to school and the basis for a family's transportation decisions. Strategies to encourage bus transportation, walking, or bicycling will vary significantly depending on the nature of the disincentives. For example, concerns about distance to school differ from concerns about safety or conflicts between bus schedules and children's after-school activities. In addition, town and school officials need to consult with the Lincoln Police Department. Some communities have established morning and afternoon one-way street policies or no-traffic zones around their schools in order to make driving less attractive than riding the school bus or walking to school. These techniques have public safety implications beyond school yard traffic, particularly during morning commuter hours. Larger towns have enlisted local businesses to offer rewards to children who walk or use school transportation services, such as discount coupons from local ice cream shops or candy stores for elementary school students, or sporting goods and music stores for older students. Incentives like these would be difficult in Lincoln because the town's business base is so small, but other incentives could be explored.

Regional Ridesharing. Another opportunity to reduce SOV is ridesharing, which includes carpooling and vanpooling. Carpooling usually involves informal sharing of a private vehicle, while vanpooling usually involves a rented vehicle and is often coordinated by a group and organization. It is possible for Lincoln residents to organize their own carpool and vanpooling systems and associations. Additionally, the 128 Business Council provides ride-matching services for carpooling and vanpooling. One of Lincoln's committees or boards (such as the Ad Hoc Traffic and Roadside Committee, its successor, or another environmentally-oriented group), could provide public information and advocacy for ridesharing.

Transportation Demand Management. A well-known strategy for reducing SOV trips is Transportation Demand Management (TDM). TDM includes several techniques for changing travel behavior to increase the efficiency of a transportation system.³⁵ The most effective financial incentives to reduce driving are employer-driven. Some of the most commonly used include parking cash-outs, or payments to employees for opting not to use a subsidized parking space; travel allowances, where an employee receives a payment instead of a parking subsidy; or transit or rideshare benefits. These incentives encourage commuting by carpool, transit, and walking and biking

34 Note: regional school districts continue to receive school bus transportation reimbursement.

35 Victoria Transport Policy Institute, TDM Encyclopedia, <http://www.vtpi.org/tdm/tdm12.htm>.

instead of commuting in a single-occupancy vehicle.³⁶ Some Lincoln residents may already receive a financial incentive not to drive to their employer. Since TDM is an employer-based program and works best when used by larger companies, it may have limited applicability in Lincoln. Should the town decide to pursue TDM, however, it could begin to develop a policy for encouraging or requiring employers to implement TDM strategies. If Lincoln decides to allow commercial development outside the Lincoln Station area, the town may want to require a TDM plan as part of the special permit process. These types of programs could be very compatible with the Land Use Review Criteria in Appendix B.

Seniors and People with Disabilities. Lincoln residents with disabilities have access to the MBTA's "THE RIDE" service, which offers door-to-door transportation for qualifying people. However, Lincoln Station does not have accessible features such as accessible parking spaces, ramps, or lifts. For elderly residents, Lincoln's Council on Aging provides volunteer-based transportation services. Beyond this, there are few options for transportation-disadvantaged groups. Lincoln could strengthen the resources it has by:

- ❖ Making sure residents get the most out of the MBTA's service by providing outreach and information;
- ❖ Encouraging the MBTA to upgrade the commuter rail station to ensure that it is accessible;
- ❖ Assessing whether there is enough demand to designate a town vehicle, such as a van, for the Council on Aging to provide more regular and predictable transportation services; and
- ❖ Coordinating existing and future paratransit services with events at the Town Offices, the Senior Center, and the commuter rail station.

Goal TC-3. Address transportation issues on a regional level.

- TC-3.1. Continue to build upon partnerships with surrounding towns and regional agencies to address regional traffic congestion through transportation alternatives to single-occupancy vehicle commutes.
- TC-3.2. Encourage ridership on the MBTA commuter rail.
- TC-3.3. Coordinate regional economic development with plans to develop regional transportation infrastructure and congestion management plans.

DISCUSSION

Regional Partnerships. Transportation requires regional solutions. While the dominance of local government in Massachusetts makes regional collaboration difficult, there are several regional organizations through which Lincoln has engaged in regional transportation planning and transportation advocacy. These organizations include the 128 Business Council, MAGIC, the Route 128 Central Corridor Coalition, and the Hanscom Area Town Selectmen (HATS). Lincoln will continue to build upon its existing partnerships with adjacent towns and regional organizations, primarily through leadership from the Board of Selectmen.

Lincoln Station. The MBTA commuter rail system is designed to provide regional access to major employment centers, namely Boston. In 2000, less than half of all Boston-bound commuters from Lincoln used the commuter rail, so there is clearly room to increase Lincoln's MBTA ridership. By targeting its Boston area-bound commuters, Lincoln could strive to increase local ridership by several hundred people. Improvements

³⁶ Victoria Transport Policy Institute, Commuter Financial Incentives, <http://www.vtpi.org/tdm/tdm8.htm>.

already planned for the Fitchburg line will have a positive impact on travel times and general service for riders at Lincoln Station. These overall upgrades may encourage more people to take the commuter rail, but the lack of passenger amenities such as shelter, seating, and services at the station can discourage ridership. Lincoln may want to evaluate conditions at the station, assess whether the amenities are adequate, and work with the MBTA for station improvements. In addition to encouraging the general population to use commuter rail, Lincoln needs to *enable* people with disabilities to access the train. Since Lincoln Station has no accessibility provisions, people with certain disabilities are categorically excluded. As with other station improvements, the town needs to work with the MBTA to ensure that the necessary lifts, ramps, parking spaces, and other accessibility improvements are implemented at Lincoln Station.

Goal TC-4. Coordinate the need for traffic control measures with preserving the rural character of Lincoln's roadways.

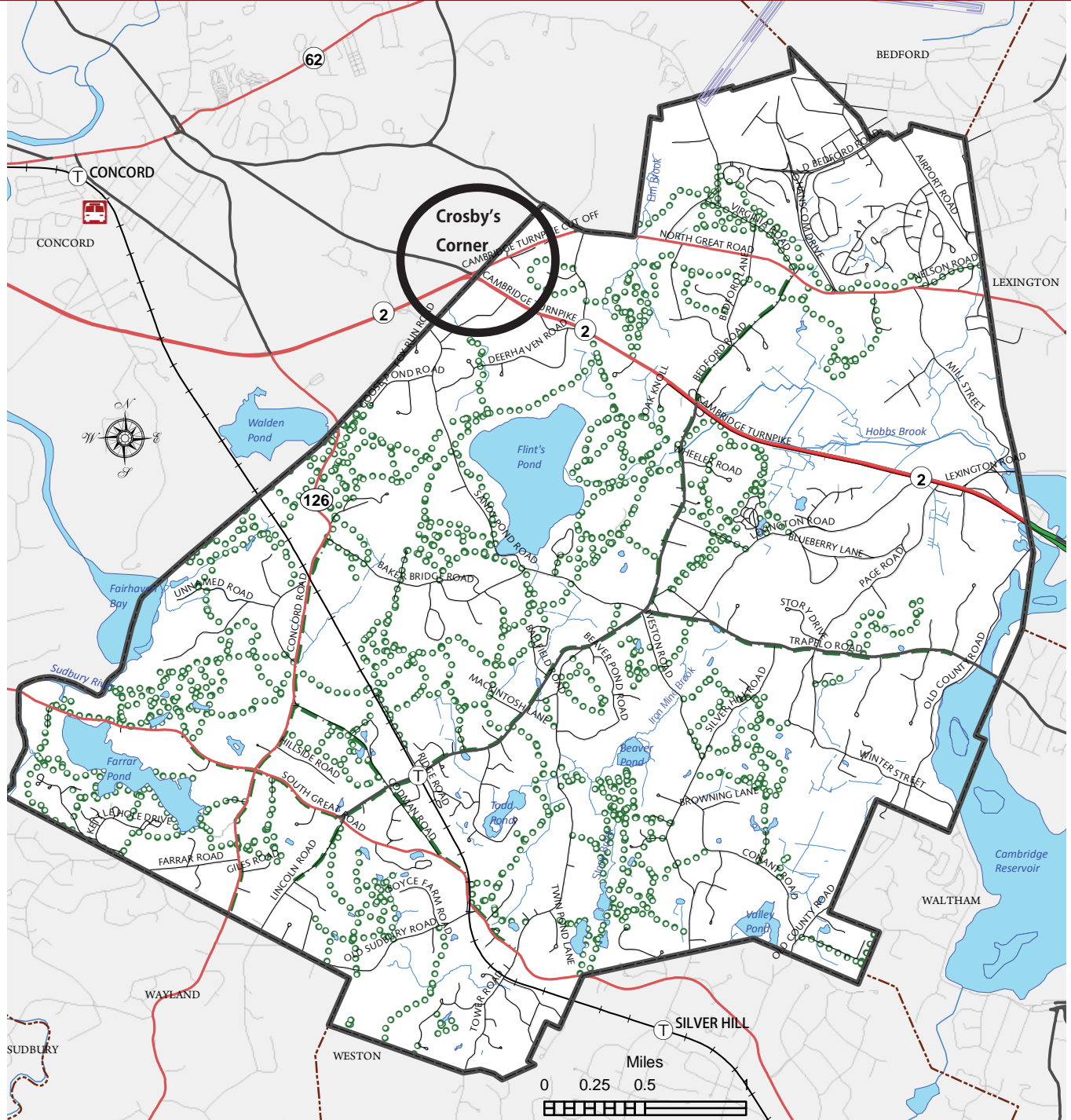
- TC-4.1. Continue to use Lincoln's Roadway Design Guidelines when reconstructing or maintaining town roads.
- TC-4.2. Consult with and incorporate the recommendations of the Lincoln Garden Club's Report on Lincoln's Roadsides preliminarily adopted by the Board of Selectmen for publication in 2009.

DISCUSSION

Lincoln's *Roadway Design Guidelines* (1997) provide technical guidance for the design of several types of roadways. The guidelines identify the factors that together give the town's roadways their rural character, such as lane and shoulder width, paving materials, and curbing and drainage treatment, and they prescribe standards to preserve those qualities without detracting from the safety of the roadway. When followed, these guidelines amount to a policy to preserve Lincoln's rural roads while upholding an acceptable safety standard as well. Currently, the guidelines are being used to provide standards for the town-wide paving program. Since they may require periodic assessment and update over time, it will be important to anticipate and budget adequately for this process to ensure a constant, credible source of roadway design guidance for the town.

The Lincoln Garden Club has recently completed the *Report on Lincoln's Roadsides*, which will be published in 2009. This document will be used as additional guidance for roadway design and maintenance.

LINCOLN COMPREHENSIVE PLAN



Community Opportunities Group, Inc. **MAP 9.1 TRANSPORTATION NETWORK**

Sources: MassGIS, Lincoln Conservation Department, USGS, U.S. Bureau of the Census, Community Opportunities Group, Inc.

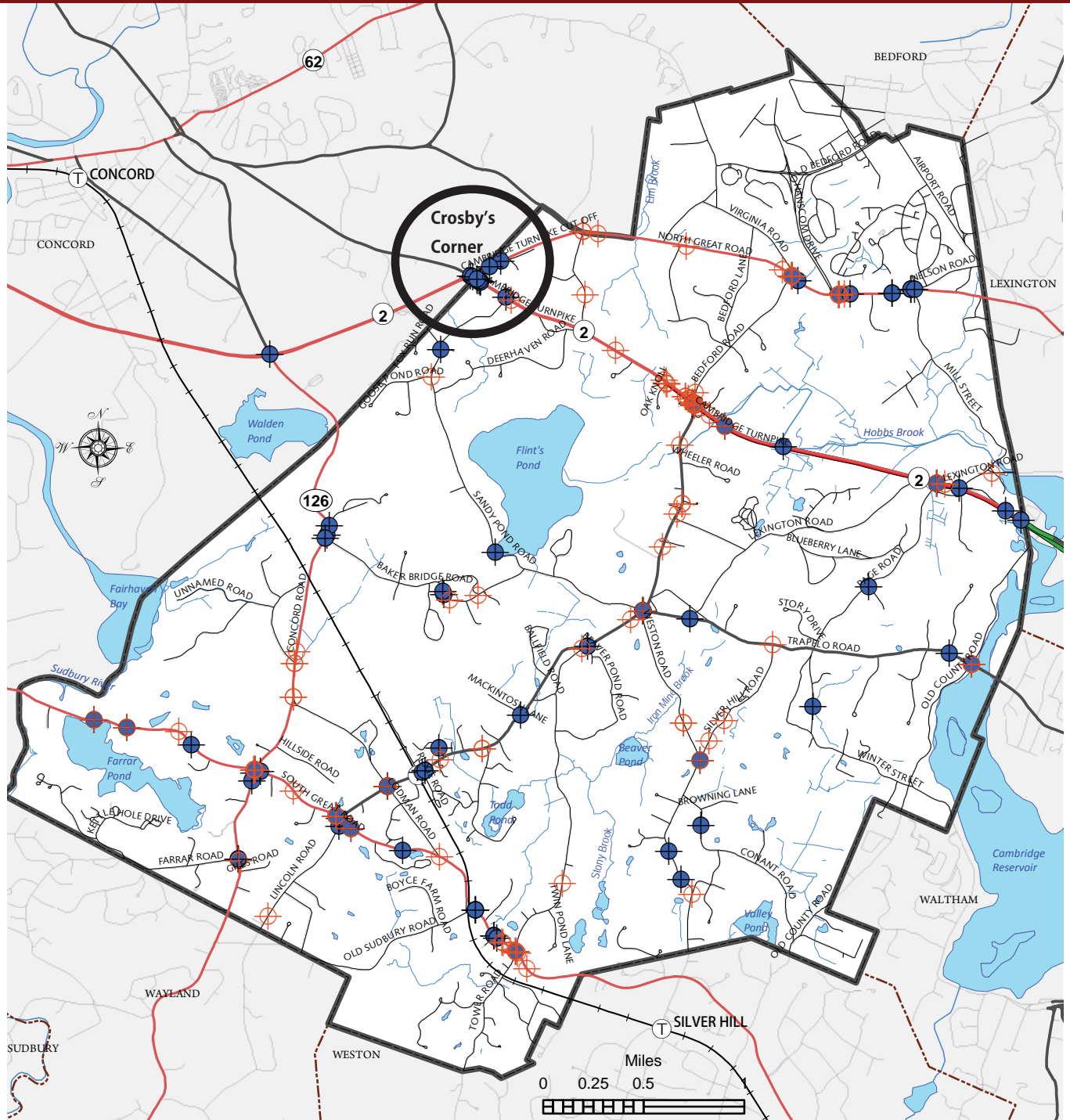
April 2009

- Legend**
- | | | |
|---------------------------------|-------------------|-----------------|
| Limited Access Highway | MBTA Stations | Existing Trails |
| Multi-Lane (Not Limited Access) | Park and Ride Lot | Public Trail |
| Other Numbered Highway | Hanscom Field | Roadside Path |
| Major Road, Collector | Open Water | |
| Local Streets | | |

LINCOLN PLANNING BOARD



LINCOLN COMPREHENSIVE PLAN



Community Opportunities Group, Inc.

MAP 9.2 CRITICAL TRAFFIC AREAS

Sources: MassGIS, Lincoln Conservation Department, USGS, U.S. Bureau of the Census, Community Opportunities Group, Inc.

April 2009

Legend

- | | | |
|-----------------|-----------------------------------|----------------------------------|
| —+— Railroad | ROADWAYS | — Local Streets |
| ⊕ MBTA Stations | Road Classification | Accident Locations (MassHighway) |
| | — Limited Access Highway | ⊕ 2005 |
| | — Multi-Lane (Not Limited Access) | ● 2006 |
| | — Other Numbered Highway | |
| | — Major Road, Collector | |

LINCOLN PLANNING BOARD

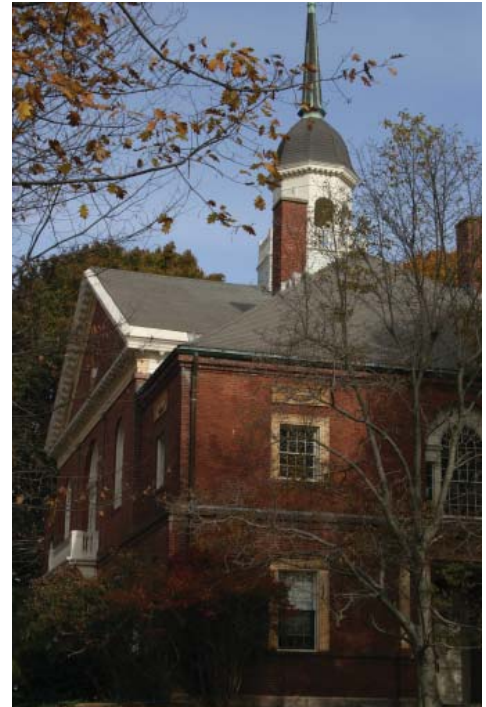


Community Services & Facilities

OVERVIEW

As a small town with finite resources, Lincoln is constantly faced with the challenge of funding municipal and school services. The educational, cultural, recreational, and human services that Lincoln provides enhance the quality of residential life, but they are increasingly expensive. In addition, many of Lincoln's public facilities need major capital improvements, and some may need to be retired, rebuilt, or rededicated to other purposes. Its infrastructure and utilities need to be updated and maintained as well, notably the water distribution system.

Despite the efforts of town boards and staff, Lincoln's decentralized administration makes it difficult to coordinate a comprehensive assessment of needs for local government services and facilities. The aging of the population, the impact of economic cycles on municipal revenue growth, the unpredictability of state aid, constitutional constraints on the taxation powers of Massachusetts towns, and the cost to operate quality services mean that Lincoln's financial challenges will intensify in the future. Moreover, Lincoln may have to face difficult, potentially costly choices about the town's responsibility to residents at Hanscom Air Force Base (HAFB) should a significant portion of housing become privatized for civilian use. Lincoln needs to be open to fresh ideas about government's responsibility for community services, the costs and benefits of those services, and ways to increase revenues without compromising Lincoln's rural character.



Key Findings

- ❖ Lincoln provides the same basic services found in most small towns: police, fire and emergency medical services, maintenance of public roads, buildings, grounds, and cemeteries, drinking water, public schools, a public library, and administration and finance. Some services are regionalized or provided under an inter-local agreement with a neighboring town.
- ❖ Residents have access to a variety of programs and services from non-profit organizations in Lincoln and surrounding towns.
- ❖ Lincoln's total revenue from all sources is approximately \$32 million per year. Residential property taxes account for sixty-five percent of Lincoln's total revenue and ninety-six percent of the tax levy.

- ❖ The Town Offices, the Library, Bemis Hall, and the Pierce House are historically significant town-owned buildings. Some provide no access or only partial access to people with disabilities, and all need capital improvements. Lincoln's public school buildings also need capital improvements.
- ❖ Lincoln facilities are maintained on a day-to-day basis by the departments that occupy them. The town does not have centralized facilities management and maintenance.
- ❖ Lincoln is one of four host communities for HAFB. Over half of HAFB's land and all of its military housing are located in Lincoln. Through a long-standing agreement with the federal government, Lincoln operates an elementary school and a middle school at HAFB and receives reimbursements for the cost to educate children of military families. The combined enrollment at the two schools at HAFB is currently 485 students in grades K-8.

Key Challenges

- ❖ Most of Lincoln's public buildings need major capital improvements. It will be challenging to set priorities and agree upon a long-term financing plan, in part because the estimated cost of the improvements is so high and in part because residents deeply appreciate the history and architecture of their municipal buildings.
- ❖ Lincoln has recently improved its approach to long-range facilities planning by completing a municipal buildings needs analysis to identify needed or desirable improvements. However, the town does not have a planned preventative maintenance program for its public facilities and infrastructure, and it is difficult to coordinate long-term planning for services and facilities.
- ❖ Lincoln may want to consider cost-effective practices such as centralized management and maintenance of public facilities and a comprehensive approach to asset management and long-range facilities planning. Instituting these practices may be difficult due to Lincoln's decentralized government, which is an asset for public participation but a challenge for achieving efficiency.
- ❖ Lincoln's open town meeting, also an asset for public participation, can make it more difficult to make orderly changes to town programs and services because ultimately, town meeting controls appropriations for each year's operating budget.
- ❖ The U.S. Air Force has entered into an agreement with a developer to privatize the housing at HAFB. In the near future, non-military personnel may become eligible to rent or buy some of the housing units at HAFB. Lincoln is concerned since privatization may lead to local responsibility for providing municipal and school services. Lincoln's leadership is concerned that there may not be enough revenue to cover the associated cost.

EXISTING CONDITIONS & TRENDS

Community services are local government services that residents receive as taxpayers, rate payers, or fee-paying participants in a municipal program or activity. Most towns in Massachusetts offer more services than the state requires them to provide, and Lincoln is no exception. Over time, the duties of local governments everywhere have changed in response to new federal and state laws, the evolution of federalism, expectations linked to state aid distributions and discretionary grants, changing social needs, and changing ideas about the responsibilities of government. In some communities, local governments and non-profit organizations have formed partner-

ships to provide services or carry out special projects. Lincoln's long-standing relationships with the Rural Land Foundation, the Lincoln Land Conservation Trust, The Lincoln Foundation and Codman Community Farms are good examples of these partnerships. In addition, Lincoln provides some municipal services under inter-local agreements with neighboring towns.

Municipal Operations and Services

Lincoln has a decentralized government with many elected and appointed boards and committees. Most town departments have professional staff and support personnel to carry out the duties and directives of the elected or appointed boards they serve. The town departments in Lincoln are quite small, often with one or two people handling a volume of work that may not be obvious to the community at large. Among Boston-area suburbs, Lincoln has an unusually small population and a low-density development pattern. As a result, it lacks the economies of scale that sometimes present advantages to larger towns. However, Lincoln's trade-off for efficiency its size that works for thoughtful deliberation and public-spirited debate – a style of governance that townspeople have valued for decades.

GENERAL GOVERNMENT

In the standard classification system used in government finance, “general government” consists of the central administrative services that a community needs in order to carry out its statutory and corporate obligations. For Lincoln, this includes the Board of Selectmen and Town Administrator, financial operations (Accounting and Finance Department, Treasurer/Collector, and Assessors), the Town Clerk, land use and permitting (Planning, Conservation, and Zoning Board of Appeals), and the legislative arm of government, town meeting.

Administration & Finance. Lincoln's chief administrative officer, the Town Administrator, directs the day-to-day work of town government, carrying out policies of the Board of Selectmen and coordinating with departments not directly under the selectmen's purview. Lincoln has had a Town Administrator (formerly executive secretary) since 1964, when Town Meeting accepted a state law that offers simple ways for towns to professionalize their operations. Though not formally empowered to the same degree as town managers in other communities, the Town Administrator in Lincoln has considerable responsibility, much of it delegated by the Board of Selectmen. The Board of Selectmen/Town Administrator office has a total of three full-time staff, including the Town Administrator, Assistant Town Administrator, and an administrative assistant.¹

Lincoln also has a Finance Director who serves as town accountant, but the Finance Department does not include all of the core municipal finance functions. In 2007, Town Meeting exercised a provision of state law that allows towns to convert certain elected offices to appointed positions, and the treasurer/collector became an appointee of the Board of Selectmen.² As a result, the Finance Department currently includes both accounting and the treasurer/collector. Assessing remains a separate department overseen by the elected Board of Assessors. Recently the Board replaced the former principal assessor position with assessor support services under a vendor contract with Regional Resource Group, Inc.

Information Technology. Lincoln created an information services office in the late 1990s. The town's one-person technology department handles a wide variety of responsibilities from a small office at the Town Office Building: the computer network, servers, operating systems, communications equipment, and security for all of the

1 Timothy S. Higgins, Lincoln Town Administrator, and Colleen Wilkins, Lincoln Finance Director, to Community Opportunities Group, Inc., 18 April 2008.

2 Town of Lincoln, *Annual Town Report* (2006), 8; *Annual Town Report* (2007), 34.

local government functions that depend on network access, the town's website and on-line bill payment system, records management services for Lincoln's public safety operations, and many other services that support town departments and the schools. The present system includes nine servers and more than 100 computers in a total of twelve buildings.³

Town Clerk. In any city or town, the clerk is the official keeper of records. Lincoln residents probably come into more contact with the Town Clerk than with any other elected or appointed official. Many town officials have frequent contact with the Town Clerk's office, too, because of the types of records held there. The Town Clerk is responsible not only for maintaining and certifying documents, but also for conducting local, state, and federal elections, issuing a variety of licenses and certificates, administering the annual town census, maintaining records of permitting and licensing decisions by town boards, and serving as sales agent for cemetery lots. To improve Lincoln's records management and preservation practices, the Town Clerk has worked with the Lincoln Public Library to organize, catalog, and preserve public documents stored in the library vault and to explore records storage solutions in the Town Offices, where problems persist because of poor conditions in the basement.⁴ In Lincoln, the Town Clerk also maintains a database that public safety officials need in order to enforce the Town's "Do Not Solicit" bylaw.⁵

Land Use & Permitting. The Planning Board, Zoning Board of Appeals, and Conservation Commission have development review and permitting responsibilities prescribed by state law and local bylaws. The decisions they make have far-reaching consequences for their communities.

- ❖ The **Planning Board** has statutory responsibility for preparing a master plan, reviewing proposed zoning changes and reporting on them to town meeting, reviewing and approving subdivisions of land, and endorsing plans for lots not subject to the Subdivision Control Law. Lincoln's Planning Board is also responsible for reviewing and acting upon several of the special permits allowed under Lincoln's Zoning Bylaw, and all site plan applications. Lincoln is one of the few communities in Massachusetts that require site plan approval for virtually all new single-family homes. Known as the "Big House Bylaw," the site plan submission process was established in order to regulate the impacts of large homes on surrounding neighborhoods, open space, and scenic views. In 2003, Lincoln funded its first town planner position.⁶
- ❖ The **Zoning Board of Appeals** has statutory authority to grant zoning exceptions and relief, to hear appeals of actions taken by the Building Inspector, and to act on comprehensive permits filed under M.G.L. c. 40B. Lincoln has traditionally assigned most special permits to the Zoning Board of Appeals.
- ❖ The **Conservation Commission** administers both the Massachusetts Wetlands Protection Act (M.G.L. c. 131, s. 40) and the Lincoln Wetlands Bylaw. It also has management responsibility for the town's open space and works with non-profit conservation groups to acquire, protect, and care for conservation land. Due to Lincoln's long-standing commitment to open space and natural resources, the Conservation Commission has had a professionally staffed department for many years. The Conservation Department manages the town's conservation land, oversees licensing of town-owned agricultural lands, prepares and updates the

3 Chuck Miller, Information Technology Director, to Community Opportunities Group, Inc., 29 April 2008.

4 See Chapter 4, Cultural & Historic Resources, for additional information about the town archives.

5 Susan Brooks, Town Clerk, to Community Opportunities Group, Inc., 4 April 2008.

6 Town Planner Mark Whitehead to Community Opportunities Group, Inc., 21 March 2008; Town of Lincoln, <http://www.lincolntown.org/depts/planning.htm>; *Annual Town Report* (2007), 104-105.

Open Space and Recreation Plan, and provides Geographic Information System (GIS) assistance to other town departments.⁷

TOWN MEETING

Lincoln holds its annual town meeting in March, when residents vote on the town budget, capital projects and land acquisitions, local bylaws, and other matters requiring approval by the local legislative body. In addition, Lincoln has a unique tradition known as the “State of the Town Meeting” (SOTT), usually held in the fall. The SOTT provides a non-legislative forum for residents to discuss important topics, ask questions, and provide early feedback to local leaders.

PUBLIC SAFETY

The Police Department, Fire Department, and Building Inspector form the backbone of public safety services in Lincoln. All of Lincoln’s public safety officials except the Building Inspector operate from an integrated public safety building in South Lincoln.

- ❖ The **Police Department** has fifteen full-time employees, including the chief, lieutenant, shift sergeants and patrol officers, a traffic enforcement officer, and a full-time administrative assistant, along with several part-time special police officers. Aside from the traditional law enforcement and investigation functions of a local police department, Lincoln’s Police Department provides education, training, and support services to the schools, issues firearms licenses as required by state law, and delivers specialized assistance to HAFB public safety officials for on-base domestic violence cases. The Police Department also has a growing yet largely “invisible” workload in matters that raise human services issues as much as public safety issues: elder affairs, youth, and mental illness.⁸
- ❖ A central **Communications Center** at the Public Safety Building, overseen by the Police Department, handles dispatch services for all public safety calls. It also provides the infrastructure for a mass communication system that allows the town to transmit emergency notifications to residents and businesses by telephone and email. The Communications Center has five full-time employees.
- ❖ The **Fire Department** currently provides twenty-four hour coverage with twelve full-time employees, including the Fire Chief, the lieutenants and firefighters, and several call firefighters. The present size of the Fire Department stems from a 2006 Town Meeting decision to fund four new firefighter positions for around-the-clock service delivery.⁹ The Fire Department’s duties range from fire suppression and fire prevention to code inspections, licensing and permitting of inflammables, inspections of underground storage tank installation and removal, public education, investigations, and rescue operations. The Fire Chief leads Lincoln’s Local Emergency Planning Committee (LEPC), a body established under federal and state law to monitor the storage and use of hazardous materials in the community. In Lincoln, the Fire Department also has responsibility for emergency medical services. All of the department’s firefighters are certified Emergency Medical Technicians (EMT), which means they have the qualifications to provide Basic Life Support (BLS) services. Emerson Hospital in Concord provides Advanced Life Support (ALS) services at the Fire Department’s request.¹⁰

7 Conservation Director Tom Gumbart to Community Opportunities Group, Inc., 4 April 2008; Town of Lincoln, <http://www.lincolntown.org/depts/conserves.htm>.

8 Kevin Mooney, Lincoln Police Chief, to Community Opportunities Group, Inc., 23 April 2008.

9 *Annual Town Report* (2006), 7, 79.

10 Town of Lincoln, http://www.lincolntown.org/fire_dept/main.htm.

- ❖ The **Building Department**, located in the Town Office Building, includes a full-time building inspector, part-time wiring and plumbing inspectors, and an administrative assistant shared with the Board of Health. By law, the Building Inspector protects public safety by administering and enforcing the State Building Code. The Building Inspector also enforces the Zoning Bylaw, first by withholding building permits for structures that fail to comply with zoning requirements and second, by responding to observed or reported zoning violations.

PUBLIC WORKS

Lincoln has a Department of Public Works (DPW) that manages most but not all traditional public works functions. The DPW takes care of fifty-one miles of public roads, including paving and pavement repairs, cleaning drainage systems, trimming roadside vegetation, installing and replacing signs, and plowing, sanding, and street sweeping. In 2008, Lincoln voters authorized a \$5.5 million bond to improve the town's major roads. The DPW also maintains Lincoln's ten-mile network of roadside paths, and all of the town's parks, cemeteries, and public building grounds. In addition, the DPW oversees solid waste disposal and recycling services at the Transfer Station, but provides no municipal trash collection services. The DPW also maintains the entire fleet of municipally owned vehicles.¹¹ During the winter, Lincoln supplements its DPW road maintenance personnel with snow and ice removal contractors on an as-needed basis.¹²

The Lincoln DPW does not oversee two functions that are fairly common public works responsibilities in other towns: public buildings maintenance and public drinking water. In Lincoln, each public facility has a maintenance budget for custodial salaries and maintenance supplies, and custodial staff report to a department head within the building. About one percent of Lincoln's annual operating budget is devoted to routine facilities maintenance, excluding public schools and buildings controlled by the Water Department.¹³

The **Lincoln Water Department** provides drinking water to ninety-seven percent of the town's residents and businesses, but provides no municipal sewer system or treatment facility. On occasion, Lincoln purchases water from the Town of Weston's DPW and also sells water to Weston, Wayland, Waltham, and Concord. Flint's Pond supplies the vast majority of Lincoln's drinking water (eighty-six percent) while the rest is groundwater from the Tower Road pumping station (thirteen percent) and the Weston DPW (one percent). The Water Department has five full-time employees and operates as a self-supporting *municipal enterprise*, which means that Lincoln separates water revenue and expenditures from the general fund and has the authority to place excess revenue into a capital reserve for water system improvements. The Water Department reports to an elected Board of Water Commissioners.¹⁴

HUMAN SERVICES

Lincoln's human services system includes the Board of Health, Council on Aging, Minuteman Home Care, Veterans Agent, and the Lincoln Housing Commission.

11 Executive Office of Transportation, MassHighway, *Year-End Road Inventory Report* (2006); Town of Lincoln, *Open Space and Recreation Plan* (2008), 40; and Department of Public Works, Town of Lincoln, <http://www.lincolntown.org/depts/dpw.htm>.

12 Colleen Wilkins, Lincoln Finance Director, to Community Opportunities Group, Inc., 18 April 2008.

13 From *Annual Town Meeting Warrant* (2008), Table 1.

14 See Chapter 3, Natural Resources, for additional information about Lincoln's drinking water system.

- ❖ The **Board of Health** is an elected, three-member board responsible for regulating wastewater disposal and private water supplies, identifying and reporting communicable diseases and public health hazards, and enforcing the State Sanitary Code. Septic system and food service inspections are handled by Concord’s health agent under an inter-local agreement that dates to the late 1990s. The Board of Health shares administrative support staff with the Building Inspector, and appoints both the animal inspector and burial agent. It also assists local residents with obtaining mental health services from the Lexington-based Eliot Community Human Services.¹⁵
- ❖ The **Council on Aging** offers information services, transportation assistance, and social, recreational, educational, and health programs to Lincoln’s over-60 population. The Council’s offices and program space are located at Bemis Hall. Approximately 800 seniors use services sponsored by the Council on Aging, with wellness, educational, and cultural programs attracting the largest number of participants. Through arrangements with Minuteman Senior Services, the Council on Aging also coordinates a “meals on wheels” program. In addition to a full-time director and full-time assistant director, the Council on Aging has senior aides under the Property Tax Work-off Program and nearly 160 volunteers. The Council on Aging is funded by a combination of user fees, local revenue, state grants, and fundraising by a non-profit support group, the Friends of the Council on Aging.¹⁶
- ❖ The **Veterans Agent** is a part-time official appointed by the Board of Selectmen. In Massachusetts, communities are required to provide medical and burial assistance to local veterans, but the state reimburses seventy-five percent of claims paid by the town.¹⁷
- ❖ A unique component of Lincoln’s human services system is the **Lincoln Housing Commission**, a town board established in 1979. Lincoln does not have a housing authority organized under state law, but handles rental assistance through Section 8 vouchers administered through the Concord Housing Authority. However, Lincoln has a larger percentage of affordable housing than most towns in the Boston metropolitan area, largely due to the efforts of the Lincoln Housing Commission, the Lincoln Foundation, and the Rural Land Foundation (RLF). The Commission does not have a town operating budget, but it receives funding and technical support from various sources, including the Affordable Housing Trust, the Lincoln Foundation, Lincoln’s Community Preservation Committee (CPC), the Codman Trust, and the RLF.¹⁸

CULTURE AND RECREATION

Lincoln has several boards, commissions, and departments with responsibility for cultural programs and services and recreation activities.

- ❖ The **Lincoln Public Library** is governed by a Board of Library Trustees with elected, appointed and self-perpetuating membership. Its collection includes books, periodicals, compact discs, audio books, videos, and databases, with a total of 79,000 volumes and annual circulations of 160,000. The library also provides lectures, book discussion groups, fine arts displays and musical performances, film screenings, museum

15 Town of Lincoln, <http://www.lincolntown.org/depts/boh.htm>.

16 Lincoln Council on Aging, “FY 2007 Annual Report EOA-SGA” (undated); *Annual Town Report* (2007), 94-96; and Town of Lincoln, <http://www.lincolntown.org/depts/coa.htm>.

17 Lincoln Finance Committee, *Report of the Finance Committee of the Town of Lincoln for Fiscal Year July 1, 2008-June 30, 2009* (undated), 22. See also, Massachusetts Department of Revenue, Division of Local Service, *Cherry Sheet Manual* (undated), 37.

18 Lincoln Housing Task Force, *Town of Lincoln Consolidated Housing Plan* (2003), 11, 18, 24-37; *Annual Town Report* (2007), 122-123, and Town of Lincoln, <http://www.lincolntown.org/depts/housing.htm>.

passes, computers with internet access, and full-service programs for children. It also offers access to the Minuteman Library Network, a consortium of thirty-five public libraries and six academic libraries between Route 128 and I-495. The Lincoln Public Library is supported by a combination of local revenue, state library funds, and contributions from the Friends of the Lincoln Library, Inc. It has two full-time staff, including the library director, and a total of 11.7 FTE employees.¹⁹

- ❖ The **Bemis Free Lecture Series** has been offering distinctive lectures, presentations, and musical performances at no charge to Lincoln residents for more than a century. The program is funded by the Bemis and the John Todd Trusts and administered by the Bemis Fund Trustees, an elected board.
- ❖ The **Recreation Department** sponsors year-round outdoor and indoor recreation and leisure activities for children and adults. It organizes, schedules, and contracts with instructors for a wide variety of programs, from play activities for preschool children to art classes and dance for adults. The Recreation Department oversees at the Codman pool and all the town's playing fields. It also provides school vacation programs for children in kindergarten through eighth grade, notably a six-week summer camp program. Despite the department's small size (2.5 FTE employees), it manages virtually non-stop use of recreation facilities at the school complex and maintains the athletic fields. In 2007, the Recreation Department absorbed responsibility for organizing and managing annual celebrations, too. The Recreation Department is overseen by the Recreation Committee, which includes elected and appointed members. It is a nearly self-supporting operation that recovers about ninety percent of its salaries and expenses from user fees.²⁰
- ❖ The **Lincoln Historical Commission** has planning, advocacy, and permitting responsibilities. It identifies properties and areas that are eligible for listing on the National Register of Historic Places, prepares National Register nominations, conducts planning studies to establish local historic districts, and generally oversees Lincoln's historic preservation survey and planning work. In addition, the Historical Commission administers Lincoln's demolition delay bylaw and holds preservation restrictions that protect historically significant properties. All of its members also serve on the Lincoln Historic District Commission (HDC), which has authority under state law and local bylaws to regulate building alterations visible from a public way and demolition of buildings within the town's four local historic districts. The Commission has no employees, but it receives staff support from the Building Department.²¹
- ❖ In addition to its permitting and enforcement duties, the **Conservation Commission** employs land management staff to monitor and patrol all conservation properties in Lincoln, prepares baseline studies of new conservation land, oversees licensing of town-owned agricultural land, maintains trails, conducts educational programs, and promotes public use of the Town's conservation land through activities such as walking tours. The land management arm of the Conservation Department has 1.5 FTE employees.²²

19 Lincoln Public Library, *Long-Range Plan: 2008-2012*, 5-6; Library Director Barbara Myles to Community Opportunities Group, Inc., 28 March 2008.

20 *Report of the Finance Committee, Fiscal Year July 1, 2008-June 30, 2009*, 23; Town of Lincoln, <http://www.lincolntown.org/depts/rec.htm>.

21 Lincoln Planning Department, *Land Use Permitting Guide* (2007); 10-11; *Annual Town Report* (2007), 124-125; Town of Lincoln, <http://www.lincolntown.org/depts/historic.htm>.

22 Conservation Director Tom Gumbart to Community Opportunities Group, Inc., 4 April 2008; *Annual Town Report* (2007), 116-117.

COMMUNITY PRESERVATION

Lincoln is one of about 140 communities receiving special revenue under the Community Preservation Act (CPA), a local option statute enacted by the legislature in September 2000. CPA helps cities and towns address four core growth management concerns: open space protection, historic preservation, affordable housing, and recreation. Toward these ends, the law allows communities that adopt CPA (M.G.L. c. 44B) to impose a surcharge on property tax bills and restrict both the surcharge revenue and matching funds from the state to projects that address one of the three statutory purposes, or to provide recreation facilities on land acquired with CPA funds. Lincoln's Community Preservation Committee (CPC) supports town services by considering applications for proposed CPA funding for projects that would be difficult, if not impossible, for the town to carry out with general fund revenue. Composed of nine members, some appointed by the Board of Selectmen and others designated to represent certain town boards, the CPC has a formal application process and criteria for choosing worthy projects to recommend for Town Meeting approval.

Municipal Facilities

Lincoln is responsible for municipally owned buildings and structures with a combined value of nearly \$50 million.²³ Several of its public facilities are historically significant, which create challenges for balancing modern uses and code requirements with the constraints of the iconic town buildings. Lincoln provides most of its local government services in buildings situated within a civic and institutional enclave that defines the center of town (Map 10.1).



- ❖ **Town Office Building.** Designed and originally used as a public school, the Town Office Building on Lincoln Road is Lincoln's primary government office building. A two-story, Colonial Revival style building constructed at the turn of the century, the Town Office Building has approximately 11,600 sq. ft. of floor space divided into departmental offices and meeting rooms. The first floor contains the Donaldson Room and offices for the Board of Selectmen and Town Administrator, Town Clerk, Tax Collector/Treasurer, Cemetery Commission, and the Rural Land Foundation. Offices located on the second floor include the Planning Board, Conservation Commission, Finance Director, Board of Assessors, Board of Health, and Information Services. The basement level also contains a meeting room with an entrance from the rear parking lot. The upper floor of the building is not accessible to people with disabilities.²⁴
- ❖ **Public Safety Building.** Lincoln has a combined police and fire station, the Public Safety Building, at the intersection of Lincoln Road and Codman Road. Constructed in 1966, the Public Safety Building was renovated and enlarged in the late 1990s.²⁵ It contains approximately 15,000 sq. ft. of floor area, with administrative offices, vehicle and equipment bays, equipment storage, prisoner detention space, training

23 Town of Lincoln, "Statement of Values," prepared for the Town by MIAA Property and Casualty Group, Inc. (July 2007).

24 McGinley Kalsow & Associates LLP, *Town of Lincoln Building Needs Assessment* (2006), 24-26; Lincoln Assessor's Office, FY 2007 Parcel Database [Electronic Version], created 19 July 2007.

25 *Lincoln Building Needs Assessment*, 39.

room and dispatch center. A radio communications tower is located on the grounds of the Public Safety Building.

- ❖ **Lincoln Public Library.** The Lincoln Public Library is a Richardsonian Romanesque building at the convergence of Bedford Road, Lincoln Road, Trapelo Road, and Sandy Pond Road in the center of town. Built in 1884 and expanded and renovated in 1989, the library has approximately 14,900 sq. ft. of finished floor space, including open stacks, areas devoted to circulation, reference, study, leisure reading, the children’s library, public computers, the Historical Room, and the town archives and vault.

- ❖ **Bemis Hall.** Bemis Hall is a two-story Colonial Revival style building constructed in 1892 on Bedford Road to house Town Offices, Town Meeting, the Bemis Lecture Series and other public events. It served as a town hall until the present Town Office Building was converted from a school to government offices in the early 1980s. Bemis Hall contains a large meeting room and lecture hall on the second floor, and a small meeting room, offices, and limited cooking facilities on the first floor. A historic cemetery lies behind the building.



- ❖ **Recreation Facilities.** The Lincoln Recreation Department is located in the Lincoln School’s Hartwell A Pod. It has programmatic and maintenance responsibility for all of the town’s outdoor recreation facilities: six sports fields, six tennis courts, and the Codman Pool, most of which are located on the grounds of the Lincoln School complex.

- ❖ **Public Works Facilities.** Lincoln’s Department of Public Works (DPW) occupies a 9,700 sq. ft. garage facility on Lewis Street. The site is located at the outer edge of the South Lincoln business area, designated by Town Meeting in 2006 for more commercial development and mixed-use developments that include housing. The DPW’s main building contains administrative offices for the DPW, nine bays for vehicle storage and maintenance, other space for equipment and tire storage, and an emergency generator. The DPW also manages a solid waste transfer station in the northern part of town near HAFB. The transfer station includes a recycling center.

- ❖ **Water Department Facilities.** The Water Department is responsible for its administrative offices and the Flint Pond pumping station on Sandy Pond Road; the new Water Filtration Plant, built in 2003 and also located on Sandy Pond Road; the Tower Road well pumping station, constructed ca. 1960; and the Farrar Pond pumping station on Birchwood Lane. In addition, the Water Department manages and maintains a distribution system with fifty-two miles of water mains and water storage capacity of 1.2 million gallons.²⁶

²⁶ Town of Lincoln, Annual Water Quality Report (2001, 2005, 2006), <http://www.lincolntown.org/depts/water.htm>; Massachusetts Department of Environmental Protection (DEP), Source Water Assessment and Protection (SWAP) Report for Lincoln Water Department (23 June 2003), <http://www.mass.gov/dep/water/drinking/neroreps.htm>; FY07

- ❖ **Cemeteries.** Lincoln has four cemeteries, all managed by the Cemetery Agent in consultation with the Cemetery Commission and maintained by the DPW. The cemeteries include the Lincoln Cemetery on Lexington Road, approximately 16 acres; the Precinct Burial Ground, adjacent to Lincoln Cemetery, approximately five acres; the First Town (Meetinghouse) Cemetery, off Old Lexington Road to the rear of Bemis Hall, approximately one acre; and the Arbor Vitae (Triangular) Cemetery on Trapelo Road, less than one acre.



- ❖ **Pierce House.** The John H. Pierce House on Weston Road, built ca. 1900, is a large Georgian Revival style estate overlooking thirty acres of open space in Lincoln's town center. By gift from the Pierce family, Lincoln obtained ownership of the house and grounds in 1964. To support the property's operating expenses, Lincoln leases the building for wedding receptions and special events.
- ❖ **Codman Farm.** After Lincoln acquired the Codman Farm in 1970, local volunteers organized Codman Community Farms, Inc. (CCF), to manage the property. CCF is a self-supporting non-profit organization that promotes active agricultural use of the Codman Farm and other farms in Lincoln. The Codman Farm property consists of nineteen acres and six buildings, including a historic Carpenter Gothic farm house built ca. 1860, four barns, and a recently constructed hen house.

PRESCHOOL AND AFTER SCHOOL SERVICES

Lincoln recognizes the important role that full-day, year-round pre- and after-school child care programs play in the lives of many Lincoln families. While by definition not a "town" service per se, child care programs provide essential services to many of Lincoln's two-parent working families, co-parenting families of divorce or separation, and single-parent households. The ability for families to secure these services within Lincoln helps to further the town's stated goal of fostering economic, racial/ethnic, and age diversity among its citizenry. Additionally, the opportunity for children to experience pre-and after-school programs in common with other Lincoln families strengthens the sense of community among Lincoln's residents. Several private preschool and childcare providers exist in the town as well. There is also a private after-school provider that has leased space in the Lincoln School complex for a number of years.

Public Schools

LINCOLN AND HANSCOM SCHOOLS

Lincoln operates its own K-8 school district and participates with Sudbury in a regional school district for grades 9-12. The local and regional districts have separate central administrative offices. Lincoln's local (K-8) school district is unique due to the presence of HAFB in the northern part of town. Approximately fifty-three percent

Assessor's Parcel Database; and Lincoln Water Department, *DEP Public Water Supply Annual Statistical Report* (2007), 3, 7-10, 16.

of HAFB's land and all of its housing units lie within Lincoln's corporate boundaries.²⁷ Since the late 1950s, the federal government has contracted with the Lincoln School Committee to operate K-8 public schools for military dependents living on base. As a result, the School Committee oversees both the Lincoln School campus on Ballfield Road and the Hanscom Elementary School and Middle School. The School Committee includes five members elected by Lincoln residents and two non-voting representatives appointed by the base commander. Of the 1,300± students enrolled in the Lincoln Public Schools, about forty-five percent attend school at HAFB. When the children of military personnel reach ninth grade, they transition to Bedford High School.²⁸

Lincoln enjoys a long-standing relationship with the Metropolitan Council for Educational Opportunity, Inc. (METCO), established in 1966 in an effort to increase the diversity of suburban school districts around Boston and Springfield. Approximately thirteen percent of the K-8 enrollment at the Lincoln School campus is composed of METCO students from Boston. METCO also has non-voting representation on the School Committee, and Lincoln's school superintendent, Michael Brandemeyer, chairs the METCO Advisory Committee. The Massachusetts Department of Education (DOE) pays a flat grant per student to suburban school districts participating in the METCO program.²⁹

LINCOLN-SUDBURY REGIONAL HIGH SCHOOL

The Lincoln-Sudbury Regional High School (LSRHS) is located in Sudbury. When Lincoln and Sudbury formed a regional school district in 1954, the two towns were fairly similar in total population and total school enrollment. However, this has changed because of Sudbury's substantial population growth in the past forty years.³⁰ Today, Lincoln generates between thirteen and fifteen percent of the students at Lincoln-Sudbury Regional High School (LSRHS). In an effort to accommodate enrollment growth and modernize the original high school, voters in both towns agreed to build a new school in 2000. Completed in 2005, the new \$73.9 million school has planned operating capacity for 1,850 students.³¹ According to state data, the total 9-12 enrollment at LSRHS in 2007 (*to be confirmed*) is slightly more than 1,600 students.³² It has often been difficult for Lincoln and Sudbury to reach agreement about the regional school budget. Since the Education Reform Act went into effect in 1993, Actual Net School Spending (Actual NSS) per student in the Lincoln Public Schools has increased eleven percent in 2008 constant dollars but decreased 3.6 percent in the Lincoln-Sudbury Regional School District.³³ Lincoln may need to continue to monitor the regional school system to determine if the differences in the funding policies of Sudbury and Lincoln are having a material effect on educational quality.

27 Sasaki Associates et al., *Hanscom Air Force Base Pre-BRAC Advance Community Planning* (2005), 5, 7.

28 Lincoln School Committee, "Report to the Town for Spring 2006 Town Meeting" (May 2006), Lincoln Public Schools, <http://www.lincnet.org/schoolcommittee/info/Reports/reportsindex.shtml>; *Annual Town Report* (2007), 141-144.

29 Ibid, and METCO, Inc., *Education Policy Initiatives: Boston and Springfield METCO Program* (January 2007).

30 MassBenchmarks, "Total Population 1930-2000 and Estimates 2001-2006" [Electronic Version], <http://www.massbenchmarks.org/statedata/data.htm>.

31 *Town of Sudbury FY08 Proposed Budget and Financing Plan*, 160.

32 DOE, "Long-Term Trends in Individual School District PreK-12 Enrollment, 1988-2007" [Electronic Version], <http://finance1.doe.mass.edu/statistics/>.

33 DOE, "Chapter 70 Profile," Lincoln Public Schools and Lincoln-Sudbury Regional School District, 1993-2009.

ADDITIONAL EDUCATIONAL SERVICES

As an alternative to LSRHS, Lincoln students seeking a vocational or technical education have the option of attending Minuteman Career & Technical High School in Lexington. In addition to its membership in the Lincoln-Sudbury and Minuteman regional school districts, Lincoln participates both in the Concord Area Special Education (CASE) Collaborative and the Education Collaborative for Greater Boston (EDCO), two public school consortiums that provide special education programs for students with severe special needs. Lincoln is one of fourteen member school districts in the CASE Collaborative and one of twenty-one districts affiliated with EDCO.³⁴

SCHOOL FACILITIES IN LINCOLN

The fifty-three acre Lincoln School campus includes academic facilities for children in preschool, grades K-4 and 5-8, an auditorium, two gymnasiums, and outdoor recreation areas. The preK-8 enrollment currently includes about 670 students.³⁵ In 1994, Lincoln carried out major renovations and an expansion of its public school facilities.



- ◆ The oldest building, the **Smith Building**, is a one-story school constructed in 1948 and expanded in 1953, 1955, and 1994. It contains approximately 48,000 sq. ft. of gross floor area, and holds classrooms and core facilities for grades K-4.
- ◆ The **Hartwell Building**, constructed in 1957, supports several uses including an integrated preschool, school administration offices, a multi-purpose room, and a non-profit child care center. It is a one-story building with a partial full-height basement and a total of 24,300 sq. ft. of gross floor area.
- ◆ The **Hartwell Pod Buildings** (A, B, and C), constructed between 1957 and 1963, include classrooms and office space. Each Pod Building consists of about 5,000 sq. ft. of gross floor area. The town added these facilities to the Lincoln School campus to accommodate enrollment growth as an interim measure prior to construction of the Brooks Building (below). These buildings are not now used for instructional purposes.
- ◆ In 1963, Lincoln constructed the one-story **Brooks Building** and expanded it in 1970 and 1994. The Brooks Building includes approximately 47,000 sq. ft. of floor area divided among classrooms, music and art rooms, an auditorium, a lecture hall, and other core facilities for grades 5-8. Lincoln uses the Brooks Auditorium for town meetings and the State of the Town meeting.

³⁴ Massachusetts Department of Education (DOE), Lincoln Public Schools, *School Profile Series*, <http://profiles.doe.mass.edu/>; CASE Collaborative, <http://www.colonial.net/progweb/caseweb/index.html>; and EDCO, <http://www.edcollab.org/>.

³⁵ Massachusetts Department of Education (DOE), Lincoln Public Schools, *School District Profile Series*, <http://profiles.doe.mass.edu/>.

- ◆ The **Reed Field House** is an indoor athletic facility and cafeteria serving grades 5-8. Constructed in 1970, the Reed Field House contains about 14,000 sq. ft. of floor space devoted to the gym, locker rooms, cafeteria storage, and offices. Additional storage space was constructed in 2004.
- ◆ The one-story **Link Building**, constructed as part of the 1994 renovations project, includes classrooms, a K-8 library, computer lab, and administrative offices in 25,200 sq. ft. of floor space. It literally “links” the Smith and Brooks buildings.

School Facilities Master Plan. About five years ago, the Lincoln School Committee commissioned a master plan for the Lincoln School complex and has been exploring options to renovate or possibly replace the existing school buildings. According to the *Lincoln Public Schools K-8 Master Plan Study* by Symes Maini and McKee Associates (SMMA), most of the basic electrical and mechanical systems in the schools have reached or will reach their useful life within the next twenty years. The SMMA study also identifies many problems with the existing instructional, administrative, and support facilities. For example, all classrooms in the Hartwell and Smith Buildings, the elementary music room in the Link Building, and all of the older (pre-1994) classrooms in the Brooks Building fall below minimum floor area standards established by the Massachusetts School Building Authority (MSBA), and most do not have sufficient design capacity to support the school department’s K-8 class size policies. There are security concerns at the main entrance to the Smith School and Brooks School due to the location of the school administration offices, and access barriers in the auditorium, music and art rooms at the Brooks School and the locker rooms at the Reed Field House.³⁶

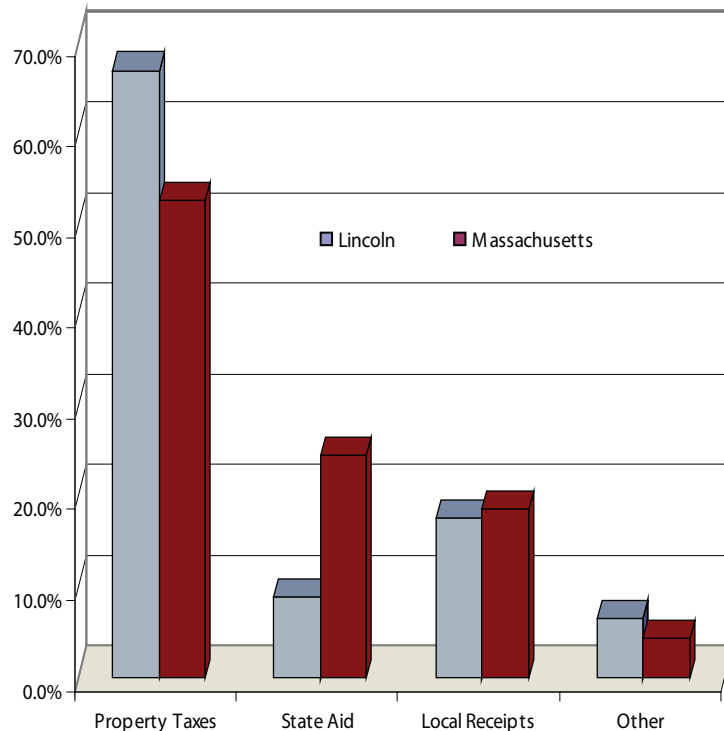
Financial Support for Community Services

REVENUES

Property taxes make up a larger share of total revenues in Lincoln than the average for local governments across the Commonwealth (Figure 10.1). This largely reflects Lincoln’s small population, affluent households and high property values, and limited options for generating revenue from other sources. As shown in Figure 10.2, total revenue per capita in Lincoln (\$5,435) is second highest in the immediate region. More than ninety-six percent of Lincoln’s tax base consists of residential property, which means that the cost of government services is borne mainly by homeowners. To maintain high-quality services, Lincoln residents have frequently agreed to pay higher taxes than required under Proposition 2½, which limits the rate of growth in each year’s tax levy unless voters decide to override the cap. Since the early 1980s

Figure 10.1
Revenues by Source: Lincoln and State Average (FY 2008)

Source of Data: Massachusetts Department of Revenue.



36 Symmes Maini & McKee Associates (SMMA), *Lincoln Public Schools Master Plan Study* (23 October 2007), 3.1/2 – 3.3E/1.

when Proposition 2½ went into effect, Lincoln voters have approved fourteen overrides and exempted the debt service for nineteen capital projects from the levy limit. The capital projects ranged from school and municipal building improvements to constructing the new regional high school and purchasing conservation land.³⁷

EXPENDITURES

In light of these revenue statistics, it is not surprising that Lincoln tends to spend more per capita for local government services than most of the surrounding towns, as shown in Table 10.1. Local government spending comparisons can be deceptive because communities do not finance all of their municipal services from general fund revenues.

For example, many towns segregate municipal utilities such as water and sewer and other services such as recreation or solid waste from the general fund, so in some cases these services are excluded from the average cost per capita reported in Table 10.1.

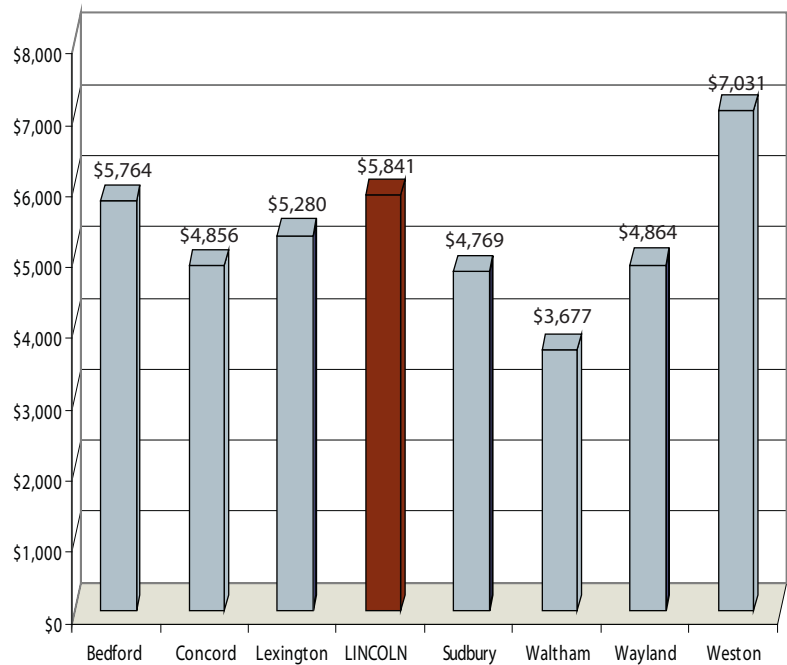
In addition, general fund expenditures for education do not always capture the cost of operating K-12 schools. While the state pays education aid (Chapter 70) to cities and towns for local schools, regional school districts receive Chapter 70 aid as a direct payment. This means that regional school aid is not among the revenue sources appropriated at town meeting. As a result, the actual cost of education is somewhat higher than the amounts reported in Table 10.1 for Lincoln, Sudbury, and Concord, all members of regional school districts. However, the average cost of services per capita in the table is generally indicative of government expenditures made by each community and consistent with other commonly used measures of local wealth. Lincoln's comparatively high general government and public safety costs speak to the diseconomies of scale that are so difficult for small towns to overcome.

FINANCIAL MANAGEMENT

Lincoln has a long track record of fiscally conservative decisions. Debt service accounts for less than six percent of the total operating budget (including all revenue sources), and the ratio of total outstanding indebtedness to the total budget is a very low 0.21. Reserves have fluctuated from about seven percent to more than ten percent of total appropriations per year over the past five years. High household wealth, high property values, limited reliance on state aid, a generally conservative approach to debt, and strong financial management help to explain

Figure 10.2
Total Revenues Per Capita, Lincoln and Surrounding Communities (FY 2008)

Source of Data: Massachusetts Department of Revenue.



37 Commonwealth of Massachusetts, Department of Revenue (DOR), Division of Local Services, "Override Votes, 1983 – Present" and "Debt Exclusion Votes, 1982 – Present," [Electronic Version], Municipal Data Bank, <http://www.dls.state.ma.us/mdm.htm>.

Table 10.1
General Fund Expenditures Per Capita in Lincoln and Surrounding Communities (2007)

City or Town	General Government	Public Safety	Public Schools	Public Works	Human Services	Culture & Recreation	All Other†	Total
Bedford	\$203	\$345	\$1,834	\$464	\$69	\$77	\$1,113	\$4,105
Concord*	\$224	\$443	\$2,521	\$216	\$38	\$121	\$573	\$4,136
Lexington	\$172	\$350	\$2,260	\$249	\$25	\$92	\$451	\$3,599
LINCOLN†	\$342	\$578	\$2,272	\$265	\$29	\$236	\$1,029	\$4,751
Sudbury	\$133	\$365	\$2,729	\$189	\$34	\$81	\$455	\$3,987
Waltham*	\$171	\$519	\$1,042	\$234	\$33	\$56	\$467	\$2,521
Wayland	\$214	\$397	\$2,279	\$174	\$75	\$127	\$1,026	\$4,293
Weston	\$229	\$538	\$2,690	\$269	\$42	\$101	\$1,936	\$5,806

Sources: Massachusetts Department of Revenue (DOR), Municipal Data Bank; U.S. Department of Commerce, Bureau of the Census, Population Estimates 2007; Claritas, Inc.; and Community Opportunities Group, Inc.

*Population estimates used to calculate expenditures per capita have been adjusted to reflect local household population, i.e., excluding group quarters populations.

†Population estimate excludes Hanscom Air Force Base.

‡“Other” includes debt service, fixed costs, intergovernmental charges, and inter-fund transfers.

Lincoln’s exceptional AAA bond rating (Standard & Poor). This reduces the town’s borrowing costs and effectively increases its borrowing capacity.³⁸

GROWTH AND CHANGE IN DEMAND FOR COMMUNITY SERVICES

In Lincoln and most towns, people with long-standing ties to local government say that public expectations have increased, volunteerism has declined, and the cost of community services has accelerated far ahead of revenue growth. Lincoln has had to adapt to population, cultural, and economic changes, too.

Ten years ago, only a handful of suburbs and small towns had an in-house technology manager. Official town websites were barely on the horizon, and many communities did not have e-mail or voicemail. Today, Lincoln maintains a website, all of its towns departments have e-mail, and numerous services have been transformed by improved technology. Public safety is supported by computer-aided dispatch, records management, mobile computing, and digital fingerprinting. Every department has computers now, but this was not the case a decade ago. Town employees have remote network and email access, the library has a local area network, and residents can pay tax bills and water bills online. Lincoln made wise investments, not only in network infrastructure but also in personnel. In fact, Lincoln has been fairly progressive in this area because many towns of similar size still have no technology staff and limited information communication systems.

- ❖ Lincoln’s decision to institute a full-time career Fire Department is consistent with statewide trends. Commuting distances and high housing costs have reduced the availability of call firefighters in small towns, especially towns with a limited employment base. For these communities, an all-professional fire department has become the only realistic way to provide basic public safety services.
- ❖ The Lincoln Police Department has experienced growth in demands for types of assistance that may signal inadequate social service and mental health resources in the community. For example, the number of juvenile cases in Lincoln more than doubled between 2004 and 2007, from seventeen to forty. In the same pe-

38 See Chapter 12, Town Finances, for a more detailed review of Lincoln’s revenues and expenditures and financial management policies.

riod, domestic violence cases increased from twenty-four to fifty, and restraining orders, from thirty-two to forty. Each year, the Police Department responds to a dozen or so calls about confused people. As the population ages, the Lincoln Police will most likely see continued growth in calls for assistance from or about elderly residents. Needs identified by Council on Aging for additional staff speak to similar concerns.³⁹

- ❖ In February 2008, the Lincoln School Committee voted to institute full-day kindergarten at the Lincoln School complex and the Hanscom Elementary School in the 2008-2009 school year.⁴⁰ The Committee's decision reflects a growing trend both regionally and nationally. In Massachusetts, the Department of Education (DOE) began to promote full-day kindergarten in 1996 following the release of a legislative commission's report on early childhood education. Interest has increased significantly throughout the state, from urban to suburban and small-town schools.⁴¹
- ❖ In 2004, the Board of Selectmen departed from a long-standing tax policy and instituted a split tax rate, i.e., a higher rate for commercial, industrial, and personal property (CIP). Faced with fiscal struggles similar to those of other towns, the Board looked to commercial projects such as the office complex at Lincoln North to make a larger contribution to the town's operating revenue. The CIP tax levy rose from 3.4 in FY 2004 to 3.9 percent in FY 2005, and has continued to inch upward since then, to 4.1 percent in FY 2008. Lincoln is currently one of 110 communities in the Commonwealth with a split tax rate.⁴²
- ❖ Lincoln established in-house planning capacity much later than most Boston-area suburbs. By the time the Lincoln Planning Board hired a town planner in 2003, all of the surrounding communities had created planning departments with full-time staff. However, until the late 1980s, municipal planners could be found only in a few Boston-area suburbs. That Lincoln did not have a professional planner until recently reflects the town's traditional way of approaching land use: citizen-led conferences and forums that often looked at parcels, areas, or major public policy questions with an eye toward reaching consensus on a particular strategy. The workload associated with the "Big House" bylaw presented new challenges that made hiring professional staff unavoidable.

NEEDS, ISSUES & CHALLENGES

Planning and Budgeting for Town Services

Towns provide municipal services in order to protect the health, safety, and welfare of residents and support and enhance their quality of life. In Lincoln, many services provided by the town instill and reinforce a sense of community and reflect shared values such as excellent schools, economic and age diversity, and land conservation. Lincoln's services are generally well-balanced. Despite the challenges presented by Lincoln's decentralized government, its time-consuming process for debating public policy, and the diseconomies of scale in a small town, Lincoln's public services have been remarkably effective at meeting local needs. This can be seen in the

39 Kevin Mooney, Lincoln Police Chief, to Community Opportunities Group, Inc., 23 April 2008; Lincoln Council on Aging to Comprehensive Long-Range Plan Committee, 21 March 2007.

40 Lincoln School Committee, Meeting Minutes, 14 February 2008.

41 Massachusetts Department of Education, FY 2008 Transition to Full-Day Kindergarten Funding Allocations and Recipients, <http://finance1.doe.mass.edu/Grants/grants08/awards/702.html>.

42 Annual Town Report (2004), 4, 57-58; DOR, "Levies by Class," 1987-2008, "FY07 CIP Shift," and "Number of Communities with Split Tax Rates," 1992-2007, Municipal Data Bank.

high marks given to town staff by Comprehensive Plan survey respondents and in the results of Town Meeting appropriations and ballot votes on Proposition 2½ overrides and debt exclusions.

The allocation of funds to each department in Lincoln’s operating budget serves as a statement of priorities. Existing services and proposed changes are vetted during the process of developing the annual town budget. Changes can be initiated by residents, boards and committees, or department heads, who frequently serve as a catalyst for new ideas because they have both on-the-ground familiarity with local needs and training as well as exposure to best practices. Any proposed program or service is evaluated jointly by the department head, the Town Administrator, and the board or committee that oversees the department. A cost accounting is developed that forms the basis of the budget request and its justification. The Finance Committee does not receive the budget request for review until the responsible elected and appointed officials have decided to support it. The Finance Committee conducts numerous public meetings throughout the fall and winter to receive public input. In addition, the SOTT gives residents an opportunity to learn what town officials have in mind and to join the debate early in the budget process. Once finished, the budget is mailed to every household and presented at the Annual Town Meeting in March. The Finance Committee provides a summary of leading financial constraints and opportunities, and other town boards, committees, and departments present their case. This process and its emphasis on planning, communicating with residents, and building consensus among town officials, the schools, and the library have inspired broad support from voters.

By contrast, long-range planning for services and facilities has been more episodic and ad hoc. Town boards periodically conduct performance reviews of town staff and work toward long-range planning. The Town Administrator recently initiated a process to coordinate and improve interdepartmental planning for municipal services. Each department prepared a ten-year staffing history, reported new or anticipated regulatory developments, and identified potential impediments to delivering services in the future. Table 10.2 summarizes the results of this effort. It will be important to take the town’s “temperature” on a regular basis about service needs and willingness to pay, and to distinguish essential or “core” services from non-core services that may be desirable but are not absolutely essential.

Planning and Budgeting for Town Facilities

Lincoln has begun to improve its approach to long-range facilities planning. The Board of Selectmen recently commissioned architectural and engineering reviews of the Town Office Building, Bemis Hall, Pierce House, and other municipal buildings under the Board’s purview. These reviews were conducted in order to identify repairs, renovations, major system replacements, and possible additions that may be necessary to achieve code compliance, address space needs, improve efficiency, or enhance the use of town facilities. Table 10.3 provides a snapshot of the reviews. The library and school department have conducted similar facilities assessments.

While town buildings, conservation lands, and recreational facilities have generally been maintained, Lincoln does not have a structure in place to coordinate or centralize facilities management. Facilities planning and management should encompass all town-owned buildings, including the schools, the public safety building, the DPW buildings, the Town Office Building, the Library, Bemis Hall, Pierce House, Codman Farm, and town-owned housing. Equally important are elements of the town’s infrastructure, such as recreation facilities – including the pool, playgrounds and athletic fields, and tennis courts – as well as the public water system.

Lincoln may find it advisable to be able to examine a range of options for some of its historic buildings. Public forums and other source of information reveal a consistent desire in Lincoln for a community center and a preference for making good use of existing facilities over constructing new buildings. The Pierce House might

be rededicated for activities that would bring residents together more frequently, such as a new home for the Council on Aging, a marketplace for all of the farms and farmers in Lincoln, a general store (such as once existed at the Old Town Hall), or Lincoln history exhibits, and some preliminary studies have already been undertaken in this regard. Similarly, it may be appropriate to reconfigure Bemis Hall to serve only as an occasional event or meeting location or expansion space for the Library. While historically important, Bemis Hall has significant issues with respect to parking, regulatory compliance, and maintenance. The town needs to be open to fresh ideas about the use of these facilities.

Hanscom Air Force Base and MassPort Facilities

HAFB includes portions of Lincoln, Lexington, Bedford, and Concord. More than half of HAFB's total landholdings and all of its military housing are located in North Lincoln. In 2005, HAFB survived the most recent Base Realignment and Closure (BRAC) process. This was the successful outcome of an intensive lobbying campaign co-chaired by Senator Kennedy and Governor Romney, and Lincoln played a role in the leadership team for this effort. Another BRAC round will occur by 2015 at the latest. Lincoln, HATS, and private sector stakeholders are already engaged in proactive efforts prepare for future BRACs. According to a study prepared for HATS, base closure could have made Lincoln legally responsible for providing municipal and school services to civilians living in HAFB's housing at an estimated net cost of \$6.6 million per year.⁴³

As part of a national program spearheaded by the Department of Defense several years ago, the U.S. Air Force is "privatizing" the military housing units at HAFB and other installations. Under military privatization agreements, the federal government continues to own the land and a private for-profit developer owns and controls the buildings. For HAFB, the original proposal involved approximately 850 housing units through a combination of demolition and new construction and redevelopment of the existing housing. After the project commenced, the developer selected by the Air Force filed for Chapter 11 and was recently replaced by a new developer, Hunt Pinnacle Communities, LLC. According to the current project schedule, the privatization project at HAFB will be completed in 2011.

"Privatization" means far more than modernizing homes and switching to a private property management company. Under the agreement between HP Communities, LLC and the Air Force, housing at HAFB will be offered to a range of potential occupants on a priority basis. Although the priority households would still be active-duty military families and others directly connected with the Air Force, HP Communities will have authority to lease or sell units to other categories of tenants if occupancy rates fall below ninety-five percent. At issue for Lincoln is that while the Department of Defense pays the town to educate children of military personnel, there would be no federal subsidy for children of non-military households. It is not clear how much revenue would flow to Lincoln to offset the cost of unsubsidized educational or municipal services, or what form the revenue would take: property taxes, a special district or host community assessment paid by HP Communities, or something comparable to a payment-in-lieu-of taxes (PILOT) that large non-profit organizations often pay to the communities in which they are located. The change in ownership and use of the housing at HAFB has Lincoln officials very concerned about the town's obligation to provide services to civilians living on the base and how it will pay for those services.

43 Sasaki Associates et al, *Hanscom Air Force Base Pre-BRAC Community Advance Planning* (2005), 6.

**Table 10.2
Community Services in Lincoln: Existing Conditions and Significant Challenges**

Department	Budget \$,000	Current Situation	Significant Future Challenges
General Government	\$2,231	<ul style="list-style-type: none"> ◆ Lincoln has a knowledgeable, professional, competent staff with the wide range of skills necessary to manage and operate Lincoln town government. There has been a systematic effort over the years to upgrade the quality of the staff to meet the increasingly diverse and complex tasks at hand, while maintaining tight control over the number of employees. ◆ Over the last ten years Lincoln has greatly increased the use of technology (e.g. through PC's, computer software and networks). Continued enhancement of this capability will be needed for an effective staff and effective interaction and coordination with citizens. 	<ul style="list-style-type: none"> ◆ Current plans assume no significant change at Hanscom Air Force Base. If changes are anticipated, action will be needed so that potential reuse strategies protect and enhance Lincoln. ◆ Lincoln needs to develop and sustain the capability to participate effectively in regional planning and advocacy. ◆ Lincoln needs to sustain the tradition of volunteerism and the town meeting form of government. ◆ Lincoln needs town wide facilities planning and management. ◆ Lincoln needs further enhancement of its Information Technology capability for improved records management and improved communication among town departments and with citizens and the public.
Public Safety - Police & Fire	\$3,072	<ul style="list-style-type: none"> ◆ Lincoln is now staffed with three full-time firefighters on duty at all times. ◆ There is a comprehensive emergency medical capability. ◆ Response times to North Lincoln can be slow. ◆ Increased regionalization and mutual aid. 	<ul style="list-style-type: none"> ◆ Increasing number of calls from Hanscom for domestic and juvenile issues. ◆ May need to cover MassPort if Hanscom contract terminates. ◆ Need to cover North Lincoln with increased equipment and/or personnel.
Lincoln Public Schools	\$9,054	<ul style="list-style-type: none"> ◆ The guiding purpose of the Lincoln schools is to provide a high quality learning experience that enables all students to access a broad program of studies that includes core academic subjects as well as other areas key to creative, well-being, social, and emotional growth. ◆ The METCO voluntary desegregation program brings to the Lincoln school system the benefit of a level of diversity that would otherwise be absent. ◆ The continued excellence of Lincoln schools is dependent on retaining the high quality teaching staff and maintaining a lower class size than exists in many school systems. 	<ul style="list-style-type: none"> ◆ The Lincoln K-8 school buildings were constructed and expanded over many years. The structures and systems are in need of major renovation or replacement in the near future at a significant cost. ◆ Lincoln operates the K-8 school at Hanscom Air Base. If the contract were to terminate, the entire school administration cost would need to be absorbed by Lincoln.

**Table 10.2
Community Services in Lincoln: Existing Conditions and Significant Challenges**

Department	Budget \$,000	Current Situation	Significant Future Challenges
Lincoln Sudbury Regional High School	\$3,516	<ul style="list-style-type: none"> ◆ The school's core values - fostering of cooperative and caring relationships, respect for human differences, and the development and maintenance of a purposeful and rigorous academic program - constitute the foundation of LSRHS. ◆ LSRHS is under significant financial stress. Enrollment growth and benefit and compensation costs are significantly more than the tax levy increase allowed without an override. Sudbury has been unwilling to propose or unable to pass a tax override for several years. ◆ The new high school building is both an operational and financial success. Construction was completed on time and under budget, with maximum state funding. Capital costs should be relatively low over the next 25 years. 	<ul style="list-style-type: none"> ◆ There are significant operational and financial challenges in operating a regional high school. Since the region was established, Sudbury has grown much faster than Lincoln. The Sudbury residential tax rate is significantly higher than Lincoln. Sudbury has been reluctant to approve the overrides necessary to provide a continuation of current programs and staffing levels. Lincoln may need to continue to monitor the regional school system to determine if the differences in the funding policies of Sudbury and Lincoln are having a material effect on educational quality.
Public Works	\$1,266	<ul style="list-style-type: none"> ◆ Lincoln roads are deteriorating. ◆ Commercial and residential development in nearby towns and significant congestion on major highways has led to a substantial increase in cut-through traffic in Lincoln. This situation is likely to get much worse. 	<ul style="list-style-type: none"> ◆ Lincoln's primary roads to be rebuilt at a significant cost after years of modest maintenance. ◆ Traffic calming is needed to reduce the speed of traffic and volume of cars passing through Lincoln. ◆ The DPW building needs modest repairs and improvements. ◆ The Library needs to continue technology upgrades, expand services to young adults, and provide adequate parking.
Library	\$805	<ul style="list-style-type: none"> ◆ Membership in the Minuteman Library Network significantly extends the capabilities and effectiveness of the library. ◆ Necessary capital and maintenance projects are in progress. 	<ul style="list-style-type: none"> ◆ Current parking at Bemis is inadequate and potentially dangerous. ◆ The crosswalk at Bemis is dangerous.
Council on Aging	\$142	<ul style="list-style-type: none"> ◆ The COA currently provides programs and services that help seniors remain in their homes in Lincoln. ◆ Recent upgrade of half-time Assistant Director position to full-time social worker enables more effective service delivery. 	<ul style="list-style-type: none"> ◆ A community recreation center is needed. ◆ Additional playing fields are needed.
Recreation	\$351	<ul style="list-style-type: none"> ◆ An extensive number and variety of programs are provided for youths and adults. 	<ul style="list-style-type: none"> ◆ Lincoln needs to comply with the DEP consent decree requiring a reduction of water drawn from the Charles River Watershed from the current 85 gallons to 65 gallons per person per day.
Water	\$969	<ul style="list-style-type: none"> ◆ Flint's Pond and the Tower Road well provide high quality drinking water. There should be no need to connect to the MWRA system. ◆ The filtration plant provides water quality exceeding current governmental standards. 	

Source: Comprehensive Long-Range Plan Committee, Town Administrator Timothy Higgins.

**Table 10.3
Major Community Facilities in Lincoln: Existing Conditions, Future Constraints & Opportunities**

Facility	Background	Current Use	Current Condition	Future Constraints & Opportunities
Public Safety Building Lincoln/Codman Road	The public safety building was originally constructed in 1966; underwent substantial renovations and expansion in 1999.	Police, Fire, Emergency Medical and Emergency Communications services. Town leases land to cell tower company (i.e., tower and attendant equipment).	The facility was evaluated in 2005 as part of the McGinley/Kalsow facilities assessment, which identified need for relatively modest repairs and improvements (primarily HVAC corrections).	<ul style="list-style-type: none"> ◆ With appropriate maintenance and updates in technology, the facility should be adequate to meet the basic needs of the services it supports for the foreseeable future. ◆ The number of apparatus and the trend toward larger equipment can create space constraints that may prompt facility changes. ◆ The site is fully utilized, there is limited land to support a future expansion, and parking is already at a premium. ◆ Fire Department recommends that long-term facilities plans assess the need for a sub-station to reduce response time to North Lincoln.
Public Works Garage Lewis Street	The public works garage was originally constructed in the 1950s and has not undergone major renovations since. Sand storage barn added with state grant in late 1990s.	Hosts the Highway Department and is base of operation for the following services: road and path maintenance, snow and ice removal, tree maintenance, cemetery support, and fueling station for all Departments. Town leases land to cell tower company (i.e., tower and attendant equipment). School buses stored on site.	The McGinley/Kalsow assessment identified relatively modest repairs and improvements. Facility was described as utilitarian and serviceable. Facility is old and energy inefficient, but not currently in need of major upgrades.	<ul style="list-style-type: none"> ◆ At such time as major upgrades or replacement are considered, the town may want to consider relocating the garage. Various South Lincoln planning discussions have raised the question of relocating the garage to create the potential to utilize the existing site to support a different use (e.g., housing or additional commercial development). Before relocation can be given serious consideration, there needs to be an in-depth study of alternative sites, expansion of South Lincoln wastewater treatment options, and environmental remediation of the current DPW site. ◆ Site has historically been utilized to store and compost street sweeping materials. Current Superintendent has made it a priority to reorganize this function in conformance with environmental regulations.

**Table 10.3
Major Community Facilities in Lincoln: Existing Conditions, Future Constraints & Opportunities**

Facility	Background	Current Use	Current Condition	Future Constraints & Opportunities
Town Office Building Lincoln Road	The building was constructed in 1908 as the Center School and used as such until the 1980s, when it was converted to Town Office use. Listed on the National Register.	Town administration, land use agencies, financial departments, Town Clerk and records management functions. The building is heavily used for a variety of public/civic meetings and events. Driveway is shared with two abutters.	Included in the McGinley/Kalsow assessment and then reviewed more closely in 2008 by the Office of Michael Rosenfeld (OMR). Of all town facilities, the Town Office Building was deemed most seriously in need of attention. It needs major upgrades to provide access for people with disabilities, correct fire code deficiencies, and improve energy efficiency. The building no longer meets programmatic needs (e.g., meeting and records storage space inadequate).	<ul style="list-style-type: none"> ◆ Future planning should assume that the basic use of the building will remain unchanged. ◆ Any substantial renovation or expansion must be sensitive to the historic quality of the building and its location. ◆ The facility is heavily used by many public and civic organizations. ◆ Parking is only marginally adequate at the current time and will be a challenge to solve in the event of building expansion. ◆ Consultant provided a renovation planning option and a renovation and expansion option. ◆ Major work is likely to require temporary relocation of staff and functions during construction. Town might explore temporary space at Hanscom or Massport.
Pierce House Weston Road	The Pierce House was constructed in the late nineteenth century; gifted to the town as a bequest from the Pierce family. Listed on the National Register.	Serves in many respects as Lincoln's "community center." Hosts numerous town and civic events (e.g., New Years, summer concerts), and is rented to residents and non-residents for weddings and other events.	The facility was evaluated in 2005 as part of the McGinley/Kalsow assessment, which identified need for "selective but rather numerous repairs and improvements." Accessibility and improved kitchen facilities were highlighted.	<ul style="list-style-type: none"> ◆ Thoughtful consideration of reuse options is required, e.g., community or senior center, more town events, change the nature of for-profit functions, etc. ◆ Consider potential overlap of functions with Bemis Hall. ◆ The Selectmen have appointed a committee to examine the current facility and its operations and to develop a strategic plan. ◆ The committee's analysis will be informed by a business plan prepared by the Bentley College McCallum School of Business. ◆ The House is no longer self-supporting, if indeed ever was the case when all costs accounted for.

**Table 10.3
Major Community Facilities in Lincoln: Existing Conditions, Future Constraints & Opportunities**

Facility	Background	Current Use	Current Condition	Future Constraints & Opportunities
Codman Farm Lincoln/Codman Road	<p>Complex consists of farmhouse (circa 1860) and five barns. The complex lies within the Grange Complex/Codman Estate historic district. The town acquired the land and the buildings in the 1960s.</p>	<p>The town leases the land and buildings to Codman Community Farms (CCF), private not-for-profit organization. The Board of Selectmen serves as landlord under the lease. CCF operates and manages the property as a working farm with crops, vegetable garden, animals, meat and eggs for sale, education and social events.</p>	<p>The facility was evaluated by McGinley/Kalsow and again by Colonial Barn, and more recently by Fire Tower Engineered Timber (Ben Brunggraber) of New Hampshire. The facilities are generally in sound condition, and well maintained and preserved – particularly given their age. The most substantial needs center on 1) repair and replacement of several timbers in the main hay barn, and 2) repair of the exterior stone foundation wall of Barn ____.</p>	<ul style="list-style-type: none"> ◆ The land on which Codman Community Farms is situated was voted into conservation status by Town Meeting. Therefore, the land cannot be put to another use without vote of Town Meeting and the General Court under Article 97 of the Massachusetts Constitution. ◆ The partnership between the town and CCF seems a good balance. The town leases the land and barns for a nominal sum and bears the expense for major repairs and any capital improvements, although, for example, Barn ____ was constructed in ____ funded exclusively via private contributions. CCF is responsible for all aspects of farm operations and their attendant costs. ◆ Upkeep and repair of historic barns when done with appropriate sensitivity is not inexpensive. ◆ A careful review of the three recent consulting reports needs to be done by a qualified individual or firm so that the right things are done first. The CCF Board should be consulted during the planning process as they are most intimately familiar with the place's squeaks and groans.

**Table 10.3
Major Community Facilities in Lincoln: Existing Conditions, Future Constraints & Opportunities**

Facility	Background	Current Use	Current Condition	Future Constraints & Opportunities
Bemis Hall Bedford Road	Constructed in 1892, the building served as a town hall until the present Town Office Building was converted from a school. Bemis Hall is located in the Lincoln Center Historic District and listed on the Natural Register.	Bemis Hall currently hosts the Council on Aging and all of its programs, the Bemis Lecture series, the Lincoln Players and a number of regular and irregular civic, social and educational programs	The facility was evaluated by McGinley/Kalsow and again in 2008 by the Office of Michael Rosenfeld (OMR). The consultants have raised a number of significant issues to include: 1) extensive accessibility improvements to complement those made in 200__ 2) HVAC system replacement 3) deficient parking. In addition, parking, accessibility, and space constraints may render the building incapable of meeting the needs of its prime tenant, the COA, much further into the future. The consultants rated Bemis Hall as second only to Town Offices in terms of the extent of repairs and improvements needed.	<ul style="list-style-type: none"> ◆ The historic nature of the building, the constrained nature of its site and limited parking make expansion improbable. ◆ Sensitivity to abutting properties is important (i.e., historic cemetery, town green, First Parish and several residential abutters. ◆ The building may not be capable of meeting the increasing needs of Lincoln's growing senior population. ◆ Parking and traffic safety are major concerns. ◆ The current parking is provided mainly through agreement with the First Parish. Safe pedestrian passage from the First Parish lot to Bemis is challenging to ensure. ◆ Upkeep and repair of historic buildings when done with appropriate sensitivity to their character is not inexpensive. ◆ Before any spending plans are finalized (other than routine care and maintenance) a careful review of changing needs of COA, potential for consolidation of programs within other existing town-owned facilities, potential overlap of mission and function with Pierce House, and potential of constructing a new community center should be undertaken.

Source: Comprehensive Long-Range Plan Committee, Town Administrator Timothy Higgins.

GOALS & RECOMMENDATIONS

Goal SF-1. Continue to identify and assess community service needs, considering Lincoln’s changing population, the cost of services, the revenues available to support them, and alternative models of service delivery.

- SF-1.1. Periodically evaluate needs for existing or new local government services through resident surveys, consultations with town staff and organizations that provide services to Lincoln residents, and review of program participation statistics and other available information.
- SF-1.2. Explore opportunities to provide services through agreements with private organizations and other local governments in Lincoln’s region.
- SF-1.3. Continue to review the sufficiency of user fees and charges to recover most or all of the town’s cost to provide certain programs and services.
- SF-1.4. Establish objective methods of measuring and analyzing the net cost of community services and provide information to town boards and town meeting.
- SF-1.5. Assess citizen’s level of support for alternative revenue sources.

DISCUSSION

Lincoln could benefit from instituting a formal process for evaluating town services, identifying unmet needs for services, and identifying services that Lincoln residents use elsewhere in the region. As part of the Comprehensive Plan’s ongoing implementation, the town may want to periodically survey residents, town officials, and town staff in order to determine current levels of satisfaction with town services and to develop an understanding of the service needs of Lincoln’s population. The survey could provide a forum to comment on non-profit organizations that currently meet some of the community’s service needs, too. To be effective, the assessment process needs to be designed to support key decisions about services and facilities: determining the proper mix of personnel and the best structure for delivering services, identifying opportunities to deliver services more efficiently through regional agreements, and recommending ways to modify the town’s approach to evaluating services in the future. The Board of Selectmen, Town Administrator, Finance Committee, and others would use the survey data as part of the annual budget review cycle.

Today, Lincoln handles three local government functions through an inter-local agreement with Concord: septic system plan review and inspections, sealer of weights and measures, and food service inspection. There may be other opportunities to share service delivery with neighboring towns, from senior citizen transportation services to managing and maintaining open space trails. Communities often feel possessive of local services and small towns in particular worry that the trade-off for more efficiency will be a decrease in responsiveness to local needs. Lincoln should consider establishing a study committee to explore possibilities for regional collaboration and make recommendations to the Board of Selectmen and Town Administrator.

Lincoln has good systems in place to monitor and adjust user fees for services such as recreation, solid waste disposal, building permits, and so forth. These systems should be maintained and periodically reviewed to ensure that fees account as closely as possible for full cost recovery.

From time to time throughout the Comprehensive Plan process, local officials and residents debated the best way to estimate the fiscal impact of residential and non-residential development. This topic was addressed and

a dynamic model for future assessments was presented in a 2005 study by the At-Risk Properties Committee (ARPC). The ARPC was convened and the model used more recently as Lincoln was asked to consider a proposal to rezone land for an office building off Winter Street and Old County Road near the Waltham line. Whether or not to consider fiscal impact as part of its land use decision-making process continues to be debated as residents seek consensus on this issue. However, in striving to establish objective methods, town boards would be well advised to reach agreement about the cost and revenue assumptions that will be used in the analysis.

Goal SF-2. Improve the management and maintenance of town facilities and infrastructure.

- SF-2.1. Establish and fund a full-time facilities manager position to coordinate and oversee the management and maintenance of all municipal facilities.
- SF-2.2. Institute a Planned Preventive Maintenance (PPM) program in order to maximize the efficiency, reliability, and lifespan of building systems and equipment.
- SF-2.3. Support Lincoln's asset management needs through a comprehensive capital improvements plan and broadly supported policies for use of non-exempt and exempt debt, capital outlays, and to the extent allowed by law, capital reserve funds.
- SF-2.4. Identify, assess, and pursue opportunities to increase the amount of revenue generated by private use of municipal facilities, consistent with the facility's intended municipal uses and the values expressed in the town's vision statement.
- SF-2.5. Systematically maintain and improve the water distribution system in order to conserve water and meet or exceed state standards for unaccounted water.
- SF-2.6. Increase support for upgrading, integrating, and maintaining information technology at the town offices and other public buildings.

DISCUSSION

Lincoln needs a process for systematically evaluating its public facilities. A consolidated facilities planning process would help Lincoln manage its facilities more efficiently and productively. This might also include the town's rental housing. It would enhance the town's ability to engage in meaningful planning for maintenance, long-term repairs or improvements, and energy efficiency. In addition, coordinated long-term facilities planning should help Lincoln make the most efficient use of its financial and human resources.

Toward these ends, Lincoln could consider consolidating its facilities management functions by appointing a qualified full-time facilities manager, which would be a new department head-level position, and work under the direction of the Town Administrator. This position would benefit Lincoln by having a centralized, professional expert overseeing all aspects of facilities management: custodial care, routine inspection, routine maintenance, repair and improvement projects, improvements to make facilities accessible to people with disabilities, energy use, budgeting, and planning. In addition to preparing a periodic assessment of and budget for these needs, the responsibilities of a facilities manager would include maintaining an inventory of the services provided in each facility, including town services and activities conducted by private groups that use town facilities. To refine the job description for this position, Lincoln could examine the experience of other towns with facilities management personnel, such as Bedford and Hopkinton.

Lincoln could also benefit by developing a long-range asset management plan that provides a process to identify elements of Lincoln's infrastructure to be replaced and plans for advanced funding to the extent allowed by law.

This process is known as Planned Preventative Maintenance (PPM). Advance funding through special capital reserve accounts, developed in consultation with the Board of Selectmen and town counsel, would be based on the predictable useful life of each facility or component of the town's infrastructure and coordinated with Lincoln's efforts to incorporate "green building" principles in its public facilities.

Goal SF-3. Continue to invest in local government innovation, capacity, and efficiency.

- SF-3.1. Continue to attract and retain highly qualified managers, professionals, and support staff in all town departments, and provide the facilities and technology they need to work efficiently.
- SF-3.2. Provide adequate, timely opportunities for employee training and professional development to encourage state-of-the-art practices and increase the town's capacity to comply with federal and state mandates. Create mechanisms to routinely solicit employee input for analysis of systems, best practices and potential for innovation.
- SF-3.3. Explore opportunities to reorganize, consolidate, or centralize functions in order to improve efficiency and control growth in operating costs.
- SF-3.4. Continue to invest in technology improvements in order to support inter-departmental operating needs and provide residents with timely access to public information.

DISCUSSION

Lincoln residents has a long history of strongly held beliefs about the importance of citizen participation and volunteerism. They want more people to attend town meeting, run for office, and serve on town boards because they value their form of government and want to preserve it in the future. As Lincoln pursues strategies to increase citizen participation, it is important to recognize that town employees handle virtually all of the day-to-day work of local government: delivering services, providing information, responding to emergencies, resolving citizen complaints, caring for town facilities, managing and maintaining records, accounting to state and federal officials for a wide variety of compliance obligations, managing the town's finances, coordinating projects that require interdepartmental cooperation, and providing support to and carrying out decisions made by numerous boards and committees. They know more about their departmental operations and the town's needs than many residents may realize. Lincoln's department heads are a significant resource, but they are not always tapped for their expertise. Their limited role in the development of this Comprehensive Plan was sometimes conspicuous, especially since staff in other communities often have active, hands-on responsibility for shaping many of the recommendations and implementation steps included in a master plan.

Lincoln has managed to attract well qualified department heads, professional staff, and support personnel. The town benefits by ensuring that its employees have many opportunities to pursue professional development and training including, but not limited to personnel whose jobs require licensure or professional certifications. Lincoln has a history of striving to find the right balance between governmental efficiency and its deliberative approach to making policy decisions. The challenge in the latter approach is to ensure that it supports interdepartmental planning and problem-solving, and that it does not impede the ability of staff to do their jobs. To achieve greater efficiency and more control over growth in operating costs, Lincoln might consider increasing its investments in technology and provide employees with the tools they need to work as efficiently as possible. Further, the town should continue to be open to consolidating functions that could be carried out more efficiently in an organization with a more centralized structure than Lincoln has today.

Goal SF-4. Continue to monitor the status of Hanscom Air Force Base and initiatives with respect to military housing, through base closure or privatization of existing housing, that may place new demands on Lincoln’s municipal and school services.

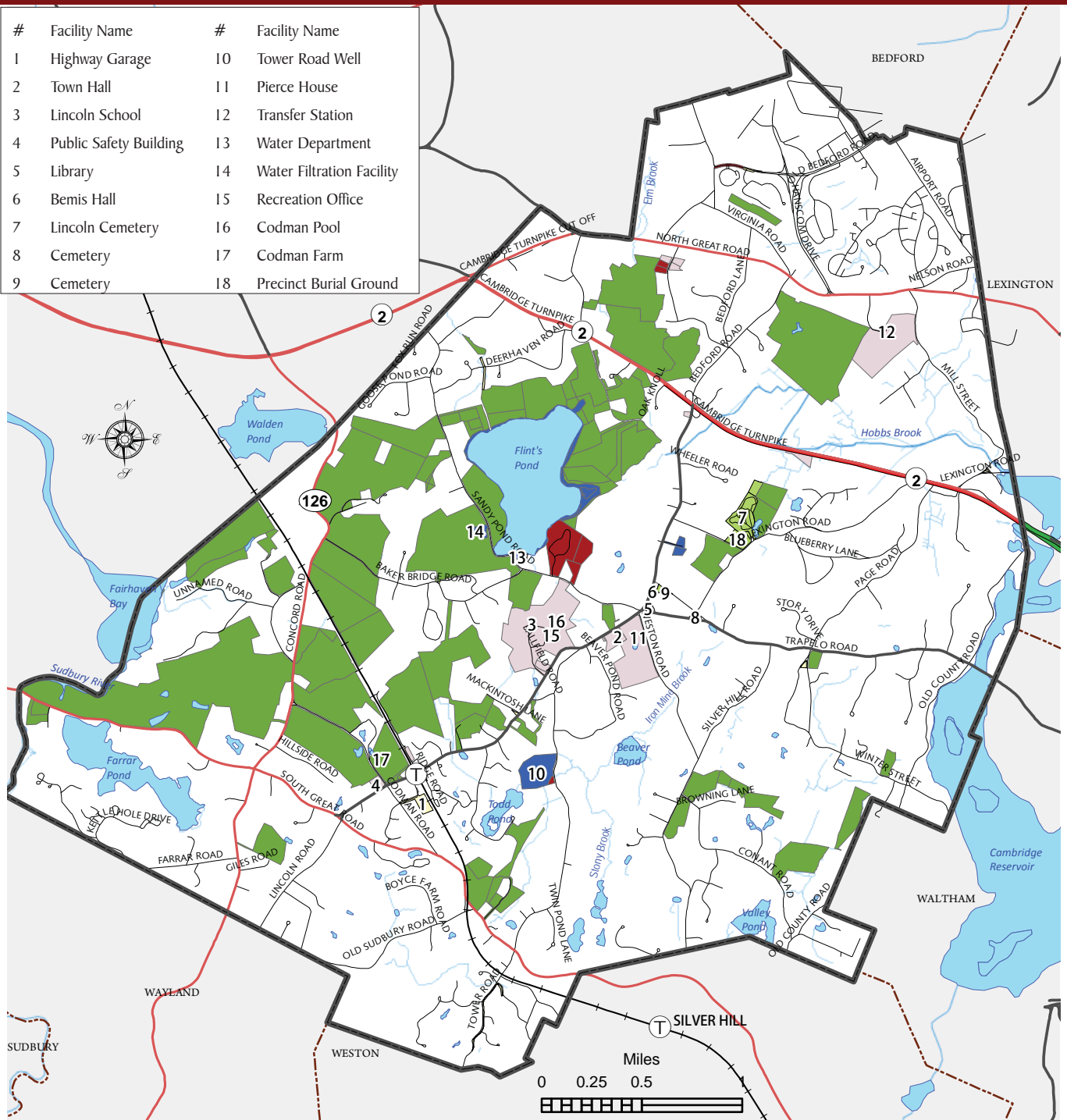
- SF-4.1. Maintain an active leadership role in the Hanscom Area Towns Committee (HATS) in order to ensure vigorous representation of Lincoln’s interests.
- SF-4.2. Secure specialized legal services, as appropriate, to ensure that local officials have the best available information to guide decisions about responding to a change in the status of Hanscom’s housing stock.
- SF-4.3. Pursue all appropriate political and legal means to protect Lincoln from having to absorb the cost of residential services at Hanscom without predictable sources of offset revenue from non-local sources.

DISCUSSION

Lincoln has taken all of the right steps to protect its interests as the fate of HAFB evolves. In addition to participating actively in the Hanscom Area Towns (HATS) Committee, Lincoln has led at least two major planning initiatives – a four-town planning process in the 1990s and a “pre-BRAC” planning effort in 2005 – and sought special counsel services to understand the legal consequences of privatizing HAFB’s housing units. In addition, Lincoln, through HATS, will serve on a board of a public-private partnership to enhance the HAFB mission and to better ensure continued operation. The situation that Lincoln faces today is challenging because the federal government will continue to own all of the land at HAFB, but the housing units will be owned and managed by a private for-profit company. Lincoln will need to remain vigilant and pursue political and legal means to limit its exposure to service demands that it has neither the capacity nor revenue to handle. Further, the town needs to work with the Department of Housing and Community Development (DHCD) to ensure that a change in the status of HAFB housing units does not increase Lincoln’s obligations under Chapter 40B. Lincoln also should explore options for establishing (through authority granted by the General Court) a special assessment district or a similar mechanism to fund services used by HAFB residents from revenues generated by HAFB development.

LINCOLN COMPREHENSIVE PLAN

#	Facility Name	#	Facility Name
1	Highway Garage	10	Tower Road Well
2	Town Hall	11	Pierce House
3	Lincoln School	12	Transfer Station
4	Public Safety Building	13	Water Department
5	Library	14	Water Filtration Facility
6	Bemis Hall	15	Recreation Office
7	Lincoln Cemetery	16	Codman Pool
8	Cemetery	17	Codman Farm
9	Cemetery	18	Precinct Burial Ground



Community Opportunities Group, Inc.

MAP 10.1 COMMUNITY FACILITIES

Sources: MassGIS, Lincoln Conservation Department, USGS, U.S. Bureau of the Census, Community Opportunities Group, Inc.

April 2009

Legend

ROADWAYS

- Limited Access Highway
- Multi-Lane (Not Limited Access)
- Other Numbered Highway
- Major Road, Collector
- Local Streets

MBTA Stations

Railroad

TOWN PROPERTY

- Municipal
- DPW/Highway
- Water Department

Conservation

Cemeteries

Other

LINCOLN PLANNING BOARD



Governance

OVERVIEW

Like many Massachusetts towns, Lincoln has seen a perceived decline in civic engagement by residents as evidenced by declines in town meeting participation and the number of volunteers and candidates for election. Although this may be attributable to the absence of highly contentious issues or the severe time constraints of dual income families, it is nevertheless a concern of many long-term residents.

Key Findings

- ❖ Lincoln has a fairly traditional small-town government with an open town meeting, a three-member Board of Selectmen, and a town administrator.
- ❖ Lincoln has numerous elected boards and appointed town committees, and some boards with both elected and appointed positions. Overall, its town government is designed to provide many opportunities to participate.
- ❖ Lincoln's regional affiliations are unique due to the presence of Hanscom Air Force Base (HAFB) and Hanscom Field. Some of Lincoln's ties with neighboring towns relate directly to the presence of these military and aviation facilities.
- ❖ Like many towns in Massachusetts, Lincoln has seen a perceived decline in town meeting participation, although this concern has been expressed periodically. There have been relatively few contested town elections over several decades. Recently, however, it seems more difficult to recruit candidates to run for office or volunteer for appointment.

Key Challenges

- ❖ Increasing public participation on town boards and committees as well as attendance at town meeting will be significant challenges for Lincoln. Reversing what appears to be a trend toward declining participation will take sustained leadership from town officials, a commitment of volunteer and staff resources, and more effective collaboration with established local organizations and networks.
- ❖ Lincoln may need to seek more effective avenues for providing public information and communication within town government and between government and residents. Toward these ends, the town might consider enhancing its use of information technology although this could require a significant investment of public funds.



- ❖ There is consensus that communication among Lincoln’s town boards and committees needs improvement. Achieving this goal will require active efforts by both town staff and volunteers. At the outset this will place a significant burden on both staff and volunteers, but in the long term it should create a more efficient government with a parallel and probable reduction in the overall effort.

EXISTING CONDITIONS & TRENDS

A community’s approach to governance largely determines how well it can resolve conflicts, develop consensus, set policy, and manage its affairs. On one level, “governance” consists of tangible components: the institutions that a community creates and arranges to conduct the work of local government, such as legislation, taxation, regulation, enforcement, and delivery of public services. On another level, it is a set of intangibles: an expression of a community’s political culture, including the beliefs, values and principles that shape policy and guide local decision-making.

One of the traditional ways of characterizing governance involves rating a unit of government’s organization and authority on scales of *effectiveness* and *efficiency*. An *effective* government is typically one that citizens regard as responsive to people, and an *efficient* government is one that citizens regard as high-value relative to cost, with little if any waste of resources. Although a government can rank high on both counts – effective and efficient – an effective government is not necessarily efficient and an efficient government is not necessarily effective. Some communities want a *decentralized* government that works slowly and deliberatively by design, with many avenues for citizens to influence or participate directly in decisions large and small. Other communities want a *centralized* government that operates mainly as an administrative unit, with clear lines of authority, a high degree of accountability, and controlled access to the decision-making process. However, most communities seem to want something “in the middle,” as evidenced by the number of local government permutations that exist in Massachusetts today. Lincoln is a hybrid of decentralized and streamlined organizations, but the degree of streamlining that exists in Lincoln today is informal because for the most part it is not codified.

Organization of Town Government in Lincoln

Lincoln is one of 213 municipalities in Massachusetts without its own *charter*: a written description of a community’s form of government and distribution of powers, approved first by the town and thereafter, by the General Court.¹ Many state laws on municipal government date to the early 1800s, but some have been changed in order to give communities simple ways to streamline and consolidate separate functions under one board or department. However, the general law version of small-town government is decentralized by design, with legislative decisions made by an open town meeting. The degree of citizen participation it requires is evident in Lincoln. Although many Eastern Massachusetts communities have moved toward more centralization and consolidation since the early 1980s, Lincoln has preserved its custom of electing a large number of boards, commissions, and individual officers of the town. Lincoln voters currently elect a combined total of fifty-two local officials. In addition, Lincoln has numerous appointed committees and statutory office holders. Excluding appointed employees of the town there are more than 160 appointed members of standing boards and committees.²

1 Not all charters are developed or take effect in the same way because there are two types of charters in Massachusetts: home rule and special act charters. Though communities can use either method to develop any form of government they choose, the home rule charter process is more prescriptive.

2 See Appendix D, Elected and Appointed Boards, Commissions, and Committees.

Lincoln has many non-profit organizations that provide services or work directly with town government on matters of general public interest. The Rural Land Foundation (RLF) and the Lincoln Land Conservation Trust (LLCT) are good examples of non-profits that work in partnership with the town on land planning and open space preservation. They also rely on volunteers to carry out their work, though the RLF also has a paid executive director and paid assistant. Other examples of privately run groups that work hand-in-hand with the town include The Lincoln Foundation, Codman Community Farms, Lincoln's youth sports organizations, the Lincoln Historical Society, and the Lincoln School Foundation. Lincoln is an active community with many functions that depend on civic-minded people. Since its population is only 5,500, including roughly 4,100 adults, many residents volunteer for more than one task.³

The town has appointed representatives to several regional organizations, such as the Hanscom Field Advisory Commission, the Metropolitan Area Planning Council (MAPC) and its subregional arm, the Minuteman Advisory Group for Interlocal Coordination (MAGIC), the Route 128 Corridor Advisory Committee, and the Hanscom Area Towns Selectmen (HATS). However, Lincoln's government has few elements of *regionalism*, less because of qualities unique to Lincoln than the structure of Massachusetts government as a whole. In other parts of the country, regional governments handle many responsibilities that New England cities and towns administer on their own. The Massachusetts model of state and local government has always involved a "direct line" between Beacon Hill and municipalities, with counties – when they existed – having jurisdiction over a limited number of functions.

While Lincoln has many elected and appointed officials, it also has a departmental structure similar to that of communities with a centralized organization, such as Lexington. Many years ago, town meeting adopted the provisions of M.G.L. c. 41, s. 23A, which allows communities to establish the position of executive secretary. In 2000, Lincoln changed the position title to town administrator. Much like a town manager, the town administrator is generally responsible for the day-to-day operations of local government. Unlike a town manager, a town administrator has as much or as little direct authority as a board of selectmen chooses to delegate. Lincoln's town administrator has both day-to-day operational responsibilities and considerable influence in key decisions, but no formal (codified) authority over the town budget, personnel matters, or the awarding

Lincoln's Regional Affiliations (Partial Listing)

Town of Concord (Interlocal Agreement: Health Department Inspections, Sealer of Weights and Measures)

Hanscom Field Advisory Commission

Metropolitan Area Planning Council (MAPC)

Minuteman Advisory Group for Interlocal Coordination (MAGIC)

Hanscom Area Towns Selectmen (HATS)

Route 2 Corridor Advisory Committee

Route 128 Central Corridor Coalition

Metropolitan Council for Educational Opportunity, Inc. (METCO)

Lincoln-Sudbury Regional School District

Minuteman Regional School District

Concord Area Special Education (CASE)

Educational Collaborative for Greater Boston (EDCO)

Minuteman Library Network

Metropolitan Boston Emergency Medical Services Council (EMS Region IV)

Massachusetts Emergency Management Agency (MEMA) Region I

Northwest Suburban Health Alliance, Massachusetts Department of Public Health, Community Health Network Area (CHNA)

³ Current population estimate from Claritas, Inc., Site Reports 2008, Lincoln, Massachusetts.

of contracts. Like so many towns in Massachusetts, Lincoln’s form of government qualifies as something “in the middle.” It has the basic components of a modern bureaucracy, but not the attendant centralization.

CITIZEN PARTICIPATION

Lincoln’s government is primarily a *participatory-deliberative* institution – that is, a governance structure that is largely decentralized, with powers and duties shared by many officials and a legislative body open to all registered voters. A government with many committees and an open town meeting provides important avenues for public participation, which Lincoln residents value. As one resident said at a public meeting for this Comprehensive Plan, “Lincoln is a place where you can truly make a difference.”⁴ Still, it can be difficult to balance a desire for public participation with a desire for efficiency because a system that accommodates multiple voices in the decision-making process usually works through deliberation. This quality of the town has often been referred to as “the Lincoln way,” and people say they appreciate it. However, decisions made through extensive deliberation take more time and they are vulnerable to being postponed or reversed. A positive feature of a participatory-deliberative mode of governance is that residents have lots of opportunities to shape policy. A negative feature is that if the ground rules for participation are unclear, the experience of government service may leave some volunteers dissatisfied and discourage them from serving in the future.

Many towns are finding it difficult to maintain citizen interest in government, and Lincoln faces a similar challenge. Lincoln has numerous volunteer boards and committees and a politically active population, so it is not surprising to hear residents describe the town as a “model of civic engagement” with “many places to get involved for many interests.” However, some residents worry about declining attendance at town meeting, the aging make-up of the population that does attend town meeting, and a decrease in the number of contested elections. Responding to a survey conducted for this Comprehensive Plan, several local officials said town meeting is not working, yet others described town meeting as one of Lincoln’s major strengths.⁵ There is concern that newcomers may not recognize the value of citizen participation, but some think participation would improve if the town took creative steps to recruit more volunteers. They also think the perception of an “open-ended time commitment” may discourage people from accepting a committee appointment or running for office.⁶

Towns with participatory-deliberative organizations like Lincoln’s need both volunteers to serve on boards and committees and space for their volunteers to meet, conveniently located meeting rooms with access to records, and parking. Today, the public often expects that meetings will be televised, too, which means that some meeting rooms need cable access. In many communities, the limited number of public meeting rooms that Lincoln has to offer would not begin to accommodate the boards and committees that need them. Lincoln seems to have managed with the space it has, at least in the past, but this is partially because Lincoln boards and committees meet both during the day and at night. Still, the meeting spaces that do exist are conspicuously limited and not always accessible to people with disabilities. Moreover, not everyone has the schedule flexibility to participate in daytime meetings. Arrangements that work well for individual committee members may not be conducive to broader public participation.

4 Town of Lincoln, “Large-Group Discussion Notes,” 9 February 2008, and “June 19th [2007] Public Forum Group Exercise Results,” <http://www.lincolntown.org/depts/planning.htm>, select “CLRP web page.”

5 Comprehensive Plan Steering Committee, Cultural and Historic Resources and Governance Subcommittee, “Board Survey; Open-Ended Responses,” [undated], to Community Opportunities Group, Inc., 21 May 2008.

6 Town of Lincoln, “February 9 Workshop Notes: Cultural and Historic Resources and Governance Subcommittee,” <http://www.lincolntown.org/depts/planning.htm>, select “CLRP web page.”

Participatory-deliberative governments also need a process for direct communication between boards and committees. Lincoln does not seem to have a clear or predictable communications structure in place for its volunteers. This concern has surfaced repeatedly in meetings and master plan surveys. Current and former town officials report the need for “better communication among boards,” “more joint meetings to resolve problems” and more coordination between the town’s development review boards in particular.⁷ Department heads supporting the work of volunteers help by communicating with each other, but they do not speak *for* the boards and committees with authority to make a decision. Some towns rely on quarterly meetings or as-needed “all boards” meetings to facilitate communication among volunteers. Lincoln once had periodic board meetings called by the town moderator, but this practice has ceased and some say it should be restored. Like a growing number of communities statewide, Lincoln posts the meeting minutes of several boards and committees on its website. However, minutes reflect actions that have already occurred, and they may not fully convey the essence of a board’s deliberations. Meeting minutes do not substitute for a conversation, and sometimes what decision-makers need most is a chance to consult with their colleagues. Lincoln also has an interesting mechanism to encourage community conversations – the State of the Town Meeting – and many people value it. Others say that while the State of the Town Meeting helps to bring residents together for public information and discussion, it does not solve the problem of inter-board communication.

Finally, communities that expect to attract and retain devoted volunteers need a culture of cooperation and a process for working out disputes. In Lincoln, there is some disagreement about the degree of cooperation inside town government or the effectiveness of existing mechanisms for achieving consensus. Descriptions of Lincoln’s strengths as its “town culture,” “efforts to reach consensus,” and a place “that looks beyond itself” stand in contrast to perceptions of “difficulty in engaging in mature public discussion/debate” and “a spirit of selectivity.”⁸ Many long-time residents praise Lincoln’s approach to weighing, debating, and resolving major public policy questions, and they say local government’s historic efforts to reach out to the community have helped to make Lincoln all that it is today. Their view of Lincoln’s dedication to consensus conflicts with concerns expressed by some more recent arrivals who think insiders resist newcomers and new ideas.

ADMINISTRATION

Lincoln has nineteen town departments with a combined total of approximately 101 full-time equivalent personnel.⁹ A strong suit of Lincoln’s local government is the cooperation and sense of unity that exist among department heads and staff. Lincoln is impressive for the services its local government provides. Through its own municipal and school employees, Lincoln delivers services that many other towns offer only on a limited basis or do not offer at all. The breadth of programs offered by the Recreation Department and Conservation Department, Lincoln’s commitment to community preservation, its outstanding public library, and the climate of public service that characterizes Town Offices all point to a community that holds high expectations of its local government. Town departments have responded in kind, but the cost of government has changed significantly since the late 1990s and revenue growth has not kept pace without frequent overrides of Proposition 2 ½. This is due to a combination of factors: fixed costs beyond Lincoln’s control, choices town meeting has made to keep Lincoln the kind of place that residents say they want, and an almost exclusively residential tax base.¹⁰

7 Comprehensive Long-Range Plan Committee, “Survey of Town Board and Committee Members.”

8 Ibid, “Large-Group Discussion Notes” and “February 9 Workshop Notes.”

9 Colleen Wilkins, Lincoln Finance Director, to Community Opportunities Group, Inc., 18 April 2008.

10 For additional information about Lincoln’s fiscal condition and fiscal policies, see Chapter 10, Community Services & Facilities, and Chapter 12, Lincoln’s Town Finances.

Local Government Traditions

HOME RULE

In Massachusetts, “local government” includes incorporated cities and towns. Since 1966, the Commonwealth has operated as a “home rule” state, which means that municipalities have a constitutional “right” of self-government and authority to design their own form of government – to a point. Even before 1966, the General Court approved local government organizational changes petitioned by cities and towns and over time, Massachusetts has assembled an interesting collection of local governments. They range from the highly decentralized, all-volunteer governments found in very small towns west of the Connecticut River to the City of Everett’s unusual bicameral legislature – a Board of Alderman and Common Council – and mayor.

“Home rule” does not mean that municipalities have absolute control over their affairs. In municipal law, “home rule” is thought of as the opposite of “Dillon’s Rule,” a principle articulated by a nineteenth century judge from Iowa, who argued that local governments possess only those powers explicitly granted to them by the state.¹¹ An important difference between so-called “Dillon’s Rule” and home rule states is that municipal powers are narrowly construed in the former and broadly construed in the latter. That is, local governments under home rule in its purest form possess all the powers not explicitly claimed by the state. A second difference involves the ease with which states can preempt locally adopted ordinances or bylaws. In Massachusetts and other states with constitutional provisions that guarantee the right of home rule to all municipalities, home rule is not without limitations.¹² Local governments in Massachusetts are prohibited from establishing charters and adopting bylaws or ordinances that are inconsistent with state law or supersede the General Court’s authority over six matters: regulating elections, levying taxes, borrowing money, disposing of park land, enacting laws governing civil relationships, setting punishments for felonies or imposing prison sentences for a violation of law.¹³

What constitutes a town?

Neither state law nor the courts provide much guidance about the legal differences between a city and town, except that eligibility to establish a city government requires a total population of at least 12,000. However, the key distinction lies with type of legislative body. Under a town form of government, each town must hold an annual town meeting and may hold special town meetings if called by the board of selectmen (or petitioned by voters).

Towns also have a plural executive – a board of selectmen – and the selectmen control the town meeting warrant. Towns usually have more elected boards and individual office holders than cities, yet the only offices towns are required to fill by ballot vote are the selectmen and school committee (and members of a representative town meeting, where applicable). Although cities have independent authority to adopt local ordinances, town bylaws require approval by the Attorney General.

11 John F. Dillon, *Treatise on the Law of Municipal Corporations*, (1872), 101-102, citing *Merriam v. Moody’s Executors*, 25 Iowa 163, 170 (1868).

12 In practice, the differences between “Dillon’s Rule” and “home rule” states are not always clear. The Brookings Institution categorizes 31 states as “Dillon’s Rule” states and another eight as “partially” Dillon’s Rule states, i.e., with home rule powers granted to some classes of municipalities (in most cases, cities). The ten states with constitutional guarantees of home rule include Alaska, Iowa, Massachusetts, Montana, New Jersey, New Mexico, Ohio, Oregon, South Carolina and Utah. Many of the Dillon’s Rule states do have some form of home rule, but not the constitutional “self-executing” home rule that applies to all municipalities in states such as Iowa and Massachusetts.

13 Constitution of the Commonwealth of Massachusetts, Article LXXXIX (“Home Rule Amendment”), Section 7.

In Massachusetts, home rule is mainly the right to adopt a plan of government. It does not include all possible forms of local autonomy, notably *fiscal autonomy*. Accordingly, the authors of a report published by the Rappaport Institute argue: "...there is no home rule in Massachusetts in the sense of local independence and autonomy. The state has established a complex mix of grants of and limitations on local power. This mix of powers and disabilities creates the constrained environment within which municipal officials operate..."¹⁴ As a result, home rule consists of blurred rights with respect to the health, safety and welfare interests of a community's population. Nowhere is this more obvious than municipal authority over land use regulation and revenue. Despite home rule, Massachusetts places more limits on local authority to raise revenue than most states. For example, there is considerable debate in Massachusetts about the legality of development impact fees. While impact fees are common in most states, Massachusetts towns have been discouraged from attempting to implement them due to a series of court decisions beginning with *Emerson College v. City of Boston* (1984).

MECHANISMS FOR SELF-GOVERNANCE

The "default" or standard powers and duties of municipal officials appear in the Commonwealth's general laws, and most communities in Massachusetts still operate under them to some degree. Cities and towns seeking to change their form of government have access to three options:

- ❖ Petition the legislature for a "special act" charter, as Lexington, Concord, Sudbury, and Waltham have done;
- ❖ Adopt the provisions of "enabling" or local option statutes – a form of *legislative home rule* -- found variously in M.G.L. c.40N, c.41 and c. 43C, as Lincoln and Wayland have done; or
- ❖ Establish a charter commission and adopt a home rule charter under the Home Rule Amendment (Article 89), ratified by voters in 1966, and M.G.L. c.43B, the Home Rule Procedures Act, enacted by the legislature in 1967. Bedford has a home rule charter.

NEEDS, ISSUES & CHALLENGES

Town Meeting Attendance

For many people in Lincoln and beyond, open town meeting embodies popularly held ideas about democracy. Residents clearly value town meeting and want to see it preserved, but many of Lincoln's long-time residents as well as leadership are concerned about the perception that town meeting attendance is declining as evidenced by the limited presence of newcomers and younger attendees. This concern may be recurring as it was equally on the minds of those who participated in the Lincoln Logs the Future forum in 1991. It may be indicative of how difficult it is for many dual-income families to engage in civic participation or maintain an interest in local government, a fact that may have contributed to the dissolution of the Lincoln League of Women Voters in 1995?. It may also be indicative of broader changes in society in which a younger generation may not relate to government as an entity on which they can have an effect. In truth, these are speculations, but ones worth watching as Lincoln works to preserve this classic New England form of self-government.

Although there may be a general trend that fewer people are voting or attending town meeting, the numbers do not necessarily support the notion that there are fewer contested elections in Lincoln. These concerns may be heard in other Massachusetts towns with an open town meeting, but contested elections in Lincoln have occurred

14 Barron, et al., *Dispelling the Myth of Home Rule*, (Rappaport Institute, 2004), 77.

periodically over the last thirty years, usually when there are differing views on pressing issues. Nevertheless, Lincoln may need to think about some innovative ways to encourage both newcomers *and* longer-term-but-inactive residents to participate in town meeting and to take advantage of the opportunity to engage in the full range of civic responsibilities offered by living in a small town.

With respect to town meeting, the town may want to consider some of the factors that could explain varying rates of attendance.

- ❖ Attending town meeting takes time. According to the Comprehensive Plan survey, sixty-four percent of the respondents who did not attend Lincoln's annual town meeting in 2007 cited time conflicts or time constraints as their only reason for non-attendance, with some saying that town meeting "takes too long."¹⁵
- ❖ Lincoln holds its town meeting on a Saturday in March. Although this arrangement may have worked well in the past, perhaps it should be revisited. Ironically, Lincoln used to conduct its annual town meeting at night, but following the "By '80 Conference on Education and Town Affairs," the town responded to recommendations from residents and instituted a Saturday meeting.
- ❖ Lincoln spends considerable time preparing for town meeting and tries to inform the public ahead of time about major decisions that need to be made. While its website could stand some improvements, Lincoln does a commendable job of making important information available on the internet. Still, mailing the annual town meeting warrant to all households and posting information on the town's website may not be enough to engage the public. Cable television announcements, town meeting broadcasts, or pre-town meeting neighborhood parties provide additional ways to make people aware of town meeting and encourage them to participate. However, these initiatives take time and also require volunteers.
- ❖ On balance, residents may be content with how the town is run. In most communities, town meeting attendance seems to increase during periods of unhappiness about taxes or dissatisfaction with town government, or when voters have to act on a controversial matter such as an override. Alternatively, residents may have concerns about how the town is run and how their tax dollars are spent, but if they believe town meeting is ineffective, they will not attend.
- ❖ In the absence of controversy, people are more likely to attend town meeting if they believe their interests are at stake and they can influence the outcome of a decision. Lincoln's population has changed over time, so perhaps the town has fewer residents who believe they have much power to affect local decisions.
- ❖ People who hold public office, whether elected or appointed, may be more inclined to think they have a stake in how the town is run than residents who have never served on a town board or committee.
- ❖ New residents unfamiliar with open town meeting may not realize that they have a right to participate and vote on such basic issues as the town's operating budget. They also may not understand that most of the town's budget is financed with property tax revenue.
- ❖ As Lincoln's population has changed, the demographic make-up of the town has changed as well. Though Lincoln has always been an affluent town, its mix of farms, estates, and modest homes suggests that historically, Lincoln had a somewhat more diverse population. Some local officials wonder if there is generally less interest in participating in civic affairs among newer residents.

15 Comprehensive Long-Range Plan Committee, *Report on Lincoln Citizens' Needs and Interests* (October 2008), 1-2. See Appendix E for survey questionnaire.

Public Participation

Communities throughout the state report greater difficulty recruiting residents to serve on town boards and committees, and uncontested races have become increasingly common. Lincoln wants to preserve its tradition of citizen involvement in town government and encourage new residents to participate. One speaker at a public meeting said that Lincoln's attraction to home buyers is "...what they see and not what they feel. There is less emphasis on shared community values than before." However, others say the town is fortunate to have as many volunteers as it has managed to retain, and that Lincoln traditionally welcomes a "diversity of ideas."

The experience of the Comprehensive Plan process suggests that Lincoln does have diverse ideas – and even if town government disagrees with some of those ideas, local officials listen. Lincoln could take steps to make public service inviting to more residents, but some barriers to participation will remain difficult to overcome.

- ❖ The Comprehensive Plan survey suggests that residents are more likely to be asked to serve on a town board or committee if they are connected in some way to an established network: parents of children in the public schools, people who have lived in Lincoln for more than a decade, or frequent users of the town's recreation facilities. As the authors of the survey report said, "...those who seek to fill empty volunteer positions need to call the people they don't know rather than the people they know."¹⁶
- ❖ More people commute longer distances to work today than ever before. Journey-to-work statistics for Lincoln confirm that local residents spent more time in the car traveling to more distant locations for employment in 2000 than in 1990.¹⁷ Similar conditions occurred throughout the state. Many employed people have less time to devote to public service today, and the effects can be seen not only in most Eastern Massachusetts suburbs but also in small, rural communities in Western Massachusetts: from a decrease in the number of residents running for office to a sharp decline in call firefighters. Still, while residents with a long commute may find it impossible to join a board or committee that meets frequently, they may be willing to serve on a board that meets once a month.
- ❖ Even for those with time to serve, they may place a higher priority on other interests than joining a town board or attending town meeting.
- ❖ Often, residents who would never run for office will agree to serve on an appointed committee. Although some exceptions exist, elected boards tend to be more visible, which means they also tend to attract more public scrutiny. When people have limited time to commit to volunteer activities, they have to decide how much criticism they are willing to endure.
- ❖ A government structure that relies more heavily on appointed volunteers would create some new needs and magnify needs that already exist in Lincoln. Recruiting volunteers takes time, and usually it requires both public outreach and personal contact. A small corps of dynamic volunteers taking responsibility for recruiting and mentoring new volunteers would probably work well in Lincoln. Historically, this was one of the major contributions of the League of Women Voters (LWV). For several decades, the LWV served to recruit, educate, and train residents interested in civic affairs. Unfortunately, a severe decline in active membership caused the LLWV to cease operations around 2004. Filling this vacuum may require significant leadership from the town's primary appointing authorities: the Board of Selectmen and Town Moderator.

¹⁶ Ibid, 3.

¹⁷ U.S. Department of Commerce, Bureau of the Census, 1990 Census of Population and Housing, Summary File 3, Tables P048, P049, and P050; and Census 2000, Summary File 3, Tables P29, P30, and P31, American FactFinder, <http://www.census.gov>.

In addition, seeking participants rarely works without a consistent process in place for managing applications or inquiries from prospective volunteers: prompt responses from the town, periodic checks to verify continued interest, and a database that can be used to store basic “talent bank” information about residents so that skills can be matched easily with openings on town committees.

- ❖ All town boards, elected or appointed, have to comply with the Open Meeting Law, which requires them to deliberate and make all of their decisions in public. While the Open Meeting Law has important functions, it makes it more difficult for boards and committees to have candid discussions and test new, potentially unpopular ideas. Town officials are more likely to think twice about what they say and how they say it. The press and the public can be so focused on assuring “transparency” in government that people sometimes forget how difficult public decision-making can be.
- ❖ Mentoring of new volunteers is important for helping citizens acclimate to public service and develop an understanding of the culture, strengths and limitations of local government.
- ❖ Lincoln may need to consider consolidating or eliminating some of its existing committees, as the town did recently when it assigned the duties of the former Celebrations Committee to the Recreation Committee.
- ❖ Veteran local officials speak reverently of Lincoln’s past achievements. They worry about what the future holds if Lincoln fails to attract a new generation citizens dedicated to a volunteer form of town government. One respondent to a survey of present and past town officials described a key weakness of the town as a “gradual deterioration in Lincoln’s pervasive, unifying ethos for conservation, open space, and rural character.” Whether long-time residents can effectively pass the baton of civic involvement to newcomers remains to be seen. Newer residents may simply have different ideas about what it means to live in Lincoln. As stated in *Lincoln Logs the Future* in words taken from an address given by Dr. Edward Waldo Emerson at the banquet held in celebration of Lincoln’s 150th anniversary in 1904:

Naturally, when new names and new ways come into old towns, there is a temporary dislocation felt by both parties. The old residents who value and continue the ways and standards of their ancestors may be anxious and disturbed. The newcomers, brought up under different conditions, may not be quite prepared to live on old-time country principles.

Efficiency

Over the past fifteen to twenty years, many suburbs and small towns in Eastern Massachusetts have looked to departmental mergers as a way to reduce costs and make more efficient use of available resources. Although some report later that they did not save much, virtually all say they achieved operating efficiencies and thereby accomplished more with available funds. Increasing efficiency can reduce some of the stress on local government and improve the community’s capacity to plan. In Lincoln, improving communication between town boards could help town government function more efficiently. Structural changes such as inter-board liaisons, a predictable schedule of joint meetings, or breakfast meetings for board chairs seem realistic for Lincoln.

Regionalism

Despite the fact that Lincoln participates in numerous regional organizations, some residents wonder if the town should do more to cultivate regional relationships. At a Comprehensive Plan meeting in February 2008, a resident noted that, “Lincoln tends to think of itself as somewhat isolated, but the town is part of a region and needs to reach out/integrate with the larger environment.” Lincoln is not alone in this view, as evidenced

by the actions of some neighboring communities who are represented at these regional meetings. Some town board members also think Lincoln should “put more emphasis on regional approaches to collaboration.” For small towns such as Lincoln, the important questions are whether residents have an appetite for surrendering some control in order to collaborate with other towns, and whether the potential advantages of regionalizing outweigh the risk that the interests of larger communities could supersede the interests of smaller communities.

Regional services exist in Massachusetts, but there is little in the way of *regional government*. Outside of New England, counties function as governing units with executive and legislative powers and financial responsibility for nearly all regional services, including county-level regional schools and regional planning. In Massachusetts, the limited presence and authority of regional institutions long pre-dates the Home Rule Amendment and reflects a historical deference to cities and towns. Massachusetts once had fourteen counties, each with administrative responsibility for county courts, jails, a registry of deeds, and maintenance of county roads. In the late 1990s, the Commonwealth began to abolish county governments and by the end of 1999, eight of its original fourteen counties had been dismantled – including Middlesex County. These areas still have a geographic identity for census purposes, but they have neither a political identity nor any of the governing powers of a county. In some parts of the state, towns have approved charters for regional councils of government to replace their former county governments.¹⁸

Most of the Commonwealth’s thirteen regional planning agencies also have limited authority. Each regional planning agency serves a central city and metropolitan area. Lincoln belongs to the Metropolitan Area Planning Council (MAPC), which covers 101 Boston-area cities and towns. More than twenty years ago, MAPC established sub-regional organizations in order to provide more locally oriented services and energize its constituents. The sub-region that includes Lincoln, MAGIC, is the administrative unit for the Route 2 Corridor Advisory Committee and other services in its thirteen-town catchment area. Although MAPC is influential in statewide planning issues, it has no power to require communities to adopt plans consistent with a regional plan. The state provides very little financial support for planning, so regional planning agencies depend on other funding sources, notably federal transportation funding. MAPC’s recent regional plan, MetroFuture, represents a noble effort to inspire communities in the Greater Boston area, but it has no legal standing under current state law.

Massachusetts has other types of regional organizations with public or quasi-public powers: regional school districts, economic development agencies and corporations, housing authorities, transit authorities, emergency planning and response districts, regional library consortia, and health care service delivery networks. The boundaries of these regional service areas differ by service type (Figure 11.1). On one hand, defining regional service delivery areas by factors other than county lines means they could be more responsive to conditions “on the ground.” On the other hand, it all but assures that no single unit could serve as the administering agency for all or even most regional programs and services.

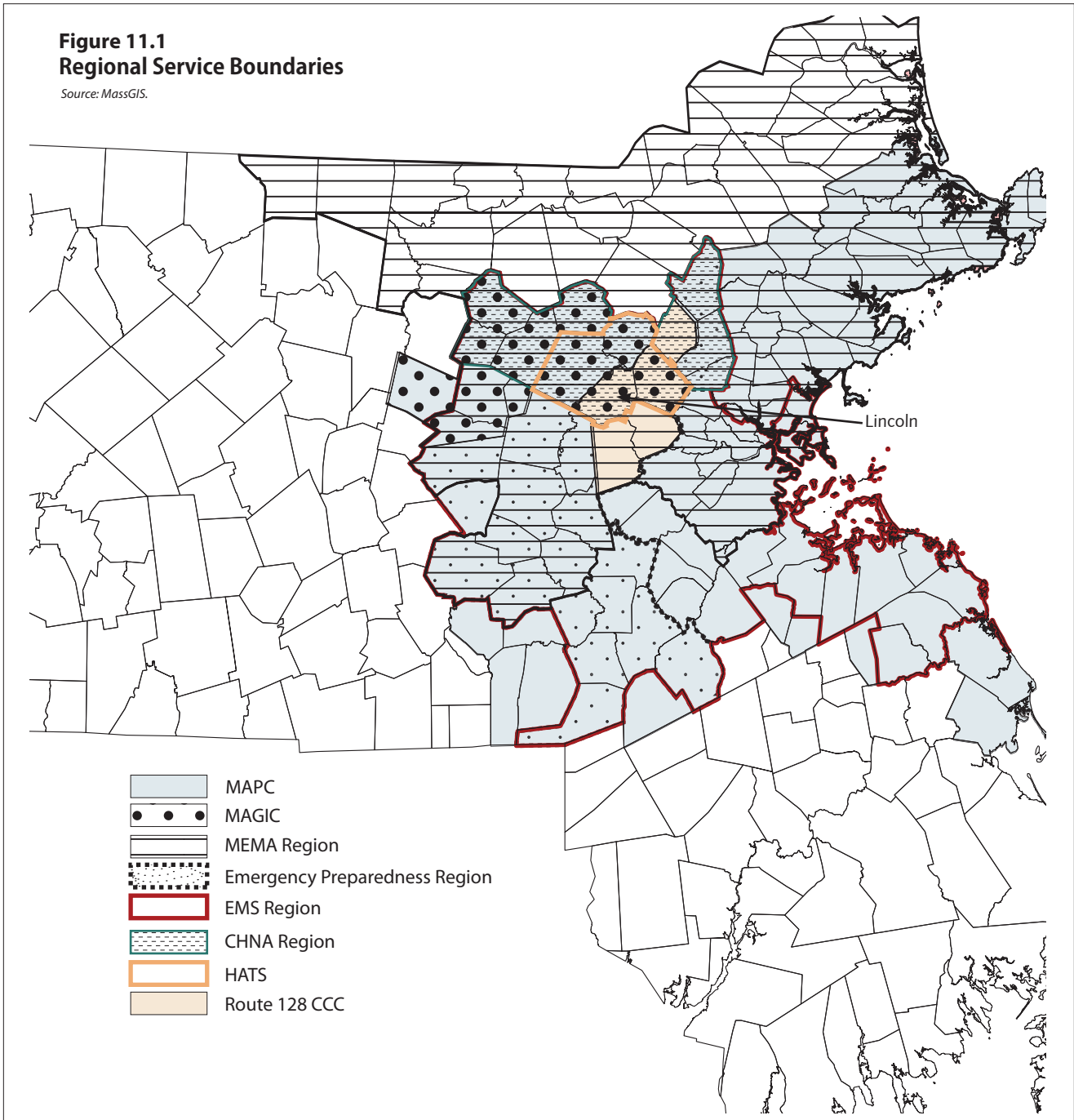
There are a few outstanding examples of inter-local service delivery initiated by individual towns, such as the Hamilton-Wenham Public Library and the Joint Hamilton-Wenham Recreation Department.¹⁹ Lincoln also provides some services through inter-local agreements, contracts with larger regional organizations and private

18 Massachusetts counties have no constitutionally guaranteed right of home rule. The legislature has created an optional process for establishing county charters and adopting alternative forms of county government in M.G.L. c.34A.

19 The Department of Revenue, Division of Local Services, recently completed a feasibility study of merging Hamilton and Wenham into a single community. See *Enhanced Regionalization and Merger Analysis: Towns of Hamilton and Wenham*, June 2009.

Figure 11.1
Regional Service Boundaries

Source: MassGIS.



service providers, and informal arrangements with neighboring towns. Communities always have informal, cooperative arrangements with neighboring towns, too, such as mutual aid (public safety) and occasional equipment sharing. Most of these programs and services reflect decisions made by municipalities to seek resources beyond their own corporate boundaries.

Communication

One of the most oft-cited concerns in Lincoln is that town government needs better ways to communicate, both internally and with the public. Lincoln’s communication challenges relate partially to the size of the town and partially to the form of government that residents want to preserve. It is a small town with a large government: large not because Lincoln has a complex hierarchy of well-staffed departments, but rather because Lincoln has

many boards and committees. With so many people involved in town government – full-time and part-time staff and volunteers – it is not surprising that Lincoln has problems managing communication.

- ❖ **Municipal Website.** Lincoln’s official website contains valuable information – for those with the time and motivation to search for it. Town government’s entire communications technology system is managed by a one-person department. The issue is not lack of talent. Rather, it is lack of resources. Improving the website’s design would go far to make it more usable to a wider range of people, but designing a website is one task and maintaining it is another. Making substantive changes to the town’s website will require voters to make a significant investment in up-front services and may require an ongoing investment in website maintenance. Moreover, Lincoln has to recognize that if an improved website succeeds as a vehicle for providing public information, the public will expect information to be readily available and this, in turn, will place some additional demands on town staff.

Ideally, all important public documents should be available on the website in an easy-to-find, indexed repository, and some documents are already available. If departmental web pages contain links to the same repository, users will have multiple ways to navigate to public records as they conduct their research. Permitting could be tracked online, too. Many communities have installed permit tracking software that allows residents to follow a project as it moves through the review and decision process. The same system helps developers and homebuilders as they await steps such as departmental sign-offs on building permit applications. Communities that have invested in making more information (and more types of information) available on the internet report that ultimately, the service can save some staff time even as it places additional responsibilities on town departments. For example, staff can direct many inquiries to the town’s website and spend less time on tasks such as photocopying documents in response to public records requests.

The public benefits of an improved website seem fairly obvious, but there are even more important advantages for volunteers and staff inside town government. Some Massachusetts communities have structured their websites to support public use and separate internal use, i.e., non-public space for posting draft minutes that board members can download prior to a public meeting, or posting draft reports for committee members to mark up and re-post for the chair or a staff member to review.

- ❖ **Information Storage and Management.** As is true in most small towns, Lincoln’s information storage and management systems are fairly dated. Virtually everyone in town hall agrees that more needs to be done to advance Lincoln’s information management capabilities. Basic systems exist for sharing financial data between the town accountant and treasurer-collector. The town has appointed a new Town Archive Advisory Committee and hired an archivist to evaluate and catalog older documents and assist with setting up a usable archive for permanent public records. A variety of department-level databases have been created to manage other information, such as a tracking system for Zoning Board of Appeals cases and homeowners registered under the “Do Not Solicit” Bylaw. However, fundamental questions about technology needs, data management and shared data access needs will have to be explored with staff and town boards. Lincoln may want to consider using a qualified consultant to expedite the process of evaluating all of these needs and bring clarity to the town’s options.
- ❖ **Town Boards and Committees.** There seems to be widespread agreement in Lincoln that boards and committees need more effective ways to communicate. Lincoln may find it difficult to address this problem. First, the limited inter-board communication that exists today must reflect, at least in part, the time constraints that Lincoln’s volunteers contend with as they juggle public service with other commitments. Second, town boards meet on different weeknights or at different times of day, so they do not always have

access to each other. Third, volunteers may need more help to perform their duties, but unless the town is prepared to hire additional employees and provide suitable work space for them, there will continue to be limitations on the amount of professional and administrative support that Lincoln can provide. Fourth, any system of improved communication has to account for compliance with the Open Meeting Law. For example, it may be possible for committee chairs to meet from time to time for the purpose of exchanging information, but strategies like this need to be reviewed with Town Counsel.

It does seem possible for Lincoln to establish more predictable communication among the Planning Board, Conservation Commission, Zoning Board of Appeals, and Board of Health, two of which currently meet on the same weeknight (though not every week). However, Lincoln seems to need a more comprehensive approach to inter-board communication, one that would benefit all boards and committees as well as staff. Some possibilities used in other towns include:

- ◆ Communications technology improvements and training, and web support for local officials.
- ◆ Systematic quarterly meetings for all town officials, organized by the selectmen’s office, with a prepared agenda to assure that important topics receive adequate attention;
- ◆ Periodic “all boards” meetings, i.e., not on a fixed schedule, sometimes inspired by specific issues, other times by the need for informal, less structured discussion, organized by the selectmen’s office or on a rotating basis by the town’s major policy boards;
- ◆ A single document that includes a list of all town boards and committees, their responsibilities, number of members, customary meeting times, and the chair’s name and contact information;
- ◆ An annual process, possibly organized by the Moderator, for bringing boards together to establish mutual goals;
- ◆ An “executive committee” of chairs or designees of each town board, mainly for purposes of sharing information; and
- ◆ Redefining the roles and responsibilities of volunteers and delegating more authority to staff, to the extent allowed by law.

GOALS & RECOMMENDATIONS

Goal G-1. Increase citizen participation in town government.

- G-1.1. Work with community organizations and networks to encourage public participation and provide town government information to residents.
- G-1.2. Provide regular e-news about town government activities, issues, and decisions.
- G-1.3. Establish a citizen skills bank (database) as a resource to identify qualified volunteers and candidates, and encourage town boards and committees to use the skills bank to identify and cultivate new members.

- G-1.4. Create a volunteer coordinating committee to assist with outreach and recruitment of potential volunteers.

DISCUSSION

Town government is not the only entity with a role to play in encouraging public participation. Other groups can help to build esprit between newcomers and long-time residents, and they may be better suited than the town to carry out some tasks. Further, many of the same community networks that generate local government volunteers also have volunteer needs of their own. For example, it would be equally effective if private organizations took responsibility for organizing welcoming events and special activities for newcomers while the town should focus on providing information about Lincoln's local government: what it does, how government is organized, opportunities for people to serve, contact information for programs and services that people typically want to know about, and a short primer on open town meeting and Lincoln's State of the Town Meeting – services once provided by the (former) Lincoln League of Women Voters. Lincoln has a small town government with limited resources that can be allocated to volunteer recruitment. It should not try to take on more than it can manage well.

Lincoln's website has basic "e-news" capability, i.e., a mechanism that allows residents and business owners to register for Connect-CTY, a service that supports mass communication by phone or email to subscribers. In many towns, the same type of service is available for residents to subscribe for news items from a menu of options, such as meeting agendas of particular boards or information from specific town departments. The challenge is that volunteers or staff have to know how to access and use the system to transmit news, and since subscribers expect to receive timely information, the people responsible for generating it inherit a maintenance responsibility. Lincoln has to decide how much internal capacity it has to provide this service and design an e-news program that is realistic for the town to implement.

For most communities with skills databases or "talent banks" of prospective local government volunteers, the source of information is a form completed by residents seeking appointment to a town board. Lincoln's volunteer application form is available on the website as a downloadable document. As designed, the form assumes that a volunteer candidate has a fair amount of prior knowledge about the work of boards or committees on which they would like to serve, and it places the burden for becoming more informed on the prospective volunteer. The town may want to consider simplifying the volunteer application process and instituting a system of follow-up with applicants by veteran local government mentors.

A local resident with expertise in volunteer development could be recruited to assist with designing a plan for outreach, skills assessment and skills matching, and a process for periodically evaluating the town's recruitment strategies. Since outreach and recruitment are time-consuming tasks, the town would most likely need to create a special committee for this purpose. Committee appointees should include some members connected to the "networks" that tend to generate most local government volunteers, as well as underrepresented networks. The Comprehensive Plan survey suggests that residents are more likely to attend town meeting if they serve on a town board or committee, and that many survey respondents who had not attended a recent town meeting had never been asked to serve. An outreach system led by experienced town officials would make encouragement to run for office more credible to those asked and also provide them with a source of mentoring. The town could have a simple set of "fact sheets" on each board with elected positions and use them to distribute information to prospective candidates, supplemented by one-to-one contact with the outreach group.

Goal G-2. Make public service and town meeting participation engaging and attractive to residents and office-holders.

- G-2.1. Encourage regular, informal breakfast meetings for town board chairs to exchange ideas and information.
- G-2.2. Provide training for board and committee chairs and members, and additional staff support as needed.
- G-2.3. Hold interdepartmental meetings of town boards and staff to coordinate the town’s response to issues that involve multiple boards or committees.
- G-2.4. Prepare and distribute a booklet with clear, simple, user-friendly descriptions of town meeting warrant articles and even-handed descriptions of the arguments pro and con.

DISCUSSION

Some boards receive direct staff support because of the scope of their responsibilities, such as the Board of Selectmen, Planning Board, Zoning Board of Appeals, and Conservation Commission. However, most town boards receive support on an as-needed or upon-request basis from personnel in the selectmen’s office or other town departments. Since Lincoln’s departments are not generously staffed and many of them seem hard-pressed to manage their existing workloads, the town should set priorities and focus on strengthening the confidence and proficiency of its volunteers. Lincoln could then assess the training needs of town boards and committees, develop a training plan, and budget funds for board training in each year’s operating budget. It is not necessary to offer training to all boards every year, but the training plan should account for the terms in office of various town boards and attempt to cover all boards over a three-year cycle. Many training opportunities are available through State agencies and departments as well as various organizations devoted to professional practices and municipal government. These programs are often low-cost and scheduled on weekends and evenings for the convenience of volunteers. A well-designed survey can produce enough information to develop a training plan.

Lincoln’s town department heads meet regularly under the leadership of the Town Administrator, and some staff hold interdepartmental meetings specifically to coordinate shared or overlapping responsibilities. For example, the department heads who support boards and commissions with development review and permitting responsibilities meet from time to time to review proposed projects. Since the town boards have the legal authority to issue or deny permits, however, Lincoln may want to consider an interdepartmental communication structure that brings together boards and staff for joint review of significant development proposals, joint meetings with applicants, and joint public hearings. For more effective, community-wide coordination, an annual goal-setting process led by the Board of Selectmen would help to build consistency in the work of town boards, committees, and staff.

Many communities in Massachusetts produce town meeting warrant supplements that contain more information for voters than the text of the warrant articles. These warrant supplements typically include the Finance Committee’s report to town meeting and short descriptions of each article, but some also include a summary of supporting and opposing arguments as well. Town staff is usually responsible for preparing a warrant supplement under the direction of the town administrator or town manager, and each department, board, or committee sponsoring a warrant article is responsible for providing the text for a short description. Due to widespread use of the internet today, the practice of printing many copies of a warrant supplement has largely disappeared. Instead, supplements are posted on town websites and circulated by email to residents who subscribe to a town

government distribution list. It is important to note that organizing the production of town meeting booklets is very time-consuming and it requires a single point person to coordinate the process.

Goal G-3. Enhance the frequency and effectiveness of town government and citizen communications.

G-3.1. Improve the town's website to facilitate access to information about the town and town government activities.

G-3.2. Enhance two-way electronic communications between residents and the town offices.

G-3.3. Consider the creation of blogs to facilitate constructive dialogue about town-related issues.

DISCUSSION

Lincoln's official website is difficult to navigate. Although it contains a considerable amount of information, the design of the website overall and the departmental web pages in particular do not make using the website inviting for many people. Most towns with well-organized, visually interesting websites have hired website design consultants, even if the towns have a full-time information technology director. In addition, the design of a new municipal website is often one aspect of a comprehensive overhaul and update of a community's information management systems. Lincoln's website could be improved significantly without such a sizeable commitment of public funds, however.

- ❖ Establish an advisory committee to evaluate the website, its use by town departments, boards and committees, the internal systems that it supports or with which it is integrated, and how it is accessed and maintained internally. The committee should also evaluate a sample of municipal websites in other communities and consult with the personnel or volunteers who maintain those websites. Lincoln's information technology director needs to be part of this process, whether as an advisor to the committee or an ex officio member.
- ❖ Consider retaining a consultant to assist the advisory committee by conducting a website needs assessment in Lincoln. Ideally, the consultant should have prior experience with e-gov models of local government service delivery. At a minimum, this process should include consultations with staff at town hall, the school department, the library, the public safety building, and at other town facilities where employees regularly work. The consultant should also have experience and the ability to design, administer, and interpret a community survey.
- ❖ Determine the information needs of users, both internal and external, how those needs are or are not met today, and the system requirements for meeting those needs. The following are some examples of the kinds of information that other communities have made available, through open access to the public and restricted access for internal users (e.g., town staff with login access):
 - ◆ Permit tracking systems that enable applicants, town boards and committees, and the public to verify the status of development permit applications for a given parcel of land. These systems require consistent data input by town departments, using an integrated database, and a public interface that is easy to use and search. Sometimes these systems are integrated with a community's online assessor's maps, such that when users select a parcel, they can view not only data from the property record card but also the property's recent permit history.
 - ◆ Repositories of reports, plans, and studies, which can be retrieved both from an online library (linked to the home page), where reports are listed by topic and subdivided by year, and from a department's

web page. These systems require an assessment of existing electronic document collection and recording procedures at the departmental level and mechanisms to protect the public records once published on the internet.

- ◆ Town manager blogs.
- ◆ “Report” links for the public to report problems to town departments. Some communities have a simple “report a problem” box while others have more detailed “report” systems, such as “report a pot-hole” or “report lost/found animal” boxes. These different approaches reflect how the reporting system database is managed at town hall. A “report a problem” box means that a single town employee reviews all citizen complaints and refers them to the appropriate department, but problem-specific “report” boxes are managed directly by the departments responsible for various services. The difference is important because any website feature for residents to communicate with government must be designed with government’s response capabilities in mind.
- ◆ Suggestion boxes, which residents can use to make suggestions to town boards and staff.
- ◆ Automated email services that allow residents to sign up to receive meeting notices, agendas, minutes, e-newsletters, and other information from specific boards or departments. Some of these systems support SMS and MMS messaging, too. *(See also, discussion under Goal G-1.)*
- ◆ An integrated calendar of all public meetings, which allows users to view a summary of meetings posted by date and access more detailed information about specific meetings by clicking on the meeting date or the town boards listed for that date.
- ❖ Identify realistic options for the town to improve the website, which may include short-term and longer-term options, and the estimated cost of each (redesign, setup, training, and ongoing maintenance).
- ❖ Determine whether the improvements can be designed in-house or if the town needs to retain additional consulting services.
- ❖ Agree on a financing plan and a management plan.

Towns make e-gov decisions based on their operating needs and the needs of their residents and businesses. A crucial factor in designing any internet and non-internet e-gov communications system is the capacity of local government to maintain it and, for interactive or two-way communication features, the capacity to respond in a timely manner. Most towns that make extensive use of the internet to provide public information say that in the long run, it helps staff work more efficiently. They also say that making information available on the internet increases public expectations. Lincoln is a small town and some of its departments have unmet staffing needs. A departmental capacity assessment must be part of any plan to improve the town’s website because if the system is not properly or consistently maintained, an attractive website could easily become a frustrating experience for residents as well as town employees.

Goal G-4. Work with other communities and the state to overhaul the system of real property taxation as the primary method of financing local government.

- G-4.1. Seek assistance from the Massachusetts Municipal Association (MMA) to form a task force to facilitate discussions and to develop proposals.

- G-4.2. Work to ensure that the Massachusetts Association of Town Finance Committees becomes an active participant in reform efforts.

DISCUSSION

Dependence on the property tax as the primary source of local government revenue has been a concern of Massachusetts cities and towns for more than a century. The ad valorem tax fosters significant inequalities between communities and makes it very difficult for small towns like Lincoln to finance the cost of basic municipal and school services. The Commonwealth's cities and towns are subject to more revenue raising constraints than their counterparts in nearly all other states, as evidenced by the inability of communities in Massachusetts to assess various local option taxes. They also generate a comparatively large percentage of total local government revenues, which means they receive a comparatively small share of their operating revenue from sources such as state aid. Obviously Lincoln cannot change the state's approach to municipal finance on its own, but the town could take a leadership role and press regional and statewide organizations such as MAPC and MMA to put more institutional effort and resources into this issue.

Town Finances

INTRODUCTION

The Comprehensive Plan contains a fairly ambitious set of recommendations designed to address critical challenges and needs, and to preserve the high quality of life long enjoyed by Lincoln residents. Some of the goals and objectives can be achieved at little or no financial cost, but others will require meaningful investments. It is essential that both policy makers who will be requesting resources and the voters and taxpayers who will determine whether the monies are authorized understand fully the financial implications. It will be incumbent upon those officials who ultimately bring forward spending requests to Town Meeting and/or the ballot to explain why a particular investment is worth making and to demonstrate that its costs can be absorbed without creating an unreasonable burden for Lincoln's taxpayers. This chapter provides an overview of Lincoln's current financial position and an assessment of key financial strengths and vulnerabilities in an attempt to create a context for prudent financial decisions and priorities established in Chapter 13, Implementation.

Lincoln's financial forecast and plan must reflect today's economic realities, which are being shaped by the world-wide economic collapse that began to materialize publicly in the fall of 2008. Although not immune from the effects of the general economy, Lincoln is better positioned than many towns to absorb short-term impacts because:

- ❖ Lincoln depends less on state aid and other outside sources of revenue than most towns. In Lincoln, state aid accounts for 6.8 percent of total revenues (\$2 million), but the typical community depends upon the state for 25 percent of its total revenue. In response to declining state revenue, Governor Patrick recently announced mid-year state aid cuts. This first round of reductions resulted in only a modest reduction for Lincoln. However, for FY 2010 the probability of substantial reductions (on the order of 10-25 percent) is high. Reductions at the lower end of this range would be consistent with assumptions used to develop Lincoln's FY 2010 operating budget. However, cuts at the higher end of the range could not be absorbed without reducing municipal and school services.
- ❖ Over the past several years, Lincoln has made a concerted effort to increase its financial reserves in order to provide some measure of flexibility in the event of a budgetary or financial emergency. The town's available fund balance as of June 30, 2008 was \$3,565,601, or 13 percent of operating expenditures – well within the range preferred by the bond rating agencies.
- ❖ Lincoln has been aggressive about repaying debt and cautious about incurring new debt. As a result, the town's debt burden is low. Lincoln has strong capacity to take on additional debt to fund needed investments in buildings, facilities and infrastructure.
- ❖ In 2004, Lincoln's bond rating was upgraded to AAA (the highest possible rating) which will allow the town to borrow funds at the lowest possible interest rate.
- ❖ The New England Deaconess project – The Groves – is under construction. When completed, this project will increase Lincoln's tax base by \$100 million, yielding an additional \$1 million in property taxes annu-

ally with very little requirement for municipal services. The construction schedule for The Groves has been affected by the decline in residential real estate values (as potential residents find it more difficult to sell their current homes) and a difficult banking environment. Construction delays will result in a slower than anticipated increase in property taxes. Nevertheless, the leadership at Deaconess remains confident that this project will ultimately achieve full buildout.

FINANCING OF GENERAL OPERATIONS

Override Strategy and History

In general, Lincoln's revenues must grow by approximately four to five percent per year in order to maintain service levels. In a typical year, revenues have grown by three to four percent exclusive of any Proposition 2 ½ overrides. To fill the gap, town officials have asked voters to support modest overrides of between \$200,000 and \$300,000. The Finance Committee has advocated for frequent but relatively small overrides versus infrequent but large overrides. There are two principal advantages to the town's approach. First, annual growth in property taxes is steadier and more predictable. Second, in the event that voters reject a proposed override, the reductions in services required to balance the budget are far less severe.

In order for property taxes to increase beyond the limit proscribed by Proposition 2 ½, voters must give their approval both at Town Meeting and at the ballot box. Table 12.1 illustrates the town's voting record on Proposition 2 ½ override proposals for general operations. Override requests have been presented to voters in seven of the last ten years; all seven were approved. The average approval rate was 62 percent, and the average override request was approximately \$326,000. The average override increased taxes by approximately two percent. No override was proposed in either of the last two fiscal years (i.e., FY 2009 and 2010), owing largely to the infusion of tax revenue provided by The Groves.

Budget Drivers

Two principal expenses drive the cost of town services in Lincoln and in other communities: employee salaries and wages, and health insurance and pensions. Salaries and wages comprise approximately 70 percent of all town spending. The three ways in which salaries and wages increase are by cost-of-living adjustments, step increases, and increasing the number of employees. Those responsible for setting or negotiating wages do so after surveying comparable communities and assessing cost impacts. Lincoln has been judicious about adding staff. On the town side, the total number of employees has held relatively constant for nearly twenty years. As new positions were added to address evolving needs and priorities, efforts were made to consolidate or eliminate positions in other areas.

The inflation rate in health costs and pensions has been three to four times the overall rate of inflation for nearly ten years. The challenge is national in scope and common throughout the public and private sectors. In Lincoln pension and insurance costs represented 10 percent of total town expenditures in 1999; by 2009 their share of the budget has nearly doubled to 19 percent. If left unchecked, the growing cost of insurance and pensions will continue to absorb an increasing share of town revenue, depriving critical programs and services of the resources they require. Lincoln has implemented a number of cost control measures. Foremost among them: Lincoln has one of the lowest contribution rates to employee health insurance (60 percent versus average of 75 percent). Over the course of several cycles of collective bargaining, the town has also reorganized its health insurance programs, eliminating the full indemnity option and consolidating the number of HMO plans. More recently, the town switched to a partially self-funded arrangement under which it assumes greater risk for claims in

Table 12.1
Proposition 2 ½ Override History: General Operations

	Date of Election	Fiscal Year	Override Type	Amount Requested	Approved	Rejected
1	3/29/1982	1983	General Override	\$100,779	\$100,779	
2	3/30/1982	1983	General Override	\$250,000		\$250,000
3	3/28/1983	1984	General Override	\$105,637	\$105,637	
4	3/26/1984	1985	General Override	\$114,869		\$114,869
5	3/30/1987	1988	General Override	\$137,629	\$137,629	
6	3/28/1988	1989	General Override	\$431,986	\$431,986	
7	4/1/1989	1990	General Override	\$375,000	\$375,000	
8	3/26/1990	1991	General Override	\$400,000	\$400,000	
9	3/25/1991	1992	General Override	\$585,000	\$585,000	
10	3/30/1992	1993	General Override	\$520,000		\$520,000
11	5/18/1992	1993	General Override	\$260,000		\$260,000
12	3/29/1993	1994	General Override	\$310,000		\$310,000
13	3/25/1996	1997	General Override	\$200,000		\$200,000
14	3/ /01	2002	General Override	\$300,000	\$300,000	
15	11/ /01	2002	General Override	\$283,000	\$283,000	
16	3/23/2002	2003	General Override	\$300,000	\$300,000	
17	3/31/2003	2004	General Override	\$350,000	\$350,000	
18	3/29/2004	2005	General Override	\$212,000	\$212,000	
19	3/ /2005	2006	General Override	\$490,000	\$490,000	
20	3/26/2007	2008	General Override	\$350,000	\$350,000	
				\$6,075,900	\$4,421,031	\$1,654,869

Source: Town Administrator Timothy Higgins, Finance Director Colleen Wilkins; May 2009.

exchange for the potential to retain any savings that would otherwise accrue to the insurance companies. Thus far the switch to partial self-funding has been cost neutral.

Lincoln is also making progress toward its long-term goal of setting aside funds to offset long-term insurance liabilities. In March 2009, Town Meeting accepted the Board of Selectmen/Town Administrator's recommendation to adopt a provision of state law that requires eligible employees to enroll in Medicare. The present value of the savings is projected at \$18 million. The School Department and Town Government are also contributing to the Health Insurance Trust Fund, which will help lower the long-term liability and, someday, provide a source of funds outside the year-to-year budget.

TOWN FACILITIES & INFRASTRUCTURE: DEBT MANAGEMENT

Lincoln's public buildings, facilities, and infrastructure help to define the character of the community and contribute greatly to its quality of life. The estimated replacement value of Lincoln's capital asset base is \$46.2 million. The financial policy boards are committed to maintaining these public assets and when appropriate, renovating, expanding, replacing, consolidating, or eliminating specific buildings and facilities.

Any sensible long-term capital plan must start with a careful assessment of existing assets. All of Lincoln's buildings and major capital assets have been reviewed in recent years, with plans developed for their maintenance and repair – including cost estimates. The State of the Town Meeting convened by the Board of Selectmen in 2007 was designed to help residents understand the scope of prospective capital projects and to begin to discuss cost

implications and potential financing strategies. All departments were asked to identify major capital projects they might conceivably pursue within the next five years. This exercise resulted in a list of projects that included building renovations, expansions, new construction, roadway improvements, land acquisitions and improved recreational facilities. The total projected cost of all projects ranges from \$36.5 million to \$66.5 million.

Table 12.2 lists capital projects that might be proposed within the next five years, and projects their relative costs and tax impact.

**Table 12.2
Potential Capital Projects**

Project	Current Estimate	Projected Debt Service	Tax Impact
Roadway Improvements	\$5,500,000	\$770,000	2.40%
Town Offices Renovation & Expansion	\$8,000,000	\$712,000	3.40%
Other Town Building Improvements	\$4,000,000	\$356,000	1.70%
Lincoln School Improvements	\$15,000,000 - \$40,000,000	\$1,335,000-3,560,000	6.5% -17%
Open Space Acquisitions	\$2,000,000	\$178,000	0.1%
Recreation**	\$2,000,000 - \$7,000,000	\$178,000 - \$623,000	0.1% - 3%
Total	\$36.5M - \$66.5M	\$3,529,000-\$6,199,000	14.2%-27.6%

Source: Town Administrator Timothy Higgins, Finance Director Colleen Wilkins; May 2009.

*Maximum 10-year term

**Including possible proposal for a community center

Lincoln will need to develop a plan to prioritize these projects and sequence the investments to avoid peaks and valleys in debt service and local property taxes paid to support the debt. The town’s budget and tax policies have aimed to limit year-to-year increases in property taxes to no more than 5 percent. With the retirement of debt for the new Public Safety Building and Lincoln School improvements, Lincoln has the opportunity to take on additional debt for one or more of the above projects without increasing taxes substantially beyond the 5 percent target. Table 12.3 shows that at present, Lincoln has minimal General Fund outstanding debt.

**Table 12.3
Outstanding Debt**

Project	Authorized	Issued	Retired	Outstanding
Codman Pool Renovations	\$200,000	\$200,000	\$120,000	\$80,000
Bemis Hall Renovations	\$415,000	\$415,000	\$175,000	\$240,000
Fire Engine	\$415,000	\$415,000	\$175,000	\$240,000
Fire Engine #2	\$450,000	\$450,000	\$45,000	\$405,000
Fire Pumper/Tanker	\$200,000	\$200,000	\$20,000	\$180,000
Roadway Project*	\$5,500,000	\$ -	\$ -	\$ -
General Fund Sub-Total	\$7,180,000	\$1,680,000	\$535,000	\$1,145,000

Source: Town Administrator Timothy Higgins, Finance Director Colleen Wilkins; May 2009.

As a relative measure, Lincoln’s outstanding debt as a percentage of operating expenditures is quite low (4.2 percent). Low debt helps to keep taxes down in the short term, but deferred investments can increase costs in the long term. The need for investment and reinvestment in municipal buildings and facilities is constant.

In 2004, Lincoln’s bond rating was upgraded to AAA. Lincoln joined a select group of sixteen Massachusetts towns that have achieved the highest rating and enjoy the benefit of the lowest possible cost of borrowing. The

bond rating agency's official statement provides insight about the financial conditions in Lincoln that justify the upgraded rating:

- ❖ Very high wealth and income factors
- ❖ Location in the Boston Metropolitan Statistical Area (MSA)
- ❖ Strong growth of its overwhelmingly residential tax base
- ❖ Favorable financial position, with a history of ample reserves
- ❖ Low debt burden
- ❖ Strong internal controls

Since Proposition 2½ went into effect in 1981, Lincoln's practice has been to ask voters to exclude the principal and interest on debt for major projects from the limits set by Proposition 2 ½. The mechanism for doing so is known as a debt exclusion. Under this approach, the town may borrow funds only after voters have given their approval both at Town Meeting (2/3 vote) and the election ballot (majority vote). There have been twenty-seven debt exclusions proposed in Lincoln since the inception of Proposition 2 ½; twenty four were approved by the voters (an 89 percent approval rate). Table 12.4 summarizes the voting history.

The goals and objectives of the Comprehensive Plan reflect a vision for Lincoln's future as contemplated and desired by those who have participated in the planning process: citizens, elected and appointed boards, and professional staff. However, the Plan is intended to evolve over time and reflect changing needs and circumstances. At present, the town is in a relatively strong financial position, with reasonable capacity to produce the resources needed to maintain services and to make needed investments in buildings and facilities. Financial decision-makers should understand the factors and practices that have contributed to Lincoln's current financial condition while also acknowledging any inherent vulnerability that could erode the town's position over time.

SUMMARY

Lincoln's Financial Strengths:

- ◆ Strong financial planning capabilities and internal controls;
- ◆ Strong voter support for financial plans and budgets;
- ◆ Have set aside prudent level of financial reserves;
- ◆ Low debt burden;
- ◆ Bond rating upgraded to AAA in 2004 - highest rating lowers cost of borrowing;
- ◆ Less dependant on state aid and other outside sources of funding than most towns, which is beneficial in a down economy;
- ◆ Household income is high;

**Table 12.4
Lincoln’s History of Capital and Debt Exclusion Votes**

#	Year	Exclusion Type	Purpose	Amount	Status
1	3/29/1983	Debt Exclusion	Land Acquisition: (Giurleo, Ricci) for Transfer Stat	^(1)	Rejected
2	11/29/1983	Debt Exclusion	Codman Farmhouse Renovations	\$100,000	Approved
3	11/29/1983	Debt Exclusion	Land Acquisition: Sandy Pond Trust	\$1,500,000	Approved
4	3/26/1984	Debt Exclusion	Land Acquisition: (Ricci) for Transfer Station	\$750,000	Approved
5	3/31/1986	Debt Exclusion	Acquire Single Family Housing	^(2)	Rejected
6	6/17/1986	Debt Exclusion	Acquire McHugh Property	\$2,000,000	Approved
7	11/4/1986	Debt Exclusion	Library Renovation	\$2,500,000	Approved
8	3/30/1987	Debt Exclusion	Cap Landfill	\$700,000	Approved
9	3/30/1987	Debt Exclusion	School Repairs	\$560,000	Approved
10	3/30/1987	Debt Exclusion	Construct Pool Bathhouse	\$160,000	Approved
11	3/30/1987	Debt Exclusion	High School Repairs/Renovations	\$595,000	Approved
12	3/30/1987	Debt Exclusion	High School Athletic Fields	\$155,000	Approved
13	3/28/1988	Debt Exclusion	Construct Permanent Transfer Station	\$410,000	Approved
14	4/1/1989	Debt Exclusion	Land Acquisition: Flint (Edward & Henry)	\$1,640,000	Approved
15	4/1/1989	Debt Exclusion	Acquire Development Rights: Flint (Warren Sr.)	\$750,000	Approved
16	3/30/1992	Debt Exclusion	High School Reconstruction	\$2,134,000	Approved
17	3/30/1992	Debt Exclusion	Lincoln School Renovations -Study	\$75,000	Approved
18	3/29/1993	Debt Exclusion	Lincoln School Renovations	\$11,850,000	Approved
19	3/28/1994	Debt Exclusion	High School Reconstruction: Rogers Theatre	\$1,950,000	Approved
20	3/27/1995	Capital Exclusion	Fire Engine	\$160,000	Rejected
21	3/27/1995	Debt Exclusion	Reconstruct Public Safety Complex	\$2,500,000	Approved
22	3/29/1999	Debt Exclusion	High School Reconstruction; Study	\$1,500,000	Approved
23	11/7/2000	Debt Exclusion	High School Reconstruction; Construction	\$68,500,000	Approved
24	3/23/2002	Debt Exclusion	Pool, Bemis and Town Offices	\$715,000	Approved
25	3/29/2004	Debt Exclusion	Fire Truck purchase: Quint	\$415,000	Approved
26	3/26/2007	Debt Exclusion	Fire Truck purchase: Engine 2	\$450,000	Approved
27	3/29/2008	Debt Exclusion	Fire Truck purchase: Pumper/Tanker	\$200,000	Approved
28	3/29/2008	Debt Exclusion	Road Reconstruction Project	\$5,500,000	Approved
29	3/28/2009	Capital Exclusion	School Field House Roof	\$190,000	Approved
			Cumulative Debt Excluded	\$107,959,000	

Source: Source: Town Administrator Timothy Higgins, Finance Director Colleen Wilkins; May 2009.

^(1) Passed @ ballot but failed @ Town Meeting

^(2) Passed @ ballot but failed @ Town Meeting

- ◆ Property values are high relative to other communities and have not decreased to the degree observed in most other communities;
- ◆ The New England Deaconess project is expected to increase Lincoln’s tax base by approximately \$80 to \$100 million and will generate \$800,000 to \$1 million annually in additional property taxes while creating very little additional demand for town services; and
- ◆ Strong sense of community and history of charitable giving to town programs and services (e.g., private gifts of money and land, active Friends Groups that raise money, variety of special purpose trust funds, Codman Trust, etc.).

Financial Vulnerabilities

- ◆ Persistent problems in the general economy will eventually reduce town revenues (e.g., property tax growth revenue, building permits, motor vehicle excise, state aid, etc.);
- ◆ Pension and Insurance costs continue to absorb larger portion of discretionary revenue;
- ◆ Heavily reliant on the residential property tax. Lincoln has one of the smallest commercial tax bases among area communities;
- ◆ Scale: Lincoln's size creates diseconomies of scale;
- ◆ Hanscom AFB closure could, under worst-case reuse scenarios, result in Lincoln assuming responsibility for provision of all municipal services (e.g., education, public works, public safety, etc.) and the attendant financial burden, which has been estimated at a net deficit of \$6 million annually; and
- ◆ Wealth factors and other demographic considerations tend to make the town ineligible, or at least less-competitive, for most state and federal grant programs.

Implementation Plan

INTRODUCTION

The implementation element is a road map for carrying out the Comprehensive Plan's major policies and recommendations. It identifies detailed steps for achieving a community's goals, yet at the same time it remains flexible enough to accommodate changing circumstances and priorities. Unambiguous, but not rigid, this element attempts to identify problems and outline potential solutions, also recognizing and building upon Lincoln's successes and strong suits. In addition, some important themes and central ideas have emerged that begin to inform Lincoln's options in pursuit various goals stated in eleven chapters of the comprehensive plan. By linking a wide variety of proposed actions under seven key themes, this implementation element attempts to integrate all of the policy elements and offer a unified approach to community planning and management.

In many respects, the Lincoln Comprehensive Plan is a reaffirmation of this unique community's way of meeting challenges, solving problems, and determining its fate. Lincoln is fundamentally different from other towns, and the measure of its success can be seen just about everywhere. The town is beautiful not only because of its natural features, but also because generations of Lincoln residents thought it was better to cherish land than to clear, excavate, grade, and radically remold landscapes to make way for homes. The town has extraordinary financial stability not only because Lincoln is affluent, but also because its residents have historically made smart decisions about fiscal policy and municipal management. Furthermore, Lincoln never waited for external forces – the federal government, the state, neighboring towns, or regional organizations – to make decisions that would change its future or foreclose its options. Instead, Lincoln took charge and made decisions in the best interests of its own people and its land. It has evolved as an exceptional place that most communities in Massachusetts yearn to be like.

Lincoln formed partnerships with non-profit organizations long before the concept came into vogue. It attracted an unusual mix of people many years ago, and instead of erecting barriers between them, they worked together toward a common vision of their community and on their terms. Though Lincoln's population has changed, the town's trademark qualities of independence, thoughtful deliberation, social responsibility, and civic commitment endure. Lincoln wants to remain the kind of community that not only protects its open space and farms, but also encourages and creates interesting places to live and work. Open to new and diverse ideas, these values and beliefs matter deeply to residents. For any plan to succeed in Lincoln, it must be mindful of the town's vision of itself and its expectations for the future as embodied in its official Vision Statement.

The recommendations in the Comprehensive Plan's policy elements appear in the following pages with specific actions to implement them. In the Implementation Summary Table at the end of this chapter, the recommendations and corresponding actions are listed by number, cross-referenced to one or more policy elements (and sometimes to related recommendations), and grouped by the seven key themes of the Comprehensive Plan: land use policy, assets and resources, town character, transportation, finances and economic sustainability, governance and civic responsibility, and infrastructure and communications. For each recommendation, the table also identifies the town boards, committees, or departments with lead responsibility for implementation.

Comprehensive Plan Implementation Committee

The success of any comprehensive plan depends on a town's commitment to follow through with implementation. Toward this end, it will be important to establish a Comprehensive Plan Implementation Committee (CPIC) to help keep the implementation process on track, set timetables for various projects and activities, provide support to other town boards and committees, and periodically evaluate the continued relevance of the plan's major recommendations. The Committee's charge could include the following tasks:

- ❖ Guide the Comprehensive Plan implementation process;
- ❖ On an as-needed basis, help other town officials with implementation roles and responsibilities;
- ❖ Provide an annual report to the town on the status of Comprehensive Plan implementation;
- ❖ Evaluate Lincoln's progress and the effectiveness of actions outlined in this implementation plan;
- ❖ Recommend amendments to the Comprehensive Plan; and
- ❖ Recommend an approach and work plan to update the Comprehensive Plan in 2018.

A CPIC would not override or substitute for town boards with responsibility for carrying out specific recommendations described in the Comprehensive Plan. Its purpose will be to help the Town stay on track, coordinate implementation measures that involve several town boards, and ensure that the Comprehensive Plan remains a "living document."

LAND USE

Goal LU-1. Institute a comprehensive process for considering proposed zoning changes.

RECOMMENDATIONS & ACTIONS:

- LU-1.1. Develop and publish the criteria that Lincoln's town boards will use to guide their review and evaluation of future proposed zoning changes.
 - LU-1.1.1. Conduct an all-boards meeting to calibrate everyone's understanding of the Land Use Review Criteria (Appendix B) and identify any remaining technical issues that need to be resolved.
 - LU-1.1.2. Formally adopt the Land Use Review Criteria following a Planning Board public hearing.
 - LU-1.1.3. Publish the Land Use Review Criteria on the town's website.
 - LU-1.1.4. Meet with key landowners to present the Land Use Review Criteria and explain how they will be used to evaluate proposals for planned development districts in the North and South Lincoln Overlay Districts or zoning changes in other parts of town.
- LU-1.2. Charge the Planning Board with responsibility for coordinating the review process with other town boards, providing timely feedback and guidance to proponents, and providing avenues for the public to participate in the review process.

Goal LU-2. Create a compact, vital, walkable village center in the Lincoln Station area that provides more housing choices near public transportation, goods and services for residents, and opportunities for social interaction.

RECOMMENDATIONS & ACTIONS:

- LU-2.1. Conduct a public planning process that captures resident interests in, as well as concerns about, further development at Lincoln Station.
 - LU-2.1.1. Establish a Lincoln Station Planning Committee, appointed by the Planning Board.
 - LU-2.1.2. Determine the Committee's responsibilities and services needed from a consultant.
 - LU-2.1.3. Prepare a budget estimate for consultant services and seek appropriation, or grants if available.
 - LU-2.1.4. Prepare and issue a Request for Proposals, conduct procurement process, and choose a consultant.
 - LU-2.1.5. Develop a public participation program and schedule.
- LU-2.2. Identify potential benefits and drawbacks, if any, arising from compact, mixed-use, and transit-oriented forms of development, and determine acceptable trade-offs.
 - LU-2.2.1. Conduct a literature search on transit-oriented development in small suburbs.
 - LU-2.2.2. Conduct focus groups with Lincoln residents and businesses about the opportunities and issues involved with providing for growth in the Lincoln Station area.

- LU-2.3. Capitalize on and reinforce existing investment at Lincoln Station in infrastructure, services, and housing choices.

Goal LU-3. Consider land development and preservation techniques that address local needs.

RECOMMENDATIONS & ACTIONS:

- LU-3.1. Consider land development and preservation techniques such as transfer of development rights and “by right” open space-residential development.
 - LU-3.1.1. Review the Comprehensive Plan zoning recommendations and identify bylaws that should be implemented by Planning Board initiative – without waiting for proposals from developers.
 - LU-3.1.2. Review draft bylaws provided by the Comprehensive Plan consultant and, as necessary, similar bylaws from other communities.
 - LU-3.1.3. Choose bylaws most suitable for Lincoln, and conduct public hearings.
 - LU-3.1.4. Submit proposals to Town Meeting for adoption.
- LU-3.2. Evaluate the town’s approach to development review and permitting, and consider options to make the permitting process more efficient for proposals that advance the goals of this Comprehensive Plan.

Goal LU-4. Maintain communication with non-profit organizations and institutions in Lincoln in order to integrate their long-range plans with the town’s plans.

RECOMMENDATIONS & ACTIONS:

- LU-4.1. Identify in a timely fashion land use and facilities development proposals that affect either the Town or the institution, and their possible impacts.
 - LU-4.1.1. Implement recommendations under Goal CH-1.
 - LU-4.1.2. Continue efforts of the Conservation Commission, the Rural Land Foundation, and the Lincoln Land Conservation Trust to maintain open lines of communication with institutional landowners about future plans for their properties.
- LU-4.2. Pursue cooperative efforts that leverage a non-profit or institution’s mission to the benefit of the Town culturally, economically, or physically.
 - LU-4.2.1. Implement recommendations under Goal CH-1.
 - LU-4.2.2. Encourage institutional property owners to consider the Land Use Review Criteria during the early planning stages of planning any changes in the use and disposition of their property.

NATURAL RESOURCES

Goal NR-1. Preserve Lincoln's natural resources and agricultural land uses.

RECOMMENDATIONS & ACTION STEPS:

- NR-1.1. By purchase, restriction, or other method, continue to protect lands which contain or contribute to the protection of valuable natural resources, including public drinking water supplies.
- NR-1.1.1. Maintain close working relationships between the Conservation Commission, Lincoln Land Conservation Trust, Rural Land Foundation, and others to protect conservation and watershed land.
 - NR-1.1.2. Continue to implement the 2008 Open Space and Recreation Plan.
- NR-1.2. Continue to secure deed restrictions to protect wetland buffer zone areas.
- NR-1.2.1. Maintain the town's practice of securing conservation restrictions as part of the wetlands permitting process, especially for expansion of existing properties.
 - NR-1.2.2. Ensure that all conservation restrictions are properly recorded at the Registry of Deeds and entered into the town's index of land restrictions.
- NR-1.3. Establish policies and regulations for water use – both voluntary and mandatory – in order to conserve water and bring Lincoln in line with the state's water use guidelines.
- NR-1.3.1. Continue to review the user fee structure and explore other incentives to reduce residential water consumption.
 - NR-1.3.2. Wherever possible, promote more compact development that consumes less water by design. (*See also, NR-4.2, LU-1.1*)
 - NR-1.3.3. As part of Site Plan Review, adopt landscaping guidelines that promote or require drought-resistant plantings and reduce turf cover for all types of development, including single-family dwellings.
- NR-1.4. Develop property management plans for the protection of conservation land and habitat areas. (*See also, OS-2.1*)
- NR-1.4.1. Fund the Conservation Commission's baseline inventory and stewardship programs at a level sufficient to prepare and implement property management plans.
- NR-1.5. Encourage or require best management practices for soil and water conservation on all construction projects in Lincoln, including agricultural lands to the extent allowed by law.
- NR-1.5.1. Study options for a land clearing and grading bylaw in conjunction with work on NR-3.2.
 - NR-1.5.2. Evaluate preferred option(s) against the town's existing regulations for subdivision control, site plan approval, and wetlands permits, as well as the state's most recent version of the Stormwater Management Handbook.

- NR-1.5.3. Develop a comprehensive approach that avoids conflicts between regulations and consolidates permitting to the maximum extent possible.
- NR-1.5.4. Propose a land clearing and grading or comparable best management practices bylaw for adoption by Town Meeting.
- NR-1.6. Ensure that developers comply with requirements for environmental impact reports, stormwater management, and open space development guidelines.
 - NR-1.6.1. Prepare and adopt an environmental “checklist” for use by all town boards with development review responsibilities.
 - NR-1.6.2. Hold periodic joint boards meetings to consult about development projects under review and ensure a consistent approach to permitting.

Goal NR-2. Promote water conservation, ecological landscaping practices, and energy and resource conservation among all property owners and town employees.

RECOMMENDATIONS & ACTION STEPS:

- NR-2.1. Develop conservation guidelines for all public buildings, including schools, the town offices, public safety, and public works.
 - NR-2.1.1. Work with the Water Department to measure trends in water consumption in municipal and school buildings and to establish performance standards for each type of building, based on its use and occupancy characteristics.
 - NR-2.1.2. Continue to monitor public buildings for energy use and provide conservation training and technical assistance to town and school employees.
 - NR-2.1.3. Equip municipal and school buildings with appropriate conservation fixtures and properly maintain them.
- NR-2.2. Continue to educate the public about Lincoln’s conservation ethic and commitment to stewardship.
 - NR-2.2.1. Provide timely information on the Town’s website, including opportunities for conservation-minded volunteers.
 - NR-2.2.2. Provide conservation displays at the library and in the schools.
 - NR-2.2.3. Continue to work with the schools to provide environmental education to children at all grade levels.
- NR-2.3. Investigate and seek opportunities to participate in state, national, and global environmental programs, such as dark skies and green cities initiatives.

Goal NR-3. Improve controls against environmental degradation and pollution.

RECOMMENDATIONS & ACTION STEPS:

- NR-3.1. Continue to educate the public about alternatives to chemical pesticides, herbicides, and fertilizers in landscaping and lawn maintenance activities.

- NR-3.1.1. Provide public information on the Town's website and through special displays or exhibits in public buildings.
- NR-3.1.2. Implement and enforce Action NR-1.3.3.
- NR-3.2. Consider adopting a Low-Impact Development (LID) bylaw, consistent with state stormwater regulations and guidelines, to require developers to include stormwater best management practices (BMPs) in future projects.
 - NR-3.2.1. Evaluate zoning and non-zoning options for a LID bylaw.
 - NR-3.2.2. Evaluate potential conflicts and/or duplication with the town's subdivision, site plan review, and wetlands protection regulations, and options to regulate land clearing and grading under Recommendation NR-1.5.
 - NR-3.2.3. Make an objective determination whether a LID bylaw and permitting procedures are necessary to achieve the town's stormwater management objectives, or if those objectives can be addressed more efficiently and effectively by consolidating stormwater and erosion control permitting with other existing regulations.
- NR-3.3. Identify and evaluate the town's options for regulating chemical and sediment pollution of private and public water supplies and establishing local standards for the use of chemical pesticides, herbicides, and fertilizers, to the extent allowed by law.
 - NR-3.3.1. Consult with Town Counsel about local regulatory options.
- NR-3.4. Adopt noise pollution regulations, with clear standards to define noise disturbance.
 - NR-3.4.1. Define noise pollution and disturbance thresholds, and evaluate regulatory options.
 - NR-3.4.2. Consult with other communities that have adopted noise regulations and review the effectiveness of their bylaws or ordinances and enforcement measures.
 - NR-3.4.3. Determine appropriate, enforceable regulations for Lincoln and present a bylaw to Town Meeting.
- NR-3.5. Ensure that new construction projects meet appropriate environmental standards by creating an avenue for reviewing such projects.
 - NR-3.5.1. Continue to conduct staff-level development review team meetings to coordinate environmental review and provide consistency in recommendations to town boards.
 - NR-3.5.2. Consider opportunities to conduct joint hearings in order to strengthen communication between boards with permitting jurisdiction over new construction projects.
- NR-3.6. Through identification, public education, regulations, and guidelines, increase the effectiveness of programs to control invasive species and pests.
 - NR-3.6.1. Continue to make public information available on the Town's website.
 - NR-3.6.2. Provide information about invasive species and pests available through means such as inserts in mailings from the Water Department.

NR-3.6.3. Provide, maintain, and update public information displays in facilities such as the library, Bemis Hall, and the schools.

Goal NR-4. Improve communication and coordination between the Water Department and other town agencies responsible for developing and implementing natural resource protection plans.

RECOMMENDATIONS & ACTION STEPS:

NR-4.1. Ensure that town agencies have a basic understanding of Lincoln’s drinking water supplies and water storage and distribution systems.

NR-4.1.1. Encourage consistent communication between staff in the Water Department and other town departments, e.g., through the town’s existing department head meetings and development review team meetings.

NR-4.1.2. Consider providing more information about the town’s water supply and distribution system in the Annual Town Report, including the maximum water withdrawal authorized for Lincoln’s water supplies, comparative consumption trend statistics, and percentage of use attributable to residential, commercial, institutional, and agricultural uses.

NR-4.1.3. Prepare a long-range water system master plan and incorporate it within this Comprehensive Plan by amendment.

NR-4.1.4. Fund water system capital improvements in order to reduce unaccounted for water.

NR-4.2. Ensure consistency between Lincoln’s land use policies and water resource protection laws that affect the amount of water Lincoln can withdraw from surface water and groundwater supplies.

NR-4.2.1. Implement Recommendation NR-1.3 and all of its associated action steps.

NR-4.2.2. Take comprehensive, effective steps to enforce conservation in order to ensure that Lincoln has sufficient water to meet its future growth needs.

NR-4.3. Coordinate water conservation efforts among Lincoln’s land use and natural resource agencies and all town departments with operations and maintenance responsibilities for public buildings and grounds.

NR-4.3.1. Implement Recommendation NR-2.1 and all of its associated action steps.

CULTURAL & HISTORIC RESOURCES

Goal CH-1. Strengthen collaboration with Lincoln’s cultural and historic organizations.

RECOMMENDATIONS & ACTION STEPS:

CH-1.1. Establish a Council for Cultural and Historic Organizations that would be the forum for exploring mutual opportunities for town government and cultural, historical, educational, and other non-profit organizations to share resources and expertise.

CH-1.1.1. Solicit participation from town’s non-profit organizations, government agencies, and municipal staff, boards, and commissions.

- CH-1.1.2. Identify staff at town hall responsible for coordinating the Council's meeting schedule and activities.
- CH-1.2. Provide information about activities sponsored by cultural and historic organizations on the town's website.
 - CH-1.2.1. Consult with the Information Technology Director and include as part of overall website analysis.
 - CH-1.2.2. Coordinate efforts through the Council for Cultural and Historic Organizations and designated staff person at Town Hall.
 - CH-1.2.3. Review websites for cross-links between groups. For institutions without websites, make space available through the town's website.
- CH-1.3. Encourage partnerships between the town's cultural institutions and the Lincoln Public Schools to identify opportunities for integrating cultural programs into the existing curriculum.
 - CH-1.3.1. Form a working group with representatives from the Lincoln School Committee and PTA, principals and teachers, and representatives from Lincoln's cultural institutions and town boards such as the Library Trustees.
 - CH-1.3.2. Meet with school officials to review existing curriculum on local history and culture in order to identify future collaborative opportunities.
 - CH-1.3.3. Review the educational programming of historic organizations such as Historic New England and the National Trust for Historic Preservation for cultural activities suitable in Lincoln.

Goal CH-2. Identify, evaluate, and protect Lincoln's cultural and historic assets.

RECOMMENDATIONS & ACTION STEPS:

- CH-2.1. Building on the Lincoln Historical Commission's previous efforts, prepare a comprehensive inventory of Lincoln's cultural and historic resources, including areas, structures, buildings, objects, and historic landscapes.
 - CH-2.1.1. Determine costs to hire a preservation consultant to complete cultural resource inventory.
 - CH-2.1.2. Apply for a Survey and Planning Grant through the Massachusetts Historical Commission (MHC) for partial reimbursement of inventory cost.
 - CH-2.1.3. Provide Community Preservation Act (CPA) funds to support the comprehensive inventory.
 - CH-2.1.4. Draft and distribute a Request for Proposals (RFP) for qualified historic preservation consultants.
 - CH-2.1.5. Catalogue the historic resources inventory in an online database and integrate with town's GIS system. Maintain database on town's website.

- CH-2.2. Upon completion of the comprehensive inventory, identify eligible buildings and districts for listing on the National Register of Historic Places.
 - CH-2.2.1. Review inventory for National Register recommended properties and districts and determine a priority list of nominations.
 - CH-2.2.2. Conduct educational outreach, including walking tours, lectures, and news articles, to highlight historical and architectural significance of identified neighborhoods and to explain the benefits of National Register designation.
 - CH-2.2.3. Determine costs of consultant services to undertake National Register nominations. Fund services through budget appropriation, or seek Survey and Planning grant or CPA funds (or both).
 - CH-2.2.4. Complete National Register nominations for submission to MHC and the National Park Service.
- CH-2.3. Work with residents to create additional local historic districts where appropriate.
 - CH-2.3.1. Coordinate meetings between Lincoln Historic Commission and neighborhood groups to discuss preservation tools appropriate for each area, including M.G.L. c. 40C Local Historic District designation and Neighborhood Conservation District (NCD) designation.
 - CH-2.3.2. Upon determination of support for historic designation, complete district study report for identified neighborhood.
 - CH-2.3.3. For proposed NCDs, appoint a Neighborhood Conservation District Commission to take responsibility for developing design guidelines for the district.
- CH-2.4. Promote the use of preservation restrictions to protect public and privately owned buildings and structures.
 - CH-2.4.1. Review model preservation restriction to determine appropriateness for variety of building and resource types. Engage in community outreach activities such as lectures, articles in the local newspaper, and distribution of literature on the financial and social benefits of preservation restrictions. Include information on the town's website.
 - CH-2.4.2. Identify public buildings and resources appropriate for preservation and work with Board of Selectmen and relevant municipal boards to discuss placement of preservation restriction on properties.
 - CH-2.4.3. Identify private institutional buildings and structures worthy of preservation and contact organization to discuss preservation restrictions.
 - CH-2.4.4. Identify private buildings and structures and initiate contact with property owner to promote the use of preservation restrictions.
 - CH-2.4.5. Identify a mechanism for funding the maintenance and enforcement of preservation restrictions held by the Lincoln Historic Commission.

- CH-2.5. Explore opportunities for preserving archaeological sites.
 - CH-2.5.1. Determine costs for completing a town-wide archaeological reconnaissance survey, which would map existing and predicted archaeological sites.
 - CH-2.5.2. Seek funding through annual budget appropriation or through Survey and Planning grant and CPA funds.
- CH-2.6. Re-establish funding for consultant and administrative expenses in the town's annual operating budget, as appropriate, to support historic preservation.
 - CH-2.6.1. Determine the Local Historical Commission's annual funding needs, including administrative costs, consultant services, and educational programming costs.
 - CH-2.6.2. Meet with Board of Selectmen and Finance Committee to review annual funding needs and determine appropriateness of including funds within town's annual operating budget.

Goal CH-3. Promote stewardship of Lincoln's cultural and historic resources.

RECOMMENDATIONS & ACTION STEPS:

- CH-3.1. Make information on Lincoln's cultural and historic character, buildings, districts, cemeteries, and other heritage treasures widely available to residents and visitors in formats that are attractive, accurate, and easily understood.
 - CH-3.1.1. Institute an interactive website with online photographs and maps of the town's historic resources and include data from the town's comprehensive inventory. Organizations such as the Marlborough Historical Society (www.historicmarlborough.org) have well-designed websites that can serve as models for Lincoln.
 - CH-3.1.2. Develop additional forms of literature, such as walking tour brochures and neighborhood guides, interpretive displays at historic sites, historic plaque programs, and historic district signage. These efforts could coincide with National Preservation Month in May and be continued throughout the year.
- CH-3.2. Expand the collections and finding aids for the newly integrated archives and records management initiative spearheaded by the Lincoln Public Library and the Town Clerk's Office.
 - CH-3.2.1. Provide expanded archival aids on the Library website. Review existing archival documents to determine appropriateness for scanning and uploading images onto the Library's website.
 - CH-3.2.2. Review existing archival storage at Town Offices. Identify and implement a cost-effective and manageable database that can be accessed on the internet to improve retrieval capabilities. Ensure that any planned public facility improvements to the Town Offices consider both the general and archival storage of materials and the preservation of these materials.
- CH-3.3. Support stewardship by collaborating with existing local organizations and providing funding from local and non-local sources.

- CH-3.3.1. Coordinate efforts through the Council for Cultural and Historic Organizations. Solicit assistance from regional, state and national preservation organizations such as Preservation MASS and the National Trust for Historic Preservation to identify funding sources for educational programming and building maintenance and preservation.
- CH-3.3.2. Utilize the town’s website to foster local appreciation and understanding of the town’s heritage. This could include the following:
 - ◆ Upload documented records of historic cemetery stones with inscriptions and photographs;
 - ◆ Published studies that provide an understanding of land use and historically significant landscapes, including conservation lands, Walden Woods, and Minute Man National Historical Park; and
 - ◆ Studies such as the *Know Your Town* and historic *Coming Together* booklets to the town’s website.
- CH-3.3.3. Develop information handouts for current and new residents and visitor about the cultural and historic character, districts, and heritage treasures of Lincoln;
- CH-3.3.4. Co-sponsor community open house days at historic house and farming sites to promote the town’s history and agricultural heritage;
- CH-3.3.5. Identify and secure funding to support an annual program on stewardship, potentially operated under the auspices of the existing Bemis Lecture Series.

THE BUILT ENVIRONMENT

Goal BE-1. Preserve key aspects of Lincoln’s rural roots and agricultural heritage, its varied architecture, and the prominence of its natural land formations.

RECOMMENDATIONS & ACTION STEPS:

- BE-1.1. Update, clarify, and strengthen Lincoln’s regulations and review procedures governing demolition and renovation requiring significant demolition.
 - BE-1.1.1. Clarify and, if necessary, strengthen the definition of “demolition” and “significant renovation” in the demolition delay bylaw and the Zoning Bylaw.
 - BE-1.1.2. Consult with the Massachusetts Historical Commission about options to strengthen Lincoln’s demolition delay bylaw.
 - BE-1.1.3. Consider amending the Demolition Delay Bylaw to require any applicant for a demolition permit, including properties not deemed historically significant, to present plans and elevations of proposed replacement structure(s) to the LHC or the Planning Board.
 - BE-1.1.4. Using the town’s GIS system, map properties with a high risk of demolition, and explore options in addition to demolition delay.

- BE-1.2. Encourage the creation of Neighborhood Conservation Districts in appropriate areas.
 - BE-1.2.1. Continue outreach to neighborhoods about the potential benefits of a Neighborhood Conservation District designation.
 - BE-1.2.2. Make CPA funding available for neighborhood plans and studies as an eligible historic preservation planning activity.
- BE-1.3. Expand protection of scenic roadways, vistas from roadways, and other elements that enhance the character of a rural and agrarian environment.
 - BE-1.3.1. Define and map critical views from the road.
 - BE-1.3.2. Evaluate options to amend the Zoning Bylaw to protect views from the road, including but not limited to a scenic corridor overlay district and backlot development.
 - BE-1.3.3. Adopt appropriate recommendations of the Lincoln Garden Club's Roadside Report on Lincoln's Roadsides to be published in 2009 as policies and regulations that balance a road's historic and scenic appearance with safety needs.
 - BE-1.3.4. Amend the Planning Board's Subdivision Regulations to include appropriate recommendations from the Garden Club's report.
- BE-1.4. Encourage owners of private property with historic or scenic vistas to keep the view open and visible to the public.
 - BE-1.4.1. Investigate options for providing incentives to preserve vistas, including but not limited to conservation restrictions, special tax incentives (which may require a special act of the legislature), and backlot development.

Goal BE-2. Preserve rural character achieved by recent public and private efforts in Lincoln to conserve open space and to place land in permanent conservation.

RECOMMENDATIONS & ACTION STEPS:

- BE-2.1. Increase non-disturbance setbacks on lots contiguous to Lincoln's conservation lands.
 - BE-2.1.1. Evaluate options for establishing different side and rear setbacks on parcels adjacent to conservation land.
 - BE-2.1.2. Develop working assumptions about the amount of non-disturbance setback required to achieve the purposes of this goal.
 - BE-2.1.3. Conduct a field survey to test assumptions.
 - BE-2.1.4. Consider a zoning bylaw amendment that would establish a minimum setback applicable in all cases with a special permit option to reduce the minimum setback based on a site analysis submitted by applicants.
- BE-2.2. Consider establishing scenic overlay districts as a means to protect land features bordering conservation lands.
 - BE-2.2.1. Implement the actions under Recommendation BE-1.3.

- BE-2.3. Require site plan review by the Planning Board of any development on lots contiguous to Lincoln’s conservations lands.
 - BE-2.3.1. Amend the Zoning Bylaw to establish development on parcels adjacent to conservation land as a threshold for site plan review.
 - BE-2.3.2. Implement Recommendation B-2.1 and all of its associated action steps.

Goal BE-3. Encourage new structures to fit within the landscape and to respect Lincoln’s unique New England character.

RECOMMENDATIONS & ACTION STEPS:

- BE-3.1. Create a Visual Preference Guide that articulates and illustrates key visual characteristics and preferred building-to-land relationships as an aide to residents, homebuilders, and developers.
 - BE-3.1.1. Determine how best to incorporate a Visual Preference Document into the development process and whether it should be advisory or adopted into rules, regulations and as criteria for site plan review.
 - BE-3.1.2. Determine appropriate criteria that would trigger review using the principles of a Visual Preference Document.
- BE-3.2. Review the Zoning Bylaw and remove regulatory barriers to allowing buildings to conform to the landforms, particularly with respect to overall height on sloped sites.
 - BE-3.2.1. Conduct a field survey to identify sites on which conformance to natural landforms was compromised by existing zoning requirements.
 - BE-3.2.2. Evaluate factors that contributed to disturbance and alteration of natural landforms.
- BE-3.3. Strengthen regulations that govern massing, scale, and issues of adjacency of principal and accessory structures to ensure they fit within context of surrounding neighborhoods.
 - BE-3.3.1. Evaluate regulatory and non-regulatory options for requiring or encouraging design and form objectives.
 - BE-3.3.2. Consider requiring site plan review for new construction or substantial alteration of residential accessory structures.
 - BE-3.3.3. Provide guidance in the Visual Preferences Guide on preferred treatments of accessory structures.
- BE-3.4. Support educational programs sponsored by local organizations that work to protect the town’s identity.
 - BE-3.4.1. Encourage groups such as the Lincoln Garden Club and FOMA to continue and increase educational programming.
 - BE-3.4.2. Make reports and presentations prepared by such groups available on the town’s website.

Goal BE-4. Encourage environmentally sensitive building and landscape practices for all future development.

RECOMMENDATIONS & ACTION STEPS:

- BE-4.1. Consider incorporating energy and environmental performance standards in Lincoln’s development regulations.
 - BE-4.1.1. Survey existing practices to encourage or require energy and environmental performance standards both for new development and substantial reconstruction.
 - BE-4.1.2. Consult with other communities that have adopted energy and environmental performance standards as part of local zoning requirements; identify and evaluate successes and problems.
 - BE-4.1.3. Consult with local developers and builders and design professionals about feasibility issues that should be considered in designing regulatory incentives or setting thresholds for mandatory compliance.
 - BE-4.1.4. Establish a policy and guidelines or consider amending the Zoning Bylaw to impose requirements and establish an appropriate review process.
 - BE-4.1.5. Increase public outreach, awareness, visibility, and access to information about environmental design.
 - BE-4.1.6. Support groups that already sponsor programs to educate citizens on the principles of environmentally responsible design.
- BE-4.2. Increase public outreach and access to information about environmentally responsible design, using the town’s website, newspaper articles, coordination with groups that sponsor public education programs, and other means.
 - BE-4.2.1. Collect and review existing literature about sustainable design.
 - BE-4.2.2. Choose a “best practices” sample and make available on the town’s website.
 - BE-4.2.3. Provide public information displays at the library, the Town Office Building, the schools, and other public places.
 - BE-4.2.4. Ensure that town government serves as a model of environmentally responsible design by meeting performance standards in public buildings.
 - BE-4.2.5. Provide support to the Green Technology Committee in its efforts to determine the feasibility of instituting alternative energy technologies in the operations and maintenance of public buildings.
- BE-4.3. Encourage higher-density development in designated areas, such as the Lincoln Station area, to preserve open space elsewhere.
 - BE-4.3.1. Implement the recommendations under Goal LU-1.
 - BE-4.3.2. Evaluate opportunities for zoning techniques such as transfer of development rights to protect priority open space by “sending” the development rights to designated growth areas such as Lincoln Station. (*See also, LU-3.*)

OPEN SPACE

Goal OS-1. Preserve, protect and expand conservation, agricultural, and recreational lands.

RECOMMENDATIONS & ACTION STEPS:

- OS-1.1. Continue efforts to protect existing conservation land and open space from development.
 - OS-1.1.1. Distribute the Open Space Map to boards and local organizations, and mount a large-format version in the Town Office Building.
 - OS-1.1.2. Place conservation restrictions on deeded conservation land to a grantee other than owner.
 - OS-1.1.3. Identify a co-holder for all new conservation restrictions.
 - OS-1.1.4. Evaluate the effectiveness of Lincoln’s existing bylaws, regulations, and policies to protect open space, and strengthen them as appropriate.
 - OS-1.1.5. Study the zoning opportunities discussed under Goal LU-3 and determine their appropriateness as incentives or requirements for open space protection in Lincoln. *(See also, BE-4.3.2, and Chapter 2)*
 - OS-1.1.6. Pursue adoption of appropriate zoning amendments at Town Meeting.
- OS-1.2. Protect lands of conservation and recreation interest, such as private farms, Chapter 61 lands, view corridors, buffers and scenic vistas, outstanding natural features, and fields appropriate for recreational use.
 - OS-1.2.1. Continue to implement the *Open Space and Recreation Plan*.
 - OS-1.2.2. Identify and map significant natural, scenic, and recreational resources, building upon the town’s existing GIS databases, and ensure that all town boards with development review and open space and recreation planning responsibilities have access to the information.
- OS-1.3. Provide incentives to farmers on private property to place conservation or agricultural preservation restrictions on non-protected agricultural land.
 - OS-1.3.1. Continue to work with owners of agricultural land to protect their farmland in perpetuity.
 - OS-1.3.2. Make CPA funds available as appropriate to acquire deed restrictions.
 - OS-1.3.3. Consider zoning tools such as a transfer of development rights (TDR) bylaw and establishment of a TDR “credits bank” as mechanisms for protecting farmland. *(See also, LU-2, BE-4.3.2, and OS-1.2.1.)*
- OS-1.4. Maintain open communication among conservation organizations and continue to explore funding, land acquisition, or limited development opportunities.
 - OS-1.4.1. Partner with adjacent towns, the state, and regional non-profit organizations to promote mutual conservation and recreation interests.

- OS-1.4.2. Continue to work with neighboring towns on conservation and recreation projects such as trail connections.
- OS-1.4.3. Consider enlisting assistance from MAPC to develop a regional open space plan for Lincoln and neighboring towns, building upon existing individual town plans and providing a framework for creating plans in communities that do not have a current open space plan.
- OS-1.5. Maintain open communication among conservation organizations and continue to explore funding, land acquisition, or limited development opportunities.
- OS-1.6. Partner with adjacent towns, the state, and regional non-profit organizations to promote mutual conservation and recreation interests.

Goal OS-2. Promote active stewardship of existing agriculture and conservation land.

RECOMMENDATIONS & ACTION STEPS:

- OS-2.1. Maintain the Conservation Commission's Property Baseline Inventory and Monitoring Program. (*See also, NR-1.2*)
 - OS-2.1.1. Continue to fund the Baseline Inventory and Monitoring Program.
 - OS-2.1.2. Acquire legal records for new conservation acquisitions and existing and new trail easements.
 - OS-2.1.3. Maintain and enhance the conservation land database.
 - OS-2.1.4. Prepare baseline inventory reports for all new conservation land acquisitions.
 - OS-2.1.5. Annually monitor conservation properties.
- OS-2.2. Encourage best land management practices, such as farming or recreation field maintenance practices compatible with natural resources, ecologically sound woodlot management, and scientifically sound management of existing open farm ponds.
 - OS-2.2.1. Evaluate and update, as appropriate, existing field and forest management plans.
 - OS-2.2.2. Establish general management plans for specific topics such as farm ponds, hemlock stands, and deer/deer ticks.
 - OS-2.2.3. Collect and disseminate current scientific research on sound management for all types of conservation land
 - OS-2.2.4. Annually monitor compliance with agricultural leases.
- OS-2.3. Support long-term land stewardship with local resources, grants, stewardship fees, and other funding sources.
 - OS-2.3.1. Seek non-local funding sources wherever possible.
 - OS-2.3.2. Institute a stewardship fee for new conservation restrictions.
 - OS-2.3.3. Establish a stewardship fund.

OS-2.4. Enforce conservation restrictions and regulations governing the use of conservation land.

Goal OS-3. Maximize recreational opportunities on recreation and conservation land.

RECOMMENDATIONS & ACTION STEPS:

- OS-3.1. Provide for multiple uses of recreation and conservation land, and multiple recreation uses of conservation trails.
 - OS-3.1.1. Identify and remove barriers to universal access to recreation facilities.
 - OS-3.1.2. Maintain trails suitable for a variety of recreational opportunities.
- OS-3.2. Maintain and evaluate opportunities to expand the roadside path and trail network. *(See also, TC-1.3, TC-2.1, and TC-2.2.)*
 - OS-3.2.1. Identify unprotected trails and corridors and pursue means to protect them.
 - OS-3.2.2. Acquire trail easements to improve connections between existing trails.
 - OS-3.2.3. Include trail maintenance needs in baseline inventory and monitoring reports.
 - OS-3.2.4. Work with the Department of Public Works to develop a comprehensive maintenance plan for roadside paths.
 - OS-3.2.5. Provide annual funding to maintain existing roadside paths and to construct new paths.
- OS-3.3. Maintain current recreation facilities and provide new facilities to meet evolving community needs.
 - OS-3.3.1. Periodically evaluate community recreation needs through surveys, program participation statistics, and updates of the Open Space and Recreation Plan.
 - OS-3.3.2. Evaluate the effectiveness, condition, and use of existing recreation facilities.
 - OS-3.3.3. Develop a long-range recreation facilities master plan and incorporate within this Comprehensive Plan and the town's Capital Improvements Plan.

HOUSING

Goal H-1. Provide for a variety of housing types to encourage diversity of Lincoln's population.

RECOMMENDATIONS & ACTION STEPS:

- H-1.1. Create higher-density housing, including a modest amount of additional multi-family housing, in the Lincoln Station area.
 - H-1.1.1. Through the efforts of the Lincoln Station Planning Committee, identify opportunities for multi-family dwellings and housing in mixed-use developments in the Lincoln Station area. *(See also, Goal LU-1.)*

- H-1.1.2. Implement the recommendations under Goal LU-1.
- H-1.1.3. Determine other areas in Lincoln that may be suitable for compact housing developments similar to Farrar Pond Village or Lincoln Ridge.
- H-1.2. Consider development incentives such as M.G.L. c. 40R (smart growth) to achieve Lincoln’s housing goals. (*See also, LU-3.2.*)
- H-1.3. Encourage retention or creation of smaller homes in order to maintain a range of housing stock available to smaller households and those in early or later stages of life.
 - H-1.3.1. Continue to implement and evaluate the effectiveness of Lincoln’s demolition delay bylaw.
 - H-1.3.2. Consider zoning techniques such as allowing construction of small dwelling units on substandard (non-conforming) lots, by special permit.
- H-1.4. Consider removing zoning obstacles to preserving smaller homes by allowing them to be relocated to another lot with an existing residence for use as an accessory dwelling unit.
 - H-1.4.1. Evaluate bylaws and ordinances in other communities (in and outside of Massachusetts) that permit the creation of accessory units through relocation of older homes.
 - H-1.4.2. Study zoning techniques such as Elder Cottage Housing Opportunity (ECHO) bylaws and determine their appropriateness for Lincoln.
- H-1.5. Encourage accessory apartments to provide more options in current housing stock.
 - H-1.5.1. Allow accessory apartments as of right in single-family dwellings, subject to conditions such as age of the existing dwelling, extent of exterior change allowed to the existing dwelling, maximum unit size, septic system capacity, and screening of off-street parking.
 - H-1.5.2. Allow accessory apartments by special permit when an applicant’s property does not meet one or more of the conditions for an as-of-right use, e.g., proposals to locate an accessory dwelling in an accessory building on the same lot.
 - H-1.5.3. Consider providing CPA assistance to homeowners who agree to place an affordable housing restriction on a proposed accessory apartment.

Goal H-2. Provide more housing and/or services to accommodate the needs of individuals who may be under-served by Lincoln’s existing housing stock.

RECOMMENDATIONS & ACTION STEPS:

- H-2.1. Determine the need, availability, and cost of in-home services to assist the elderly and people with disabilities so they are able to remain in their own homes if they choose.
 - H-2.1.1. Work with local and area service providers to identify the home-based service needs of frail elders and people with disabilities.
 - H-2.1.2. Evaluate available models of in-home service delivery and the role(s) of local government in coordinating or providing such services.

- H-2.1.3. Consider ways to achieve economy of scale by working with other communities on regional solutions to the in-home service needs of seniors and people with disabilities.
- H-2.2. Conduct outreach and provide information to elderly taxpayers about available programs such as reverse annuity mortgages or work in lieu of property taxes, which might allow them to remain in their own homes for as long as possible.
 - H-2.2.1. Continue to provide taxpayer information on the Town’s website.
 - H-2.2.2. Make literature and referrals available through the Council on Aging.
- H-2.3. Determine the need for additional age-restricted (55+) housing beyond Lincoln’s existing developments, including but not limited to options such as an elderly cottage housing opportunity (ECHO) program. *(See also, H-1.4)*
 - H-2.3.1. Survey regional housing market conditions to estimate pipeline of over-55 developments, absorption rates, and vacancies.
 - H-2.3.2. Consult with local and regional service providers on need for additional over-55 housing (independent living units), assisted living, and other types of housing for retirees and the elderly.
 - H-2.3.3. Consider zoning to provide for a variety of housing types and prices for over-55 households.
 - H-2.3.4. Incorporate findings and address with appropriate actions, as warranted, in the Town’s Affordable Housing Plan.
- H-2.4. Continue to study needs for supportive housing to serve adults with disabilities, particularly adult children of Lincoln residents.
 - H-2.4.1. Consult with local and area service providers about disability housing needs in Lincoln.
 - H-2.4.2. Determine the need for a program for providing basic home repair/maintenance services for people with disabilities who would like to remain in their own homes.
 - H-2.4.3. Determine the need for additional group homes and types of group homes to serve adults with disabilities, particularly adult children of Lincoln residents.
 - H-2.4.4. Maintain a local library of data sources and case studies, such as the WestMetro HOME Consortium’s Five-Year Consolidated Plan.

Goal H-3. Maintain Lincoln’s long-standing commitment to provide affordable housing that meets local needs.

RECOMMENDATIONS & ACTION STEPS:

- H-3.1. Continue to seek affordable housing opportunities throughout the town, using techniques such as scattered site development, condominium buy-downs, and group homes.

- H-3.1.1. Evaluate options for the effective use of zoning incentives to encourage creation of affordable housing.
- H-3.1.2. Continue to commit CPA revenue to affordable housing initiatives conducted or supported by the Lincoln Housing Commission and which are consistent with the Town's Affordable Housing Plan.
- H-3.1.3. Support efforts to preserve the affordability of Lincoln Woods.
- H-3.2. Ensure that affordable housing is included in residential and mixed-use developments in the Lincoln Station area.
 - H-3.2.1. As part of the planning process for Lincoln Station (*Goal LU-1*), explore options for providing affordable units in mixed-use and multi-family developments.
- H-3.3. Support the Lincoln Housing Commission in setting local targets and strategies to provide affordable housing.
 - H-3.3.1. Provide adequate resources to the Housing Commission to conduct and implement plans and studies to meet local housing needs.

Goal H-4. Maintain local control over affordable housing development.

RECOMMENDATIONS & ACTION STEPS:

- H-4.1. Review, refine, and update Lincoln's Affordable Housing Plan.
 - H-4.1.1. Maintain and implement the town's Affordable Housing Plan and ensure that the plan meets DHCD requirements for a Housing Production Plan.
 - H-4.1.2. To the extent possible, ensure that Lincoln's Affordable Housing Plan also meets HUD Consolidated Plan requirements so that Lincoln can continue to participate in the West Metro HOME Consortium and be competitive for state HOME funds.
 - H-4.1.3. Implement Recommendation H-3.3.
- H-4.2. Continue to prevent hostile comprehensive permits by ensuring that Lincoln meets the ten percent statutory minimum affordable housing under M.G.L. c. 40B.
 - H-4.2.1. Commit CPA funds to housing initiatives that produce additional affordable units eligible for the Chapter 40B Subsidized Housing Inventory.
 - H-4.2.2. Monitor market-rate housing development and tailor affordable housing efforts to avoid falling below the ten percent minimum after the next decennial census.
- H-4.3. Propose, shape, and support positive changes to state legislation that would align with Lincoln's affordable housing goals without posing a threat to its rural character.
 - H-4.3.1. Monitor state and federal initiatives levels that could negatively affect Lincoln's character, upset the balance of existing affordable housing compliance, or usurp local regulation with respect to housing development.
 - H-4.3.2. Oppose initiatives that would impose locally unregulated development on Lincoln's infrastructure.

ECONOMIC DEVELOPMENT

Goal ED-1. Develop the Lincoln Station area as a higher-density mixed-use village that complements and reinforces the vitality of Lincoln’s existing small businesses, consistent with smart-growth principles and Lincoln’s core values.

RECOMMENDATIONS & ACTION STEPS:

- ED-1.1. Create a Lincoln Station Area Planning Committee appointed by the Planning Board to undertake an initial study of the opportunities, factors and constraints that would inform the necessary steps toward incenting desirable development in the area.
- ED-1.2. Review and build upon the Report to the Lincoln Planning Board by the South Lincoln Business Area Planning Committee that was the outcome of the 1998 charrette, and prepare a report that adjusts, refines, or adds to its recommendations to apply to current conditions.
- ED-1.3. Prepare a needs analysis and feasibility study to determine what commercial activities would best serve the town’s interests.
 - H-1.3.1. Work with the Rural Land Foundation, existing businesses at Lincoln Station, and organizations such as MassDevelopment and the Massachusetts Office of Business Development (MOBD) to fund and carry out a Lincoln Station retail and commercial market study.
- ED-1.4. Develop realistic economic goals and evaluate the fiscal impact of enacting any recommendations to increase the density of development in the area.
- ED-1.5. Prepare a comprehensive development plan including the infrastructure required to encourage desirable development.
 - ED-1.5.1. Implement Goal LU-1.

Goal ED-2. Provide for economic development that respects Lincoln’s rural character and adds to the quality of local residential life by providing goods and services desired by residents, jobs and livelihoods for Lincoln residents, and tax revenue that support the town services that are important to Lincoln residents.

RECOMMENDATIONS & ACTION STEPS:

- ED-2.1. Create an Economic Development Committee with members appointed by the Board of Selectmen to identify and assess Lincoln’s economic development opportunities and advise the Board of Selectmen, Planning Board, and other town boards about economic development policy.
 - ED-2.1.1. Establish a nine-member Economic Development Committee appointed by the Board of Selectmen, and prepare a formal committee charge.
 - ED-2.1.2. Conduct outreach to identify residents and business owners interested in serving on the Economic Development Committee.
 - ED-2.1.3. Seek ex officio members for the Economic Development Committee from the Finance Committee, Planning Board, Agricultural Commission, Rural Land Foundation, and the Council for Cultural and Historic Organizations. (*See also, CH-1.*)

- ED-2.1.4. Reassess the role, functions, and contributions of the Economic Development Committee within two years of its creation, and determine whether it should be made a permanent town committee.
- ED-2.2. Consider opportunities for new mixed uses or commercial uses that can be developed and operated for the benefit of the town.
 - ED-2.2.1. Maintain and periodically update information contained in the At-Risk Properties Report (2005).
 - ED-2.2.2. Working with the Conservation Commission, the Recreation Commission, other boards and private organizations, the Planning Board will lead the effort to determine future land needs and land suitability for various uses, as well as identify areas that may be appropriate for mixed-use or commercial development.
 - ED-2.2.3. Explore and evaluate strategies used in other communities to reuse properties for nonresidential purposes, such as the “Great Estates” zoning that exists in some Berkshire County and Essex County communities.
 - ED-2.2.4. Explore the feasibility of economic development opportunities such as agri-tourism.
 - ED-2.2.5. Establish basic policies and procedures to guide the preparation of development agreements for mixed-use or commercial projects requiring new zoning, drawing upon sources such as the Land Use Review Criteria (Appendix B), the town’s Capital Improvements Plan, and other plans and studies.
 - ED-2.2.6. Ensure that development agreements, when used, are presented to Town Meeting for approval at the same time that Town Meeting is asked to authorize zoning changes, and ensure that approved development agreements are recorded at the Registry of Deeds.

Goal ED-3. Retain and capitalize on Lincoln’s cultural, educational, environmental, and other non-profit charitable organizations as a vital part of the local economy.

RECOMMENDATIONS & ACTION STEPS:

- ED-3.1. Encourage partnerships between non-profit organizations and local businesses for special events, programs, and other forms of joint marketing that would be mutually beneficial for them and of interest to Lincoln residents.
 - ED-3.1.1. Implement the recommendations under Goal CH-1.
 - ED-3.1.2. Study opportunities for non-profit/for-profit partnerships.
- ED-3.2. Support non-profit organizations by including their programs and activities on a community-wide calendar maintained on the town’s website.
 - ED-3.2.1. Implement the actions under Recommendation CH-1.2.
- ED-3.3. Encourage non-profit organizations to provide a variety of educational and enrichment opportunities for Lincoln’s youth, both in and outside of the classroom.
 - ED-3.3.1. Implement the actions under Recommendation CH-1.3.

- ED-3.3.2. Work with the School Committee to ensure that information about educational and enrichment opportunities is made available to Lincoln students.

Goal ED-4. Promote local businesses and home-based businesses as a source of local, “zero-commute” employment.

RECOMMENDATIONS & ACTION STEPS:

- ED-4.1. Periodically evaluate the needs of local businesses, such as business services, expansion space, communications technology, networking, or supportive policies from town government.
 - ED-4.1.1. Survey local business owners from time to time, possibly in conjunction with or on the same timetable as need and interest surveys of residents for long-range services and facilities planning (*See also, SF-1.1*)
 - ED-4.1.2. Identify barriers (if any) to meeting the services and infrastructure needs of local businesses.
 - ED-4.1.3. Determine local government’s responsibility, and evaluate appropriate and realistic options for the Town’s response to business needs.
- ED-4.2. Review the town’s zoning regulations in order to determine if there are barriers to appropriate at-home employment.
 - ED-4.2.1. Identify residents with home occupations and consult with them to determine whether regulatory barriers exist.
 - ED-4.2.2. Through formal and informal means, conduct local research to determine whether land use conflicts exist between Lincoln’s variety of home occupations and the surrounding neighborhoods.
 - ED-4.2.3. Review home occupation bylaws and ordinances from other communities similar to Lincoln and determine whether the existing town bylaw should be updated or otherwise modified.
- ED-4.3. Encourage local businesses to collaborate and coordinate with the town’s non-profit organizations and institutions to address mutual interests, such as planning and cross-promotions of special and seasonal events, and wayfinding to the Lincoln Station area.

Goal ED-5. Continue to encourage agriculture as a way of life and a source of local employment and food.

RECOMMENDATIONS & ACTION STEPS:

- ED-5.1. Adopt a right to farm bylaw.
 - ED-5.1.1. Evaluate the state’s model right-to-farm bylaw and similar bylaws adopted in other communities.
 - ED-5.1.2. Consult with agricultural commissions, realtors, developers, lenders, town assessors, and others in communities that have adopted a right-to-farm bylaw and identify advantages and disadvantages (if any).

- ED-5.1.3. Draft a right-to-farm bylaw deemed appropriate for Lincoln and publish it on the Town's website for public review and comment.
- ED-5.1.4. Modify the draft based on public input and present to Town Meeting.
- ED-5.2. Support and collaborate with local and regional organizations to promote agri-tourism in Lincoln and increase the base of loyal customers for Lincoln agricultural products.
 - ED-5.2.1. Consult with the state Department of Agriculture, Department of Conservation and Recreation (DCR), the Metropolitan Area Planning Council (MAPC), the Massachusetts Audubon Society, and other organizations to identify successful agri-tourism and community-supported agriculture (CSA) programs in New England.
 - ED-5.2.2. Study successful programs by contacting and visiting them, and determine relevance to Lincoln.
 - ED-5.2.3. Work with Codman Community Farms and other local farms to evaluate the potential benefits and drawbacks of promoting tourism through agriculture.
 - ED-5.2.4. Strengthen and build upon connections between agriculture and local artists and producers of contemporary and traditional craft in order to create new markets for farm and non-farm microbusinesses.
- ED-5.3. Continue the Conservation Commission's agricultural leasing program and explore opportunities to expand it, where appropriate.

TRANSPORTATION & CIRCULATION

Goal TC-1. Increase the safety of Lincoln's roadways.

RECOMMENDATIONS & ACTION STEPS:

- TC-1.1. Implement traffic-calming measures to manage vehicle speeds and reduce the amount of cut-through traffic through certain areas of town.
 - TC-1.1.1. Implement the recommendations of the Ad Hoc Traffic and Roadside Committee, including but not limited to the establishment of a permanent or standing town committee, the Traffic and Roadway Management Committee.
 - TC-1.1.2. Use the 2009-2010 roadway improvements project to implement and test traffic volume and traffic speed measures.
 - TC-1.1.3. Institute traffic calming measures in appropriate locations both to slow traffic and to preserve the rural beauty of Lincoln's roads, particularly in critical traffic locations with significant pedestrian activity, e.g., the school complex, Lincoln Station, or the town center.
 - TC-1.1.4. Conduct a review of cut-through traffic patterns.
 - TC-1.1.5. Investigate the possibility of designating some non-major roads as one-way streets during peak periods, and evaluate the benefits and drawbacks.

- TC-1.2. Control traffic speed through speed limit regulation and enforcement in a manner guided by a balanced traffic management program..
 - TC-1.2.1. Increase traffic-speed enforcement to include greater use of methods such as automated speed cameras.
 - TC-1.2.2. Provide adequate support to the Police Department to carry out regular, effective speed limit enforcement.
- TC-1.3. Institute public education and outreach to encourage traffic safety and awareness for users of Lincoln’s roads, roadside paths, and trails. (*See also, OS-3.2, TC-2.1, TC-2.2.*)
 - TC-1.3.1. Develop an effective public outreach plan through the use of the Town’s website, other local websites, brochures, signage, and other means to communicate public safety rules.
 - TC-1.3.2. Encourage town boards such as the Recreation Committee and Conservation Commission to work together on trail and path usage guidelines for walkers, bikers, and others.
 - TC-1.3.3. Seek public input about safe and appropriate provisions for speed and mountain bikers.
- TC-1.4. Continue to advocate for the Route 2 Crosby’s Corner project and coordinate with state and regional transportation agencies.
 - TC-1.4.1. Provide appropriate town representation on the Corridor Advisory Committee to work cooperatively with the towns of Acton and Concord and the Massachusetts Highway Department (MassHighway).
 - TC-1.4.2. Ensure timely and appropriate compliance with all environmental requirements for planned road improvements.
- TC-1.5. Assess and, if necessary, improve parking in the center of town.
 - TC-1.5.1. Conduct a study and review of existing parking in the center of town, with particular emphasis on the parking needs for the Public Library, The First Parish and the community users of Bemis Hall.
 - TC-1.5.2. Look for increased parking opportunities in the area – while being fully cognizant of protecting the residential neighborhoods from being harmed by inappropriate parking solutions.

Goal TC-2. Encourage the use of both motorized and non-motorized modal alternatives for intra- and inter-town transportation.

RECOMMENDATIONS & ACTION STEPS:

- TC-2.1. Improve the attractiveness of, and access to, Lincoln’s pedestrian and bicycle infrastructure, including roadway shoulders. (*See also, OS-3.2, TC-1.3, TC-2.2.*)
 - TC-2.1.1. Maintain and expand the roadside paths and provide more linkages with conservation trails.

- TC-2.1.2. Maintain and promote the trail walks led by the Conservation Department.
- TC-2.1.3. Communicate to residents the environmental and public health benefits of expanded access and usage of paths and trails.
- TC-2.2. Explore feasibility of expanding bicycle access to the trail network in coordination with the Conservation Commission. (*See also, OS-3.2, TC-1.3, TC-2.1.*)
 - TC-2.2.1. Ensure broad distribution and public access to the Conservation Department’s *Trail Guide for Bicycles*.
 - TC-2.2.2. Identify areas where additional bicycle stands could be safely located and easily accessed, and seek funding for acquisition and installation.
- TC-2.3. Explore ways of increasing availability of motorized transportation alternatives, such as ridesharing and shuttle service, and investigate mechanisms to fund them.
 - TC-2.3.1. Study and implement incentives to encourage carpooling and increase school bus ridership.
 - TC-2.3.2. Study and implement improved transportation options (such as van shuttles) for elderly residents and people with disabilities.
 - TC-2.3.3. Continue to work with the state to overcome current legal objections to charging developers impact fees as a means of funding transportation initiatives.
 - TC-2.3.4. Seek alternative funding for alternative modes, such as developer agreements, in lieu of impact fees.

Goal TC-3. Address transportation issues on a regional level.

RECOMMENDATIONS & ACTION STEPS:

- TC-3.1. Continue to build upon partnerships with surrounding towns and regional agencies to address regional traffic congestion through transportation alternatives to single-occupancy vehicle commutes.
 - TC-3.1.1. Increase the town’s awareness of existing transit programs in surrounding towns and explore joint ways to address traffic congestion on a regional level.
 - TC-3.1.2. Include HATS, Massport and Hanscom Air Force Base (HAFB), the Route 128 Central Corridor Coalition, and where appropriate, the Minuteman Advisory Group on Interlocal Coordination (MAGIC) in all regional transportation discussions.
 - TC-3.1.3. Support expansion of regional services such as bus routes, ride-share, car-pools, etc.
- TC-3.2. Encourage ridership on the MBTA commuter rail.
 - TC-3.2.1. Conduct an exploration and conversations with the MBTA to investigate the possible increase and expansion of train service (with perhaps a reduction of the ticket costs).
 - TC-3.2.2. Ensure that parking facilities at the train station remain adequate to meet demand.

TC-3.3. Coordinate regional economic development with plans to develop regional transportation infrastructure and congestion management plans.

Goal TC-4. Coordinate the need for traffic control measures with preserving the rural character of Lincoln's roadways.

RECOMMENDATIONS & ACTION STEPS:

TC-4.1. Continue to use Lincoln's Roadway Design Guidelines when reconstructing or maintaining town roads.

TC-4.2. Consult with and incorporate the recommendations of the Lincoln Garden Club's Report on Lincoln's Roadsides preliminarily adopted by the Board of Selectmen for publication in 2009.

COMMUNITY SERVICES & FACILITIES

Goal SF-1. Continue to identify and assess community service needs, considering Lincoln's changing population, the cost of services, the revenues available to support them, and alternative models of service delivery.

RECOMMENDATIONS & ACTION STEPS:

SF-1.1. Periodically evaluate needs for existing or new local government services through resident surveys, consultations with town staff and organizations that provide services to Lincoln residents, and review of program participation statistics and other available information.

SF-1.1.1. Recruit a working group of volunteers to design a resident opinion survey about local government services, and beta test the survey questionnaire.

SF-1.1.2. Conduct a regular survey process (such as every three years) to determine needs, desires, and priorities for municipal services. Analyze survey results in-house or arrange for data entry and tabulation services from an outside vendor.

SF-1.1.3. Conduct focus groups with town boards, municipal employees, and representatives of local organizations to enlist their ideas about existing and future service delivery needs.

SF-1.1.4. Compile survey, focus group, and other available data, and report findings and preliminary conclusions to the State of the Town Meeting for public discussion.

SF-1.1.5. Consider assessment results as a source of information for evaluating and making adjustments to town services as part of the budget process.

SF-1.2. Explore opportunities to provide services through agreements with private organizations and other local governments in Lincoln's region.

SF-1.3. Continue to review the sufficiency of user fees and charges to recover most or all of the town's cost to provide certain programs and services.

SF-1.4. Establish objective methods of measuring and analyzing the net cost of community services and provide information to town boards and town meeting.

- SF-1.4.1. Consult with town staff to identify the most appropriate ways to measure service demands in each department (e.g., number of incident response calls handled by the police or fire department in any given year), and other variables that need to be accounted for in a fiscal impact analysis.
 - SF-1.4.2. Consult with the Town Administrator, Finance Director, and Board of Assessors to establish appropriate options for estimating revenue from different types of development.
 - SF-1.4.3. Prepare and annually maintain a basic cost of community services analysis that reflects existing conditions in Lincoln.
 - SF-1.4.4. Ensure that methods and assumptions are periodically reviewed and verified by town staff.
 - SF-1.4.5. Provide net cost of services data, assumptions, and statistics to the Planning Board, other town boards, and Town Meeting for any proposed land use changes and, as appropriate, for proposed increase, decrease, consolidation, or elimination of town services.
- SF-1.5. Assess citizen's level of support for alternative revenue sources.

Goal SF-2. Improve the management and maintenance of town facilities and infrastructure.

RECOMMENDATIONS & ACTION STEPS:

- SF-2.1. Establish and fund a full-time facilities manager position to coordinate and oversee the management and maintenance of all municipal facilities.
 - SF-2.1.1. Survey other communities in the Boston area to obtain job descriptions and compensation schedules for full-time municipal facilities managers.
 - SF-2.1.2. Develop job description and salary range, and seek funding from Town Meeting to establish a full-time facilities manager.
 - SF-2.1.3. Charge the Facilities Manager with planning, budgeting, and keeping building survey plans current; carrying out routine inspection and maintenance; overseeing custodial care, repair and improvement projects; and collecting, recording, and analyzing data to monitor energy use and cost of maintenance.
- SF-2.2. Institute a Planned Preventive Maintenance (PPM) program in order to maximize the efficiency, reliability, and lifespan of building systems and equipment.
 - SF-2.2.1. Develop a baseline inventory of building systems and equipment to be included in the PPM program.
 - SF-2.2.2. Evaluate condition of existing systems and equipment, establish maintenance needs, and estimate maintenance and life cycle replacement needs.
 - SF-2.2.3. Establish a PPM database, including cost estimates.

- SF-2.2.4. Make an annual commitment of funds to PPM implementation, including routine maintenance costs in the operating budget and, where appropriate, extraordinary maintenance and replacements through capital outlays.
- SF-2.3. Support Lincoln's asset management needs through a comprehensive capital improvements plan (CIP) and broadly supported policies for use of non-exempt and exempt debt, capital outlays, and to the extent allowed by law, capital reserve funds.
 - SF-2.3.1. Continue to develop and refine the procedures, methods, and assumptions used to create a five-year CIP.
 - SF-2.3.2. Periodically evaluate financing assumptions and policies.
 - SF-2.3.3. Explore options to establish capital reserve funds for major capital projects, such as new building construction.
 - SF-2.3.4. Conduct a comprehensive evaluation of all facilities, including cost and efficiency of maintenance, long-term repairs or improvements, energy efficiency, usage.
 - SF-2.3.5. Seek input from Town staff, service agencies, citizen surveys, neighborhood meetings, and other outreach activities to determine if existing facilities meet the needs of the community, if current facilities could be improved or reconfigured, or if new facilities are needed.
 - SF-2.3.6. In concert with the Capital Planning Committee, prepare a Long-Range Facilities Plan that addresses replacement, reconfiguration, recycling or new infrastructure required to meet future needs of the Town based on predictable useful life models.
- SF-2.4. Identify, assess, and pursue opportunities to generate revenue from private use of municipal facilities, consistent with each facility's municipal uses and values expressed in the Town's mission statement.
 - SF-2.4.1. Establish and periodically evaluate policies to guide fee setting and fee waivers for use of public property.
 - SF-2.4.2. Establish and periodically evaluate policies to guide the use of facility-generated revenue, i.e., as revenue to the general fund or revenue restricted to support facility operations and maintenance.
- SF-2.5. Systematically maintain and improve the water distribution system in order to conserve water and meet or exceed state standards for unaccounted water.
 - SF-2.5.1. Continue negotiations with state regulatory bodies to protect Lincoln's interest in maintaining local control of its water supply.
 - SF-2.5.2. Prepare due diligence report on the status of the distribution system, and develop a plan for appropriate replacement of aging sections that are subject to ongoing leakage.
 - SF-2.5.3. Develop a long-range water system master plan, including upkeep and replacement of pumping stations, treatment facilities, storage facilities, and distribution mains.

- SF-2.5.4. Incorporate the water system master plan into this Comprehensive Plan and the town's five-year CIP.
- SF-2.6. Increase support for upgrading, integrating, and maintaining information technology at the town offices and other public buildings.
 - SF-2.6.1. Periodically evaluate, update, and adjust the town's technology plan in consultation with town boards and staff.
 - SF-2.6.2. Design, fund, and implement information technology improvements in accordance with a technology plan for municipal and school facilities.
 - SF-2.6.3. Provide adequate funding for the information services department.

Goal SF-3. Continue to invest in local government innovation, capacity, and efficiency.

RECOMMENDATIONS & ACTION STEPS:

- SF-3.1. Continue to attract and retain highly qualified managers, professionals, and support staff in all town departments, and provide the facilities and technology they need to work efficiently.
 - SF-3.1.1. Maintain competitive wage and salary schedules and benefit plans for municipal employment positions.
 - SF-3.1.2. Plan the design and construction of facility improvements in consultation with the town departments that operate in municipal facilities on a day-to-day basis.
- SF-3.2. Provide adequate, timely opportunities for employee training and professional development to encourage state-of-the-art practices and increase the town's capacity to comply with federal and state mandates. Create mechanisms to routinely solicit employee input for analysis of systems, best practices and potential for innovation.
- SF-3.3. Explore opportunities to reorganize, consolidate, or centralize functions in order to improve efficiency and control growth in operating costs.
 - SF-3.3.1. Considering the services assessment process and service priorities, technology, and space needs, identify options to increase efficiency. (*See also, SF-1.1*)
 - SF-3.3.2. Maintain effective communication with elected boards that have independent jurisdiction over town staff in order to ensure cooperation and explore opportunities to consolidate.
 - SF-3.3.3. Consult with other communities about their experiences with inter-local agreements and regional service delivery.
- SF-3.4. Continue to invest in technology improvements in order to support inter-departmental operating needs and provide residents with timely access to public information.
 - SF-3.4.1. Implement Recommendation SF-2.6.

Goal SF-4. Continue to monitor the status of Hanscom Air Force Base and initiatives with respect to military housing, through base closure or privatization of existing housing, that may place new demands on Lincoln’s municipal and school services.

RECOMMENDATIONS & ACTION STEPS:

- SF-4.1. Maintain an active leadership role in the Hanscom Area Towns Committee (HATS) in order to ensure vigorous representation of Lincoln’s interests.
- SF-4.2. Secure specialized legal services, as appropriate, to ensure that local officials have the best available information to guide decisions about responding to a change in the status of Hanscom’s housing stock.
- SF-4.3. Pursue all appropriate political and legal means to protect Lincoln from having to absorb the cost of residential services at Hanscom without predictable sources of offset revenue from non-local sources.

GOVERNANCE

Goal G-1. Increase citizen participation in town government.

RECOMMENDATIONS & ACTION STEPS:

- G-1.1. Work with community organizations and networks to encourage public participation and provide town government information to residents.
 - G-1.1.1. Enlist volunteer assistance to develop a town government information packet that can be distributed to residents when they register to vote.
 - G-1.1.2. Encourage one or more local organizations to sponsor welcoming events for newcomers.
 - G-1.1.3. Involve community organizations and associations in designing and implementing citizen outreach programs.
- G-1.2. Provide regular e-news about town government activities, issues, and decisions.
 - G-1.2.1. Conduct periodic surveys of residents, or assess resident interests through other means, in order to identify e-news priorities.
 - G-1.2.2. Encourage residents to sign up for e-news opportunities on the Town’s website.
 - G-1.2.3. Ensure adequate capacity to manage e-news services by monitoring the workload of participating staff and volunteers, and adjusting staff time commitments as necessary.
- G-1.3. Establish a citizen skills bank (database) as a resource to identify qualified volunteers and candidates, and encourage town boards and committees to use the skills bank to identify and cultivate new members.
 - G-1.3.1. Review and confirm existing procedures for recruiting residents to serve on volunteer boards and committees.

- G-1.3.2. Determine the personnel and technology requirements to establish and maintain a skills bank database system, and assign staff to manage the database.
- G-1.3.3. Establish volunteer recruitment and selection policies.
- G-1.4. Create a volunteer coordinating committee to assist with outreach and recruitment of potential volunteers.

Goal G-2. Make public service and town meeting participation engaging and attractive to residents and office-holders.

RECOMMENDATIONS & ACTION STEPS:

- G-2.1. Encourage regular, informal breakfast meetings for town board chairs to exchange ideas and information.
 - G-2.1.1. Provide training for board and committee chairs and members, and additional staff support as needed.
 - G-2.1.2. Collaborate with neighboring towns to provide board training at a regional level using resources such as the Citizen Planners Training Collaborative (CPTC) and Massachusetts Municipal Association (MMA).
 - G-2.1.3. Continue to evaluate the staff support needs of boards and committees and assign staff based on identified priorities.
- G-2.2. Provide training for board and committee chairs and members, and additional staff support as needed.
- G-2.3. Hold interdepartmental meetings of town boards and staff to coordinate the town's response to issues that involve multiple boards or committees.
 - G-2.3.1. Use department head meetings to identify issues requiring inter-board coordination and arrange for joint meetings when needed.
 - G-2.3.2. Consider the possibility of establishing an inter-departmental coordinating council of staff and board chairs (or board designees) to coordinate the work of boards and committees with overlapping or shared responsibilities.
- G-2.4. Prepare and distribute a booklet with clear, simple, user-friendly descriptions of town meeting warrant articles and even-handed descriptions of the arguments pro and con.

Goal G-3. Enhance the frequency and effectiveness of town government and citizen communications.

RECOMMENDATIONS & ACTION STEPS:

- G-3.1. Improve the town's website to facilitate access to information about the town and town government activities.
 - G-3.1.1. Give high priority to enhancing IT planning and implementation.
 - G-3.1.2. Create secure internal data bases to facilitate communications among town staff and committees and boards.

- G-3.1.3. Enhance the town website to facilitate user-friendly access to information on the town and town government activities.
- G-3.2. Enhance two-way electronic communications between residents and the town offices.
 - G-3.2.1. Provide an electronic suggestion box for ideas and complaints (ensure responses).
 - G-3.2.2. Target electronic messages for specific audiences.
- G-3.3. Consider the creation of blogs to facilitate constructive dialogue about town-related issues.

Goal G-4. Work with other communities and the state to overhaul the system of real property taxation as the primary method of financing local government.

RECOMMENDATIONS & ACTION STEPS:

- G-4.1. Seek assistance from the Massachusetts Municipal Association (MMA) to form a task force to facilitate discussions and to develop proposals.
 - G-4.1.1. Ask the MMA to establish a task force to facilitate discussions and to develop tax reform proposals.
 - G-4.1.2. Ensure that Lincoln’s policy boards play a role in developing a political constituency.
 - G-4.1.3. Ask Lincoln’s legislators to sponsor and lead legislative efforts toward reform.
- G-4.2. Work to ensure that the Massachusetts Association of Town Finance Committees becomes an active participant in reform efforts.

Implementation Plan Summary: Recommendations and Action Steps by Priority and Comprehensive Plan Theme - 1

Major Theme	Goal(s)	Recommendation/ Action(s)	Topic	Related Elements	Primary Responsibility	Support Needed	Priority	Existing or New Staff	New or Additional Funding
Land Use Policy	LU-2, H-1	LU 2.1, LU 2.2, H-1.1	Compact, vital, walkable village center in the Lincoln Station area.	LU, H, ED, TC, SF	PB	BOS, FC	High	Existing	X
Land Use Policy	LU-1	LU-1.1	Comprehensive process for considering zoning changes.	All Elements	PB	BOS	High	Existing	
Land Use Policy	NR-2, NR-4	NR-2.1, NR-2.2	Water conservation.	NR, LU, OS	WC, BOS	CC	High	Existing	
Land Use Policy	NR-4	NR-4.2 NR-4.2.2	Consistency between land use policies and water management.	NR, SF, LU	WD	BOS, PB	High	Existing	
Land Use Policy	BE-2	BE-2.3 BE-2.3.1	Site plan review for activity on lots adjacent to conservation land.	BE, LU, NR, OS	PB, CC	CC	High	Existing	
Land Use Policy	BE-4	BE-4.3 BE-4.3.2	Higher-density development in designated areas in order to preserve open space elsewhere.	BE, NR, LU, OS	PB	CC	High	Existing	
Land Use Policy	H-1, LU-1	H-1.1 H-1.1.1, H-1.1.2 LU-1	Housing at Lincoln Station.	H, LU, ED	PB, HOC, LSPC*	BOS	High	Existing	
Land Use Policy	H-1	H-1.1 H-1.1.3	Diversity of housing.	H, LU	PB, HOC	BOS	High	Existing	
Land Use Policy	H-4	H-4.2	Local control over affordable housing development.	H, LU, SF	HOC, BOS	CPC	High	Existing	X
Land Use Policy	ED-1, LU-1	ED-1.1 ED-1.2, LU-1.1	Small businesses at Lincoln Station.	ED, LU	PB		High	Existing	
Assets & Resources	CH-2	CH-2.1	Cultural resources inventory.	CH, LU, BE, H	HC	BOS, CPC	High	Existing	X
Assets & Resources	H-3	H-3.1 H-3.1.3	Protecting long-term affordability of Lincoln Woods.	H, LU	HOC, BOS		High	Existing	
Assets & Resources	ED-1	ED-1.3	Lincoln Station retail and commercial market study.	ED, OS, SF	EDC*	BOS, FC	High	Existing	
Assets & Resources	ED-1	ED-1.4	Fiscal impact of increasing density.	ED, SF	EDC	TA	High	Existing	
Town Character	BE-1	BE-1.1	Stronger regulations and review procedures governing demolition and renovations involving significant demolition.	BE, CH, LU	HC	CPC, CD	High	Existing	
Town Character	BE-2	BE-2.1, BE-2.3 BE-2.3.2	Non-disturbance setbacks adjacent to conservation land.	BE, LU, OS, NR	PB	CC	High	Existing	
Town Character	BE-3	BE-3.1	Visual preferences document, design guidelines.	BE, LU, OS, NR, H	PB	HC, NCDC	High	Existing	X
Town Character	OS-1	OS-1.4	Incentives for farming.	OS, LU, NR	CC, AC	LLCT, CPC	High	Existing	X
Town Character	H-1	H-1.3	Creation and retention of smaller homes.	H, LU, CH, BE	PB, HOC, HC		High	Existing	
Transportation	LU-2	LU-2.3	Capitalizing on and reinforcing existing infrastructure to support new growth.	LU, H, TC, SF	PB		High	Existing	
Transportation	TC-1	TC-1.4	Crosby's Corner project.	TC	BOS		High	Existing	
Transportation	TC-3	TC-3.1	Regional transportation issues.	TC	BOS	EDC*	High	Existing	
Governance/Civic	G-1	G-1.1	Citizen participation in town government.	G, SF, CH	BOS		High	Existing	
Finances/Sustainability	SF-3	SF-3.3	Opportunities to centralize or reorganize municipal functions.	SF, G	BOS	TA, All Boards	High		
Finances/Sustainability	SF-4	SF-4.1, SF-4.2, SF-4.3	HATS.	SF, G	BOS		High	Existing	X
Infrastructure & Comm.	NR-2, NR-4	NR-2.1, NR-4.3	Water and energy conservation in municipal facilities.	NR, SF	WD, FM *	All	High	Existing & New	
Infrastructure & Comm.	SF-2	SF-2.1	Establishing full-time facilities manager position.	SF	BOS	FC	High	New	X
Infrastructure & Comm.	SF-2 NR-4	SF-2.5 NR-4.1	Reducing unaccounted for water by repairing leaks in the water distribution system.	SF, NR	WC	BOS, FC	High	Existing	X
Infrastructure & Comm.	SF-2 SF-3 G-3	SF-2.6 SF-3.4 G-3.1, G.3.2	Provision of technology in public facilities.	SF, G	BOS	TA, IT, CIPC	High	Existing (<i>may need additional IT staff</i>)	X

Notes. (1) Board, committee, and departmental abbreviations: PB, Planning Board; CC, Conservation Commission; CD, Conservation Department; WC, Water Commission; WD, Water Department; FM, Facilities Manager; BOH, Board of Health; BOS, Board of Selectmen; BOA, Board of Assessors; HOC, Housing Commission; HC, Historical Commission; CPC, Community Preservation Committee; DPW, Department of Public Works; TA, Town Administrator; CCHO, Council of Cultural and Historic Organizations; SC, School Committee; NCDC, Neighborhood Conservation District Commission; FC, Finance Committee; FinD, Finance Department; CIPC, Capital Planning Committee; EDC, Economic Development Committee; TnC, Town Counsel; LC, Library Commission; TC, Town Clerk; IT, Information Technology; LLCT, Lincoln Land Conservation Trust; COA, Council on Aging; FD, Fire Department; PD, Police Department; RC, Recreation Committee; VCC, Volunteer Coordinating Committee. (2) Committee names followed by an asterisk (*) are new committees recommended in the Comprehensive Plan.

Implementation Plan Summary: Recommendations and Action Steps by Priority and Comprehensive Plan Theme - 2

Major Theme	Goal(s)	Recommendation/ Action(s)	Topic	Related Elements	Primary Responsibility	Support Needed	Priority	Existing or New Staff	New or Additional Funding
Infrastructure & Comm.	G-3 SF-2, SF-3	G-3.1 SF-2.6, SF-3.4	Improvements to website communication.	G, SF	BOS	TA, IT, FC	High	Existing (<i>may need additional IT staff</i>)	X
Land Use Policy	TC-2	TC-2.3 TC-2.3.3, TC-2.3.4	Impact fees and development agreements.	TC, LU	PB	BOS	Low	Existing	
Assets & Resources	NR-2	NR-2.3	State, national, and global environmental initiatives.	NR, OS	CC		Low	Existing	
Assets & Resources	NR-3	NR-3.3	Chemical and sediment pollution controls.	NR	CC, BOH	TnC	Low	Existing	
Assets & Resources	NR-3	NR-3.4	Noise pollution regulations.	NR	PB	CC	Low	Existing	
Assets & Resources	CH-2	CH-2.3 CH-2.3.1, CH-2.3.2	Local historic districts.	CH, LU, BE	HC	PB, BOS, CPC	Low	Existing	X
Assets & Resources	CH-2	CH-2.5	Archeological resources inventory.	CH, LU	HC	CPC	Low	Existing	X
Assets & Resources	CH-2	CH-2.6	Funding for Historical Commission's work.	CH, SF	HC	BOS, TA, FC	Low	Existing	X
Assets & Resources	H-1	H-1.4	Preservation of smaller houses.	H, BE, LU	PB	HOC, BOS	Low	Existing	
Assets & Resources	H-2	H-2.1	Analysis of needs for in-home services for the elderly.	H, SF	HOC	COA, TA	Low	Existing	X
Assets & Resources	H-2	H-2.3	Analysis of need for more senior housing.	H, LU	HOC	PB	Low	Existing	
Transportation	TC-1	TC-1.5	Town center parking.	TC	BOS	DPW, PD/FD	Low	Existing	
Transportation	TC-2	TC-2.2	Feasibility of expanding bicycle access on conservation trails.	TC, OS, SF	CC		Low	Existing	
Transportation	TC-2	TC-2.3 TC-2.3.1, TC-2.3.2	Alternatives modes of transportation.	TC, ED	EDC*	BOS, COA	Low	Existing	
Governance & Civic	CH-1	CH-1.1	Council of Cultural and Historic Organizations.	CH, SF	BOS		Low	Existing	
Governance & Civic	CH-1	CH-1.3	Partnerships between non-profit cultural organizations and schools.	CH, SF	CCHO*, SC		Low	Existing	
Governance/Civic	G-1	G-1.3	Volunteer skills bank.	G, SF	BOS, TM	TA, IT	Low	Existing	X
Governance/Civic	G-1	G-1.4	Volunteer Coordinating Committee.	G, SF	BOS, VCC*	TM	Low	Existing	
Finances/Sustainability	G-4	G-4.1, G-4.2	Promoting alternatives to the property tax to finance local government.	G, SF	BOS, FC		Low	Existing	
Infrastructure & Comm.	ED-4	ED-4.1	Municipal and other service needs of small businesses.	ED, SF	EDC*	BOS	Low	Existing	
Infrastructure & Comm.	G-2	G-2.1	Coordination between chairs of town boards	G, SF	BOS, TM		Low		
Infrastructure & Comm.	G-3	G-3.3	Town government blogs on the town's official website.	G, SF	BOS	IT	Low	Existing	
Land Use Policy	BE-3	BE-3.2, BE-3.3	Regulations or guidelines addressing massing, scale, and conformance of buildings to landforms.	BE, LU, NR	PB		Medium	Existing	
Land Use Policy	BE-4	BE-4.1	Environmental performance standards.	BE, LU, NR	PB	CC	Medium	Existing	
Land Use Policy	H-1	H-1.2, LU-3.2	Development incentives to achieve housing goals.	H, LU	PB	HOC	Medium	Existing	
Land Use Policy	H-1	H-1.5	Accessory apartments.	H, LU	PB	CPC	Medium	Existing	X
Assets & Resources	NR-1, NR-4	NR-1.3, NR-4 NR-1.3.1, NR-4.2.1	Goals for water consumption.	NR, SF	WC	WD, BOS	Medium	Existing	
Assets & Resources	CH-2	CH-2.2	National Register nominations.	CH, LU, BE	HC	CPC	Medium	Existing	X
Assets & Resources	CH-2, BE-1	CH-2.3, BE-1.2 CH-2.3.3	Neighborhood Conservation Districts.	CH, BE, LU, H	HC, NCDC*	BOS, PB, CPC	Medium	Existing	X
Assets & Resources	CH-3	CH-3.1	Public access to cultural resources information.	CH, SF, G	HC	IT	Medium	Existing	
Assets & Resources	OS-1	OS-1.6 OS-1.6.2	Regional open space plan.	OS, NR, SF	CC		Medium	Existing	
Assets & Resources	OS-3	OS-3.1	Multiple uses of conservation and recreation land.	OS, SF	CC, RC		Medium	Existing	
Assets & Resources	ED-2	ED-2.1	Establishing an Economic Development Committee to explore economic development options.	ED, SF	BOS		Medium	Existing	
Town Character	BE-1, BE-2	BE-1.3, BE-2.2	Scenic roads protection.	BE, OS, LU, NR	PB	CC	Medium	Existing	
Town Character	BE-1	BE-1.4	Scenic views protection.	BE, LU, OS, NR	PB, CC	CPC, BOS	Medium	Existing	X
Town Character	TC-2	TC-2.1	Improvements to pedestrian and bicycle facilities.	TC, SF, OS	CC, DPW	FC	Medium	Existing (<i>may need additional DPW staff</i>)	X
Transportation	OS-3	OS-3.2	Maintenance of roadside paths.	OS, SF	CC, DPW	BOS	Medium	Existing	X
Transportation	TC-1	TC-1.1	Traffic calming measures.	TC, LU, SF, BE, OS	BOS	PD/FD, DPW	Medium	Existing	X

Implementation Plan Summary: Recommendations and Action Steps by Priority and Comprehensive Plan Theme - 3

Major Theme	Goal(s)	Recommendation/ Action(s)	Topic	Related Elements	Primary Responsibility	Support Needed	Priority	Existing or New Staff	New or Additional Funding
Transportation	TC-1	TC-1.2	Speed enforcement.	TC, SF	BOS	PD, FC	Medium	Existing	X
Transportation	TC-3	TC-3.2	MBTA ridership.	TC	EDC*	BOS	Medium	Existing	
Governance/Civic	G-2	G-2.4	Information booklet about town government.	G, SF	BOS	FC	Medium		X
Finances/Sustainability	ED-3	ED-3.1, ED-3.2	Retention of non-profits in local economy.	ED, LU, BE, OS	EDC*, PB	BOS, CC, FC	Medium	Existing	
Finances/Sustainability	SF-1	SF-1.4	Data and assumptions used to determine net cost of community services (fiscal impact).	SF, LU, ED	BOS, PB	FC, FinD, BOA	Medium	Existing	
Infrastructure & Comm.	CH-3	CH-3.2	Collections, finding aids at the library.	CH, SF	HC, LC, TC	CPC, FC, BOS	Medium	Existing	X
Infrastructure & Comm.	BE-4	BE-4.2	Public outreach and education to promote environmentally responsible design.	BE, NR, LU, SF	PB, GTC	CC, IT	Medium	Existing	
Infrastructure & Comm.	SF-2	SF.2.2	Instituting Planned Preventive Maintenance (PPM).	SF	BOS, FM*	FC	Medium	New	X
Infrastructure & Comm.	G-1	G.1-2	E-gov services and communication with the public.	G, SF	BOS	IT	Medium	Existing <i>(may need additional IT staff)</i>	X
Infrastructure & Comm.	G-2	G-2.2	Training for town boards.	G, SF	BOS	All Boards	Medium	Existing	X
Infrastructure & Comm.	G-3	G-3.2	Improving two-way communication with residents.	G, SF	BOS	All Depts.	Medium	Existing	
Land Use Policy	LU-3	LU-3.1	Creative zoning techniques.	H, ED, CH, OS	PB	BOS	Ongoing	Existing	
Land Use Policy	LU-4	LU-4.1	Communication with non-profits about their long-range plans.	LU, BE, CH, OS	PB	BOS,	Ongoing	Existing	
Land Use Policy	NR-1	NR-1.1, NR-1.2	Preservation of natural resources through land conservation.	NR, OS, LU	CC	WD, BOS	Ongoing	Existing	X
Land Use Policy	NR-3, NR-1	NR-1.3, NR-1.5, NR-3.2, NR-4.2 NR-1.3.3, NR-3.1.2	Protection of land and water resources through regulation.	NR, LU	WC, CC	BOH	Ongoing	Existing	
Land Use Policy	NR-1	NR-1.6	Environmental impact reports.	NR, LU	PB	CC, BOH, BOA	Ongoing	Existing	
Land Use Policy	NR-3	NR-3.1	Controls against environmental degradation.	NR, OS, SF	CC	DPW	Ongoing	Existing	
Land Use Policy	OS-1, LU-3	OS-1.2 LU-3.1	Regulations and policies to protect open space.	OS, LU, NR	PB	CC	Ongoing	Existing	
Land Use Policy	H-3	H-3.2	Town's commitment to affordable housing.	H, LU	PB, LSPC *	HOC	Ongoing	Existing	X
Land Use Policy	H-4	H-4.3	Support for legislative changes that aligns with Lincoln's affordable housing goals.	H, LU, SF, G	BOS	PB	Ongoing	Existing	
Land Use Policy	ED-2	ED-2.2	Exploring economic development opportunities.	ED, SF	EDC*	PB, BOS	Ongoing	Existing	
Assets & Resources	NR-1	NR-1.2	Deed restrictions to protect wetland buffer zones.	NR	CC		Ongoing	Existing	X
Assets & Resources	NR-1 OS-2	NR-1.4, OS-2.1	Property management plans for conservation land.	NR, OS,	CC	FC	Ongoing	Existing	X
Assets & Resources	NR-3	NR-3.5 NR-3.5.1	Coordination of environmental review by staff.	NR, LU, H, SF	TA	BOS, other town boards	Ongoing	Existing	
Assets & Resources	NR-3	NR-3.5 NR-3.5.2	Joint public hearings to improve inter-board coordination and communication.	NR, LU, SF	PB	As applicable	Ongoing	Existing	
Assets & Resources	NR-3	NR-3.6	Invasive species control.	NR, SF	CC	IT	Ongoing	Existing	
Assets & Resources	CH-2	CH-2.4	Historic preservation restrictions.	CH, BE	HC	BOS, CPC	Ongoing	Existing	X
Assets & Resources	CH-3	CH-3.3	Stewardship of historic resources.	CH, SF	CCHO*	HC, CPC	Ongoing	Existing	X
Assets & Resources	OS-1	OS-1.5	Communication with conservation groups.	OS, NR, LU	CC	PB, LLCT	Ongoing	Existing	
Assets & Resources	OS-1	OS-1.6 OS-1.6.1	Partnerships with other towns, the state, and non-profit conservation groups.	OS, LU, NR, SF	CC		Ongoing	Existing	
Assets & Resources	OS-2 NR-1	OS-2.1 NR-1.4	Baseline inventory program.	OS, NR, SF	CC	CPC, FC	Ongoing	Existing	
Assets & Resources	OS-2	OS-2.2	Best land management practices for farms, woodlots, farm ponds.	OS, NR	CC, AC		Ongoing	Existing	
Assets & Resources	OS-2	OS-2.3	Financial support for stewardship of conservation land.	OS, NR	CC	FinD	Ongoing	Existing	X
Assets & Resources	OS-2	OS-2.4	Enforcement of conservation regulations and policies.	OS, NR, LU	CC		Ongoing	Existing	
Assets & Resources	H-2	H-2.2	Increased outreach to seniors.	H, SF	BOS	BOA, COA	Ongoing	Existing	
Assets & Resources	H-2	H-2.4	Analysis of need for more supportive housing for people with disabilities.	H, SF	HOC	BOS, CPC	Ongoing	Existing	

Implementation Plan Summary: Recommendations and Action Steps by Priority and Comprehensive Plan Theme - 4

Major Theme	Goal(s)	Recommendation/ Action(s)	Topic	Related Elements	Primary Responsibility	Support Needed	Priority	Existing or New Staff	New or Additional Funding
Assets & Resources	H-3	H-3.1 H-3.1.1	Provision of affordable housing opportunities throughout town.	H, LU	PB, HOC		Ongoing		X
Assets & Resources	H-3	H-3.1 H-3.1.2	Provision of CPA funding for affordable housing.	H, LU	HOC	CPC	Ongoing	Existing	X
Assets & Resources	H-3	H.3.3	Support for Lincoln Housing Commission.	H, LU	HOC	BOS, CPC	Ongoing	Existing	X
Assets & Resources	H-4	H-4.1	Updates of affordable housing plan.	H, LU	HOC	CPC	Ongoing	Existing	X
Town Character	OS-1	OS-1.1	Protecting conservation land and existing open space from development.	OS, NR, LU	CC		Ongoing	Existing	X
Town Character	OS-1	OS-1.3	Protecting lands of conservation interest.	OS, LU, NR	CC	PB	Ongoing	Existing	
Town Character	TC-4	TC-4.1	Traffic control measures.	TC, LU, OS	BOS	PB	Ongoing	Existing	
Finances/Sustainability	ED-2	ED-2.2 ED-2.2.1	Exploring opportunities for mixed-use and commercial development.	ED, LU	EDC*, BOS	PB	Ongoing	Existing	X
Finances/Sustainability	SF-1	SF-1.1	Needs assessment of local government service delivery.	SF, G	BOS	TA, FC	Ongoing	Existing	X
Finances/Sustainability	SF-1 SF-3	SF-1.2 SF-3.3	Use of interlocal agreements to provide community services.	SF, CH	BOS, CCHO*	TA, FC	Ongoing	Existing	
Finances/Sustainability	SF-1	SF-1.3	Adequacy of user fees to cover town's cost of services.	SF	BOS	FC, All Depts.	Ongoing	Existing	
Finances/Sustainability	SF-2	SF-2.3	Asset management policies.	SF	BOS, TA	FinD, FM*, FC, CIPC	Ongoing	Existing	X
Finances/Sustainability	SF-2	SF-2.4	Generating revenue from use of municipal facilities.	SF, CH, ED	BOS, TA	FM*, FC, EDC*, RC	Ongoing	Existing	
Finances/Sustainability	SF-3	SF-3.1	Retention and recruitment of highly qualified personnel in town government.	SF	BOS	TA, All Boards	Ongoing	Existing	
Infrastructure & Comm.	NR-3	NR-3.1 NR-3.1.1	Public education about protecting natural resources.	NR	CC, BOH		Ongoing	Existing	
Infrastructure & Comm.	NR-4 SF-2	NR-4.1 SF-2.5	Education and training of town boards and staff.	NR, SF	WD	BOS, FC	Ongoing	Existing	X
Infrastructure & Comm.	CH-1	CH-1.2	Making cultural information available to the public.	CH, SF	BOS	IT	Ongoing	Existing	
Infrastructure & Comm.	BE-3	BE-3.4	Support for educational programs to protect Lincoln's identity and character.	BE, CH, SF	PB, BOS	IT	Ongoing	Existing	
Infrastructure & Comm.	OS-3	OS-3.3	Maintenance of current town facilities.	OS, SF	RC, CC	BOS	Ongoing	Existing	X
Infrastructure & Comm.	TC-1	TC-1.3	Public education about traffic.	TC, SF, OS	BOS	CC, RC, PD, IT	Ongoing	Existing	
Infrastructure & Comm.	SF-3	SF-3.2	Provision of employee training.	SF	BOS	TA, All Boards	Ongoing	Existing	X
Infrastructure & Comm.	G-2	G-2.3	Interdepartmental meetings that include boards and staff.	G, SF	BOS, TM	All Boards	Ongoing	Existing	

Appendix

APPENDIX A: PAST PLANS & STUDIES

The following is a summary of planning studies conducted by or for the Town of Lincoln since the 1950s. The summary does not include all of the Town's past planning work. Rather, it covers a collection of plans and studies considered by the Comprehensive Long-Range Plan Committee and consultants during the development of this Comprehensive Plan. The summary is divided into sections, with studies grouped by their relationship to various Comprehensive Plan elements.¹

General Planning, Land Use, and Zoning

Planning for Lincoln, Massachusetts

Charles W. Eliot and Planning and Renewal Associates, 1958

Lincoln initiated its first master planning effort in 1958. Often referred to as the Braun-Eliot report, this plan began by defining Lincoln's most valuable amenities: the "Pleasing character of the unspoiled open landscape; Tree-lined country roads; Older buildings in the center of town; Unobtrusive residences blended into the landscape by irregular setback and generous foliage barriers." The plan addressed Lincoln's natural characteristics, built environment, and implications of growth with a series of far-reaching and innovative measures:

- ❖ Encouragement of voluntary restrictions and covenants for buildings and landscapes;
- ❖ Recommendations for restrictions to control architectural character in historic areas;
- ❖ Tax abatements for land kept as open space (*see below*); and
- ❖ Double-tracking roads that were lined with stone walls – that is, building a parallel road on the opposite side of the stone wall-lined roads that would provide additional capacity, but keep the walls and original road intact.

The Braun-Eliot report noted that for Lincoln, the "unique character of the town is dependent on one factor above all others: Open Space," i.e., land under cultivation or left in natural state. This plan emphasized the need to protect Lincoln's open spaces, water supply and town character. Specific recommendations included establishing a committee to conduct a natural historic inventory update, and specific land acquisitions to protect Sandy Pond, the Hobbs Brook Basin, Stony Brook Basin, the Swamp Belt and parcels along the town's other brooks. The report recognized the economic impact of removing land from private ownership and recommended that the town encourage owners to voluntarily place conservation restrictions on their land instead of relying on public land acquisitions. It also recommended that Lincoln establish conservation zones for swamp lands to prevent them from being filled, drained, or built upon; designate setback requirements from local streams to preserve natural drainage; and make better use of zoning to preserve open space and agriculture and protect viewsheds on the town's hilltops. In promoting the importance of open space to Lincoln's character and future development pattern, Eliot argued: "It is almost the universal experience with parks and reservations that the value of the land taken off the tax rolls for these purposes is added to the value of the surrounding properties."

¹ Several of the plans and studies summarized in Appendix A are discussed in greater detail in *A History of Lincoln Planning* (September 2005), prepared for the Town by Angela Kearney. *A History of Lincoln Planning* covers some reports that are not presented in Appendix A, and Appendix A also presents some studies that are not covered in *A History of Lincoln Planning*.

The Braun-Eliot report also devoted considerable attention to possible locations for industrial development within the town's boundaries. While the report recognized the benefits of industrial tax revenue, it also urged the Town to place strict controls on industrial development. The Plan concluded that the most suitable areas for industry included an 85-acre site at Bedford Levels and sixty-five acres west of Mill Street. Eliot reasoned that in both cases, the land was adequately separated from other land uses to limit the potential for use conflicts, and the sites also seemed desirable from an industrial developer's point of view. Still, he cautioned the Town to focus on its primary goals of "...maintenance and improvement of [Lincoln's] established qualities and amenities." Although he believed commercial or industrial uses were not inherently in conflict with the Town's basic planning objectives, Eliot encouraged Lincoln to limit the amount of land zoned for industry and to choose its industrial areas strategically. "The enterprise which causes no problems while it incubates may later generate problems and costs which more than offset its fiscal utility. It is more prudent to set aside one area in which more than one enterprise may locate and in which the particular requirements of light industry may be grouped and treated together."

The Braun-Eliot report concluded with several important recommendations:

- ❖ Adopt and implement a preliminary general plan for protecting open space, to include a focus on conservation land acquisitions around Sandy Pond, within the watersheds of the Stony Brook and Hobbs Brook, and along the banks of brooks and streams; identification of land for town forest protection; and creation of walking and riding trails to link public open space;
- ❖ Adopt zoning regulations to protect wetlands and swamps, flood plains, scenic views, and open space and agricultural land;
- ❖ Prepare and implement a street tree plan to preserve & enhance the character of Lincoln's scenic roads;
- ❖ Adopt zoning regulations providing for local review of architectural plans in the town center;²
- ❖ Maintain two-acre zoning – and exclude all wetlands from the calculation of minimum lot area;
- ❖ Promote voluntary restrictions, agreements and covenants among property owners, and gifts of rights in land to public and semi-public agencies;
- ❖ Provide tax relief for land owners who keep large tracts of land as open space;³
- ❖ Designate Routes 2, 117, and 126 as traffic routes and direct traffic accordingly;
- ❖ Support the planned "northern realignment" of Route 2, which would have relocated the roadway to the southern boundary of the then-proposed Minuteman National Park;⁴
- ❖ Consider land west of Mill Street for commercial or industrial use, and land adjacent to the airport for industrial use.

² This plan pre-dates the statutory provision for local historic districts, which are not zoning districts, and historic district commissions.

³ In 1973, the state legislature enacted Chapter 61A and provided a type of tax relief comparable to that recommended by Charles Eliot.

⁴ The state abandoned its plans for the northern realignment proposal ca. 1978.

Lincoln Revisited: A Report on the Planning of Lincoln, Massachusetts

Dennis Jesson, 1965

Local resident and architect Dennis Jesson produced a “philosophy of planning” report after attending a December 1964 meeting of the Planning Board. Although he said he did not disagree with the town’s two-acre zoning policy, he argued that Lincoln’s approach to land use regulation and growth management could unwittingly impede the retention of rural character. Jesson had many thoughts on the contributions of open space to rural design. “...We should distinguish between two types of open space. Open space implies, and I think is taken by most people to mean, physically open. This however is often not the case. Its real meaning is land, for any number of reasons, on which building is not to take place. The two are not necessarily synonymous.” Noting that forested land also qualifies as open space, Jesson said the term “open space” itself “has nothing to with a lack of physical enclosure. A void is only a void as it is defined by solids.” He encouraged the Planning Board to pursue a master plan concerning “massing of open and closed [built] spaces [that] would predetermine the logical expansion areas of the town and hence preserve our rural community.”

Comprehensive Development Plan for the Town of Lincoln, Massachusetts

Adams, Howard and Opperman, Planning Consultants, August 1965

Lincoln’s second major town-wide planning study reinforced and built upon many of the proposals in the earlier Braun Eliot report while focusing on three issues: protecting Lincoln’s open space, maintaining excellent schools, and providing adequate town and school facilities and services.

Less than seven years after the Braun-Eliot Report, the *Comprehensive Development Plan* recognized that Lincoln needed to work pro-actively with preservation techniques and tools and to encourage conservation activity. The community could not continue to depend on the voluntary efforts of private land to keep its land open. While open space preservation is one of the primary focuses of this plan, it also emphasized the need to protect the town’s natural resources including watershed land, groundwater, and “unspoiled” natural areas in order to protect the balance of nature for wildlife habitat, study, and simple enjoyment. The *Comprehensive Development Plan* also included a list of historic sites recommended for protection. Many of these sites are also some of Lincoln’s most important natural resources: Flint’s Esker, fields, Farrar Pond, Van Leer Maple Swamp, Flint’s Great Meadow’s, and the shores of Sandy Pond.

As in the Braun-Eliot report, this plan identified several areas that were considered potential candidates for industrial development. Anticipating the relocation of Route 2, the master plan consultants said Lincoln would have land suitable for industrial use – suitable in light of criteria deemed important to the Town. However, the consultants questioned whether there was enough market demand to make the land appealing to developers. The consultants reported that Massachusetts already had enough industrially zoned land along Route 128, from Canton to Wakefield, to meet the Commonwealth’s needs through 1980.

While the plan encouraged Lincoln to investigate industrial development possibilities with land owners, it also advised against rezoning any land without a specific development proposal in hand. The consultants conferred with nonresidential developers about a list of potential industrial sites supplied by the town, ruled out two (including a parcel that Lincoln reviewed more recently in the 2005 *At-Risk Properties Study*), and focused their analysis on the area between Route 2 and Route 2A and east and west of Mill Street and the Bedford flats west of Virginia Road. They examined land use alternatives for each site, projected the Town’s future costs and revenue, and concluded that industrial uses would be the most advantageous to Lincoln. The consultants also noted that Lincoln’s lack of commercialization was an essential part of its character. They largely reinforced the conclusions

of a 1962 study by the South Lincoln Planning Committee, and said that since Lincoln had adopted most of committee's recommendations, the Town should have enough commercial land for the near future.

The 1965 plan concluded with the following recommendations:

- ❖ Give priority to protecting watershed land, wildlife habitat, and scenic areas such as open fields and views of water;
- ❖ Acquire and hold land for future municipal and school facilities;
- ❖ Expand the concept of cluster developments to achieve both open space and social objectives by allowing some higher-density housing in cluster developments;
- ❖ Give serious consideration to allowing more housing density in selected areas;
- ❖ Reinforce the role of South Lincoln as the town's commercial center;
- ❖ Consider industrial zoning in the vicinity of North Lincoln only on a case-by-case basis;
- ❖ Separate through and local roads in order to accommodate through traffic while improving safety for pedestrians, bicyclists, and local vehicular traffic;
- ❖ Protect scenic features on town roads and provide pedestrian and bicycle amenities; and
- ❖ Develop roadside paths.

The Lincoln By '80 Conference Report

Land Use Conference Committee, June 1970

A poignant exercise in "taking stock" and assessing Lincoln's future occurred in 1970 at an unusual workshop known as the "By '80 Conference." Devoted to a focus on Lincoln's schools and local government, the two-day "By '80 Conference" represented an attempt to build consensus about the town's needs, to reaffirm its core values, and to chart a course of action for local government. It involved not only panel discussions and "sandwich seminars," or structured discussion periods for participants, but also preparatory interviews with more than forty town committees and community organizations and a community survey. Among the striking revelations in the conference report is that the average age of the 450 residents who attended the meeting was "somewhere between 35 and 45."

The conference report contains the conference proceedings, and while economic development was not a priority topic at the meeting or in a related citizen survey, some ideas surfaced about the town's tax base and need for more sources of revenue. Among the recommendations made during the conference was that the Finance Committee and Board of Selectmen should evaluate ideas that residents identified for other sources of revenue: "Airport West," and improving the South Lincoln business area. Residents also thought local officials should look at different types of taxes and commuter parking fees. In addition, they said Lincoln should consider establishing an organization to run profit-making businesses for the Town's financial benefit, e.g. a liquor store, camping areas, restaurants, or a hotel or motel for visitors to the national park.

The *By '80* report focused on the adequacy of Lincoln's community services, resident satisfaction with the schools and town government, and possibilities for the future. One issue that residents debated in 1970 was the potential for dissolving the Lincoln-Sudbury Regional School District in favor of establishing a local high school. Though nearly all of the participants in the 1970 "sandwich seminars" supported retaining the regional district, some were concerned that Sudbury was "too conservative" and they questioned the success of the METCO program at the regional high school. Ironically, the keynote speaker on public education suggested that Lincoln sever its ties with Sudbury and establish a new region by forming a partnership with the Boston Public Schools. The status of METCO in general led others to urge more steps to involve METCO parents in the Lincoln school's operation – a theme that became one of the report's key recommendations.

The process that culminated in the *By '80* report elicited a lively discussion about revenue, property taxes, and municipal services. Residents seemed to agree that Lincoln should try to obtain more revenue from the businesses in South Lincoln, but a few participants had creative ideas: replacing the property tax with a local income tax, establishing a liquor store operated by a "feeder organization" that would turn the profits over to the Town, and charging train commuters a fee to park in Lincoln. Asked what the Town's funding priorities should be, residents named moderate-income housing, recreation, a town swimming pool, a youth center, trash collection, planning and developing South Lincoln, and hiring more professional help for the town's volunteer boards and committees. They also thought the Town could make better use of existing facilities.

Regarding open space and recreation interests, the final conference report records these ideas and recommendations:

- ❖ Lincoln should establish a "land ethics" policy, shaped by principles such as these: "Land should be thought of as something to be held in trust for people coming along many years after," and "The time has come to cease to think of land as a possession to be utilized for private gain."
- ❖ Lincoln has a responsibility to the "core city" to provide open space and recreation opportunities.
- ❖ The Conservation Commission should pursue a long-range plan for the use of Lincoln's open land, including ways that Lincoln could help to meet regional open space needs.
- ❖ The Planning Board should "develop new principles of land use throughout the town, taking into account the desire of the townspeople to maintain population at the ratio of one family per 2 acres of land."
- ❖ The Recreation Committee should "develop a proposal for a town swimming facility," preferably an outdoor swimming pond; and a long-range plan and schedule for creating more bicycle paths, equestrian trails, and walking and skiing trails, in conjunction with the Planning Board and the LLCT;
- ❖ The Recreation Committee also should study and make recommendations on ways that Lincoln's land could meet regional recreation needs.

Route to Tomorrow: Challenges and Choices

Land Use Conference Committee, October 1983

The Lincoln Land Use Conference Committee sponsored a day-long community planning event in October 1983 as the "beginning in the consensus-building process essential for effective planning..." Although the impetus for the event was the possible realignment of Route 2 and its impacts on North Lincoln, the Committee

designed a program that covered many planning topics, including open space and housing. *Route to Tomorrow* is a report on the conference proceedings and the results of a survey completed by 363 local residents.

According to the report, most residents who participated in the housing discussion group supported Lincoln's then-existing policy of encouraging moderate-income housing and they also reaffirmed local preference for a Housing Commission instead of a Housing Authority.⁵ *Route to Tomorrow* is intriguing for what it reveals about attitudes toward low- and moderate-income housing in Lincoln before the euphemism "affordable housing" came into vogue only a few years later. For example, the report notes disagreements about whether Lincoln had already done enough to provide moderate-income housing – such as Lincoln Woods – and whether the Town should pursue a concentrated ("central site") or "scattered-site" approach to diversifying its housing stock. People wanted to know more about Lincoln's housing needs, i.e., "who are we trying to help?" Both the discussion group participants and respondents to the Conference Committee's survey registered strong support for accessory apartments, and this is particularly noteworthy because Lincoln town meeting took steps to liberalize the accessory apartment bylaw in 1983, 1984, and 1985 (and thereafter). Still, other possible housing initiatives received mixed reviews. Construction of new housing drew nearly uniform opposition – multi-family, elderly housing, low- or moderate-income housing – yet acquiring or rehabilitating existing housing for the same groups of beneficiaries appealed to the vast majority of survey respondents. Support for what is now called inclusionary zoning won lukewarm support.

Lincoln Logs the Future

Lincoln Conference Report, 1991

This conference continued the tradition of citizens planning for Lincoln's future. The building blocks remain essentially the same: time, thoughtfulness, creativity, shared goals, and commitment. However, each time the resulting edifice looks different. Discussion topics at the conference included government structure, town and human services, land use, education, the region and finances. The Conference report noted several deficiencies in the public safety building (25 years old at the time), including poor working conditions, an unusable firing range, security issues, outmoded equipment in the communications/dispatch center, and inadequate space for the then-19 employees of the police and fire departments. Presumably many of these concerns were addressed when the public safety building was renovated a few years later.

At-Risk Properties Committee Study

Vanasse Hangen Brustlin, Inc., and Community Opportunities Group, Inc., 2005

In 2005, the At-Risk Properties Committee commissioned a study of six properties believed to be near-term candidates for development or redevelopment. The Committee wanted to consider possible reuse options for these sites and the potential traffic, environmental, and fiscal impacts of each option. Accordingly, the report provides several conceptual site plans for the properties. For most of the sites, the site plans include conservation/open space, commercial uses, educational or charitable uses, a single-family subdivision, multi-family housing, and a comprehensive permit (Chapter 40B). A summary-level environmental impacts review was prepared, along with a land use prototype-fiscal impact model for estimating the cost and revenue impacts of each preservation and development scenario. The At-Risk Properties Committee Study was subsequently used by the town in developer negotiations with Deaconess Abundant Life Communities, developer of The Groves, a mixed residential community for seniors. In 2008, the Committee replicated the study in order to consider a proposed commercial project on land adjacent to a site in the original report.

⁵ The Lincoln Housing Commission was established pursuant to Chapter 359 of the Acts of 1979.

The Built Environment

Report to the Town of Lincoln: Article 7 Zoning Bylaw Study Committee

March 1998

In 1997, the Planning Board proposed a zoning bylaw amendment to address the construction of large homes and the loss of small “starter homes.” Residents were concerned that large-home construction would threaten Lincoln’s “unique and special character, as embodied in the variety and uniqueness of the town’s housing stock and its relationship to the land.” The Planning Board’s proposal called for reducing the maximum gross floor area of a residence from 25 percent of the lot size to a new limit of 8 percent or 2,500 square feet, whichever is greater. However, town meeting was concerned about the amendment’s impact on owners of nonconforming buildings or lots, so the proposal was tabled and the Moderator appointed a study committee.

The Article 7 Zoning Bylaw Study Committee reviewed Lincoln’s policies for nonconforming lots and underlying reasons for the trend toward bigger houses and more intense development. The committee’s report, issued in 1998, recommended that Lincoln establish a site plan review process for new construction and alterations to existing structures, and for development on nonconforming and conforming lots that exceed certain size thresholds. The committee also recommended that Lincoln prepare and publish non-binding guidelines and educational materials to be distributed to owners, builders and developers, in order to encourage development in keeping with the town’s natural environment and community character. In addition, the committee recommended a review of Lincoln’s subdivision regulations to ensure that decisions about both private and municipal developments are consistent with existing built environment relationships, notably street width, curb treatment, paving, tree preservation, and preservation of natural land contours and vegetation. The report further identified elements that could be explored in a voluntary design guidelines document, e.g., preservation of “rustic” natural landscape features, use of natural fence colors, retention of natural vegetation buffers along roadways, and meandering driveways.

Lincoln Reconnaissance Report: Freedom’s Way Landscape Inventory

Massachusetts Department of Conservation and Recreation, Massachusetts Heritage Landscape Inventory Program, June 2006

This report analyzes Lincoln’s heritage landscapes in partnership with the Freedom’s Way Heritage Association. Prepared by Shary Page Berg and Gretchen G. Schuler, the study included extensive coordination with interested Lincoln residents on the choice of priority landscapes and discussion of other critical concerns. The report focused on Lincoln’s heritage landscapes, defined as special places created by human interaction with the natural environment that contribute to Lincoln’s unique built environment and community character. Eight priority landscapes were identified based on their high community value, contribution to community character, and lack of permanent protection: *Brown’s Wood*, a neighborhood of mid-twentieth century modern residences on large wooded lots; the *Catalpa Tree on Library Lawn*, a tree that likely dates to late-nineteenth century valued for its unusual whorled trunk; *DeNormandie Land*, a large farm with sledding hill used by many Lincoln residents; the *Farrington Memorial*, a large eighty-acre property used for environmental programs for low-income children from metro Boston; the *Flowerpot at Five Corners*, a former 1892 horse trough converted to planter at prominent intersection; the *Horse Trough on Lincoln Road*, a 1883 granite trough at Lincoln and Codman roads; the *Massachusetts Audubon Society Land – Drumlin Farm*, the former Hatheway Estate; and the *Mile Marker on Great South Road*, a c. 1840 granite marker on Route 117.

The report also identified critical community concerns and recommended that Lincoln complete a town-wide comprehensive cultural resource inventory to identify its heritage landscapes, historic buildings, structures, areas, and objects in order to plan for future preservation. Other recommendations included:

- ❖ Designating Brown's Wood as a Neighborhood Conservation District;
- ❖ Revise the demolition delay bylaw from a six-month delay period to twelve months;
- ❖ Amend the Scenic Roads bylaw to include design criteria;
- ❖ Consider a scenic overlay district, which could provide a no-disturb buffer on private property bordering scenic roads;
- ❖ Develop flexible zoning standards to protect certain views; and
- ❖ Develop policies and implementation standards for road maintenance and reconstruction, including bridge reconstructions that address scenic and historic characteristics while addressing safety.

The report also addressed several critical concerns expressed by the community and provided more general advisories on some of these critical concerns:

- ❖ *Agriculture/Loss of agricultural activities*: Document farms on MHC inventory forms; Adopt an agricultural commission to advocate for farming; Adopt a right-to-farm bylaw; Purchase development rights/Preservation Restrictions; Continue public-private partnerships to preserve farmland through purchase or restrictions
- ❖ *Land Stewardship, Trails and Regional Landscapes*: The Town should remain open and aware of cooperative activities with surrounding communities
- ❖ *Dark Sky*: Partner with adjacent communities and others to decrease light pollution.
- ❖ *Scenic roads and stone walls*: Prepare inventory of all roads with descriptions, photo documentation, and character-defining features; Amend Scenic Road bylaw to include design criteria to be considered when approving removal of trees and stone walls; Scenic Road overlay district with no-disturb buffer on private property bordering scenic roads; apply to numbered routes, which are not protected under the Scenic Road bylaw; Develop polices and implementation standards for road and bridge maintenance and reconstruction.
- ❖ *Minute Man National Historical Park*: Develop a buffer zone around the park.
- ❖ *Documentation and Designation Efforts*: Prepare list of under-documented resources; Document unprotected resources, especially those most threatened; Record landscape elements on properties; Conduct a community-wide archaeological reconnaissance survey; Develop National Register listing plan; Refine Brown's Wood NCD study report and prepare article for Town Meeting regarding its designation as a NCD; Consider extending demolition delay period to one-year. This recommendation was acted upon and approved by the town in 2007.

Economic Development

Economic Study Committee Report (1960)

In 1960, the Economic Study Committee presented a report on industrial development at a special town meeting. The Committee's charge had been to help Lincoln make "a reasoned judgment on the advisability of rezoning certain portions of town for light industrial use." Toward that end, the Committee selected an area of about 150 acres west of Mill Street for a case study. (Ed. Note: The Committee's approach was similar to that of the At-Risk Properties Committee Study in 2005).

The Economic Study Committee considered two possible development scenarios for the land: single-family homes and nonresidential use. Each had some advantages. For example, a single-family subdivision would construct its own roads and lay its own water mains without any financial obligation from the Town. The industrial use alternative would require Lincoln to invest in basic capital improvements to make the site "construction ready," notably the provision of drinking water, but an industrial project would be able to make more efficient use of the land. The Committee compared Lincoln's capital cost to make the site attractive to industry and to construct additional school space for the single-family development, added basic recurring municipal and school costs, and concluded that Lincoln would spend less under the industrial option. Its members concluded that light industrial use, "properly located and controlled," would provide substantial tax revenue without detracting from the town's residential character.

Economic Development: Study on the Impact of Light Industry on the Character and Economy of Nine Boston-Area Towns

League of Women Voters of Lincoln, 1963

The League of Women Voters of Lincoln conducted an analysis of several suburbs around Boston in an attempt to determine whether industrial development had enhanced or detracted from their character. The study included Winchester, Needham, Natick, Lexington, Burlington, Wayland, Weston, Sudbury and Lincoln. In each case, the League looked at the town's history and unique features, the quality of its public schools, the availability of recreation and conservation areas, its approach to planning and zoning, its tax and assessment policies,⁶ and the amount and types of industry located within its borders. Overall, the League concluded that the character and quality of the study communities had more to do with their relative support for public schools, measured by teacher salaries and per-pupil spending, and their commitment to long-range planning than the presence or absence of industry. For those towns in which industry appeared on the surface to have created problems, the authors of the League report said the real problem was the community's own lack of planning and weak zoning regulations, not the industrial uses per se.

Undeveloped Land in Lincoln

Lincoln Conservation Commission and Planning Board, 1977

Co-produced by the Lincoln Planning Board and the Conservation Commission, the Undeveloped Land in Lincoln report examined the status of privately-owned undeveloped areas and analyzed the effect of future development and land acquisition on population and property taxes. Toward this end, the report summarized and mapped the status of protected and unprotected lands, listed undeveloped properties of interest to the Town for acquisition, and presented suitable uses and methods for conserving land as noted below. The report also

⁶ This study preceded *Sudbury v. Commissioner of Corporations & Taxation* (1974), which compelled the state to ensure that cities and towns instituted uniform assessment and taxation practices. In 1965 when the League wrote its report, most communities were still using fractions of market value to determine tax assessments. As a result, tax rates were very high and the tax burden was unevenly distributed across all classes of property taxpayers.

noted “features of historic value” on these lands as worthy of protection, including old houses, cellar holes, old roads, dams, ditches and sites of early industrial activities. It offered many recommendations, including:

- ❖ Uses of Conservation Land: Recreation that does not require permanent structures or motorized vehicles; Hiking, riding, skiing, nature study encouraged; trail bikes and snowmobiles discouraged; Find ways to limit over-use or damage to conservation lands; Local resident use vs. general public debated
- ❖ Funding sources: Purchase for protection by private interests; Conservation restrictions in perpetuity; public purchase; Gift of land; Decreasing assessment; Agricultural restrictions; Direct tax payment assistance; Limited-term conservation restriction; Lease of development rights; Land use regulations; Creative development

South Lincoln Business Area Planning Committee

Report to the Lincoln Planning Board, 1999

This status report on the South Lincoln Business Area Planning Committee’s work is important because it laid the groundwork for the eventual creation of an overlay district and the use of planned development districts to revitalize and improve the business area around Lincoln Station. In May 1998, the Committee conducted a charrette to look at options for the village, including relocation of the post office. The Committee also conducted a survey.

According to the Committee’s report, some recurring themes surfaced from the charrette and survey process. First, residents said they supported a village center concept “with its attendant scale and character,” and they wanted to see the area made more attractive, with pedestrian amenities, buildings located closer to the street, a better collection of retail, and preservation of the nearby open space at Codman Farm. Second, residents said it would make sense to locate a community center in South Lincoln, along with restaurants, more housing, more or better office space, and a variety of uses. They also said the town should consider relocating the DPW garage and make better use of the land. The proposed concept for the South Lincoln business area involved a four-quadrant plan, organized by Lincoln Road and the railroad. The four quadrants included the Mall Quadrant, the Ridge Road Quadrant, and the Lewis Street Quadrant – areas suitable for more intensive use, somewhat taller buildings, more housing, and a mix of land uses – and the Codman Farm Quadrant. Major proposals for the Codman Farm Quadrant included permanently protecting the farm, linking the community gardens to the village center with walkways, and reorganizing the MBTA parking.

Services & Facilities

Town of Lincoln Building Needs Assessment

McKinley, Kaslow & Associates, 2006

This study analyzed six town-owned buildings with regard to the building envelope, structural condition, disability access issues, and code compliance. Four of the six buildings are historic properties, all of which are either within the Lincoln Center Local and National Register Historic Districts or part of the Grange Complex/Codman Estate National Register/Local Historic District. The report recognized the historic significance of these buildings and noted that any work completed on these structures should follow the Secretary of the Interior’s Standards for Historic Preservation. Specific conclusions and recommendations included:

- ❖ Bemis Hall: Replace roof, gutters, flashing and downspouts; Stage repair of cupola and masonry at same time as roof work; Consider replacing asphalt roof covering with slate; Consider accessibility improvements

to front entrance used by seniors. Lincoln Town Hall: Mainly functional and/or code deficiencies, rather than condition issues; Functional deficiencies include non-accessible second floor, open stairways without fire separation, insufficient fire rating for town records vault, outdated HVAC system.

- ❖ Pierce House: Repair or replace selected wood elements; Make front entrance accessible through railing additions and modification of existing porches; Install accessible men's and women's restrooms on first floor; Upgrade kitchen to meet commercial kitchen standards.
- ❖ Codman Farm: Roofing work needed on the c. 1860 farmhouse; Address structural framing and stone masonry issues at several barns; Consider partnering with the North Bennett Street School preservation carpentry program for repairs.

Housing and Residential Development

Lincoln: A Tight Little Island

League of Women Voters of Lincoln, 1971

The League of Women Voters of Lincoln published this report to promote moderate-income housing development. In comparing Lincoln to other west suburbs, the League noted that Lincoln's population had been growing very slowly. "The reasons for this slow growth are several: initially, the topography of the town, which made building relatively difficult and expensive, and more recently, the town's deliberate policies of large lot zoning and land conservation, and the absence of sewers for more intensive development."

Much of the League's report was devoted to reinforcing and building upon earlier work by the Town's Moderate Income Housing Committee (1967-68) and its brainchild, The Lincoln Foundation. In addition, the League sought to address concerns about allowing multi-family housing at all, such as the creation of stigmatized neighborhoods isolated from the rest of town and negative fiscal impacts, and examined arguments for and against locating multi-family housing in South Lincoln vs. providing for it on a scattered-site basis. As for Chapter 40B, enacted just two years before *A Tight Little Island* was written, the League said "If Lincoln can implement the spirit and intention of this law successfully, it should be an encouragement to very other community where generous impulses may be stifled by fear of the unknown and untried... With one of the highest median incomes of any community in the country and an excellent school system, surely we can share this by a factor of 10%."⁷

Housing – What Does Lincoln Need?

League of Women Voters of Lincoln, 1985

Fourteen years after publishing *A Tight Little Island*, the League of Women Voters released another housing study, this time focusing on Lincoln's housing needs. The authors of the second report analyzed housing cost barriers in Lincoln by comparing the housing sale prices and rents that a young couple "making a respectable salary" could afford in 1979 and 1985, noting that wage growth in the Boston area had failed to keep pace with growth in housing costs. The authors also examined the sale prices and rents that Lincoln's own town employees could afford, and pointed out that Lincoln's housing costs were so high that all of its highest-paid employees lived in other communities. In addition, they estimated elderly housing needs by compiling and summarizing the results of various housing need surveys conducted by the League or the Council on Aging.⁸ The second League report is important because it foreshadows steps that Lincoln eventually pursued to in-

7 League of Women Voters, *Lincoln: A Tight Little Island* (1971), 1, 20.

8 The League of Women Voters of Lincoln, *Housing – What Does Lincoln Need?* (June 1985), 10-16.

crease its inventory of affordable housing. For example, the report notes that the Town and Housing Commission were negotiating with the state to lease a house on Sunnyside Lane, and other “land taken for the northern alignment of Route 2...might be available at no cost if it were used for subsidized housing.” The League also suggested “a local sales tax on real estate transactions” to generate funding for the Housing Commission – a precursor to the Community Preservation Act – and that Lincoln could consider developing affordable housing “on land near Hanscom currently being considered for commercial or industrial use.” Further, the League’s second report suggested that various public subsidies could be used to make accessory apartments and houses owned by the Town affordable for low-income tenants.

Five-Year Housing Plan for Lincoln, Massachusetts

Lincoln Housing Commission, 1988

The Lincoln Housing Commission prepared a housing plan and submitted it to the Executive Office of Communities and Development (EOCD), now known as DHCD. The *Five-Year Plan* came at the heels of local and state approval of Battle Road Farm, the first phase of which was under construction when the Housing Commission wrote the plan in 1988. The report is noteworthy for several reasons:

- ❖ First, it catalogs three significant impediments to affordable housing production in Lincoln: land values and lack of buildable land, environmental constraints, and barriers to eligibility for state housing funds because the Housing Commission operates under a special act of the legislature and is not a Housing Authority under M.G.L. c.121B.⁹
- ❖ Second, it articulates clear housing development goals and a variety of methods to achieve them. One method, inclusionary zoning, did not materialize for 17 years, but Lincoln made more rapid progress with other recommendations in the housing plan, e.g., providing staff support to the Lincoln Housing Commission and acquiring land on Sunnyside Lane for construction of affordable housing.¹⁰
- ❖ Third, the plan was a forerunner of major amendments to the state’s Chapter 40B regulations in 1990, when the Local Initiative Program (LIP) was established. The original LIP amendments included a provision for cities and towns to develop affordable housing plans for EOCD review and approval – plans that would protect communities from an unwanted comprehensive permit as long as they made systematic progress on implementing their plans. While LIP endured, the housing plan regulations were rescinded a few years later, only to be replaced by the Chapter 40B “Planned Production” rule in 2002.

Lincoln Consolidated Housing Plan

Lincoln Housing Task Force, 2003

Lincoln and several surrounding communities belong to the Newton-based West Metro HOME Consortium.¹¹ Administered by the U.S. Department of Housing and Urban Development (HUD), the HOME Program is the largest federal “block grant” for affordable housing. HUD requires every jurisdiction participating in the HOME Program to prepare a Five-Year Consolidated Plan. In a regional HOME consortium, the lead community – in this case, Newton – is responsible for the Five-Year Plan and the annual spending plan components known as One-Year Action Plans. Newton required each member community to submit its own plan, which in turn was incorporated into the regional five-year plan. In Lincoln, a Housing Task Force appointed by the Board of Selectmen in 2002 developed the Consolidated Housing Plan to meet requirements set by the

9 Lincoln Housing Commission, *Five-Year Housing Plan for Lincoln, Massachusetts* (April 1988), 1-2.

10 Ibid, 4-8.

11 The federal HOME Program was established under Title II of the Cranston-Gonzales National Affordable Housing Act of 1990, as amended.

City of Newton and HUD and also to qualify under DHCD's then-new Planned Production regulation. In 2002, DHCD made several changes to the Chapter 40B regulations. One of the changes offered cities and towns the option to develop an affordable housing plan according to broad state guidelines. Under this "Planned Production" rule, communities with a DHCD-approved affordable housing plan became eligible to deny a comprehensive permit if they created enough new low- and moderate-income housing to meet state production targets and received certification of the same from DHCD. Until recently, Lincoln's minimum annual production target was sixteen low- or moderate-income units. DHCD recently overhauled its Chapter 40B regulations, however, including Planned Production, and Lincoln's minimum production target has been reduced to 10 low- or moderate-income units per year. Since Lincoln has met the ten percent statutory minimum under Chapter 40B – at least until the next federal census (2010) – the Town does not need to obtain housing plan certification from DHCD. The Housing Commission is currently updating the 2003 plan.

Open Space and Natural Resources

Interim Report of the Public Land Study Committee

Town of Lincoln, 1956

In response to a land use survey conducted by the Planning Board in 1955, a Public Land Study Committee was established to examine "land that will be needed in the future for common use and enjoyment by the citizens, and for the protection or conservation of amenities." The Committee considered several areas previously identified by the Planning Board as potential candidates for public acquisition, but ultimately focused on two, both described as "reservations" in the Committee's report:

- ❖ Reservation A: a protective buffer around Sandy Pond (Flint's Pond), roughly following the 240 foot contour on USGS maps and containing a total of about fifty acres. The buffer's purpose would be to protect the pond's scenic beauty and water quality.
- ❖ Reservation B, "...an almost continuous strip of swamps and connecting low lands running north and south parallel to Lincoln and Bedford roads, and about a half-mile to the east," from Hanscom at the north to South Great Road and Sudbury Road on the south. The committee characterized Reservation B as open space "...for recreation, conservation of natural land, and setting aside of land for any road that might be needed in the future to relieve traffic on existing major roads. For recreational use, such as nature walks, the land is well suited." Today, many of the conservation parcels owned by LLCT lie within the boundaries of Reservation B.

Report of the Recreation Study Committee

Lincoln Recreation Committee, 1964

In 1963, Lincoln established a special committee to "study the whole recreation program," but the impetus for creating the committee was the cost of the Lincoln Recreation Department's summer playground program. The Committee's report to town meeting in 1964 remains relevant today because of the issues it raises about taxpayer responsibility for programs that serve a specific class of users. These issues have surfaced in virtually every town in the Commonwealth, particularly since 1981. Lincoln voters had questioned whether the playground program provided educational value or simply operated as a "baby sitting" service for parents. At the time, Lincoln provided an eight-week, all-day summer program for children between 5 and 15 years of age, and approximately 240 children participated each year. The per capita cost of the program was \$1.25, with program fees generating 30 cents per capita as offset revenue. After surveying parents, consulting with the Recreation Committee and program staff, and reviewing recreation statistics from other communities, the Recreation Study

Committee concluded that Lincoln’s summer playground program was an educational activity that the town should support. The Committee made several points in its final report:

- ❖ The program contributed to “the physical and mental development and well being” of the town’s children.
- ❖ “In a society which is likely to have more and more leisure time at its disposal, it is important for members to develop at early age the outside interests and skills with which to creatively fill their leisure.”
- ❖ Transferring the full cost of the program to the parents of participating children would make it impossible for some children to enroll and “place an unwelcome emphasis on relative wealth.”
- ❖ Compared to other affluent towns in the region, Lincoln was spending less per capita on recreation and far less than the recommended national average.

Open Space Plan

Lincoln Conservation Commission, March 1977

Lincoln’s first Open Space and Recreation Plan provided broad goals for natural resource conservation including the protection of watersheds and the promotion of adequate water quality and quantity. The Plan recommended that Lincoln cooperate with regional organizations, such as the SuAsCo and Charles River Watershed Associations and the Metropolitan Area Planning Council 208 Team. It also recommended studies of the Tower Road well watershed and the environmental effects of various herbicides and pesticides to determine those best suited for use on the Conservation Commission’s agricultural lands. The plan emphasized several points:

- ❖ Lincoln’s future growth potential consisted of about 1,900 additional housing units on its 4,000 acres of remaining vacant, unprotected land;
- ❖ The criteria for protecting additional conservation land should include quality and accessibility of land for public use; productivity of land for farm and forestry products; open space adjacent to public ways and public areas; part of trail connector pattern; and wetlands and watershed as storage areas and protection for public water supplies; and
- ❖ Measures to protect open space should include Chapter 61A agreements, accepting gifts of land to the town; conservation restrictions; zoning; acquisition of trail easements; wetlands protection, and acquisition of fee or lesser interest.
- ❖ As of 1977, Lincoln’s future growth potential consisted of about 1,900 additional housing units on its 4,000 acres of remaining vacant, unprotected land;
- ❖ Lincoln’s criteria for protecting additional conservation land should include quality and accessibility of land for public use; productivity of land for farm and forestry products; open space adjacent to public ways and public areas; part of trail connector pattern; and wetlands and watershed as storage areas and protection for public water supplies.
- ❖ Measures to protect open space should include Chapter 61A agreements, accepting gifts of land to the town; conservation restrictions; zoning; acquisition of trail easements; wetlands protection, and acquisition of fee or lesser interest.

Open Space and Recreation Plan

Lincoln Open Space Committee, March 2008

Lincoln completed a new Open Space and Recreation Plan in 2008, anticipating that resource information compiled for the open space plan would serve as the basis for this Comprehensive Plan. The Open Space and Recreation Plan encourages Lincoln to focus on land stewardship, a need identified in the 1988 Interim Report. While focusing on stewardship does not mean Lincoln should forego additional land acquisitions, it recognizes that protecting natural resources requires proper land management. The new plan describes Lincoln's progress toward establishing and implementing a stewardship program, and it records Lincoln's conservation land efforts since 1977. In addition, it calls attention to the need for accessible conservation trails and recreation facilities. Highlights of the 2008 Plan's recommendations include:

- ❖ Work with Drumlin Farm, Farrington Memorial, Walden Woods, Historic New England and Cambridge to place conservation restrictions on unrestricted land;
- ❖ Consider providing incentives to farmers to place conservation or agricultural preservation restrictions on private, non-protected agricultural land;
- ❖ Determine suitability for converting fallow fields on existing conservation land into agricultural production;
- ❖ Prepare a town-wide management map identifying each conservation area's resource values and strategies to manage for such (e.g., biodiversity, wildlife, recreation, agriculture, etc.);
- ❖ Use recreation field maintenance practices compatible with resource protection goals;
- ❖ Develop strict guidelines for the best maintenance practices of all public buildings and grounds including limited or no use of chemical pesticides & fertilizers;
- ❖ Prepare outreach materials for new residents about Lincoln's ethics and recommendations for resource conservation and land stewardship; and
- ❖ Develop lawn-irrigation and construction-site bylaws that define and require best management practices.

Traffic Studies

Lincoln has done a considerable amount of planning in the past, more than most towns in Massachusetts and certainly more than a majority of towns in a similar population range. From the town's first master plan, *Planning for Lincoln* (1958), Lincoln's transportation planning concerns have centered on defending the town against unwanted regional transportation improvements and protecting its own roads from loss of rural character. Projects such as various proposals to realign and widen Route 2, a controversial but short-lived proposal known as the Middle Circumferential Highway, which would have run through the west side of Lincoln on a path roughly coterminous with Route 126, and the potential expansion of Hanscom Field have caused the town to rally its forces many times. Lincoln's awareness of what poorly conceived highway projects could do forms part of the backdrop for its attitude toward the historic roads that cross the town.

Traffic Management Plan for the Town of Lincoln

Lincoln Traffic Management Committee, 1988

The objective of the Traffic Management Plan was to find ways to encourage non-local traffic to use the numbered highway system rather than local roads. The study acknowledged that Lincoln faces major traffic issues caused by intense commercial development on its eastern border, a buildup of housing to the west, and a mixture of commercial development and airport-related activity to the north. Numbered highways passing through Lincoln were thought to have adequate capacity to accommodate existing traffic volumes. The plan also determined that Lincoln's collector roads (Lincoln, Trapelo, Bedford, Weston, and Sandy Pond) have ample capacity. However, capacity was severely constrained at various intersections, resulting in congestion under existing conditions and providing little capacity for future growth. The report recommended various measures designed to alleviate this congestion without resorting to a major program of land acquisition and road construction. The report also encouraged the town to find ways to accommodate regional traffic and to keep the level of development in line with the capacity of the infrastructure. It also discussed specific locations where turning movement restrictions could provide protection for the Town's internal roads.

Lincoln Traffic Committee Report, Phase 1: Fact Finding, Policy Review and Recommendations

Lincoln Traffic Management Committee, 1995

This report identifies ways to control, regulate, manage and, if possible, reduce vehicular traffic in Lincoln, and provides short-, medium-, long-term, and ongoing recommendations to meet this goal. The Traffic Committee also prepared a policy statement, a list of criteria against which to assess projects and proposals that affect traffic in Lincoln, and a list of projects requiring attention. Recommendations focused on the following issues:

- ❖ *Speed:* Recommended that law enforcement and other town officials study, set, communicate, and strictly enforce speed limits on all Lincoln roads, and provide ample funding to meet this objective.
- ❖ *Traffic Lights:* Recommended that the Selectmen authorize and/or request that MassHighway review the status and timing of traffic lights at major intersections throughout town, including pedestrian signals.
- ❖ *Route 2:* Recommended that the town agree on an overall long-term strategy for Route 2, with particular emphasis making Route 2 a four-lane, limited access highway. The study also recommended improving the connection between North Lincoln and the rest of the town and communicating these strategies to Lincoln residents.
- ❖ *Dangerous Intersections:* Recommended key intersections for further study, including intersections along Great South Road (Route 117), Bedford Road and Route 2, Five Corners, Lincoln Road's intersection with Codman and Tower Roads, Sandy Pond Road and Baker Bridge Road, Old Country Road and Trapelo Road, and Farrar Road and Route 126.
- ❖ *Improve Relationships with Abutting Towns:* Recommended that Lincoln form better relationships with neighboring Concord and Waltham with the objective of having an advance warning system where development on those borders might negatively impact traffic in Lincoln. Recommended forming on-going relationships with other towns in the region.
- ❖ *Monitoring Institutional Traffic:* Recommended that the Town review with local institutions ways to decrease or diminish the detrimental effect of increased traffic.
- ❖ *Signs:* Recommended that the Town catalogue all signs in order to determine their relevance, identify problems, and consider their visual impact around town.

Other recommendations focused on improving conditions at crosswalks, snow removal, maintenance of lighting, improving the safety and connectivity of bike paths, and greater provision of trails and roadside paths.

Roadway Management Study, Lincoln, Massachusetts

Roadway Design Guidelines, Lincoln, Massachusetts

Vanasse, Hangen & Brustlin, Inc., 1997

The Roadway Management Study assessed and characterized the condition of Lincoln's roadway network and projected future road conditions, assuming various funding scenarios. Generally, the study found Lincoln's primary roads to be in poor condition, requiring varying levels of attention to repair them. It also found the town's secondary roads to be in good condition, and its neighborhood roads between good condition and requiring significant maintenance. The Roadway Management Study formed the basis of a town-wide paving program that is underway as of the completion of this Comprehensive Plan.

The Design Guidelines document is a companion piece to the Management Study. Lincoln wanted to create guidance to ensure that local roadway improvement projects would be carried out in a manner that preserved the rural character of its roads. The guidelines present specifications for two types of roadways: primary roadways – which experience traffic volumes greater than 5,000 vehicles per day and have an average posted speed limit of 30 miles per hour – and secondary/residential roadways, which experience less than 5,000 vehicle trips per day and have a posted speed limit of 35 miles per hour or less. The guidelines also addressed issues common to all roadways including lighting, traffic calming through physical intervention, and traffic calming through paving surface alternatives.

1999-2000 Lincoln Traffic Management Committee Recommendations

Lincoln Traffic Management Committee, 2000

The Board of Selectmen and Planning Board asked the Traffic Management Committee to develop a major, comprehensive, town-wide traffic calming and control program in order to address speed/volume problems and recommend its adoption and implementation. This program was to be tailored to the unique needs of Lincoln and to leave an indelible impression on drivers that Lincoln is a rural town. Extensive traffic counts were collected and regional employment trends were studied for their implications for Lincoln traffic.

The Committee prepared an exhaustive 130-page report on traffic issues and potential mitigation measures. According to the study, communities west of Boston have grown three times faster than the statewide average, and workers have longer commutes to their places of employment. In an effort to shorten travel times, commuters are more heavily using Lincoln's arterial roads to reach Routes 2, 2A and 128, and to reach Waltham. The report found that traffic volumes are increasing on Lincoln's roads, primarily due to cut-through traffic from both commuters and trucks. It also found that traffic speeds are excessive.

Additionally, the report stated that the intersections of Lincoln Road at Route 117, Codman at Lincoln Road, and Route 126 at Route 2 were areas of acute concern. To move toward mitigating these problems, the report advanced a three-prong initiative of road design, public education/signs, and enforcement. Specific recommendations included traffic calming, e.g., raised crosswalks or speed tables and road narrowing, "smart" traffic signals, stop signs, increased police enforcement, sidewalks and crosswalks, and improved signage. The study also concluded that "in addition to the internal efforts described herein, it behooves us to form alliances with our neighbors and attempt to work collectively towards regional solutions, including infrastructure improvements and much needed public transportation initiatives."

Since the report was issued, Lincoln has implemented specific recommendations aimed at reducing speeds and cut-through traffic volumes on neighborhood roadways and improving safety for all users of the transportation network. This includes the development of a specific “traffic calming program” geared toward addressing neighborhood traffic impacts from development, speeding, and other transportation-related issues commonly found in suburbs adjacent to high-growth communities. The town-wide paving program currently underway will implement some traffic calming measures on Lincoln’s primary roadways.

Draft Report on Lincoln Roadsides

Lincoln Garden Club, April 2008

The Lincoln Garden Club prepared this report in order to raise awareness of the need to protect and maintain Lincoln’s scenic roadways and their physical characteristics. The report includes recommended actions for the town to consider and suggested guidelines for plantings, infrastructure improvements, and protection of design features such as stone walls, fences, lighting, and so forth to respect the historic and rural nature of the town’s scenic roads. In addition, the report identifies eight key entrance corridors in Lincoln and presents recommended actions to enhance their appearance. [Ed. Note: the final version of this report is scheduled for release in October 2009.]

Governance

Task Force on Town Governance

March 1994

This report was prepared by a committee appointed by the Moderator under Article 15 of the 1993 Annual Town Meeting. The Task Force’s charge was to examine how Lincoln’s town government was functioning at the time, identify opportunities for improvement, and make recommendations to town boards and Town Meeting. According to the Task Force, the conditions facing town government had changed considerably over the previous thirty years. In the past, the town had fewer regulations to contend with and more resources available to support the work of local officials. The Task Force went on to describe a time in which town boards planned for the future and had broad support from Town Meeting, and Town Meeting was willing to pay for schools, open space, and programs to preserve housing diversity. By the early 1990s, however, there seemed to be some unhappiness with town government and the general environment at town hall. As a result, the Moderator was asked to appoint a committee to study town government and report back to the next Town Meeting.

The *Task Force on Town Governance* report provides some important background for the Task Force’s work, notably an increase in demands on town government, an increase in state and federal regulations and their impact on local governments in general, and financial constraints. The report sympathetically notes that the lives of elected and appointed town officials had become more complex, too, with family and job demands competing for time with volunteer activities. In addition, the Task Force recounts the conditions that led to its creation. For example, the report describes a sense that Town Meeting had been “essentially eviscerated by Proposition 2 ½.” It also cites concerns from residents who characterized town hall as unresponsive and overly bureaucratic, decisions that appeared to be “bottlenecked” with the Board of Selectmen or Executive Secretary [Ed. Note: the former Executive Secretary position was changed to Town Administrator after 1994], and citizen efforts not being recognized or appreciated. Further, the report mentions communication gaps between town boards and in some cases, unresolved disputes between town boards. While the Task Force said that professionalizing town government had benefited Lincoln, it also acknowledged that some residents felt the town was being “run by bureaucrats” instead of townspeople.

To address these and other concerns, the Task Force made numerous recommendations to the Board of Selectmen, other town boards and committees, the Town Moderator, the Executive Secretary, and the citizens of the Town, such as:

- ❖ The Moderator should convene and facilitate inter-board meetings in April and October, i.e., after Annual Town Meeting and before the start of the next fiscal year's budget process;
- ❖ The Board of Selectmen should set priorities and explain them, anticipate Lincoln's future needs, delegate more responsibility to appointed committees, as appropriate, and delegate more day-to-day operational responsibilities to the Executive Secretary;
- ❖ There should be a clear job description for the Executive Secretary;
- ❖ The Board of Selectmen and Executive Secretary should periodically evaluate the effectiveness and responsiveness of town hall staff to residents;
- ❖ Meetings of the Board of Selectmen should be held in a larger room so that more people can attend and participate [Ed Note: Selectmen's meetings are now held in the Donaldson Room];
- ❖ The Board of Selectmen should sponsor a thank-you reception for volunteers at least once a year;
- ❖ The Executive Secretary should promote more effective communication with residents and work to make town hall a more "resident friendly" environment;
- ❖ There should be periodic meetings with board chairs in order to coordinate inter-board activities; and
- ❖ Steps should be taken to improve communication with residents, e.g., a newsletter, suggestion book, or through the use of fax and other means of distributing information.

Citizen Participation and Planning Process Committee (C3PO)

Report to Select Board, July 2000

This report was prepared by a committee appointed by the Moderator pursuant to Article 6 of the 1998 Annual Town Meeting. The committee's charge involved identifying ways to improve Lincoln's goal setting and financial planning processes, to encourage citizen participation, and to improve communication between town boards and committees. Out of the C3PO project came three initiatives:

- ❖ A pilot three-year planning and budgeting-by-program process involving the Police Department and the Lincoln Public Schools;
- ❖ Establishing a town website; and
- ❖ Maintaining and improving access to data that would illustrate how well the town's tax dollars are being spent – in part by comparisons to eleven communities similar to Lincoln. [Ed. Note: these communities included Carlisle, Concord, Dover, Harvard, Lexington, Manchester by the Sea, Sherborn, Sudbury, Wayland, Weston, and Westwood.]

C3PO's report encouraged Lincoln to consider instituting an approach to budgeting known as the "program budget," which is designed to support multi-year planning at the departmental level and to connect departmen-

tal budgets to a community-wide plan. It also noted that citizen participation appeared to be on the decline, and that perhaps the Town could improve communication with residents by creating and maintaining an official website. According to the Committee’s report, the website would be maintained by the Town’s Information Systems Manager with assistance from a Website Advisory Committee. Finally, C3PO recommended that Lincoln establish a Town Data Subcommittee to develop statistical measures to evaluate the Town’s performance over time. These central recommendations were based on several observations, including:

- ❖ The difficulty of finding and keeping volunteers to serve in town government;
- ❖ The needs of town boards for more and better information, and for better communication with one another;
- ❖ The blurred lines of communication and accountability associated with Lincoln’s decentralized town government;
- ❖ Confusion about the budget process: timelines, process, roles and responsibilities;
- ❖ Town meeting procedures for considering and voting on the Town’s operating budget; and
- ❖ Unclear town priorities.

Hanscom

Hanscom Area Towns Master Plan

Daylor Consulting Group, August 1997

Lincoln, Bedford, Lexington, and Concord commissioned a master plan for a study area that included Hanscom Field, Hanscom Air Force Base (HAFB), and the Minute Man National Historical Park. The purpose of the project was to establish a framework for coordinating the planning activities of the four towns and to evaluate Massport’s interest in developing non-aviation uses on land in the vicinity of the airfield. At the time, Massport had prepared an Environmental Impact Report that considered several potential uses ranging from a golf course/ lodging/conference center (low-impact use) to office/research and development facilities (higher-impact uses). The report specifically notes skepticism about the desirability of allowing any nonresidential development in Lincoln’s portion of study area.

Hanscom Air Force Base Pre-BRAC Community Advance Planning

Sasaki Associates, et al., May 2005

This study was conducted under a federal grant from the Department of Defense’s Office of Economic Adjustment (OEA). In August 2004, Lincoln filed an application for the grant on behalf of the four towns that would be directly affected by closure of HAFB under the Base Realignment and Closure (BRAC) legislation. The purpose of the project was to conduct a preliminary analysis of the economic, fiscal, and community services impacts that would most likely occur if HAFB had been slated for closure.

The Pre-BRAC Community Advance Planning study includes extensive documentation of then-existing conditions at HAFB. According to the report, there are approximately 166 major buildings at HAFB and some two-thirds of the buildings are in good condition. Nonresidential uses such as research and development space account for 1.5-1.7 million gross square feet of the total space existing on base. In addition, the report notes

that all 850 +/- housing units at HAFB are located within Lincoln's borders. The major findings of the report include:

- ❖ The Air Force is "privatizing" 850 housing units at HAFB. In the event of closure, all of the units would most likely be sold at market value.
- ❖ HAFB's existing infrastructure is generally in good condition and has capacity to accommodate growth. Lexington provides water and Bedford provides sewer service. If HAFB were closed, there would probably be a need for inter-municipal agreements or special legislation for municipal services in order to continue the current arrangements with Lexington and Bedford.
- ❖ There are several hazardous waste sites at HAFB and modest clean-up efforts have been undertaken by the Air Force. A more detailed study of contamination is needed.
- ❖ Intersections with the most traffic congestion currently include Route 2A/Bedford Road, Routes 4 & 225/62, and Route 2A/Cutoff. If the base were closed and redeveloped, growth in traffic would most likely be accommodated through grade separation at the jughandle (intersection of Hartwell Avenue and State Routes 4 & 225). Transportation demand management (TDM) would also be necessary at some point in the future. To some extent, all four towns would feel the traffic impacts from future growth under any plausible development scenario.
- ❖ Overall, base closure would impose relatively modest impacts on Lexington, Bedford and Concord, but Lincoln would experience significant impacts. The estimated annual deficit is \$6.6 million (in 2005 dollars) to serve households living in the former military housing units.
- ❖ The towns should consider forming a Local Redevelopment Authority (LRA) in order to gain control over the disposition of property at HAFB. In addition, the LRA should have permitting authority, much like the Devens Enterprise Commission (DEC).

APPENDIX B: LAND USE REVIEW CRITERIA

The Land Use Review Criteria listed below will be considered by the Lincoln Planning Board when it evaluates a request for a zoning change to accommodate land uses not currently permitted on a site owned or controlled by the proponent. The purpose of the Land Use Review Criteria is to communicate to landowners and developers the factors that Lincoln town boards and residents consider in making decisions about zoning changes. While no proposal can be expected to meet all of the criteria, proponents should consider and address as many as possible, given the characteristics of the site and the nature, scale, and likely impacts of the proposed use. In addition, proponents should consider possibilities for trade-offs and mitigation of negative impacts, if any. A debate by supporters and opponents of a project, citing the Land Use Review Criteria to justify their views, will be fruitful in bringing out the opportunities and challenges associated with a proposed development.

A proposed zoning change will be deemed substantially compatible with Lincoln's interests and the goals of the Comprehensive Plan based on the degree to which it:

- a. Is consistent with – and preferably enhances – the rural character of Lincoln by:
 - a.1. Maintaining consistency with the overall look-and-feel of the town and its neighborhoods
 - a.2. Preserving and enhancing traffic-limiting and traffic-calming arrangements already in force, or providing public or shared transit options to mitigate traffic impacts
 - a.3. Avoiding noxious effects such as noise, night-time lighting, and chemical pollution
- b. Enhances the social and economic diversity of the town by:
 - b.1. Providing housing opportunities for families with low incomes, senior citizens, and people with disabilities
 - b.2. Providing homes that diversify the price and life-style choices available in Lincoln, such as co-housing, cottage neighborhoods, cluster housing, and accessory apartments
 - b.3. Supporting the ability of residents to age in place
- c. Enhances the long-term financial stability of town government by:
 - c.1. Offsetting its direct and indirect costs to the town, e.g., through the provision of tax revenue, contributions to finance the town's capital improvement needs or off-site improvements needed to serve the project.
 - c.2. Providing additional net revenue to the town to fulfill public goals and objectives
- d. Promotes the equitable sharing of burdens and enrichment among residents by:
 - d.1. Ensuring that positive financial gains from rezoning benefit not only the proponent but also the town as a whole
 - d.2. Augmenting local amenities such as neighborhood open space, closure of some roads to outside traffic, or traffic-calming measures

- e. Maintains Lincoln's strategic use of open space by:
 - e.1. Facilitating recreation and exercise as well as connections among residents by creating a seamless network of open space and trails
 - e.2. Protecting water resources
 - e.3. Providing protected habitat for wildlife
 - e.4. Providing open space buffers or linkages between different types of land uses, when necessary and appropriate

In addition to the five priority criteria, an additional set of criteria should be considered given their special focus on emerging trends or relevance to specific land uses.

- f. Enhances Lincoln as a "green town" by:
 - f.1. Incorporating environmental and energy performance standards in order to minimize damage to the environment
 - f.2. Minimizing impact on finite town resources such as water and waste disposal (and preferably improves capacity)
 - f.3. Avoiding activities that contribute to global warming and environmental damage such as automobile commuting
 - f.4. Helping to improve the "green" performance of other town businesses, institutions and citizens
 - f.5. Encouraging the reuse and diverse use of currently underused structures
- g. Creates amenities that enrich the experience of living in Lincoln by:
 - g.1. Providing Lincoln residents with local shopping, dining, recreation, education, or health care, or services to the elderly or people with disabilities
 - g.2. Promoting Lincoln's home-based businesses and micro-businesses and the entrepreneurs who run them, e.g., "incubator" facilities and business services
 - g.3. Enhancing the viability of Lincoln Station as a village center where scale may be critical to sustainability and rail access is available; for example mixed residential and commercial land uses
- h. Maintains Lincoln's long-standing special relationship with agriculture by:
 - h.1. Enhancing agricultural activities
 - h.2. Involving Lincoln residents in the future of food and agriculture, including local sourcing, processing, and marketing of food
- i. Encourages historic preservation by:
 - i.1. Respecting historic structures when seeking to modify them

- i.2. Respecting historic settings, neighborhoods, and viewscapes
- j. Enhances the educational orientation and resources of the town by:
 - j.1. Providing educational resources for Lincoln residents
 - j.2. Encouraging “knowledge businesses” that offer training as well as employment to local residents
 - j.3. Encouraging businesses interested in entering into private-public partnerships with Lincoln’s educational and cultural institutions (e.g., schools, library, museums)
- k. Enhances social connection and civic engagement among residents and among neighborhoods by:
 - k.1. Preserving and enhancing unique neighborhood resources, capabilities, and character
 - k.2. Creating opportunities for spontaneous social interactions among citizens
 - k.3. Providing opportunities for healthy out-of-school socializing and activities for the town’s children of all ages
 - k.4. Reinforcing the identity of the Lincoln community as a whole
 - k.5. Promoting involvement of the community in town government
 - k.6. Promoting social engagement through recreational opportunities
- l. Helps Lincoln contribute positively to the region by:
 - l.1. Creating assets that meet regional needs
 - l.2. Improving regional relations
 - l.3. Contributing to the region’s needs for health and sustainability

APPENDIX C: SOILS PREVALENT IN LINCOLN

Mapped Soil Series	Acres	Percent Total	Soil Depth	Drainage and Permeability	Geologic Formation	Use and Vegetation
Freetown Muck	955.5	10.0%	More than 80"	Very poorly drained	Depressions on plains and upland	Native vegetation includes red maple, American elm, green ash, eastern hemlock, Atlantic white cedar, buttonbush, winterberry, swamp azaleas, and leatherleaf
Canton Fine Sandy Loam	921.7	9.6%	18-36"	Well drained	Till, ground moraine, ice-contact stratified drift	Native vegetation is forest composed of white pine, red, white and black oaks, hickory, red maple, sugar maple, gray birch, yellow birch, beech, hemlock, and white ash
Narragansett Hollis Rock Outcrop Complex	709.5	7.4%	10-20"	Well drained and somewhat excessively drained	Thin mantle of glacial till derived from local bedrock of schist, granite, and gneiss	Common trees are red, white, black, and chestnut oak, hickory, white pine, hemlock, and gray and black birch
Hinckley Loamy Sand	697.5	7.3%	More than 80"	Excessively drained	Outwash plains	Red, black, white, scarlet and scrub oak, white and pitch pine, hemlock and gray birch are the common trees. Unimproved pasture and idle land support hardhack, little bluestem, bracken fern, sweet fern, and low bush blueberry

Mapped Soil Series	Acres	Percent Total	Soil Depth	Drainage and Permeability	Geologic Formation	Use and Vegetation
Narragansett Silt Loam	669.3	7.0%	18-38"	Well drained	Coarse-textured till derived from gneiss, schist, sandstone, shale, conglomerate and basalt	Common trees are red, white and black oak, hickory, white ash, sugar maple, red maple, gray birch, white pine and hemlock.
Merrimac Fine Sandy Loam	645.6	6.7%	18-30" to contrasting soil	Somewhat excessively drained.	Glacial outwash plains and valley trains, and associated kames, eskers, stream terraces and water deposited parts of moraines	Most areas are cultivated and used for growing hay, pasture, silage, corn, or truck crops
Haven Silt Loam	619.5	6.5%	18-36"	Well drained	Glacial outwash plains, valley trains, terraces, and water-sorted moraine deposits	Common forest trees in woodlots include black, white, and red oaks, beech, and maple
Montauk Fine Sandy Loam	472.1	4.9%	20-38"	Well drained	Moderately coarse or medium textured glacial till mantles underlain by firm sandy till	Woodland contains red oak, white oak, and occasionally yellow poplar, white pine, red pine, sugar maple, beech and birch.
Water	430.5	4.5%				
All Other	3,446.7	36.2%				

Source: U.S. Department of Agriculture, Natural Resource Conservation Service, Soil Data Mart; Middlesex County Soils Data, User-Defined Report; and MassGIS.

APPENDIX D: ELECTED AND APPOINTED TOWN OFFICIALS

Board, Commission, or Committee	Elected (E) or Appointed (A)	Appointed By
Agricultural Commission	A	Board of Selectmen
At-Risk Properties Committee	A	Board of Selectmen, Planning Board, Conservation Commission, Board of Health, Finance Committee, Board of Assessors, Rural Land Foundation
Bemis Trust Fund Trustees	E	
Board of Appeals	A	Board of Selectmen
Board of Assessors	E	
Board of Health	E	
Board of Selectmen	E	
Cable Advisory Committee	A	Board of Selectmen
Capital Planning Committee	A	Moderator
Cemetery Commission	E	
Commissioners of Trust Funds	E	
Community Preservation Committee	A	Board of Selectmen; and Conservation, Housing, Recreation, Historical Commissions
Comprehensive Long-Range Plan Committee	A	Planning Board
Conservation Commission	A	Board of Selectmen
Council on Aging	A	Board of Selectmen
Cultural Council	A	Board of Selectmen
DeCordova Trustees	E & A	Board of Selectmen, School Committee, Library Trustees
Commission on Disabilities	A	Board of Selectmen
Emergency Assistance Fund	A	Board of Selectmen
Finance Committee	A	Moderator
Flag Committee	A	Board of Selectmen
Green Energy Technology Committee	A	Board of Selectmen
Historic District Commission	A	Board of Selectmen, Planning Board
Historical Commission	A	Board of Selectmen
Housing Commission	E & A	Board of Selectmen, Governor
Insurance Advisory Committee	A	
Library Trustees	E & A	Board of Selectmen, School Committee

Board, Commission, or Committee	Elected (E) or Appointed (A)	Appointed By
Lincoln School Committee	E	
Lincoln-Sudbury Regional School Committee	E	
Minuteman Science-Tech High School	A	Moderator
Natural Resources Preservation Committee	A	Board of Selectmen, Planning Board, Board of Health; and Conservation, Water, Recreation Commissions
Personnel Board	A	Moderator
Pierce House Property Committee	A	Board of Selectmen
Planning Board	E	
Public Health Nurse Study Committee	A	Board of Selectmen
Recreation Commission	E & A	Board of Selectmen
Recycling Committee	A	Board of Selectmen
Registrars of Voters	A	Board of Selectmen, Town Clerk
Scholarship Fund Committee	A	Moderator, School Committee
Town Clerk	E	
Town Historian	A	Board of Selectmen
Town Moderator	E	
Traffic and Roadsides Committee	A	Board of Selectmen
Tree Warden	A	Board of Selectmen
Water Commission	E	

Notes:

- 1) Some committees include non-resident members, e.g., the DeCordova Trustees, but Lincoln holds the controlling number of votes.
- 2) This chart includes both permanent or standing committees as well as temporary or ad hoc committees. It does not include town employees.

APPENDIX E: CITIZEN SURVEY QUESTIONNAIRE

Your answers will be kept completely confidential and used only in combination with other responses to picture prevailing ideas and trends. We will not know who offered which response and will not share any single response either within or outside the Town.

1. First, we'd like your views of some of your experiences in living in the Town and using Town services. For each of the following statements, please circle the number that indicates if you Strongly Agree = 5, Agree =4, Neither Agree Nor Disagree = 3, Disagree =2 or Strongly Disagree =1.

Questions	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I believe that Town Meeting government does a good job of addressing my interests and concerns about living in Lincoln	1	2	3	4	5
Whenever I need something from people who work for the Town government, they're very helpful	1	2	3	4	5
Whenever I need something from people who work for the Town government, they're very efficient	1	2	3	4	5
Town boards made up with volunteers rather than paid staff work well for extending Town staff's capabilities for meeting Lincoln's needs	1	2	3	4	5
Town leaders regularly come forward to convincingly show the way to innovative new solutions to emerging challenges	1	2	3	4	5
The Town government spends my tax dollars in the most effective ways	1	2	3	4	5
The Town of Lincoln is an affordable place to live for me	1	2	3	4	5
The culture of the Town is very open to new people and new ideas	1	2	3	4	5
The Lincoln elementary and middle school systems do an excellent job of preparing students for the next stage in their lives	1	2	3	4	5
The Lincoln-Sudbury Regional High School does an excellent job of preparing students for the next stage in their lives	1	2	3	4	5
The Lincoln school systems do a good job of managing the taxpayer money that funds it	1	2	3	4	5
I'd strongly consider paying more taxes to support a more diverse school curriculum	1	2	3	4	5
I'd strongly consider paying more taxes to set aside more conservation land in Town	1	2	3	4	5
The Town of Lincoln is a very satisfying place to live	1	2	3	4	5
I would recommend the Town of Lincoln as a place to live to anyone who I'd like to live near me	1	2	3	4	5
If I could, I'd live in Lincoln for as far as I can see into the future	1	2	3	4	5
Town government is a regular topic of conversation with my friends and family members	1	2	3	4	5

2. I attended Town Meeting during last spring (2007) Yes ____ No ____

If "No," skip to Question 4

3. Please describe your reasons for attending Town Meeting by responding to each of the following statements. Circle the number that indicates if you believe it was an important reason = 3, Neither important nor unimportant = 2, Unimportant = 1. If you don't recall, circle Don't Recall = DR

Reasons for attending 2007 Town Meeting		Neither important nor unimportant	Important	Don't recall
I want to help make the Town run well	1	2	3	DR
I want to make my Town a better place to live	1	2	3	DR
Town meeting form of government allows me or a group of other Lincoln citizens the opportunity to make a difference	1	2	3	DR
I'm concerned about how the Town spends my tax money	1	2	3	DR
I was interested in a particular issue	1	2	3	DR
I like to keep up with the range of issues facing the Town	1	2	3	DR
I like to hear the discussions	1	2	3	DR
I like to run into friends and neighbors	1	2	3	DR
Friends or family members encouraged me to attend	1	2	3	DR
It's a tradition in my family	1	2	3	DR
Town meeting offers me a chance for new learning	1	2	3	DR
It is my civic duty	1	2	3	DR

Other (please describe): _____

4. If you did NOT attend Town Meeting in 2007, please describe your reasons for not attending by responding to each of the following statements. Circle the number that indicates if you believe it was an Important reason = 3, neither important nor unimportant = 2, Unimportant = 1. If you don't recall, circle Don't Recall = DR

If you attended the 2007 Town Meeting skip to question 5

Reasons for NOT attending Town Meeting in 2007		Neither important nor	Important	Don't Recall
I had conflicting obligations	1	2	3	DR
Someone else from my household attended to express my opinion	1	2	3	DR
I hadn't been informed of the pros and cons of the issues that would be addressed	1	2	3	DR
I didn't know when issues that are important to me would be discussed	1	2	3	DR
I didn't have the time	1	2	3	DR
I missed the announcement	1	2	3	DR
I didn't know how to find the location	1	2	3	DR
From past experience, too much time is spent on unimportant discussion	1	2	3	DR
From past experience, it just takes too long	1	2	3	DR
From past experience, the presentations are not easy to follow	1	2	3	DR
From past experience, its hard to see what people are presenting	1	2	3	DR
From past experience, its hard to hear what's being said	1	2	3	DR
From past experience, the seating is uncomfortable	1	2	3	DR
From past experience, the room temperature is uncomfortable	1	2	3	DR

Other (please describe): _____

5. I attended Town Meeting one or more times in the three years before 2007 (i.e., 2004, 2005 2006)

Yes ___ No ___

6. I attended the State of the Town meeting on November 3, 2007

Yes ___ No ___

7. In the past five years I have served on ___ (number of) Town Board or Commission or neighborhood planning or improvement planning or improvement committees in Lincoln (if zero, write in 0 and skip to question 9)

8. If you've served as a volunteer on any Town Board or Commission or neighborhood planning or improvement committees in Lincoln in the past five years, please circle the number reflecting whether the reason shown was important to your decision to serve. If you've served on more than one Lincoln volunteer activity, please rate the reasons for your most recent and time consuming service. Circle the number that indicates if you believe it was an Important reason for you = 3, neither important nor unimportant = 2, Unimportant reason = 1.

Reason for Volunteering for Lincoln		Neither important nor unimportant	Important
Some issues in my neighborhood concern me	1	2	3
Particular Town-wide issues concern me	1	2	3
I just want to make Lincoln a better place to live	1	2	3
I enjoy serving with my friends and neighbors	1	2	3
I enjoy the possibility for new learning	1	2	3
Friends or family members encouraged me to serve	1	2	3
It is my civic duty	1	2	3
It's a tradition in my family	1	2	3

Other (please describe): _____

9. Following are sources for staying well informed about what's going on in Lincoln, including topics that tend to be discussed in Town Meeting. On a 1 to 3 scale, please circle the numbers representing each source's usefulness for keeping you informed. 1 = Poor source, 2 = neither good nor poor source, 3 = Good source

Information Source	Poor source	Neither good nor poor source	Good source of
Local newspapers (Lincoln Journal for example)	1	2	3
Regional newspapers (Boston Globe for example)	1	2	3
Town publications, including the Town Warrant	1	2	3
The Town website	1	2	3
Community access TV channel	1	2	3

Other (please describe): _____

10. Please tell us if you've heard about or seen opportunities for volunteering to work on Town activities. Circle "yes" if it applies to you and "no" if it does not.

I know how to get involved if I wanted to volunteer to work with Town committees or boards or neighborhood groups	Yes	No
I've been asked to work on one or more Town committees or improvement efforts	Yes	No
I know how and where I could sign up to volunteer to help my neighborhood or the Town	Yes	No
I know how to get involved if I wanted to volunteer to help out with activities at the Lincoln or Lincoln-Sudbury schools	Yes	No
I have been asked to help out with activities in the Lincoln or Lincoln-Sudbury schools	Yes	No

Other (please describe): _____

11. On average, during 2007 I spent time in Town conservation or open lands (e.g., run, walked, skied, on horseback, etc.) (check the best answer):

- At least several times per week
- One or several times per month
- One or several times per year
- Never or hardly ever

12. In the years prior to 2007 and since I've lived in Lincoln, the time I spent in Town conservation or open lands (e.g., run, walked, skied, on horseback, etc.) was (check one answer):

- More than I did in 2007
- About the same as 2007
- Less than I did in 2007

13. Lincoln's land conservation approaches are (please check one answer):

- Much too aggressive. There's too much land that no one can build on
- Somewhat aggressive, but I can live with it
- Just about right
- Need to be a bit more aggressive in acquiring and managing the land in its control
- Not up to the task and the challenges of the future
- I don't know

14. On average, during 2007 I used the Town's recreational and other public facilities (e.g., pool, meeting rooms, tennis courts,); check one answer

- Several times per week or greater, and more than
- One or several times per month, and more than
- One or several times per year
- Never or hardly ever

15. Lincoln's recreational and other public facilities (e.g., pool, meeting rooms, tennis courts) are (please check one answer):

- Sufficient to fill a great many of my or my family's needs for those kinds of facilities
- Adequate
- Insufficient to current needs and the challenges of the future
- I don't know enough about them to offer an opinion

16. Knowing what brought you to Lincoln and your thoughts about the future for the Town will help us choose our planning directions.

I chose to live in Lincoln because (check all that apply; if you moved away and returned, respond about your most recent move to Lincoln):

- I was born here or my family lived here before I began my own working career
- My employment brought me to this area and I chose to live in Lincoln
- My college or other educational choices brought me to this area and I chose to live in Lincoln
- I chose to move here from another place in the Boston metropolitan area
- I was drawn by Lincoln’s institutions such as Codman Farm, DeCordova Museum, Drumlin Farm, etc.
- I was drawn by Lincoln’s conservation and recreation spaces and trails.
- The Town’s commuter train connection was attractive
- I wanted to live in a rural environment yet be near urban amenities of Boston
- I wanted to live in a community where an individual could make a difference
- I wanted to live in a Town where my investment in a home would appreciate significantly
- When I retired, I decided that this would be a good place to live
- Other: _____

17. Following are statements about planning possibilities for the Town. For each of the following statements, please circle the number that indicates if you Strongly Agree = 5, Agree =4, Neither Agree Nor Disagree = 3, Disagree =2 or Strongly Disagree =1.

Planning possibilities	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Removing or substantially rehabilitating average sized or smaller houses to construct much larger houses takes away from the Town’s attractiveness	1	2	3	4	5
Lincoln’s planning should seek more creative ways to create a balance of environmental, economic development, and social equity strategies	1	2	3	4	5

18. Are you concerned about potential future lack of housing diversity with respect to having housing available in a range of prices?

Yes ___ No ___

19. Do you believe that the Town should take an active role in creating or sustaining housing affordability for low income households, including efforts by Lincoln’s Housing Commission (its mission is to “pursue housing opportunities for targeted populations, including seniors on fixed incomes, town employees, and children of present and past residents”)?

Yes ___ No ___

20. Do you believe that the Town should encourage low income affordability by working with developers to bypass local zoning to build denser housing (the so-called Chapter 40B housing) if the Town does not meet the State mandate requiring that 10% Towns’ housing should be “affordable”)

Yes ___ No ___

21. Do you believe that the Town’s housing diversity initiatives should include housing for middle income households?

Yes ___ No ___

22. Concerning commercial development and Lincoln’s character, do you agree that the quality of life in Town would benefit from adding the following commercial activity?

For each of the following statements, please circle the number that indicates if you Strongly Agree = 5, Agree =4, Neither Agree Nor Disagree = 3, Disagree =2 or Strongly Disagree =1.

Commercial development possibilities	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Add a large-scale office complex (over 50,000 sq-ft) similar in size to the Lincoln North building (120,000 sq-ft) near Hanscom AFB	1	2	3	4	5
Add a medium-sized office complex (20,000 - 50,000 sq-ft) slightly smaller than the new office building (63,000 sq-ft) being completed in Waltham at 1560 Trapelo Road at Route 128 across Trapelo Road from Reservoir Place	1	2	3	4	5
More small, flexible offices (i.e., “business incubator”) for growing home-based businesses	1	2	3	4	5
More space for services (e.g., conference rooms) for home-based businesses	1	2	3	4	5
More retail activity in existing commercial areas (e.g., shops, restaurants, etc. in South Lincoln Mall)	1	2	3	4	5
More retail activity mixed with residential housing (e.g., “mixed-use” buildings near train)	1	2	3	4	5
Lincoln should not add new commercial activity even when current zoning allows it	1	2	3	4	5

23. Please offer any thoughts that you’d like to add about your answers to any of the above questions: _____

Please don’t give up now! You’re almost done.

Your answers to the following questions will help us classify your responses. Again, none of these data will be shared with anyone else or used for marketing purposes.

24. About how many total years have you lived in Lincoln (count all the time including if you moved away and returned)?

25. In which neighborhood do you now live. Select one. If you are uncertain, please make your best estimate)

- Hanscom Air Force Base
- North Lincoln from on Route 2 north to Concord and Bedford, not including Hanscom AFB
- Central Lincoln where you must pick up your mail at the post offices rather than having it delivered (one-quarter mile from either post office)
- East Lincoln south of Route 2 from on Bedford Road or Weston Road/Silver Hill Road and eastward to the Town line with Waltham and the post office delivers your mail to your mailbox near your place of residence.
- West Lincoln south of Route 2 from the west side of Bedford Road (not on Bedford Rd) and the west side of Weston Road/Silver Hill Road (not on Weston Road/Silver Hill Road), north of South Great Road (Route 117) and the post office delivers your mail to your mailbox near your place of residence.
- South Lincoln from on South Great Road (route 117) and south to the Town lines with Weston and Wayland

26. Zip code where you work _____
27. Including you, how many adults 18 or older live at your current address? _____
28. How many children under the age of 18 currently live at your current address? _____
29. How many children in your household now attend either the Lincoln elementary or the Lincoln middle school? _____
30. Have there ever been children in your household who once attended the Lincoln middle or elementary school and no longer attend?
Yes ___ No ___
If NO, skip to question 32
31. If yes, how many _____
32. How many children in your household now attend the Lincoln-Sudbury Regional High School? _____
33. Have there ever been children in your household who do not now attend the Lincoln-Sudbury Regional High School but once did?
Yes ___ No ___
If NO, skip to question 35
34. If yes, how many _____
35. Approximately, what is the sum of cumulative years of school attendance at the Lincoln middle or elementary school Lincoln-Sudbury school systems of all of your children who have ever attended (if none, enter 0)? _____
36. Which one of the following occupational categories best describes what you do? (If you have several occupations, check the one that takes the most time during working hours)
- | | |
|---|---|
| <input type="checkbox"/> Professional services (lawyer, health care provider, researcher, accountant, economist, consultant, social worker, etc.) | <input type="checkbox"/> Arts, design, entertainment, sports, and media |
| <input type="checkbox"/> Science, engineering, architectural, mathematical or technology | <input type="checkbox"/> Personal service (massage, hair care, etc.) |
| <input type="checkbox"/> Manager in a business or non-profit organization | <input type="checkbox"/> Farming, fishing, mining or forestry |
| <input type="checkbox"/> Sales, operations, office and administrative support or services | <input type="checkbox"/> Household manager |
| <input type="checkbox"/> Education and library occupations | <input type="checkbox"/> Military |
| <input type="checkbox"/> Manufacturing or production or transportation or material moving | <input type="checkbox"/> Local, state or federal government except military |
| <input type="checkbox"/> Construction, installation, maintenance, or repair | <input type="checkbox"/> Student |
| <input type="checkbox"/> Food preparation and serving | <input type="checkbox"/> Full time volunteer in public or non-profit activities |
| <input type="checkbox"/> Police, fire and other protective services | <input type="checkbox"/> <input type="checkbox"/> Fully retired (if partially retired and you work 50% or more of the average day, please note your occupation above) |
| <input type="checkbox"/> Community and social services | <input type="checkbox"/> <input type="checkbox"/> Other: _____ |

37. By getting some idea how Lincoln residents' typical weeks fall into place, we'll be better able to create plans that meet your needs. Please try to give your best estimate of the number of waking hours you spend on average each week when you are not on vacation. Please enter whole hours only. If less than one hour, but more than zero, enter "1":

Activity	Hours per Week
Work for pay (including travel time and work at home)	_____ hrs
Active sports or athletics	_____ hrs
Shopping in stores or on-line	_____ hrs
Attending or preparing for educational activities	_____ hrs
Active artistic pursuits such as music, art, theatre, etc.	_____ hrs
Activities related to my children's school	_____ hrs
Working on Town boards, commissions, etc.	_____ hrs
Other community, charitable or religious activities	_____ hrs
Entertainment outside my home (e.g., theatre, spectator sports)	_____ hrs
In home entertainment (e.g., watching TV, listening to the radio)	_____ hrs
Time with family or friends including parties and get-togethers	_____ hrs
Hobbies or games, including on-line	_____ hrs
Reading, including online	_____ hrs
Political activities	_____ hrs
Tasks around my residence	_____ hrs
Child or elder care or transportation	_____ hrs
Other (describe) _____	_____ hrs

38. I belong to a private health club or health clubs Yes ___ No ___

If no, skip to question 40

39. I use the club facilities for (please check all that apply)

- Athletic programs for me or my family or friends
- Meetings
- Social events
- Other (please describe) _____

40. What's your highest level of educational achievement?

- Did not finish high school
- High school
- Some college or post high-school trade education
- Hold undergraduate degree
- Hold graduate degree

41. What is your marital status (please check one)?

- Single, never married
- Married or living with a partner
- Divorced

42. Do you or your family rent or own the home or apartment where you live in Lincoln (please check one)?

Own the house or condo

Rent the house or apartment

43. What is the year of your birth? _____

44. Are you male or female? Male _____ Female _____

45. Which annual income category best describes your 2007 household income (please check one)?

Less than \$30,000 per year

\$30,000 to \$49,999 per year

\$50,000 to \$99,999 per year

\$100,000 to \$149,999 per year

\$150,000 to \$199,999 per year

\$200,000 to \$299,000 per year

\$300,000 or more per year

46. Please offer any thoughts that you'd like to add about your answers to any of the above questions:

Thank you very much for taking the time to answer our questions. The Comprehensive Long Range Planning Committee and its subcommittees, Town employees and boards, and the selectmen will be working hard in the coming months to make productive use of the information you've offered.

Ken Hurd

Chairman, Lincoln Comprehensive Long Range Planning Committee

APPENDIX F: TOWN BOARD QUESTIONNAIRE

Survey of Town Board and Committee Members to Help with Long-Range Planning in Lincoln¹

All information will be kept strictly confidential. Only aggregate results will be discussed or reported in writing.

On what committee(s) or board(s) are you currently serving? Year began ___

1. _____

2. _____

What committee(s) or board(s) have you been on, but are not currently on?

1. _____

2. _____

For the following questions, please use the scale to rank your responses from: 1 = disagree strongly to 5 = agree strongly.

1. *What factors contributed to your decision to serve on a town committee or board?*

I was encouraged to run or stand for appointment	1	2	3	4	5
My wish to serve the town was very important to me	1	2	3	4	5
I had specific objectives or changes I wanted to work on	1	2	3	4	5
I wanted to work with fellow residents	1	2	3	4	5
I felt I had special skills to offer	1	2	3	4	5

What are your special skills? Please don't be modest.

Please tell us what your objectives are (were) in serving on this (these) board(s) or committee(s).

¹ This survey was distributed to present and former elected and appointed town officials. Fifty-seven responses were received. A summary of the survey results is on file in the Planning Department.

2. How would you rate your experiences while serving on this (these) board(s) or committee(s)?

I was well briefed as to how the committee operates	1	2	3	4	5
We made decisions that helped the Town	1	2	3	4	5
I was able to represent my constituency or neighborhood	1	2	3	4	5
I would be happy to serve/run again	1	2	3	4	5
Meetings were stimulating	1	2	3	4	5
Meetings were too long	1	2	3	4	5
Meetings were too frequent	1	2	3	4	5
Meetings were often frustrating	1	2	3	4	5
The experience was difficult for me	1	2	3	4	5
State regulations are an overwhelming burden	1	2	3	4	5
Pressures from outside the town took up too much time.	1	2	3	4	5

What is the single greatest failure or frustration you have experienced during your time of service; in hindsight, what would you have tried to do differently to address it?

What is the single most satisfying experience you have had during your time of service?

3. How would you rate the adequacy of staff support for your board(s)/committee(s)?

Does (Did) your board or committee have paid staff support? Yes No (If No, skip to Q 4)

Staff assigned to us has (had) excellent skills	1	2	3	4	5
Staff time/effort is (was) adequate	1	2	3	4	5
Staff/board division of labor was appropriate	1	2	3	4	5

Please describe additional staff needs/skills that would help (have helped) your board or committee function more effectively. Be as specific as you can.

4. *How would you describe your board(s) or committee(s)' relationships with other town employees?*

Other town employees are (were) very sensitive to our needs and very helpful when we approached them.	1 2 3 4 5
Other town employees had other priorities and didn't help us much.	1 2 3 4 5

Please give us specific examples that describe your experiences with town employees – pro or con.

5. *How were your interactions with other boards or committees?*

We are (were) largely independent and rarely interact(ed) with other boards or committees.	1 2 3 4 5
Interactions with other boards or committees were usually constructive.	1 2 3 4 5
Confusion was frequent over overlaps in areas of responsibility.	1 2 3 4 5
We had conflicts with other boards / committees.	1 2 3 4 5

Please give specific examples of interactions that were either constructive or frustrating. Describe how these arose and how they were resolved.

In what areas do you believe your board or committee could benefit by improved interactions or communications with other boards or committees (specify)?

6. *Use of volunteers to facilitate work of your board(s)/committee(s).*

Do (did) you use volunteers to assist you in your work (e.g. ad hoc committees or help with specific tasks)?
 Yes No

If *Yes*, please give specific examples of how you found people with needed skills; how you used them; and with what results. If possible, give an example of a positive outcome and an example where the experience could have been improved.

7. *Involvement of citizens in town governance.*

Citizens are (were) explicitly invited to attend all meetings.	1	2	3	4	5
Minutes are (were) posted on the Town website.	1	2	3	4	5
Citizens' input is (was) sought through public hearings.	1	2	3	4	5
Citizens are (were) regularly kept informed of debated issues <i>and</i> decisions through articles in the newspaper.	1	2	3	4	5

Please suggest ways we might better inform and involve citizens in matters of town governance.

8. *Looking ahead, which of these actions would you recommend as ways to improve town government?*

Lincoln should delegate more responsibility to paid town employees.	1	2	3	4	5
Steps should be taken to reduce the time commitment required to serve on a board or committee.	1	2	3	4	5
The number of town committees or boards should be decreased.	1	2	3	4	5
We should increase the size of some boards or committees	1	2	3	4	5
We should hire a management consultant to help improve the effectiveness and efficiency of town government.	1	2	3	4	5
We should improve our use of data technologies for storing and accessing records	1	2	3	4	5

9. *Please give us recommendations for improving town government. Specific examples will be especially helpful!*

What changes are needed in the organization or workings of your board or committee to improve its effectiveness?

What leadership, management, or technical skills are especially needed on your board or committee?

What changes in the structure of town government would help most, e.g. committee structure; committee interactions; qualifications or deployment of town employees; division of tasks among employees, boards and volunteers?

What do you feel will be the greatest strengths and the greatest weaknesses of the town's institutional culture/ way of doing business, as we seek to address potential changes in the coming years, what do you feel will be the biggest challenges ahead?

What recommendations would you make to improve our financial planning and budgeting process?

What steps should the town take to encourage broader participation of residents in town government?

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