

TOWN OF ELLINGTON



PLAN OF CONSERVATION & DEVELOPMENT

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Inside Cover



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Chapter One: Plan Introduction

Introduction

Ellington has a very desirable set of characteristics which make it a highly sought-after place to live. The Town has a broad range of housing options, excellent schools, a good network of roadways, significant opportunities for recreation, and despite growth over the past several decades, desirable elements of rural character.

Many of these characteristics did not result by chance but were realized in part by implementing recommendations contained in earlier Plans of Conservation and Development (POCD). This Plan has been prepared as an update to the 2008 POCD. In 2014 a study was completed for the Route 83 corridor prompting an amendment to the residential chapter of the Plan in 2015 and formally adopting the Route 83 corridor study as part of the Plan. It has been incorporated as Appendix B and continues as an official element of this Plan.

This Plan plays an important part in creating a long-term vision for how land should be developed, as well as preserved as open space. Through its implementation, using the principle tools available to the Planning and Zoning Commission which include zoning and subdivision regulations this vision may be realized.

Many important goals established in the 2008 POCD and subsequent amendments in 2015 have been accomplished. They include the following:

Farmland and Open Space Preservation

- Significant additional acreage preserved through property acquisition or the purchase of development rights
- Adopted new zoning regulations that support more as of right uses and structures
- Initiated a fund for Farmland preservation

Zoning and Subdivision Regulations

- Adopted density-based regulations. Takes into consideration existing natural features such as steep slopes, wetlands, and flood plains when computing the maximum number of lots which may be permitted in a subdivision. (2011)
- Eliminated the multi-family housing zone and established a designed multifamily regulation. Any proposed new multi-family project now requires a change of zone with conceptual plans and special permit approval giving PZC substantial discretion. (2016)
- Rezoned excess Planned Commercial area in Crystal Lake to Residential (2008)
- Adopted specific regulations for elderly and assisted living housing (2016)

Community Facilities

- Constructed four (4) tennis courts at Ellington High School (2011)
- Constructed 11,000 square foot Senior Center (2013)
- Rehabilitated Old Crystal Lake School for programming and meeting space (2012)
- Constructed two (2) multi-purpose recreation fields on Pinney Street (2014)
- Addition and improved Human Services Office (2014)
- Addition and improved Crystal Lake School (2016)
- Purchased 6 Nutmeg Drive and converted building for fire house (2016)

Transportation

- Worked with CT DOT to construct roundabout in the 5 corners area to improve traffic circulation
- Worked with CT DOT to replace Windermere Avenue bridge to resolve flooding of Hockanum River (2009)

Better Design

- Established the Design Review Board as a permanent board (2018)

The Planning and Zoning Commission also has an important regulatory function. The Commission must review individual applications from landowners who wish to develop their property. The Commission is in some instances given a certain degree of discretion through its regulations when reviewing applications for development. In other instances, however, certain development activities are, by State law, permitted “as of right”. In these circumstances, there is very little discretion given to the Commission and an application must be approved if all regulatory standards are satisfied.

State enabling law is designed to ensure a process of orderly development. This Plan establishes several strategies related to planning. The Regulations enacted by the Commission are the mechanism to achieve them. This is a process that has served Ellington very well. More growth will occur but in accordance with this Plan and in compliance with established land use regulations. At the same time, natural resources will be protected, safe infrastructure built, housing opportunities created, commercial areas developed, and selected open space and farmland assets preserved.

This Plan is intended to be a working document to help guide the Planning and Zoning Commission and the residents of Ellington in making decisions regarding land use, transportation, public services, recreation, open space, natural resources, business development, and housing, over the next decade.

This POCD also discusses certain capital needs relating to areas such as roads, sewers, and the construction of new or improved Town facilities. In some instances, this plan can set the stage

for future capital investments. Under Section 8-24 of the Connecticut General Statutes, significant capital projects which the Board of Selectmen decide to pursue must be first referred to the Planning and Zoning Commission for a finding of consistency with this Plan.

It is important to note that in some instances, final decision making on matters relating to land use is determined by other Boards or groups such as the Ellington Board of Selectmen and Ellington taxpayers. For example, a decision to purchase a significant parcel of open space consistent with this Plan must first be supported by the Board of Selectmen and later supported at referendum/town meeting by Ellington taxpayers. The following is a summary of the responsibilities that other Town Boards and Commissions have related to the area of land use planning.

Board of Selectmen: Responsible to set priorities and implement various capital improvements relating to roads and Town facilities. Responsible to set priorities for the acquisition of open space and farmland. Authorize funding for staffing necessary to support land use commissions like the Planning and Zoning Commission and Inland Wetlands Agency in the conduct of their statutory responsibilities.

Zoning Board of Appeals: Conducts public hearings to review requests to vary the requirements of the Zoning Regulations when the strict application of the regulation will result in hardship.

Inland Wetland Agency: Through its regulatory process protects mapped wetlands, watercourses, and waterbodies. Reviews development proposals to ensure that the alteration of land within wetland upland review areas will not adversely impact the wetland resource. Makes determinations regarding activities that are exempt from wetland regulations.

Economic Development Commission: Charged with fostering a pro-business environment that encourages a growing, sustainable and diverse tax base.

Water Pollution Control Authority: Prepares and updates a “Master Sewer Facilities Plan” which identifies which land parcels may be serviced with the Town’s public sewer system. Establishes a specific sewer allocation for each of these parcels. Reviews proposals for new development to ensure that adequate sewer capacity has been assigned to serve this property. Prepares long-range plans for public sewer extensions and strategies for financing these improvements. Administers the intermunicipal sewer agreements with the Towns of Vernon and Stafford Springs and when necessary enters into negotiations to amend these agreements.

Parks and Recreation Committee: Analyzes demand for the use of existing Town recreational facilities and makes recommendations for improvements to the Board of Selectmen and Board of Finance based on forecasted needs.

Requirements of a Plan of Conservation and Development

A Plan of Conservation and Development is required under Connecticut General Statutes (CGS) 8-23 to establish policies and goals related to both the development of land, as well as setting priorities for the conservation of land.

Connecticut General Statutes state that the Plan shall:

- Be a statement of policies, goals, and standards for physical and economic development.
- Provide for a system of principal thoroughfares, sidewalks and multi-purpose trails.
- Promote coordinated development to have compact transit-accessible pedestrian-oriented mixed-use development patterns and land reuse.
- Recommend the most desirable use of land for residential, recreational, commercial, industrial, conservation and other purposes and include a map showing proposed land uses.
- Note inconsistencies with the following growth management principles: redevelopment and revitalization of commercial centers; expansion of housing opportunities and design choices; concentration of development around transportation nodes; conservation and restoration of the natural environment, cultural and historical resources and existing farmlands; protection of environmental assets critical to public health and safety; integration of planning across all levels of government.
- Make provision for the development of housing opportunities.
- Promote housing choice and economic diversity in housing.
- The Plan shall consider:
 - The need for affordable housing.
 - The need for protection of existing and potential drinking water supplies.
 - The use of cluster development and other development.
 - The State Plan of Conservation and Development (most recent Plan adopted in 2018).
 - The Regional Plan of Development (Capitol Region Council of Governments most recent Plan adopted in 2014).
 - Physical, social, economic, and governmental conditions and trends.
 - The needs of the municipality, including the objectives of energy-efficient patterns of development.
 - Protection and preservation of agriculture.

The Planning Process

The Planning and Zoning Commission is charged by State Law with the preparation and the adoption of a Plan of Conservation and Development. However, as noted earlier there are several other Town Boards and Commissions who also have responsibilities that relate to goals that need to be established in the plan. As a result, the Commission worked with a subcommittee known as the POCD Update Committee consisting of 9 members representing 6 Town agencies each of which have responsibilities in the area of land use. These are the Planning and Zoning Commission, Inland Wetlands Agency, Conservation Commission, Water Pollution Control Authority, Economic Development Commission, and Parks and Recreation Commission.

Each of these boards and commissions is prescribed a unique set of responsibilities by state law and in some instances operates with its own set of regulations. In certain instances, during the conduct of their business, these agencies must by law seek input from other agencies. However, often decisions are made in accordance with the agency's regulations but without consideration of the mission of other town land use agencies. The POCD process presented an opportunity to work cooperatively by obtaining input from the 6 agencies represented on the subcommittee in setting Plan goals that will best serve the Town. There are recommendations within the Plan for not only the Planning and Zoning Commission but other Boards and Commissions as well when their actions may contribute to accomplishing Plan goals.

The Committee met 13 times. The first meeting was held on January 18, 2018 and the last meeting was held on March 14, 2019. Each meeting was noticed in the Town Planner's Office, Town Clerk's Office and on the Town's website, and conducted in open session at the Town Hall Annex. Public comments were welcomed at each meeting.

The Committee was assisted by Goman + York Planning & Design who prepared drafts of each element of this Plan. These drafts were distributed to the Committee in advance of scheduled meetings and discussed at each meeting.

After the subcommittee agreed on a draft document it was submitted to the Planning and Zoning Commission for their review. The Commission reviewed this document on April 29, 2019 and June 24, 2019. Public comment was sought by June 24, 2019. Following these meetings revisions were made. In accordance with State Law the Commission submitted a copy to the Ellington Board of Selectmen (BOS) on July 8, 2019 and to the Capitol Region Council of Governments (CROG) on July 24, 2019. The Commission voted to adopt the Plan on October 28, 2019.

To gauge public opinion on issues relevant to the Plan of Conservation and Development (POCD), both an online survey (The Survey) and two (2) community visioning sessions were conducted by Goman+York Planning & Design on behalf of the Town of Ellington at the start of the process. Both activities served as primary methods to engage residents in

participating in the update of the POCD. As noted earlier, Connecticut General Statutes specify the various areas that the Planning and Zoning Commission must consider in the preparation of a plan. The questions chosen for the survey and exercises created for the visioning sessions directly relate to this charge.

The survey consisted of 51 questions plus additional optional questions about participant demographics. Participants were asked to answer 3-5 questions regarding each of the following subject areas: open space, community character, natural resources, farms & agriculture, economic development, transportation and community facilities. Survey questions were posed in varying formats and administered electronically through the Survey Monkey online platform, through notifications at Town-facilitated visioning sessions, as well as distributed by Ellington town officials through social media outreach (Facebook, Twitter, Instagram, Civic Send, a newspaper press release, and the Town Website). Hard copies were also made available at community buildings including the Town Planner's Office, Town Hall, Library, Senior Center, and Community Center.

The Survey was administered to elicit response from residents about their perception and assessment of the Town of Ellington. It included many of the same questions used on a previous community survey conducted in 2007 (in advance of the 2008 POCD) so that results could be compared about perceptions of the quality of life in Ellington and goals related to future growth and development. Participation in the survey was heavily represented by residents between the ages of 45 and 64. (46 % of all respondents fell into this age range). Thirty-one percent (31%) of Ellington's total population are within this age range. Additionally, survey participants were much more likely to own and occupy single-family housing units (88 % of respondents) as opposed to renters in multi-family units (2%). Ellington's housing distribution is 67% owner-occupied and 27% renter occupied.

Two community visioning sessions were held March 1st and April 15th, 2018 at Ellington High School to further facilitate discussion around the POCD update. A total of roughly 60 community members participated in two meetings and received important information about how their input affects the POCD update and how the POCD influences future development and conservation. Meeting attendees were guided through various exercises including an analysis to identify the strengths, weaknesses, opportunities and threats that exist in Ellington today. There was also an activity in which attendees were given \$100 worth of play money to spend towards areas of importance such as community facilities, economic development, and conservation & preservation. This discretionary spending activity showed much of the interest (52% of all dollars) directed towards community facilities, primarily public schools. Conservation and preservation received 25% of the money and economic development received 23%.

Responses to the Ellington Community Survey showed a favorable attitude toward current planning efforts as well as the process being followed for this plan update. When asked if Town boards and commissions should have increased regulatory oversight on issues relating to land use, 70% of respondents responded favorably. The survey also helped outline several priorities

that demonstrate a high interest level related to the preservation of community character. This effort is often associated with the preservation of open space and farmland. Over 80% of respondents agreed preservation of farmland is a top priority for the town. Respondents felt the town should work towards preserving more open space, but 50% of respondents were unwilling to spend \$100 more in annual property taxes to support this effort.

Development is something that was approached with caution, and most favorably in the following areas:

1. In association with a farm in the form of winery/brewery/agri-tourism or event space.
2. In the town center in association with the development of an “enhanced” village center.
3. On the Route 83 corridor with the intention of preventing development spreading into currently undeveloped parts of town.

When asked about specific types of commercial development, respondents tended to be more favorable towards small-business development, specifically restaurants.

Please refer to the end of this report for a detailed discussion of the results of the community survey and community visioning sessions.

Other Studies Reviewed

Many relevant studies, reports, and plans were reviewed in the preparation of this plan. They include:

- Conservation Plan, update 2016
- Ellington Zoning Regulations, amended through 2019
- Ellington Subdivision Regulations, amended through 2013
- Ellington Inland Wetland Regulations, amended through 2014
- Ellington Road Safety Audit, 2018
- Stormwater Management Plan 2017
- Final Report Ellington Airport, 2010
- Approved Tax Abatement Policy, amended 2017
- Farmland Preservation Brochure, 2018
- Ellington Plan of Conservation and Development, 2008
- Housing Study and POCD amendment, 2014
- Route 83 Corridor Study and POCD amendment, 2015
- Buildout Analysis 2004
- Master Sewer Facilities Plan, 1998
- Ellington Community Survey, 2007
- The Capitol Region Natural Hazards Plan Update for Ellington, 2019-2024
- Cost of Community Services Study, 2018

How This Plan is Organized

This plan is organized into ten (10) chapters. The following is a summary of each. It should be noted that recommendations contained in this plan often relate to more than just an individual chapter. For that reason, the Commission asks that the document be reviewed in its entirety.

Chapter 1: Introduction

Presents information on what a Plan of Conservation and Development is and how it was prepared. Discusses statutory requirements, and challenges in maintaining community character. Presents an overview of efforts to gauge public opinion through the conduct of an on-line survey and 2 community visioning sessions.

Chapter 2: A Plan for a Sustainable Future in Ellington

This chapter discusses the importance of decision making relating to planning that will help support a sustainable future for Ellington. Also introduces a discussion about the concept of “resiliency” and the importance of adopting a planning approach that can adopt to changes that have not necessarily been forecasted.

Chapter 3: Conservation Strategies: Natural Resource Protection

Presents information relating to the Town's natural resources and mechanisms to protect them, including floodplains, wetlands, open space, forested lands, the management of stormwater, erosion control, and septic system maintenance. Discusses challenges to protect these resources with additional measures to consider.

Chapter 4: Conservation Strategies: Preservation

Discusses strategies to further preserve community character through prioritizing the preservation of certain parcels of open space, utilizing a zoning technique known as the transfer of development rights and open space subdivisions. Discusses the broadening of regulations to create additional opportunities for farmers relating to eco-tourism. This chapter also recommends that the Town undertake an inventory of historic properties as a first step toward preserving valuable historic structures.

Chapter 5: Housing Strategies

Presents detailed information about Ellington’s existing housing stock and includes a housing needs assessment utilizing criteria established under state law for “affordable housing”. Also presents strategies to address this need. Includes a discussion about creating opportunities for mixed use development and administrative steps the Town can take to be of assistance to those homeowners who are seeking to resolve issues relating to crumbling foundations.

Chapter 6: Economic Development Strategies

Discusses strategies for development along the Route 83 corridor, the town center triangle area and the Ellington Airport. This chapter also includes a discussion about the importance of agriculture as a major contributor to the Towns overall economy. Also presents

recommendations regarding site design standards and an overall strategy for economic development.

Chapter 7: Transportation Strategies

Discusses the established Town road network. Also includes a discussion about parking requirements for commercial uses and the importance of access management. This chapter also discusses issues relating to alternative modes of transportation including sidewalks and recreational pathways.

Chapter 8: Public Facilities and Infrastructure Strategies

Reviews accomplishments in the areas of the Town Hall Complex, Public Works Complex, Senior Center, Fire Protection, Community Center, Recreation, Schools, and Sewers and discusses considerations for the next 10-year planning period.

Chapter 9: Consistency with State and Regional Plans

Presents a summary of how the recommendations contained in this plan are consistent with the major principles express in the both the State Plan of Conservation and Development (2013-2018) and the Capitol Region Plan of Conservation and Development (2014-2024).

Chapter 10: Implementation Guide

Presents a summary of the major recommendations in this plan and the agencies and/or staff principally responsible to implement them.

Appendices

Appendix A: Considerations/strategies

Presents a summary of recommendations and strategies which can be implemented to further the goals contained in individual chapters.

Appendix B: Route 83 Corridor Study

Adopted in 2015, this Plan includes several important recommendations relating to commercial and residential development along this corridor. The plan includes a discussion about access management, design guidelines, and specific land use recommendations for each section along the roadway. These recommendations are still very much relevant and are adopted as part of this plan.

Appendix C: Conservation Plan 2016

Adopted by the Conservation Commission this plan establishes goals related to the preservation of open space.

Appendix D: Housing Needs Analysis

Presents data and a discussion related to meeting the affordable housing needs of Ellington.

Appendix E: Stormwater Management Plan

Required by state law, this plan was adopted by the Town in 2017 and establishes procedures to mitigate the adverse effects of the discharge of municipal stormwater into wetlands and watercourses in Ellington.

Supplemental Materials

The following additional information is included at the end of this document is relevant to areas of the Plan and may be of value to the reader but should not be considered as an official part of the Plan.

- **Community Profile**

Presents a demographic profile of the socio, economic, and housing characteristics of Ellington.

- **Summary of On-line Survey and Visioning Sessions**

Presents the findings of an on-line public opinion survey relating to community perceptions on several issues relevant to the Plan of Conservation and Development. Also presents a summary of 2 “visioning sessions” held at the Ellington High School where participants were led through a series of exercises and public opinion was gathered on issues related to growth, conservation, transportation, recreation, education, and housing.

- **Capitol Region Natural Hazards Mitigation Plan Update**

The plan identifies natural hazards, assesses vulnerabilities to hazards, and sets mitigation strategies to reduce loss of life and property, economic disruptions, and the cost of post-disaster recovery.

- **Town of Ellington Fiscal Value of Land Use 2018**

A study of cost of community services by major land use category.

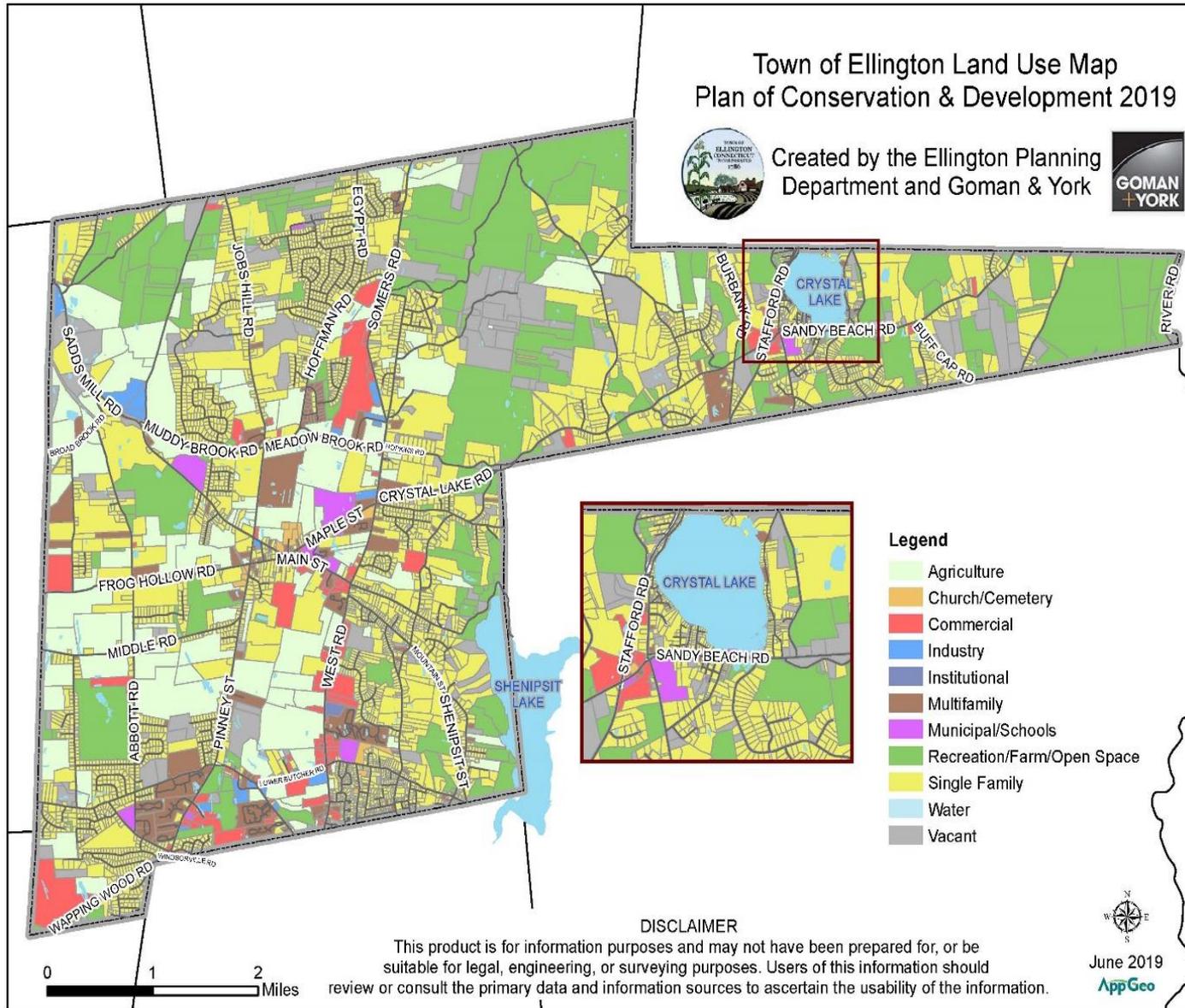
Existing Land Use

As we plan for the future it is helpful to review where we are today. Map 1 presents information on how every parcel of land in Ellington is being used today. There are 11 individual land use categories shown. Table 1 presents data on the number of acres of land in each land use category and the total number of acres that it comprises expressed as a percentage of the entire town. There is a total of 22,075 acres in Ellington or 34.4 square miles.

Land Use Group	Acreage	Percent
Agriculture	3,443	15.5%
Church/Cemetery	80	0.4%
Commercial	819	3.7%
Industry	150	0.7%
Institutional	12	0.1%
Multifamily	1,149	5.2%
Municipal/Schools	202	0.9%
Single Family	8,150	36.9%
Recreation/Farm/Open Space	4,958	22.5%
Vacant	1,937	8.8%
Shenipsit Lake	162	0.7%
Crystal Lake	177	0.8%
Rights of Way	836	3.8%
Total	22,075	

**Table 1-1
Land Use**

The Planning and Zoning Commission has a great appreciation for the important role it plays in helping to maintain the special community character which residents' value so highly. We hope that the recommendations which follow will help Ellington retain this special character while at the same time address forecasted needs.



Map 1-1
Land Use

Chapter Two: Sustainability and Resiliency

The key to maintaining Ellington’s community character and quality of life is to create a sustainable and resilient Ellington. While the concepts of sustainability and resiliency may appear or feel a bit abstract and their goals far reaching and idealistic, sustainability and resiliency do provide a pragmatic framework for thinking about community planning and outcome. While possibly unattainable, sustainability and resiliency provide direction—outcome to be continuously working toward. This chapter provide a means for Ellington to conceptualize and understand sustainability and resiliency, while providing a framework for working towards a more sustainable and resilient Ellington.

Sustainability

The concept of sustainability is embodied in every section of this Plan. The widely accepted definition established by the United Nations 1987 Brundtland Report (World Commission on the Environment and Development) explains sustainability as follows:

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Doing so must integrate and balance economic, environmental, and social goals.

Key to conceptualizing sustainability and for sustainable development to be achieved, it is important to recognize the symbiotic relationship of the three core elements: economic, environmental, and social. For a community to be sustainable—working towards sustainable outcomes—it cannot simply work at one of the core elements but must be working at all three. In addition, the core elements emphasize the importance of balance, that one outcome (i.e. environmental sustainability) cannot be achieved if the community is not also economically and socially sustainable. Exhibit 1 illustrates the interaction of these variables.

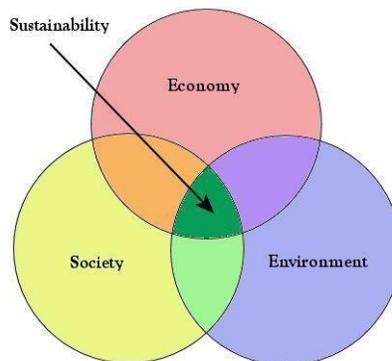


Exhibit 2-1
Sustainability Model Diagram

This Plan, as an overall outcome, seeks to create a dynamic balance between social wellbeing, economic opportunity, and environmental quality of the community within the context of the authority granted to the Planning and Zoning Commission under Connecticut State law. Although this Plan is divided into many individual chapters, in order to place emphasis on a thematic topic, in fact, no topic (or theme) may be thought of in isolation. Each thematic topic must be integrated into a framework where it may be evaluated and worked at in context with all planning topics which are discussed in this Plan.

Resiliency

Resilience is defined as the capacity (or capability) of a community to absorb disturbance (or change) and still retain its basic function and structure. In the context of community planning, resiliency shifts the focus from simply seeking to achieve the community's vision and goals (staying the intended course), to building capacity to adapt to and manage change. Communities (cities and towns) are complex adaptive systems with multiple variable and forces at work. For example, as discussed above regarding sustainability, the multiple forces at work include economic, social, and environmental elements. These forces work varying intensities, competing at times, and cooperating at other times. Together, with elements of spatial location and physical condition, these elements create community character—the kind of place that Ellington is.

Key to resiliency—the capacity (or capability) of a community to absorb disturbance (or change) and still retain its basic function and structure—is diversity. Complex adaptive systems—a community—that is over reliant on a single industry (economic sector) or a certain type of housing (single-family homes) is less stable, more susceptible to disturbances, and at greater risk of losing their basic function and structure. Detroit, for example, being a community that was over reliant on the automobile industry, collapsed under the economic forces that reworked manufacturing—economic forces that were beyond its control.

Planning, as a process and practice, is inherently a rigid top-down structure that assumes adequate knowledge of future change. In other words, planners assume a degree of confidence in what is right, or best, or what is to come and how-to best plan for what we need, want, and desire. However, resiliency and creating a resilient community is counter intuitive, and even at times contradictory to how communities conceptualize, understand, approach, and engage in the practice of planning, since the future is unknown and change inevitable. This does not mean we should not plan. What it does mean, is that if planning and municipal governance are to work toward resiliency, then they need to shift from a planning and governance approach that focuses mostly on vision and goals, to an approach that includes capacity building and management of the everyday.

Such an approach to planning would:

- start with *embracing change* and the *simple notion that things change*,
- recognize that communities (towns) are *always shifting* around multiple equilibria and that change is *neither continuous and gradual nor consistently chaotic, but episodic*,
- not *presume sufficient knowledge, but the recognition of our ignorance*.

- *keep options open*, fostering *novelty* and *experimentation*, while embracing, not trying to resist or constrain *change*,
- *not assume that future events are expected, but that they will be unexpected*,
- *embrace diversity*,
- recognize the importance of and pay close attention to micro-practices and the *slow variables of change*,
- embrace and encourage *redundancies*, *overlapping responsibilities*, and incorporate both *top-down* and *bottom-up structures*,
- analysis, strategy development, and implementation would recognize the *regional context* and be scaled to fit the local, and
- not focus on *capacities to predict or preordain the future*, but on the *capacity to devise systems that can absorb and accommodate future events in whatever unexpected form they may take*.

In this regard, a resiliency approach to planning and governance is about Ellington having the capability and capacity to adapt to change. This is about managing the everyday, doing the little things well, and not being afraid of change.

The Regulatory Framework

It can be argued that the current regulatory framework that Ellington (and all other Connecticut communities) follows (as prescribed by State law) sometimes forces the fragmentation of these issues (i.e. economic, social, and environmental). The preservation of wetlands, for example, is often analyzed without any analysis of social or economic benefits. This Plan provides an opportunity to think about how conservation and development relate, and how compromises must often be made to achieve what the Commission concludes are the most important goals.

Most Chapters of this Plan contain a discussion as to how its various components relate to the principles of sustainability and resiliency. Where appropriate, specific recommendations are made concerning regulatory changes which warrant further discussion in order to advance these principles.

In general, this Plan addresses Environmental Sustainability by:

- Recommending changes/refinements to existing regulations in the areas of floodplain protection, inland wetland protection, and aquifer protection.
- Recommending the adoption of regulations to manage stormwater in a more environmentally sensitive manner using a concept known as LID (Low Impact Development).
- Setting priorities for the acquisition/preservation of additional open space. The Town should create a defined list identifying key parcels for open space acquisition.

- Setting priorities for the management of existing open space assets and the construction of additional recreational trails.
- Recommending a reduction in the ratio of required parking.
- Review of roadway standards and requirements.
- Creating opportunities for mixed-use developments that will allow residents to gain access to services, shopping, and recreation by walking and biking. To encourage and facilitate mixed-use development the Town should consider the creation of a transfer of development rights and/or transfer of open space program.

Economic Sustainability by:

- Creating opportunities for commercial and industrial development that reflects the present and projected needs of the residents and businesses of Ellington.
- Carefully analyzing Route 83 corridor for innovative economic development opportunities.
- Recommending a reduction in the rate of required parking in certain instances which will increase (re)development opportunities.
- Encouraging investments in land that will provide opportunities and potential for the expansion of Ellington Airport.
- Manage traffic in the Route 83 corridor through roadway design and access management.

And Social Sustainability by:

- Creating additional opportunities for a broad range of housing that can meet the needs of both younger and older buyers (a significant portion of Ellington's population) and reflecting an increased interest in the ability to walk or bike for goods, services, and health.
- Recommending ways to make Ellington more pedestrian and bike friendly by prioritizing locations for new sidewalk construction, further study to promote the creation of bike lanes, and adding safer crosswalks.
- Encouraging the preservation of important historic structures which help define community character.

Collectively, the sustainability themes and outcomes above provide a resiliency framework, focused on the economic, social, and environmental forces that shape and create Ellington's community character. Working toward or implementing each of the items above and the other specific recommendations of this Plan will move Ellington toward being more sustainable and resilient. However, Ellington must not lose sight of the everyday, investing in itself, doing the little things well, building capacity, and managing well.

Chapter Three: Conservation Strategies, Natural Resource Protection

Introduction

Ellington has significant valuable natural resources throughout the community. The Commission will continue its efforts to protect and preserve these resources as they:

- Help to define a special community character valued highly by Town residents;
- Provide sources of clean drinking water for town residents and businesses;
- Reduce the probability of the loss of life and damage to personal property in flood prone areas;
- Positively affect human health;
- Provide environments essential to the survival of certain plant and animal communities;
- Protect prime agricultural soils permitting continued farming operations, the production of food, and an opportunity for a sustainable future.

The online survey plus two community visioning sessions summarized in the supplemental materials at the end of this Plan, indicate that residents strongly believe the protection and preservation of these natural resources help define community character and provide valuable recreational opportunities.

The survey also clearly indicated the importance of balancing conservation with growth. Over 60% of respondents indicated that they "strongly agreed" that protecting community character in Ellington was of importance to them. Many respondents felt that development should be focused on already-developed areas such as the town center and the Route-83 corridor to reduce development pressure on existing open space.

Over the past five decades there have been many successful efforts to preserve and protect natural resources in Ellington. This has been realized through a host of regulations at the Federal, State and Local level. Ellington has done a commendable job complying with every mandate it has been assigned such as the adoption of wetland regulations, floodplain regulations, and most recently municipal stormwater regulations. In some instances, the town has undertaken its own programs to further protect valuable natural resources. These local initiatives include the adoption of density-based zoning regulations in 2014, partnering with the State Department of Agriculture in funding the preservation of farmland, the purchase of open space, and the authorization of a two million-dollar bond in 2007 for the future acquisition/preservation of farmland. The adoption of a regulation to protect natural resources sometimes places restrictions on the use of privately-owned property which may result in financial impacts to private property owners. The Commission is keenly aware of this reality and carefully weighs these impacts against the needs of the community when considering changes to its regulations or

implementing new programs. In addition, many of these regulations relate directly to public safety which takes priority over other considerations.

Chapter 2 discussed the importance of incorporating sustainable practices. This approach requires utilizing natural resources in a responsible manner and preserving them when possible in their natural state, such that future generations may also benefit from them. The recommendations which follow are intended to further this important goal. Table 3-1 is a summary of Town regulations related to natural resource protection and when first adopted.

REGULATION	SUMMARY	YEAR ADOPTED
Zoning Regulations	Initial set of zoning regulations.	1952
Subdivision Regulations	Requires the dedication of open space to the Town equal to 10% of the overall parcel or the payment of a fee equal to 10% of the land value, or combination thereof prior to subdivision approval.	1954
Flood Plain Regulations	Requires habitable floor area in association with new construction or substantial improvements to be one foot above the 100-year flood elevation. Places restrictions on the filling of flood prone areas.	1968
Site Plan Review	Requires the submission of detailed site grading plans prior to the approval of larger construction projects and measure to ensure compliance.	1968
Inland Wetland and Watercourses Regulations	Defines valuable wetland resources. Places restrictions on the filling or regrading of these resources. May also limit certain activities within upland review areas.	1974
Erosion and Sediment Control	Requires certain measures during construction to minimize the erosion of soil.	1987
Density Based Zoning	Requires adherence to an overall density-based formula for residential construction with consideration given to steep slopes, flood plain, and wetland soils.	2011
Municipal Stormwater MS-4	Program required under federal law administered by the U.S. EPA and under state law administered by the State DEEP to minimize adverse impacts originating from the Town's municipal storm drainage system.	2017

Table 3-1

Summary of Town Regulations Protecting Natural Resources

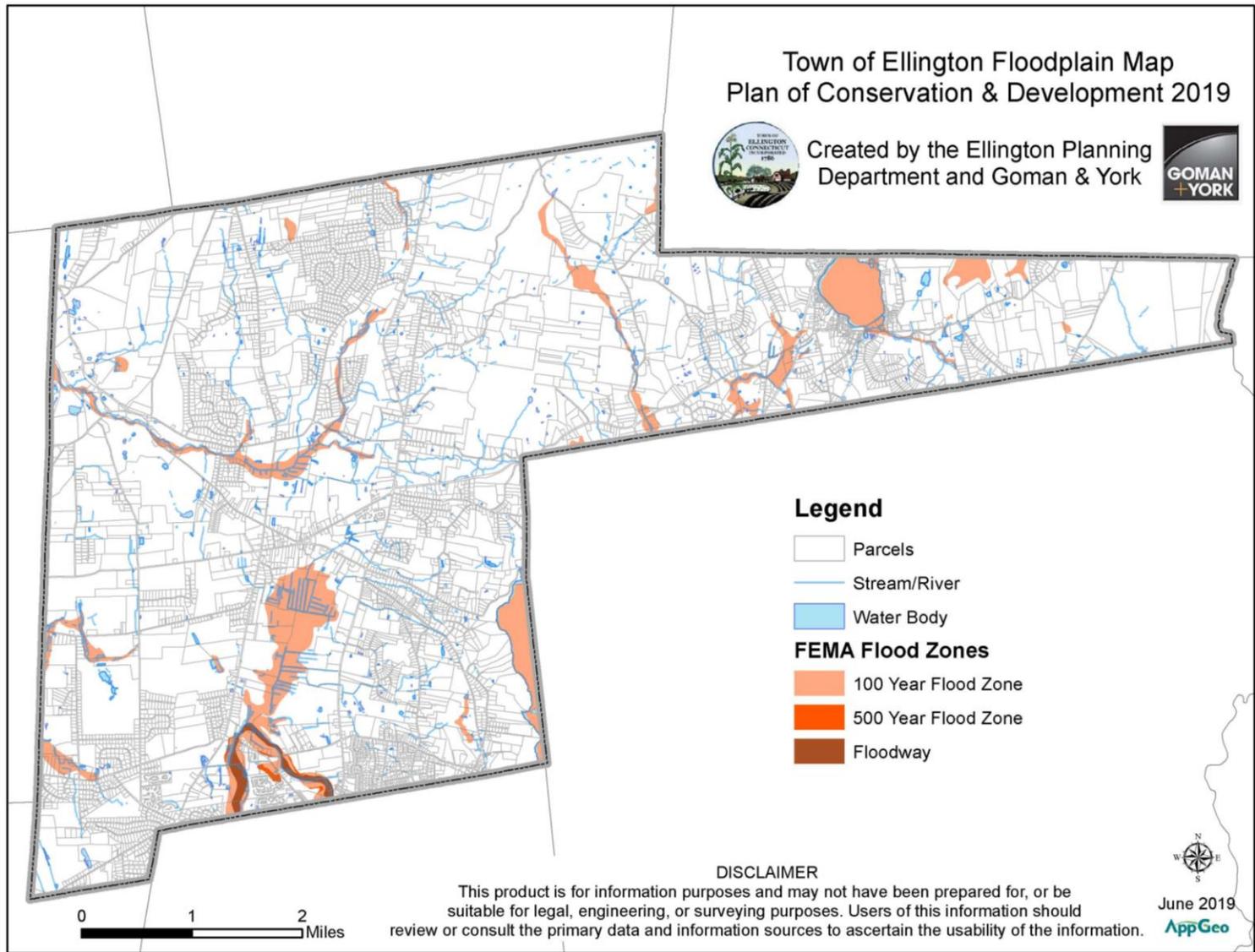
This chapter explores opportunities to further improve the intended outcome for these existing regulations/programs. In addition, several new programs are outlined for consideration by the Commission and other Town boards.

Floodplain Regulations

Ellington first adopted floodplain regulations in August of 1968 following the flood of 1955. These regulations establish standards for the minimum elevation of habitable floor area and rules relating to the filling of flood prone areas. All regulated activities must comply with standards set by the Federal Emergency Management Agency (FEMA). FEMA administers this program in partnership with State agencies who in turn are responsible to monitor local regulations for compliance with provisions of Federal law. Remaining in compliance with FEMA standards permits owners of property within flood prone areas to purchase flood insurance at a reduced rate. All new structures built in Ellington since the adoption of local flood plain regulations are above the regulatory flood and do not require the purchase of flood insurance.

Ellington is in the fortunate position of having very few existing structures within the floodplain. Approximately 25 homes are located partially or wholly below the 100-year flood plain. Currently there are 15 insurance policies issued through FEMA. Over the past 10-year period, the Commission has not received any applications for proposed regulated activities within the floodplain or floodway. The Commission is keenly aware of the importance of flood plain regulations and as a result a very limited amount of filling below the 100-year floodplain has been permitted since the adoption of regulations. In the few instances where filling has been allowed, it has been kept to a minimum, and in all instances compensatory storage has been required. The Commission has generally not permitted filling within the floodway.

Map 3-1 shows all areas in Ellington that are within the 100-year and 500-year flood plain.



Map 3-1
Areas within the 100-year and 500-year floodplain

Considerations/Strategies:

- ***Department of Energy and Environmental Protection (DEEP) Model Regulations***
The State of Connecticut Department of Energy and Environmental Protection (DEEP) published a comprehensive set of model floodplain regulations in November 2015. The Commission may wish to adopt these regulations or portions of these regulations to add further clarity to procedures relating to administration, enforcement, and technical review. A detailed comparison between current regulations and the 2015 model should be undertaken. In addition, the Commission should consider asking DEEP to conduct a review of current regulations to determine compliance with all current FEMA standards.
- ***More Detailed Flood Study***
FEMA provided the Town with paper maps and a flood study in 1997 and digital maps in 2006. This data establishes the 100-year and 500- year floodplain. It includes accurate data for "studied" areas and less accurate data for "non-studied" areas. This mapping is used as the basis to determine whether flood insurance will be required as part of home mortgage financing. This has resulted in some inaccuracies especially in non-studied areas. In those areas some structures are shown as being below the 100-year flood elevation (making flood insurance mandatory) when a more detailed evaluation might prove otherwise. In order to amend this official map, a private homeowner must petition FEMA through a rather cumbersome process known as a Letter of Map Amendment (LOMA). A homeowner must hire a private licensed engineer or licensed surveyor to conduct a study as part of a petition for a change. The Town has helped to facilitate this process, but primarily the burden is on the homeowner.

The Commission may wish to engage a private civil engineer to conduct a more comprehensive review of "non-studied" areas and work with FEMA to modify the official map where the result identifies a variance with current official maps. Doing so may help determine that certain properties are above the regulatory flood elevation (100 - year floodplain) and not required to purchase flood insurance. The Commission may also wish to contact FEMA to determine whether any mapping updates are scheduled and whether they may be of assistance in this effort.

Inland Wetlands

In 1974 the State of Connecticut passed legislation aimed at the protection of wetland resources and delegated the responsibility of protecting these resources to each of Connecticut's 169 towns. Ellington adopted a comprehensive set of regulations and created the Inland Wetland Agency in the same year. Under Connecticut law wetlands are defined by soil type.

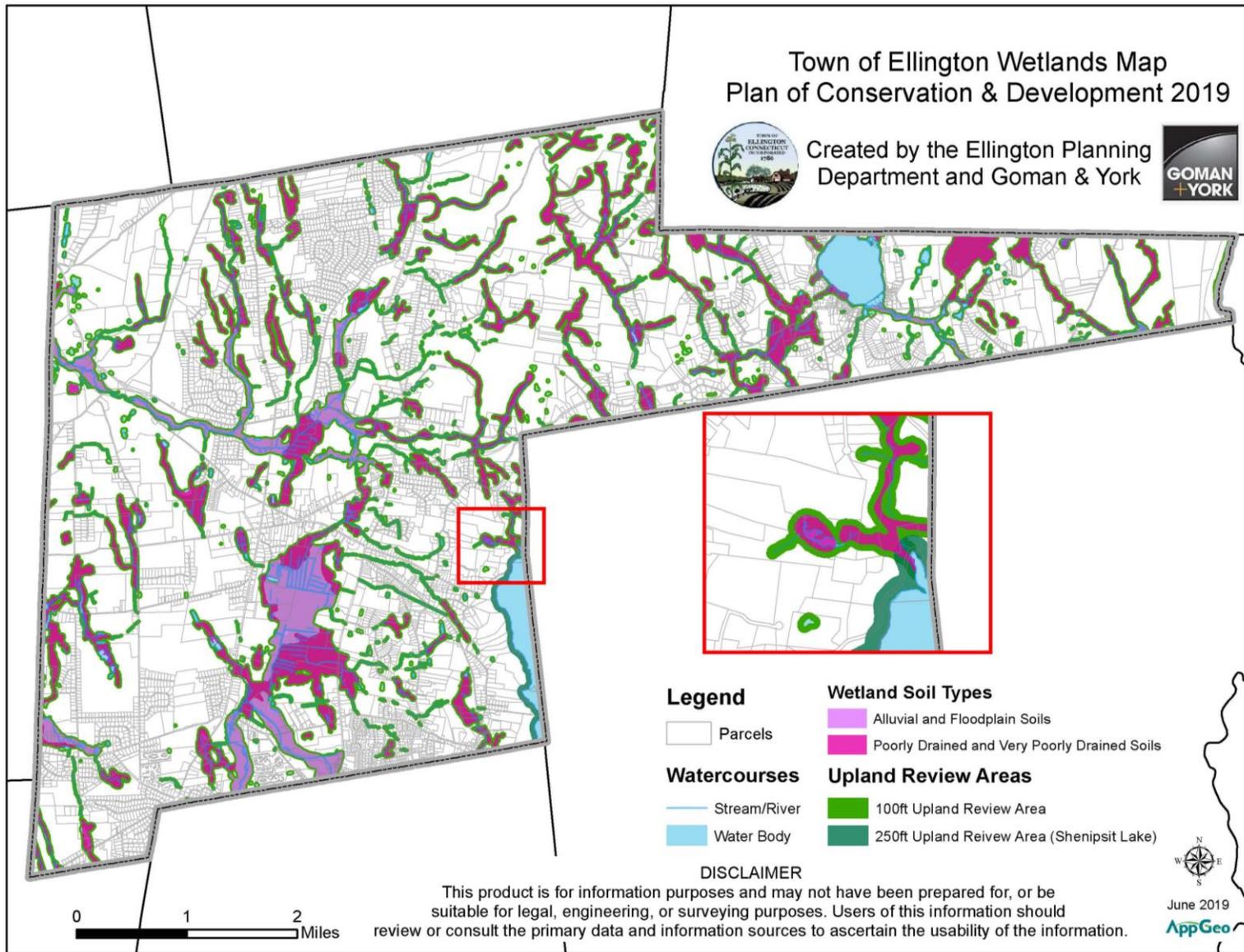
In 2006 the DEEP published a model set of regulations (4th Edition). These were used as the basis for Ellington's current regulations. They include a 100-foot upland review area where in addition to mapped wetlands, regulated activities within 100 feet of a wetland must also be reviewed by the Commission. In addition, the Agency adopted a more restrictive 250-foot upland review area in the Shenipsit Watershed Area.

Wetlands offer significant value in both maintaining and improving water quality. DEEP, as well as the U.S. Army Corps of Engineers, lists 13 important functional values of wetlands as follows:

1. Groundwater recharge/discharge
2. Floodwater storage
3. Fish habitat
4. Sediment retention
5. Nutrient removal/retention/transformation
6. Production export
7. Sediment and shoreline stabilization
8. Wetland wildlife habitat
9. Recreation
10. Educational/scientific value
11. Uniqueness
12. Visual/aesthetic quality
13. Threatened and endangered species habitat

The Inland Wetland Agency is charged with the responsibility to protect valuable wetland resources in Ellington. There are 2,744 acres of wetland soils and 490 acres of waterbodies for a total of 3,234 acres of wetlands comprising 14.7% of the Town. There are an additional 7,422 acres in the upland review area (sometimes referred to as the wetlands buffer area) which comprise an additional one third of the Town. Under the Inland Wetland Agency's regulations, it is difficult to earn a permit to fill wetlands. In addition, in order to earn an approval to conduct work within a buffer area, an applicant must be able to demonstrate little to no adverse impact to the adjacent wetland. Over the past 10 years the Inland Wetland Agency has reviewed 172 applications; a very modest amount of filling has been permitted in Wetlands.

Map 3-2 depicts all regulated wetlands and watercourses in Ellington which include wetland soils, waterbodies, watercourses and alluvial soils. In addition, the 100-foot regulated upland review area as well as the 250-foot upland review area in the Shenipsit Lake Watershed Area is also depicted.



Map 3-2

Official Wetland Map also showing the 100-foot and 250-foot upland review area

Considerations/Strategies:

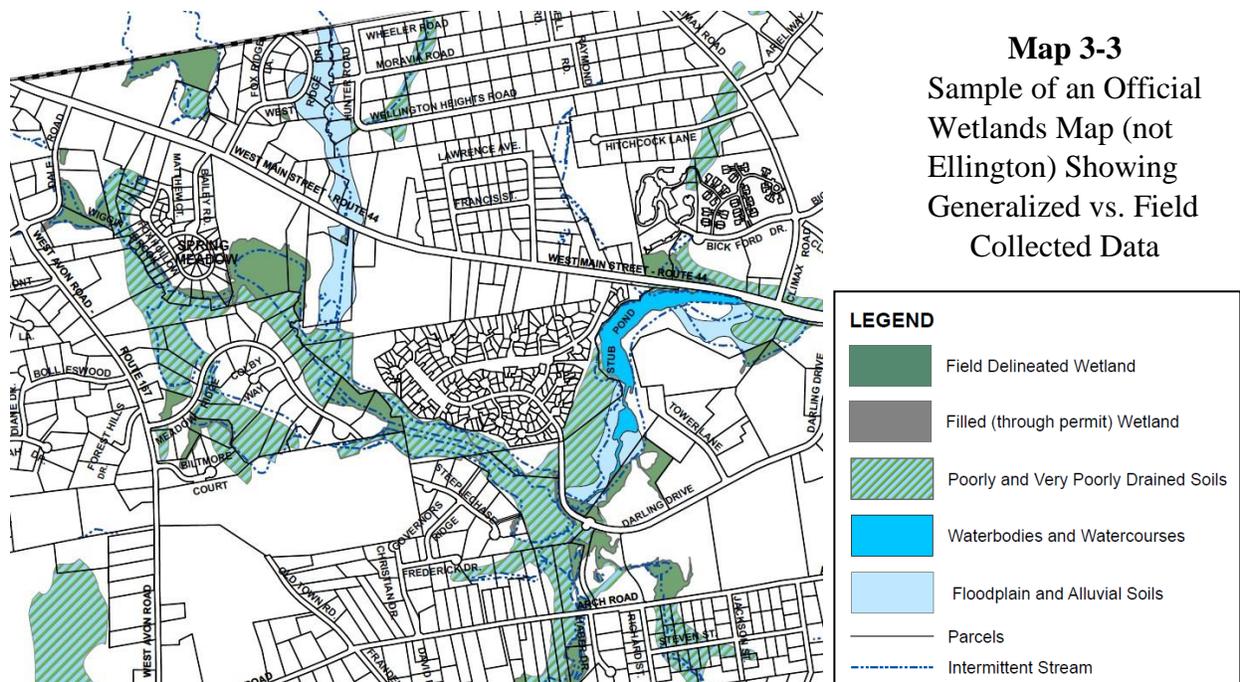
Build a more detailed Wetland Map that incorporates field data collected since 1974

Applications which are submitted to the Inland Wetlands Agency (IWA) for review require the accurate identification of wetland soils by utilizing the services of a licensed soil scientist and licensed surveyor. The "official" map now used by the agency consists of information taken from generalized soils data prepared by the U.S. Department of Agriculture in the 1960's (initially compiled to depict soil suitability for agricultural purposes).

The Inland Wetland Agency (IWA) may wish to undertake a project to build a more accurate wetland map by compiling all the mapped field data submitted during the application review process (1974-2019) into a digital format. The "official" map would then be depicted as a combination of this data differentiated from the more generalized data compiled from USDA soils maps.

This would be useful to prospective applicants as well as the agency in their review of applications.

The Town's GIS consultant can be helpful in building this map. Map 3-3 shows an example of how this map would look. It includes categories depicting waterbodies and watercourses, floodplain and alluvial soils, wetlands (information taken from generalized soils data), field delineated wetlands (information derived from the application process) and filled wetlands (permitted through the wetland process).



Ranking of Wetland Values

The final decision of the Inland Wetlands Agency (IWA) to approve or disapprove an application to conduct "regulated activities" is a matter of analyzing the value of the wetland resource (some wetlands are of much greater value than others) and then evaluating projected adverse impacts that the proposed regulated activities may have on the wetland.

The Agency may find it useful to conduct a town-wide study to evaluate wetlands associated with remaining vacant, privately owned land with development potential, that contain significant wetland resources. A ranked value of these wetlands could be established utilizing the 13 functional values established by State law. This information may be an additional aid to the Agency by establishing a relative wetland "value" (in comparison to other wetland resources in Ellington). This study is not meant to replace a more comprehensive study prepared by a soil scientist or wetland biologist in association with individual applications, but rather as a reference guide that can be used by a prospective applicant prior to the actual submission of an application and by the Agency.

Develop a Searchable Data Base

The development of a searchable data base for past wetland applications, mapping, and related information would be useful to both the Agency and applicants. Potential applicants might search for similar applications based on the amount of filling requested, size of the wetland resource, amount of work within the regulated buffer, etc. Such data may also prove useful to the Agency seeking consistency in reaching outcomes that are largely similar when similar resources with similar activities are proposed.

Forestry Management/Town Open Space

The Town owns significant parcels of open space which are forested. Table 3-2 identifies these areas which together comprise 290 acres.

**Table 3-2
Town Owned Forested Open Space**

Town Owned Forested Open Space	# of Acres Forested
Carriage Hill Open Space	10
Crystal Ridge Estates Open Space	47
Crystal View Open Space	35
Ellington Highland Open Space	22
Rising Acres Open Space	8
Eagle Estates	8
Batz Property	36
Kimball Forest	55
Metcalf Preserve	15
Other	54

Several of these properties include well used hiking/walking trails including:

- Balanced Boulder Trail (Tolland Turnpike)
- Batz Trails (Shenipsit Street)
- Franklin Street Trail (Franklin Street, Vernon north to Ellington)
- Kimball Trail (Hopkins Road)
- Metcalf Preserve (Woodside Acres, Cedarwood Drive)
- Sunset Hill Trail (Porter Road)
- West Road Trail (West Road)
- Windermere Trails (Windermere Ave)

All trees within these forested areas compete for resources such as light, water, and nutrients. A selective tree harvest program based on a plan prepared by a licensed forester, when properly administered, will result in an overall benefit to the long-term health of the forest. This also provides an opportunity for the Town to generate income as more valuable trees mature and are harvested. In addition, skid roads needed to remove timber can be strategically located/designed in a manner that enhances the trail network. Staging areas can be designed which in some instances can be used for future parking.

Considerations/Strategies:

Adopt a Forestry Management Program

Consider hiring a licensed forester to prepare a forestry management plan for certain properties identified in Table 3-2 . The Town might choose to harvest trees on a rotating basis between properties in accordance with this plan. The bid process and supervision of tree cutting may also be contracted with a licensed forester. Revenues from timber sales may be used by the Town for trail construction and maintenance on these properties as well as improvements such as stream crossings, parking areas, and signage. The Commission, Public Works Director, and the Conservation Commission should all work together in selecting and prioritizing areas most appropriate for such a program.

Aquifer Protection

Ellington has two (2) public water well fields operated by the Connecticut Water Company and several private communities well fields serving residential developments. The Shenipsit Lake Reservoir is also owned and operated by the Connecticut Water Company. However, most Ellington homeowners get their drinking water from individual wells.

A small amount of hazardous material if improperly stored and/or disposed of, can result in substantial damage to underground aquifers as well as above ground water resources. The State Department of Energy and Environmental Protection (DEEP) has identified twenty-seven (27)

contaminated or potentially contaminated sites in Ellington. Most of these sites involve leaking underground tanks. For more information visit www.ct.gov/deep/lib/deep/site_clean_up

In 2010, the State legislature passed legislation requiring eighty (80) towns within the state to adopt aquifer protection regulations and create an aquifer protection commission. These Towns have aquifer resources meeting specific state defined criteria. Under the law, water companies with public wells in those affected communities are required to prepare detailed maps of recharge areas. Although Ellington has significant aquifer resources, it does not have large sand and gravel aquifers as defined under State law and therefore is not required to adopt aquifer protection regulations under this law. However, this does not mean that groundwater resources in Ellington are less vulnerable to contamination or are not significant enough to still merit added protection. The Town may wish to consider the following strategies aimed at further protecting these resources.

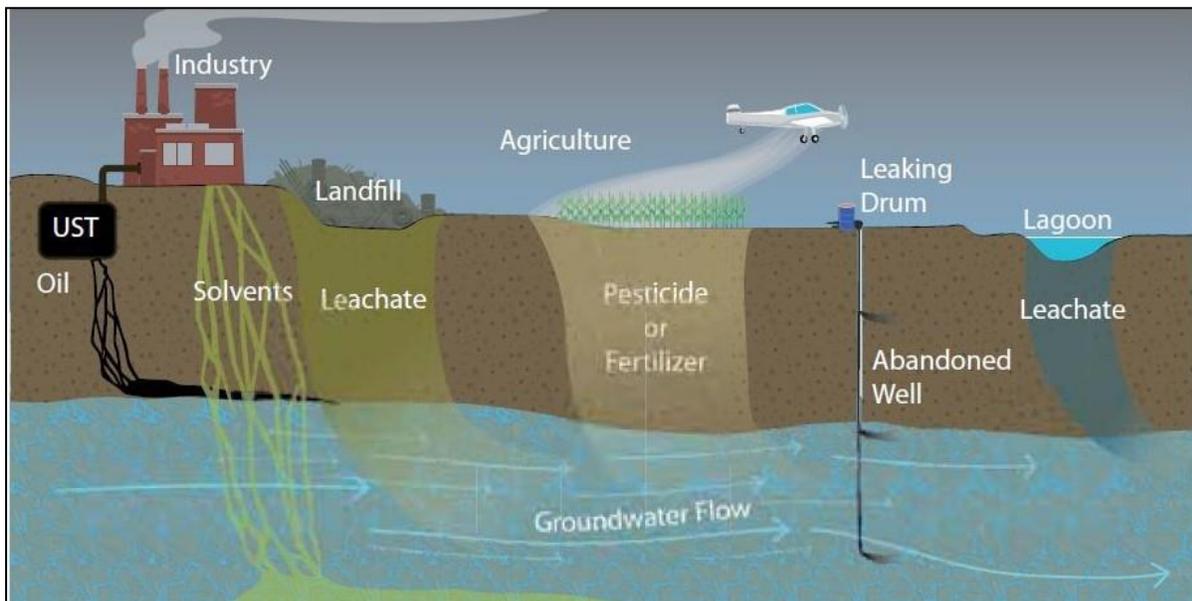


Exhibit 3-1
Sources of Groundwater Contamination

Source: Connecticut's Aquifer Protection Area Program - Municipal Manual

Considerations/Strategies:

Adopt Limited Aquifer Protection Regulations

The Town may wish to adopt a more modest version of the State's aquifer protection program. A study to map recharge areas could be undertaken in partnership with the Connecticut Water Company. In addition to recharge areas associated with public well fields, all significant aquifers should be identified. These areas would be used as the basis to define an overlay

protection zone. Zoning regulations could be adopted which either prohibit or place restrictions on certain land uses within this area which pose the greatest threat to ground water resources. These regulations would be administered by the Planning and Zoning Commission without need to create an aquifer protection committee. Some examples of incompatible uses include:

- Oil or petroleum dispensing
- Car or truck washing
- Commercial dry cleaning
- Furniture stripping
- Pest Control Services that involve mixing and/or storage of certain chemicals
- Certain agricultural activities which can result in non-point source pollution

Require Best Management Practices

Another approach is to produce mapping described above and then simply reference an expected set of best management practices required to be implemented in connection with any application seeking site plan approval from the Commission within the overlay zone. The following is a partial list of best management practices that are recommended:

- Storing hazardous materials above ground in a building or under a roof
- Storing hazardous materials within an impermeable containment area with a capacity to contain 100% of volume of the hazardous substance
- Hazardous materials are to be kept in a secured area
- Limits on replacing existing underground storage tanks
- Submission of a materials management plan
- Development and implementation of a stormwater management plan designed to prevent groundwater contamination
- Certain agricultural practice designed to reduce non-point source pollution

Stormwater Management

The Town prepared a Stormwater Management Plan in March of 2017 in compliance with the Connecticut Department of Energy and Environmental Protection (DEEP) general permit requirements for the discharge of stormwater from small municipal separate storm sewer systems (MS-4.) This plan includes recommended best management practices and compliance with six (6) requires measures of the MS-4 program including:

- Public education and outreach;

- Public involvement and participation;
- Illicit discharge detection and elimination;
- Construction site stormwater runoff control;
- Post-construction stormwater management in new development and redevelopment; and
- Pollution prevention good housekeeping.

The plan includes a schedule for implementation and assigns responsibility for each element within the plan to Town staff and agencies. The Town is currently in compliance with this schedule.

Several important parts of the program have already been completed by the Town including:

- Completion of mapping of stormwater infrastructure including outfalls in identified priority areas;
- Participation in regular household hazardous waste collection events;
- Amendments to Zoning Regulations requiring compliance with Connecticut DEEP 2002 guidelines for erosion and sedimentation control.

The complete plan may be viewed at www.ellington-ct.gov/467/stormwater-managementplan. This plan is formally adopted as part of this plan and is included as Appendix D. The MS-4 plan indicates that the Town will, to the maximum extent possible, consider the use of Low Impact Development (LID) and runoff reduction site planning and development practices in accordance with DEEP's stormwater quality manual.

Low Impact Development (LID) is an innovative stormwater management approach with a basic principle that is modeled after nature; managing rainfall at the source using uniformly distributed decentralized controls. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source. Techniques are based on the premise that stormwater management should not be seen as storm water disposal. Instead of conveying and managing/treating stormwater in large, costly end-of-pipe facilities located at the bottom of drainage areas, LID addresses stormwater through small, cost-effective landscape features located at the lot level. Many components of the built environment have the potential to assist in LID. This includes not only open space but also rooftops, streetscapes, parking lots, sidewalks, and medians. LID is a versatile approach that can be applied equally well to new developments and redevelopment/ revitalization projects. LID techniques include measures such as rain gardens, green roofs, permeable pavers, tree boxes, and bio retention.

LID has numerous benefits and advantages over conventional stormwater management (catch basins and pipes). In certain instances, managing stormwater by utilizing LID techniques can result in improved protection of natural resources at a lower cost.

Although there are often added costs associated with landscape materials, studies have shown savings compared to conventional approaches due to reduced infrastructure and site work, including reductions in clearing, grading, pipes, ponds, inlets, curbs, and paving. In the case of private development, such as commercial parking lots and roadway infrastructure associated with residential condominiums, maintenance responsibilities should be assigned to these private owners or associations. Exhibits 3-2 to 3-4 illustrate three (3) LID techniques including a rain garden; a detail for parking lot storm drainage; and the use of a landscape island to help manage storm drainage in a commercial parking lot.



Exhibit 3-2
Photo of a Rain Garden



Exhibit 3-3
LID Parking Lot Storm Drainage



Exhibit 3-4
LID Landscape Island

Considerations/Strategies:

Possible LID Amendments to Zoning Regulations

The Commission may consider the adoption of LID methods for the handling of stormwater in connection with private infrastructure such as shopping centers, and apartment/condominium developments as well as public infrastructure such as the construction of new roads in association with an approved subdivision, which will become public, or the construction of new public buildings such as schools. These standards/requirements would be incorporated in the Town's Zoning and Subdivision Regulations and should be drafted in a way to comply with standards contained in the DEEP Stormwater Manual, MS-4 requirements, and the Town's Stormwater Management Plan. Each of these design standards should be reviewed by the Public Works Director and Town Engineer prior consideration for adoption. Table 3-3 present a list of possible LID related regulations to be incorporated into the Towns Zoning regulations for residential development and table 3-4 presents a list of possible LID regulations related to commercial development.

Table 3-3 LID Zoning Considerations: Residential Zones		
Directly Connected Impervious Area (DCIA)	New Development Retention Standard	Redevelopment Retention Standard
40% or more	Retain the full water quality volume for the site	Retain half the water quality volume for the site
less than 40%	Retain the full water quality volume for the site	Retain the full water quality volume for the site
If retention standards cannot be met	Developer required to provide a report indicating why the standard could not be met and a mitigation project on another property or pay a fee to fund a DCIA retrofit.	
Residential driveways	Require pervious pavement for portions of paved driveways that are over 12 feet in width.	
Buildable Square	In an effort to create lots with a relatively uniform shape, require that within the R and RAR zones individual lots contain a contiguous developable land area of at least 10,000 square feet within which a square with dimensions of 90 feet by 90 feet can be situated. Also require that at least 75% of the house footprint then be located within this area.	

Table 3-4
LID Zoning Considerations: Commercial/Industrial Zones

<p>Lot Coverage Bonus (Authorize the Commission to permit a lot coverage bonus of an additional 10% if one of two criteria is satisfied)</p>	<p>At least 50% of all paved surfaces (parking and driveways) utilize pervious paving. Develop enforcement mechanisms to ensure that this area is maintained properly and not repaved using conventional pavement.</p>	<p>Encourage construction of a “disconnected impervious area” of substantial size which is separated from other impervious areas utilizing Low Impact Development Best Management Practices, such as swales, filter strips, or other vegetated buffers.</p>	
<p>Parking Lot Design</p>	<p>Require that landscaped end islands be depressed and contain bio-retention features consistent with the Connecticut Stormwater Quality Manual.</p>	<p>Require a maintenance plan that identifies planned maintenance methods and responsible parties for insuring proper upkeep of landscaping and LID</p>	<p>Specify clear standards to ensure proper installation of base material</p>
<p>Parking Lot Surface Treatment</p>	<p>Authorize and encourage alternative pavement materials including porous asphalt, porous concrete, plastic and concrete grid systems, and block pavers.</p>		

Possible LID Amendments to Subdivision Regulations

There are several LID related regulations which may be considered in connection with Subdivision regulations as shown in Table 3-5.

Table 3-5	
LID Considerations: Subdivision Regulations	
Site grading	Require that site grading (cuts and fills) be kept to a minimum. Consider restriction on depth of cut to less than 10 feet from natural grade unless an alternative design is acceptable to the Commission (would require a finding by the Commission that the result from a larger cut would be superior).
Stockpiling and storage areas	Soil under stockpile areas to be returned to pre-development permeability levels through soil restoration and soil amendments.
Amend design standards	<p>Require a planted island at center of cul-de-sac. Island to be depressed to include bio-retention features. Maintenance of island to be assigned to a homeowner’s association or one (1) or more adjoining lots.</p> <ol style="list-style-type: none"> 1. curbs to be used where slope of roadway exceeds 6%. Where roadway slope is 3% or less and where the Right-of-Way (ROW) is sufficient to support natural stormwater drainage elements, Commission may require curb breaks. 2. consider curbless sections of roadway where appropriate along with curbless catch basins.
Drainage Design	<p>Encourage Low Impact Development (LID) design strategies as a primary means of stormwater management.</p> <p>Use roadside swales with a minimum depth of 18” and a maximum side slope of 3:1.</p>
Volume Control Design Criteria	Require post-development total runoff volume equal to 90 to 110% of the predevelopment total runoff volume (based on 2-year, 10-year, 25-year, and 50- year, 24-hour storms).
Operations and Maintenance Plan	<p>Require a detailed plan for any infrastructure or drainage swales/ponds which are to be maintained privately:</p> <ol style="list-style-type: none"> 1. maintenance schedules 2. identify responsible parties 3. post construction documentation which demonstrates compliance with required maintenance activities

Village Center Development

The creation of a compact Village Center, as discussed in Chapter 7, would offer many benefits and appears to be widely supported by the community. It will however result in increases to impervious coverage and stormwater runoff in comparison to a more "conventional" development. Requiring the use of LID techniques in association with a project of this type will help mitigate these impacts and may result in a more positive outcome in the management of stormwater.

Bonus for the Use of LID Techniques

Instead of a mandatory requirement, the Commission may also consider a bonus approach. If a developer were to incorporate LID techniques as part of a new development application a bonus could be offered in the area of lot coverage, density, and/or yard setbacks.

Review of Roadway Design Criteria

The Commission may wish to review its roadway design criteria contained in the Subdivision Regulations to incorporate either mandatory or optional stormwater management techniques that employ LID principles. The Commission might also incorporate these principles in the management of stormwater in private developments such as condominium or commercial development. These regulations should include a requirement for the submission of a routine maintenance plan an assurance that adequate funding is allocated for these tasks.

Site Grading/ Erosion & Sedimentation Control

The Planning and Zoning Commission is charged by State law with the responsibility to adopt rules aimed at controlling soil erosion during construction. A comprehensive set of regulations currently exist. However, as Ellington continues to develop and as economics permit, the Commission will be faced with the review of proposed development on more challenging properties with steeper slopes. This sets the stage for soil erosion if not properly controlled. To better control erosion during construction, the Commission may consider regulatory changes which include some or all the following additional measures in connection with the review of subdivision applications. These considerations are designed to minimize the amount of regrading required and to ensure compliance with plans that are presented to the Commission at the time of subdivision review.



Exhibit 3-5
Erosion Control Blanket (Silt Fence)

Considerations/Strategies:

Enhancements to Current Site Grading and Erosion and Sedimentation Control Regulations

- ✓ Require that certain lots be graded at the time of road construction.
- ✓ Require that the site feasibility plan presented at the time of subdivision approval be controlling.
- ✓ Require that the building lots be rough graded and stabilized prior to the issuance of a building permit.
- ✓ Require the preparation of an as-built survey map demonstrating compliance with approved site feasibility plan.
- ✓ Require the posting of a cash bond for each building lot.
- ✓ Require the preparation of a full graded “as built” site grading plan prior to the issuance of a Certificate of Occupancy (CO) to demonstrate compliance with the approved site grading plan. Require this plan for all new construction as well as significant changes to existing sites.
- ✓ Restrict the maximum change permitted to current topography in reviewing site grading plans for residential subdivisions including road construction and grading for individual lots.

Septic System Maintenance

The Water Pollution Control Authority is responsible to determine what properties will be served by a public sewer. For non-sewered areas the Connecticut Public Health Code mandates that all sewage be disposed of by subsurface sewage disposal systems, commonly known as septic systems. Permitting and inspection is performed by the North Central District Health Department (NCDHD).

The average septic system should be pumped every 3-5 years depending on how many people are living in the house and how the system is used. In addition, every system should be inspected every few years. In fact, some states have implemented a mandatory inspection program for homeowners. The improper use and maintenance of a septic system may lead to the failure of the system and even worse groundwater contamination. Should a system fail the NCHD will revoke the permit and issue an order for repairs in accordance with State Law.

Many homeowners are simply not knowledgeable about how a septic system works or the importance of regular maintenance. Homeowners need to be educated such that these systems are maintained like other household systems that homeowners are more knowledgeable about such as heating and air-conditioning.

The following is a list of items that should be inspected on a regular basis for all septic systems.

- Check tank for leaks or groundwater intrusion
- Check baffles
- Check and clean baffle screen
- Measure scum
- Measure sludge
- Check color and odor
- Look for back-up stains
- Check pump tank (floats and effluent pump)
- Look for wet soil conditions at the surface
- Pressure test

There are administrative procedures currently in place where in certain instances homeowners are exposed to the importance and functionality of their septic system when construction projects are proposed. For example, if a homeowner applies for a building permit for certain kinds of renovations such as a home addition, no permit will be issued by the Town until the North Central District Health Department (NCDHD) has reviewed the proposal for compliance with the Connecticut Health Code and provides a sign off. Some projects may be of a scope that forces an upgrade to comply with modern codes. For example, a proposal to add bedrooms to an older home may require the installation of a new septic system. At a minimum, this will require soils testing and the designation of a reserve area if the septic system fails in the future. This process exposes a homeowner to the mechanics of how a septic system works. However, unless building permits are needed, there is likely no interaction between the Town, NCDHD, and the homeowner.

Considerations/Strategies:

Develop an Educational Program

The WPCA and Town should work with the North Central District Health Department (NCDHD) in developing an educational program for homeowners to include elements relating to how a system works, how it should properly be used, and the importance of regular inspection and maintenance. This could include educational seminars in a Town facility, information posted on the Town's web page, town wide mailing, and/or information to be included in the Town newsletter.

Chapter Four: Conservation Strategies, Natural Resource Preservation

The preservation of community character is valued very highly by Ellington residents. To protect a rural landscape, the Planning and Commission and Conservation Commission will continue to give priority to the preservation of important open space assets and seek creative ways to preserve farmland and a vibrant farm economy for future generations. In addition, the preservation of key historic structures also helps to define Ellington’s special character. These provide an important window into Ellington’s early history and are worthy of preservation.

The on-line survey and 2 community visioning sessions (see supplemental information at the end of this report) clearly indicated strong support for both open space and farmland preservation. Residents felt passionate about preserving these assets to protect community character.

The Planning and Zoning Commission and Conservation Commission have taken several steps to preserve these assets since the adoption of the 2008 Plan of Conservation and Development including several important amendments to the zoning and subdivision regulations. These are summarized in Table 4-1. This chapter discusses additional actions which the Planning and Zoning Commission may consider to further refine regulations with the aim of accomplishing these goals. These are measures which may be implemented that do not require capital outlay by the Town.

Change to Better Preserve Farmland	Details
Adoption of density-based zoning regulations	Changes to Zoning Regulations where the presence of steep slopes, flood plain, and wetland soils limit lot yield
Adoption of more flexible farm use regulations	Residential zones: Keeping of horses, agricultural buildings, backyard poultry, bees. Commercial zones: Farm stands, farm store, brewery, brew pub, distillery.
Established an farmland acquisition fund	\$2 million referendum approved in 2007.

Table 4-1
Accomplishments Since the Adoption of the 2007 POCD

Open Space Preservation

The Ellington Conservation Commission adopted a Plan of Conservation in 2006 with updates in 2014. This plan establishes an important goal to preserve 21% of Ellington as protected open space. This is consistent with the State of Connecticut goal to preserve 21% of land statewide. Currently 3,816 acres or 17 % of Ellington have been preserved as shown in Table 4-2. This includes land that is owned by the Town, Northern Connecticut Land Trust, State of Connecticut, or where development rights have been purchased. It should be noted that the public has no rights to enter land where development rights have been purchased to preserve farmland. There are 888 acres of open space in this category. There is a total of 2,928 acres of land with public access or 13% of the Town.

INVENTORY OF OPEN SPACE, FARMLAND, AND RECREATIONAL ASSETS

(NOT INCLUDING GOLF COURSES AND CONSERVATION EASEMENTS)

DESC.	OWNER	AREA
Pinney and Windermere (Including Pinney Street Fields)	Town	67.71
Carriage Hill Open Space	Town	18.51
Crystal Ridge Estates Open Space	Town	47.89
Crystal View	Town	35.3
Ellington Highlands Open Space	Town	29.5
Rising Acres II Open Space	Town	8.3
Tripp Road Open Space	Town	8
Mosley Plains Open Space	Town	4.62
High Ridge Open Space	Town	3.46
Hatheway Road	Town	3.18
Sunset Hill - Town Access	Town	1.6
Batz Properties	Town	44.86
Kimball Forest	Town	55.61
Meadow Brook Estates Open Space	Town	15.26
Metcalf Nature Preserve	Town	15.63
Stagecoach Crossing Open Space	Town	6.64
"T" Properties	Town	73.32
Arbor Park	Town	3.3
Brookside Park	Town	41.42
Sandy Beach	Town	7.23
Crystal Lake Memorial Park	Town	0.24
Porter Road Highlands	Town	3.16
Other Town Unimproved Open Lands	Town	19.18
Properties Taken In Lieu of Taxes	Town	8.55
Subtotal		522.47
Sunset Hill	Land Trust	14
Swann Farm	Land Trust	56.01
Joy Property	Land Trust	6.86
Shenipsit Woods	Land Trust	30
Ernie Boothroyd Preserve	Land Trust	58
Bird Sanctuary	Audubon	6.67
Bellante	Land Trust	37
Subtotal		208.54

	Purchase of Development Rights (PDR)	
Way Farm	PDR	68.6
Culbro Farm	PDR	171.09
Burke Farm	PDR	119
Pinney Farm	PDR	5
Myers Farm*	PDR/Land Trust	70.59
Dzen Farm	PDR	22.25
Silverhurst/Foster Farm	PDR	97.32
Silverhurst/Foster/Thrall Farm	PDR	20.57
Charter Farm	PDR	43.39
Pease Farm	PDR	20.79
McKnight Farm	PDR	124.429
Bahler Farms	PDR	125.785
Subtotal		888.814
Shenipsit State Forest	State	1396.92
Nye Holman State Forest	State	361.21
Bradway Reservoir	State	87.93
Boat Launch, Crystal Lake	State	4.69
Subtotal		1850.75
Crystal Lake		175.51
Shenipsit Lake		170.91
Subtotal		346.42
TOTAL		3816.99

*Included in open space totals

Table 4-2
Inventory of Open Space and Recreational Assets

Source: Plan of Conservation, Ellington Conservation Commission, 2007 and 2014

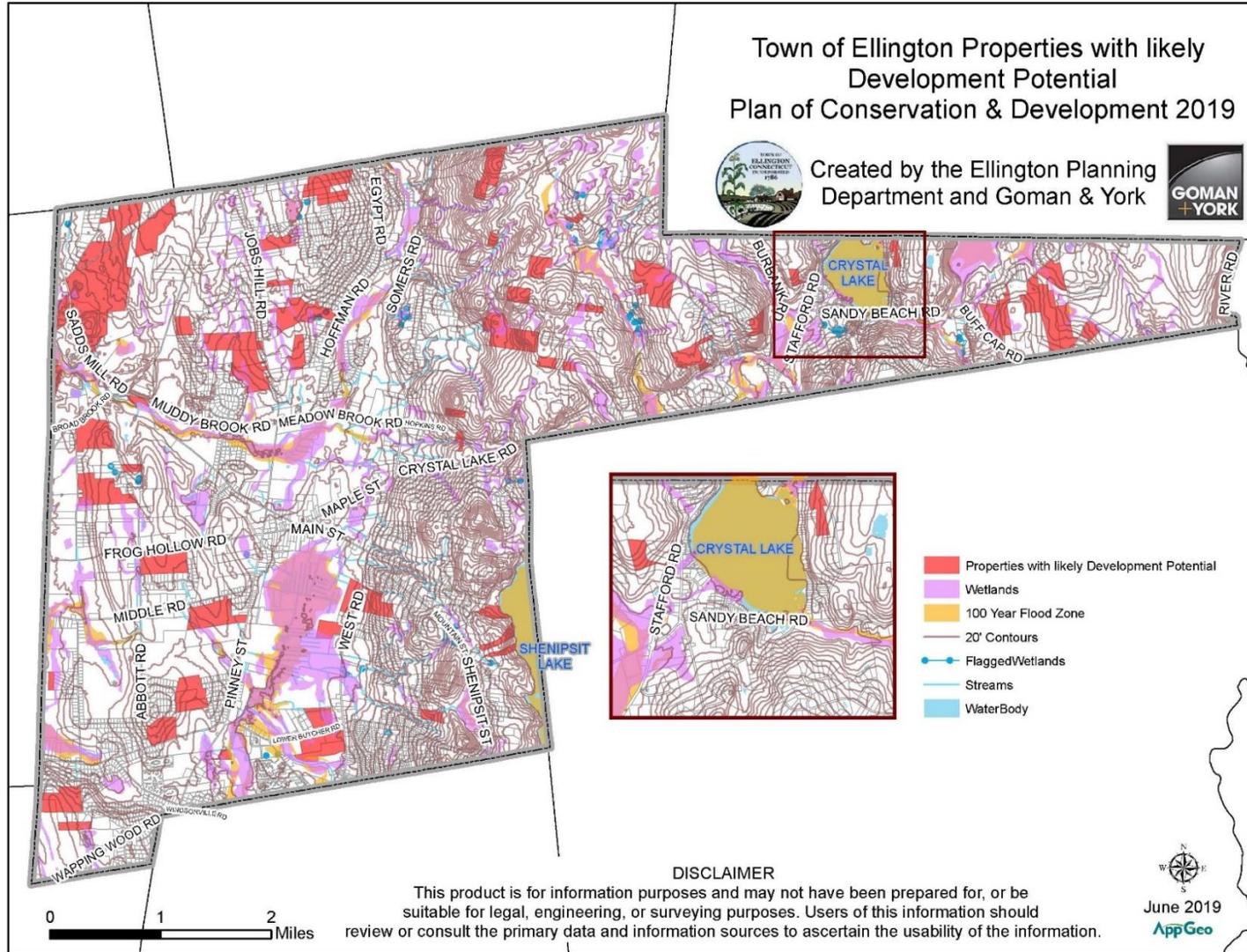
The Conservation Plan establishes five (5) “focus” areas and establishes objectives and strategies for each area. The 5 areas are:

- Western Farm Belt
- Shenipsit Lake and Forest
- Crystal Lake Watershed
- Eastern Panhandle
- Hockanum River Linear Park

The Conservation Commission's plan and its recommendations are formally adopted as part of this plan and are included as Appendix C.

It is important to note that land commonly referred to as open space, in fact, has different levels of protection regarding the certainty that the land will always remain open and undeveloped. In fact, although it is a goal of this Plan to permanently protect all existing open space assets identified in this Plan, those guarantees cannot necessarily be made in perpetuity. It is likely that these assets will remain undeveloped but that cannot always be assured. Important variables include whether the property contains restrictions in the deed, whether the property is in private or public ownership, and physical and regulatory constraints such as zoning, floodplain, wetlands, and steep slopes.

There is still a significant amount of land in Ellington which is in private ownership that has development potential. Although it is natural that residents sometimes associate these undeveloped properties as contributing to the rural landscape which they enjoy, they are not in public ownership, and may be developed in accordance with local requirements such as zoning, subdivision, wetlands, and the public health code. Map 4-1 depicts vacant parcels of land in private ownership excess of 5 acres in size. Property which has slopes in excess of 25% and where significant wetlands are present have been excluded due to limited development potential. In total there are 1,035 acres of undeveloped land with development potential.



Map 4-1

Vacant land parcels >5.0 acres, privately owned, excluding steep slopes, wetlands, and flood prone areas.

The Planning and Zoning Commission may wish to work with the Conservation Commission in identifying a list of high priority parcels of land to be targeted for preservation within each of the before mentioned 5 focus areas. These parcels can be selected on the basis of meeting the objectives of the conservation plan. Properties identified shall not be in a ranked order nor is it intended that the properties listed shall be the only properties that may be considered for preservation by the Town. However, identifying a list of properties can be a valuable tool for the Commission in their review of individual applications (site plan, special permit, subdivision) and by the Board of Selectmen who may consider the acquisition of certain properties when they are offered for sale.

It should be noted that the Town has a modest amount of funding available for the purchase of open space. As a rule, the Town does not on its own initiative target land parcels for acquisition, but rather reviews offers from private owners should choose to sell. The preparation of such a list may serve as notice to private landowners that there may be interest by the Town to purchase particular parcels. It may be helpful to a property owner should they be interested in selling their property. In addition, a list of priority parcels is not meant to bind the Town in any manner but to be used only as a guide for possible future consideration.

Considerations/Strategies

- ***Identify high priority parcels for preservation.***

It may be prudent that the Planning and Zoning Commission work with the Conservation Commission in developing a list of high priority parcels targeted for preservation either through acquisition by the Town, partnering with the Northern Connecticut Land Trust, or through the purchase of development rights. This list may then be used when evaluating the possible purchase of these properties or in the purchase of development rights as they become available for sale. The Planning and Zoning Commission may also use this information to encourage the partial preservation of some of these parcels. For example, if appropriate the Planning and Zoning Commission may encourage the submission of an application for an open space subdivision vs. a traditional large lot subdivision if public sewers are available and site conditions warrant this type of development.

Transfer of Development Rights

A zoning technique known as Transfer of Development Rights (TDR) offers additional opportunity to preserve open space without any capital outlay by the Town. To establish a program of TDR the official zoning map would need to be amended to include both “transfer in” and “transfer out” areas. Transfer- in areas represent those parcels where higher density development may be appropriate. Transfer-out areas represent undeveloped parcels of land which have been identified as having the highest priority for preservation. Some of the properties may include those identified by the Commission as a refinement to the Conservation Commission’s Plan of Conservation as discussed earlier in this chapter. The Commission retains maximum control as it is responsible to determine in advance which properties receive the

highest priority for preservation and which properties are appropriate for higher density development. In addition, a special permit is required. A great advantage of a TDR program is that it results in land preservation at no cost to the taxpayer. Designated “transfer out” properties can include both undeveloped land as well as property being used for agricultural purposes. If the transfer out parcel includes farmland, this land may remain in the ownership of the farmer following the sale of development rights, subject to a conservation easement, and may be sold in the future and used for similar purposes. Exhibit 4-1 shows a schematic of the mechanics of TDR.

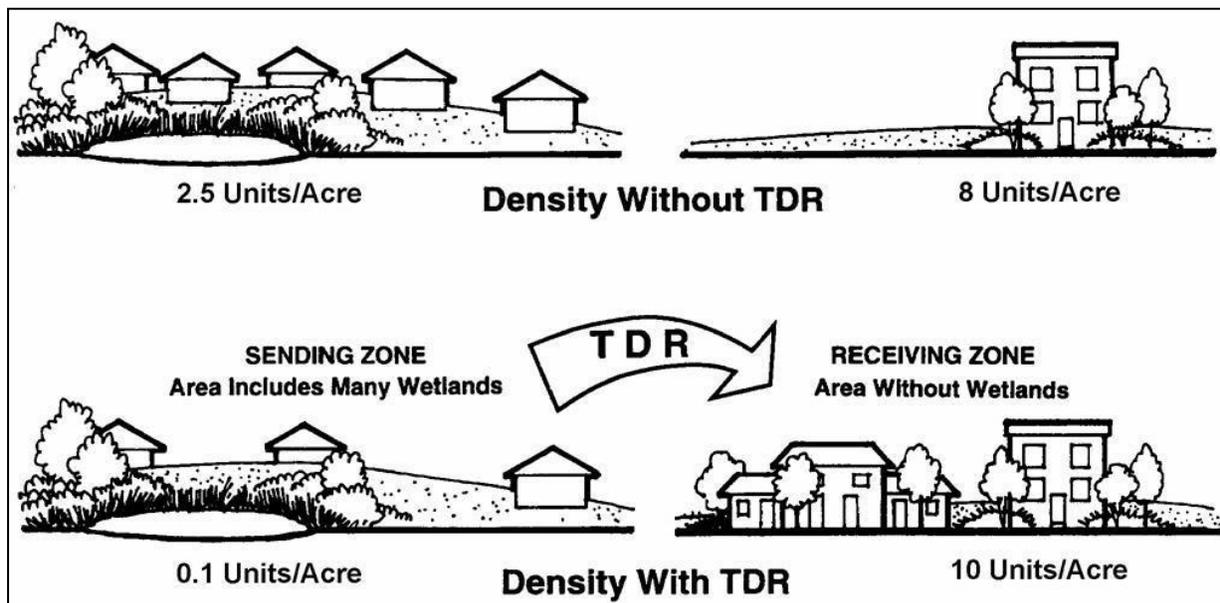


Exhibit 4-1: The Mechanics of TDR

Source: Michigan Department of Environmental Quality

A TDR program by its nature does add complexity to a potential development application. Perhaps the most significant is that it requires a developer to obtain an interest in two or more (noncontiguous) parcels of land. A developer must secure an interest in land he/she wishes to develop, as well as an interest in land to be preserved (where development rights may be transferred out). The economics must be favorable enough for a developer to pursue such a transaction, given the added costs in time and uncertainty when compared to a more conventional development application. Accordingly, TDR regulations must be carefully crafted when establishing a formula for the transfer of rights between transfer out (sending) and transfer in (receiving) parcels. It may be prudent to offer a small increase in density to be assigned to the transfer-out parcel.

TDR traditionally involves the transfer of the potential residential development in the transfer-out parcel to added residential development assigned to the transfer-in parcel. It is possible, however, to also develop a formula which permits the transfer of potential residential development in exchange for additional commercial density in commercial zoning districts. As an example, a town in Massachusetts allows an additional 2,000 square foot increment in building size plus a potential increase in lot coverage for every acre of farmland preserved. It may be appropriate to utilize a concept like this in the permitting of compact commercial development in Ellington Village Center. These ideas are also discussed in Chapter 6: Housing Strategies and Chapter 7: Economic Development.

Considerations/Strategies

Adopt a Transfer of Development Rights program (TDR)

The Commission may consider adopting a TDR program through its Zoning Regulations to achieve the preservation of additional open space in targeted areas and increased residential densities in locations deemed appropriate by the Commission. Such an approach results in land preservation without capital expenditure by the Town. However, such an approach does add a level of complexity for a potential developer. As a result, careful thought must be given in developing the metrics of the transfer formula with enough incentive, such that a potential developer is encouraged to pursue this option over a conventional subdivision.

Agriculture

The Conservation Commission and the Planning and Zoning Commission are keenly aware of the importance of agriculture in Ellington and will continue to use its authority under zoning to adopt rules that favor agricultural operations. There are many benefits farming provides to the community which include:

- Producing food locally helps meet sustainable development goals.
- Retail sales associated with farming attract customers from outside of Ellington which may benefit other commercial establishments.
- Many environmental benefits including wildlife habitat and the potential for groundwater recharge.
- Underground farmland within the floodplain and floodway can convey and store floodwaters in an unimpeded manner.
- Farms provide jobs and contribute to the local economy.
- Net positive tax revenue as compared with conventional single-family subdivision.
- There are many intangible benefits associated with farmland including a rural aesthetics, open space, and preservation of rural character.

The Planning and Zoning Commission, Board of Selectmen, Conservation Commission, and taxpayers of Ellington have, through their actions, shown great support for agriculture. This is evidenced by:

- Approval of a \$2,000,000 referendum in 2007 for the preservation of farmland.
- Including partnering with the Connecticut State Department of Agriculture in the purchase of development rights for several farms totaling 888 acres.
- Amendments to zoning regulations which significantly broaden commercial opportunities for working farms.

How Agriculture is Currently Regulated

Ellington's regulations provide generous opportunities for agriculture in all residential zones and significant commercial opportunity in all commercial and industrial zones. A number of these regulations were adopted through a comprehensive set of amendments to the zoning regulations in 2010, 2014, and 2016. All residential zones permit agricultural opportunities along with limited related commercial uses. The boarding of horses is also permitted in these zones. Recent amendments allow a Brewery, Brew Pub, or Distillery by special permit in all Commercial and Industrial Zones.

The Planning and Zoning Commission has determined that agri-tourism presents a unique opportunity to combine aspects of tourism and agriculture which provide a number of financial, educational, and social benefits to the community while allowing farmers to supplement their farming activities with activities and events directly related to the farm and farming. The Commission may consider addition amendments to further promote agri-tourism. These activities may include hayrides, petting zoos, cut your own Christmas trees, horseback riding, carriage and sleigh rides, ice cream and baked goods, and garden tours. There is also a unique opportunity to promote farm wineries, farm breweries, and farm distilleries in Residential Zones. These uses, especially farm wineries, have become increasingly more popular over the past ten years. The State of Connecticut has now granted more than forty (40) licenses for farm wineries. In 2018 the State Legislature passed Public Act 08-187 establishing rules for farm wineries. Such activities, if allowed, can provide opportunities for a more viable agricultural operation along with a modest commercial/retail component. The key in permitting any agri-tourism related activity is to establish the correct balance between "traditional" agricultural activities such as the growing of crops and "less traditional" activities such as wine and beer tastings, retail sales, and the hosting of special events.

For example, few residents would question the bucolic nature of a vineyard or even buildings necessary to process grapes and produce wines at a modest scale. Experience has shown that introducing these added commercial activities is necessary to support the economics of such a facility. Some other activities often associated with a winery such as tastings, the sale of bottles of wine, and the use of the facility for special events such as meetings or/weddings need to be properly integrated and scaled so as not to adversely affect neighboring residents using adequate buffers for abutting residentially used property.

The Planning and Zoning Commission should consider the adoption of regulations which would permit the establishment of a farm winery, distillery, or brewery by special permit on parcels of land in excess of ten (10) acres. Regulations must strike a balance between fostering the economic success of these agricultural enterprises and safeguarding property rights of surrounding residential neighbors. It is important to note that any land use brings with it some impact/consequence on nearby properties. For example, the sale of agricultural land and its development into a “traditional” single-family subdivision results in some neighborhood impact. The key in developing a balanced regulation is to establish a set of rules which permit the operation of a viable farm, but which result in a set of impacts to nearby properties that are comparable to those that would be generated by a residential subdivision (i.e.: traffic, noise, lot coverage, etc.)

The Planning and Zoning Commission may wish to consider establishing standards for the following:

- Requiring that a certain percentage of produce sold be grown on the farm. In the case of
- a winery that a certain percentage of grapes used in wine production be grown on the property where the production facility and tasting room is located.
- Limits on the total number of gallons of alcohol which may be produced. Limits may be linked to number of acres and may differ from maximum thresholds established by the State Liquor Control Commission.
- Limiting the size of the tasting room and indoor and outdoor space that may hold special events.
- Limit the number and size of outdoor events.
- Establish noise standards, buffer zones to nearby properties, and place limits on hours that special events may take place.
- Establish parking requirements.
- Limits on the amount of food which may be sold/served. Consider differentiating between sales during “normal” tasting hours and special events.
- Prohibition on obtaining a restaurant liquor permit from the State of Connecticut Liquor Control Commission.
- Limiting the scale of the commercial activities such that the Ellington Assessor may decide the farm is still eligible for special tax consideration under public act 490.
- Requiring that the owner of the farm resides full-time on the farm.

The preservation of farmland to preserve rural character is widely supported in Ellington. In their support many residents emphasize the rural and scenic character that farmland promotes sometimes without giving due consideration to the commercial and business aspects that are required to successfully operate a farm.

Connecticut's right-to-farm law exempts farms meeting specified conditions and following generally accepted agricultural practices, from certain nuisance laws, regulations, and ordinances concerning odor, noise, and other objectionable farming by-products. But it does not exempt them from nuisances caused by negligence or willful or reckless misconduct. Towns may also adopt right-to-farm ordinances to emphasize support for local farms and agriculture. They reiterate the right-to-farm law's protections from nuisance lawsuits and often declare farming as

an accepted and valued activity within the community. The Town may wish to consider adopting a local right to farm ordinance.

The PZC might consider adopting zoning regulations that require an adequate buffer between a proposed subdivision and an existing farm. For example, regulations could require a 200-foot separation between a proposed new house and any property line that is in common with an established farm.

Regulations could also be adopted to either encourage or require the use of cluster zoning when a new subdivision is proposed adjacent to an established farm, concentrating development away from the farm. Consideration may also be given to permitting a cluster style subdivision “as of right” and requiring a special permit for a traditional large lot subdivision to encourage cluster development a significant buffer when new lots are created adjacent to an established farm.

Considerations/Strategies:

- The PZC may wish to consider amendments to the Zoning Regulations to allow farm wineries, farm breweries, and farm distilleries by special permit. Regulations must address important considerations discussed above in order to balance the need to conduct an economically viable operation while mitigating potential adverse impacts of commercial activities on nearby residential properties. Permit limited use of these facilities for special events such as weddings and other outdoor events subject to the parameters discussed in this chapter.
- The PZC may wish to consider amendments to the Zoning Regulations that require a permanent buffer between proposed new residential lots and established agricultural operations. Regulations may also be adopted which either encourage or require the use of cluster techniques to minimize conflict between proposed housing and established farms.
- The Town may wish to consider adopting a right-to farm ordinance which demonstrates the Town’s support for agriculture by limiting opportunities for nuisance damage lawsuits to established farms who otherwise follow sound agricultural practices.
- The Commission may wish to consider amendments to the Zoning and Subdivision Regulations which mandate a separation requirement between proposed new homes and established agricultural operations. The Commission may also consider regulations that either encourage or require the use of cluster zoning techniques to reduce areas of possible conflict between established farms and new homes.

Open Space or Cluster Subdivision

In 2011 Ellington adopted a density-based zoning regulation which establishes a maximum lot yield of either 0.5 or 0.6 homes per acre and minimum lot size of 40,000 square feet (except for 25,000 square feet in the lake residential zone with access to public water and sewer.) Under this regulation lots must average between 1.6 and 2 acres in size. (See sections 3.2.1 and 3.2.2 of the Ellington Zoning Regulations for more detail.

If soils are suitable or public sewers are available, the PZC may permit a reduction in lot size of 32,000 square feet. In this event overall density must still comply with the 0.5 or 0.6 requirement. To date (since 2011) there have not been any requests to seek a lot reduction to 32,000 square feet. The PZC may wish to consider an amendment to this density-based regulation aimed at the preservation of significant tracts of open space.

The following might be considered:

- Offering greater density and reduced dimensional standards when more than ten(10) acres of open space is preserved (in addition to the 10% open space requirement in subdivision regulations.) The PZC is to retain discretion on the location, shape and quality of the open space.
- Reduction in road width where the PZC determines that public roads are not required for overall road circulation and private roads are proposed.
- Identify individual parcels or areas where an open space subdivision would be preferred over a traditional large lot subdivision. In these locations permit an open space subdivision as of right and require a special permit for a traditional project. Factors to consider in identifying locations for an open space subdivision can include:
 - The presence of unique natural resources especially worthy of preservation (steep slopes, floodplain, wetlands, endangered species habitat)
 - Land which has been identified as having the highest priority for open space preservation
 - Proximity to other protected open space assets to add to areas of unfragmented open space

Considerations/Strategies

- Consider zoning amendments to Article 3 of the zoning regulations that would award a density bonus and reduction in required dimensional standards where significant amounts of open space are preserved well beyond minimum requirements established in the subdivision regulations.
- Consider identifying certain parcels or areas where an open space subdivision would be allowed as of right and where a traditional large lot subdivision would be allowed by special permit. Preparing a list of properties with the highest priority for preservation discussed in this chapter could also be used as the basis for this alternative approach.

Historic Preservation



The preservation of significant historic structures contributes to the quality of life of Ellington residents in many ways. The Connecticut Trust for Historic Preservation states:

“Connecticut cities and towns are defined by the history of human impact on both the natural environment and the built environment. Rural or urban, coastal or hill town, industrial center or suburb—each of the state’s 169 cities and towns has a distinct character derived in part from the buildings, sites, and structures that represent the heritage of that community. Preserving community character enriches the lives of Connecticut residents and adds vitality to neighborhoods and downtowns.”

The 2008 POCD discussed several steps which may be undertaken to identify and help preserve important historic structures. These recommendations have not been accomplished to date. These recommendations are still relevant and are incorporated into this plan.

As a first step, the Town should consider hiring a consultant to conduct a historic resource inventory. Grants are available through the State Historic Preservation Office. A consultant must be selected that meets certain qualifications established by the U.S. Secretary of the Interior. Following this, the Town may decide what additional steps to take to add various levels of protection to these structures. These measures range from honorary to regulatory. They include listing on the National Register of Historic Places, State Register of Historic Places, and/or the creation of a local historic district.

Considerations/Strategies

- Implement the various historic preservation strategies outlined in the 2008 POCD. Begin by conducting an inventory of historic structures.
- Consider adopting a demolition/delay ordinance which would impose a 30-day delay on owners seeking a permit to demolish a structure identified on the Town’s inventory. Give preservation groups an opportunity to negotiate privately with the owner for acquisition and possible adaptive reuse.

Chapter Five: Housing and Residential Development

Housing Overview

Residential development and housing play an important role in community and the community planning process. In the context of community, housing is where jobs go at night and where families live. In addition, housing density, style, and tenure play a key role in creating community character. In the context of community planning, residential uses are the most predominate land use and residential zoning typically dominates the land area of a town. Therefore, residential development patterns often frame the overall development patterns of a community.

As a community that is rural-suburban in character, approximately 80% of Ellington's land area is zoned residential, the overwhelming majority of which is zoned for single-family residential housing. This demonstrates how and why residential development, uses, and housing are key component of Ellington's community character and frame the overall development patterns. In addition, residential land uses are important to consider and understand when planning for community facilities and infrastructure. For example, residential land uses may require community facilities and the infrastructures required to support them.

Even though single-family residential zoning dominates Ellington's land area and allowable uses, Ellington's housing stock is made up of only approximately 65% single-family residential housing units. Therefore, the balance of housing units (approximately 35% of Ellington's housing stock) are a mixture of multi-family units that include duplexes, three-family, and large and small multi-family developments with 4 or more units. In terms of resiliency—specifically, diversity—Ellington's housing mix is similar to the statewide mix of housing and well above most rural-suburban communities.

As a rural-suburban community, especially with abundance of working farm land (agricultural uses) and substantial dedicated open space, it is reasonable to anticipate (and to recommend) that Ellington will continue to maintain its rural-suburban community character throughout most of the community—a predominance of low-density single-family residential land uses balanced with a mixture of multi-family housing options. That said, what Ellington is missing from its residential and commercial development patterns and its housing mix are mixed-use developments that provide housing, commercial retail and office, and other features or amenities such as public spaces and walkability.

Two challenges that face Ellington regarding residential land uses and housing are the crumbling foundations and housing affordability. Approximately 100 crumbling foundations have been identified—that is fewer than 2% of the housing stock—at this time. However, it is safe to assume that number will increase to 3% or 4% of the housing stock. Housing affordability, the

lack of affordable housing, is the greatest housing issue facing Ellington and it undermines diversity in housing and income, ultimately undermining resiliency.

The review of the residential land use recommendations in Ellington’s 2008 Plan of Conservation and Development reveal that the Planning and Zoning Commission successfully implemented many, if not most, of the residential development and housing strategies aim at density, development practices, and protecting and maintaining Ellington’s rural-suburban character. Therefore, this plan recognizes and accepts that Ellington’s residential development patterns, housing type, form, and density will continue, mostly as it is today. As a result of this, this Plan does not recommend any specific changes to the single-family residential zoning, but that the Planning and Zoning Commission continue to monitor market trends and demand to ensure that the existing zoning is in sync with consumer needs and wants. This Plan will focus on the crumbling foundations, housing affordability, and mixed-use development opportunities.

Crumbling Foundations

Over a dozen communities in eastern Connecticut have experienced the issue of cracking and crumbling foundations in recent years. The cause of this issue has been traced to a specific quarry and the existence of a mineral called pyrrhotite in the stone aggregate that was used to mix concrete.

Since the discovery of this issue, a few public agencies led by the State have been evaluating the issue and exploring how to best address the issue. This has included Federal and State funding, federal tax abatements, and other options. While it may take years for the overall issue to be resolved and for affected property owners to receive satisfactory relief, the financial implications for affected property owners are real and considerable. There are also financial implications for the Town of Ellington regarding the tax base and the ability of affected property owners to request that the municipality re-assess the property values. The re-assessment of property values will shift the tax burden to other property owners.

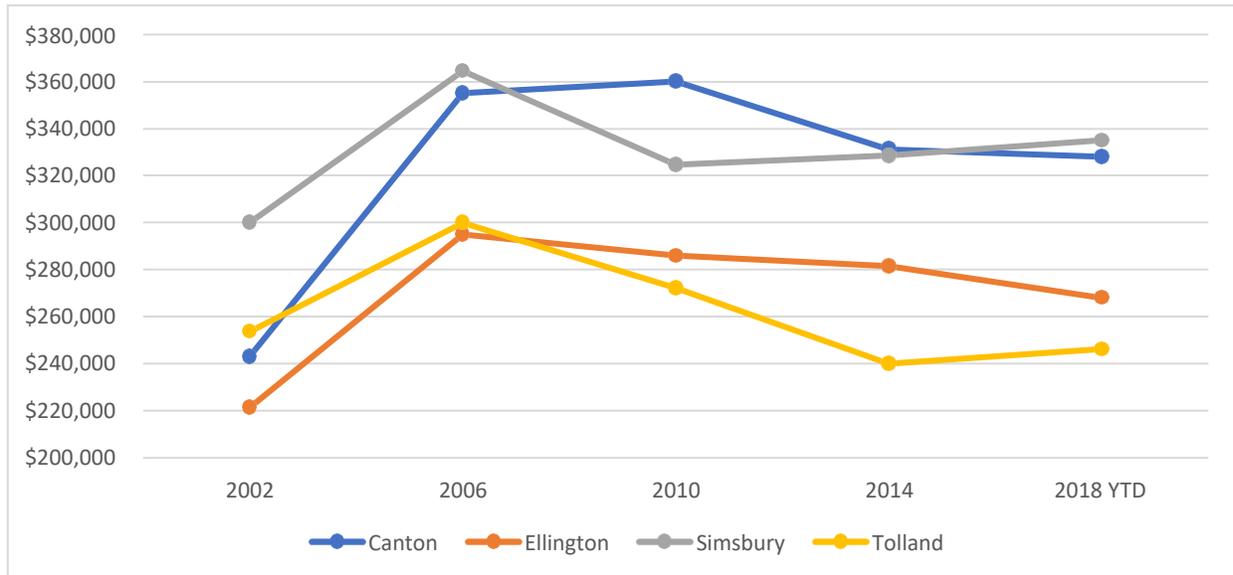
Another possible concern or threat to property values and tax base, are the impacts that the foundation issue is having on the overall housing market—sales value and the ability of property owners to sell their properties. To assess this potential impact, the sales value of property and days on the market of properties for sale from 2002 to 2018 were evaluated in two affected towns (Ellington and Tolland) and compared to the sales value and day on the market in two similar unaffected towns (Canton and Simsbury) during the same period of time to see if property values and days on the market have suffered more in the affected towns.

The period of 2002 to 2018 was selected because it goes back before the housing market crash of 2008, the recession, and prior to the discovery of the crumbling foundation issue. This provides a good comparative baseline of property values pre-market crash and post-foundation issues. The tables and charts below provide the results of this assessment, providing the Median Close Price (Sales Price) and Median Days on the Market of each of the four communities.

**Table 5-1-A
Median Close Price**

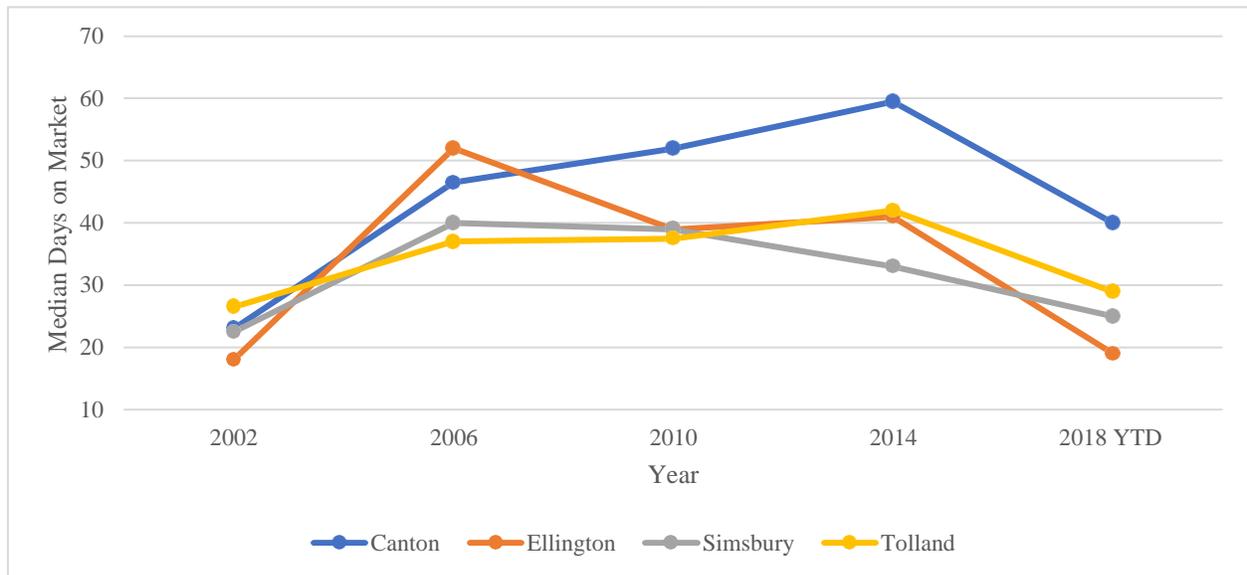
	2002	2006	2010	2014	2018 YTD
Canton	\$243,050	\$354,950	\$360,000	\$331,250	\$328,000
Ellington	\$221,400	\$295,000	\$286,000	\$281,500	\$268,000
Simsbury	\$300,000	\$364,500	\$324,625	\$328,500	\$335,000
Tolland	\$253,750	\$299,900	\$272,200	\$240,000	\$246,250

Exhibit 5-1-B Median Close Price



**Table 5-2-A
Median Days on Market**

	2002	2006	2010	2014	2018 YTD
Canton	23	47	52	60	40
Ellington	18	52	39	41	19
Simsbury	23	40	39	33	25
Tolland	27	37	38	42	29

Exhibit 5-2-B Median Days on Market

Based on the data and results, Ellington's sales value increased by a greater percent from 2002 to 2018 than both Canton and Simsbury. In addition, days on the market for Ellington in 2018 recovered to similar days on the market from 2002. While this analysis is limited in scale and scope, for general planning purposes, it shows that the foundation issues has probably had little to no effect on overall property values and the ability of property owners to sell their homes in Ellington.

While there is little that Plan of Conservation and Development can do by itself to alleviate or resolve this kind of situation, the Town of Ellington and the Planning and Zoning Commission can do some simple thing to best manage this unfortunate situation and alleviate the challenges and cost of affected property owners.

Considerations/Strategies

- Waive the zoning and building permit fees for affected properties requesting permits for reconstruction and/or relocation.
- Simplify the zoning permitting process for the reconstruction, replacing, or relocation of an affected foundation.
- Modify the Zoning Regulation to allow 'variation' to the yard setbacks (for affected buildings to be relocated to a new foundation on the property) without the need to demonstrate zoning hardship.
- Allowing a 'reasonable accommodation' to the zoning requirements by staff review and the approval process.
- Allowing temporary housing and/or temporary storage trailers on a site during reconstruction.
- Support efforts at the regional, state, and federal level to address the foundation issues.
- Consider adopting a property tax abatement program that reduces the property taxes of properties with replaced or repaired foundation by 10% for up to 10 years to off-set the cost of repairs or replacement.
- Continue to monitor the 'crumbling foundation' issue so that additional strategies can be implemented as appropriate.

Mixed-Use Residential Development

As discussed above, the type of housing missing from Ellington's diverse housing stock is housing in mixed-use developments. Based on changes in consumer housing preferences, market demand for higher density rental housing, walkable neighborhood, mixed-use commercial district, and the associated housing can provide Ellington with viable opportunities to forward housing, economic development, conservation, and other community goals and objectives. For example, mixed-use development can provide economic development through the development of commercial properties, advance open space conservation objectives through a transfer of open space (and/or development rights) program that would allow greater residential density and address affordable housing issues by requiring 'affordable housing' as part of mixed-use developments. In addition, site design requirements for mixed-use developments could require public space, walking and biking trails, and other community amenities. Simply put, mixed-use development can and would be a win for Ellington.

The location of mixed-use developments should be confined to the sewer service area, specifically along the Route 83 corridor and near the town center. To encourage and facilitate such developments, the Planning and Zoning Commission should create a 'Mixed-Use Master Plan Overlay Zone' that would allow flexible standards for the development of housing as part of the mixed-use development. While further study is required and recommended, the following recommendations provide a starting point for consideration and a framework for thinking about provisions that could be beneficial to the creation of mixed-use developments and the associated housing.

Considerations/Strategies

- **Residential Density:** Allow residential density, by right, of 8 to 10 units per acre.
 - Density Bonuses: Allow density bonuses of an additional 2 to 4 units per acre (12 to 14 unit per acre total).
 - Transfer of Open Space: Allow between 2 and 4 units per acre of density bonuses for every acre of open space transferred to the Town or local Land Trust.
 - Transfer of Development Rights: Allow between 1 and 2 units per acre of density bonuses for every acre of development right transferred to the Town.
- **Commercial Density:** Require a minimum of 1,000 square feet commercial space per 10 units of housing, excluding the density bonuses.
- **Site Design:** Allow flexibility in site design requirements aimed at favoring 'good' design over rigid standards and requirements. However, such provisions could require:
 - The commercial development/uses be placed nearest to or along the Route 83 frontage.
 - That 65% of ground floor commercial square feet have residential housing provided above on second or third floors.
 - Common public spaces and walking/biking trails with connections to neighboring properties and existing or future trail networks.
 - Shared parking reductions.

Housing Needs Assessment

As part of Plan of Conservation and Development update process, a comprehensive housing needs assessment was conducted to determine the extent to which there is a need for affordable housing in Ellington. This assessment is designed to comply with the requirements of Public Act 17-170 that local towns create a housing plan aimed at housing affordability. The assessment is also intended to comply with the Connecticut General Statutes Section 8-23 recommendation that towns plan for housing, including affordable housing.

The assessment primarily utilized U.S. Census data on the characteristics of housing, household income, and housing purchase and rent values in Ellington. In other words, household income was compared to the availability of housing types at corresponding sales value and rents to determine the affordability of housing and need for more affordable housing at certain sales values and rents based on income.

Before getting into the specific data, findings, and recommendations, it is important to understand that housing affordability is a complex concept and challenging problem. One of the challenges regarding housing affordability, is that it can be defined in several ways. For example, affordable housing, as defined by the Connecticut General Statutes, Chapter 126a Affordable Housing Land Use Appeals, Section 8-30g narrowly defines housing affordability as:

Assisted housing: means housing which is receiving, or will receive, financial assistance under any governmental program for the construction or substantial rehabilitation of low and moderate-income housing, and any housing occupied by persons receiving rental assistance under chapter 319uu or Section 1437f of Title 42 of the United States Code;

Set-aside development: means a development in which not less than thirty per cent of the dwelling units will be conveyed by deeds containing covenants or restrictions which shall require that, for at least forty years after the initial occupation of the proposed development, such dwelling units shall be sold or rented at, or below, prices which will preserve the units as housing for which persons and families pay thirty per cent or less of their annual income, where such income is less than or equal to eighty per cent of the median income. In a set-aside development, of the dwelling units conveyed by deeds containing covenants or restrictions, a number of dwelling units equal to but not less than fifteen per cent of all dwelling units in the development shall be sold or rented to persons and families whose income is less than or equal to sixty per cent of the median income and the remainder of the dwelling units conveyed by deeds containing covenants or restrictions shall be sold or rented to persons and families whose income is less than or equal to eighty per cent of the median income;

The 8-30g definition of housing affordability is narrow because it only considers and includes housing units and households receiving government assistance through specified programs or

housing units that are specifically deed restricted as affordable through set-aside developments. For example, 364 housing units or 5.46% of Ellington's housing stock qualifies as affordable housing as defined by 8-30g. What 8-30g does not consider (or define) as affordable, are market rate housing—housing units that are not subsidized or deed restricted as affordable—that are affordable to low- and moderate-income households in the overall housing market. This in effect, distorts the discussion and understanding of housing affordability and need.

Connecticut Housing Finance Authority (CHFA) defines affordability based on a percent of area median family-income and the number of persons in the family/household. CHFA uses the Hartford Metropolitan Statistical Area (MSA), which Ellington is in, and the median family income at \$96,600. For example, moderate income would be 80% of median family income (\$96,600), or \$77,280. The Hartford MSA median household income is \$72,559, approximately \$6,000 less than Ellington local median household income of \$79,917.

Other means of defining housing affordability include how much a household can spend to purchase housing or the percent of household income spent on housing—purchase or rent. Both approaches will be explained below and will be utilized as a means of calculating housing affordability, and ultimately, housing need in Ellington. In the form of a question, we can ask, is housing in Ellington affordable in comparison to household income?

To determine housing affordability and housing need—the aim of this assessment—we need to determine the overall affordability of housing in Ellington. The two common methods for calculating housing affordability, as discussed above, compare housing costs (purchase value and rent value) to household income. The first, typically applied to home purchase and home ownership, is to calculate what a household can afford to purchase—the maximum purchase price of house that household can afford. The commonly agreed upon metric is that a household can afford the purchase of a housing unit valued at 2.6 to 3.0 times their gross household income with the lower limits of affordability being 2.6 and the maximum limit of affordability being 3.0. For example, a household earning \$75,000 can afford to purchase a housing unit up to a valued between \$195,000 (2.6 x income) and \$225,000 (3.0 x income). For this report, we split the difference and use 2.8 as the affordability multiplier on home purchases/ownership.

The second method of calculating housing affordability is based on HUD's threshold of 30% of household income. From the perspective of this approach, if a household pays more than 30% of their income for housing, then housing is deemed to not be affordable—if the household pays less than 30% of their household income, then housing is deemed to be affordable. For example, if the same household earning \$75,000 per year is spending more than \$22,500 (30%) per year or \$1,875 (30%) per month on housing, then such housing is deemed to be unaffordable for said household. This 30% of household income threshold can be applied to both rental and ownership housing but will be used for rental housing in this report.

While these measures or thresholds provide a means for calculating the affordability of housing and will be utilized in the assessment of housing need, it is important to note that there are limits as to how these measures inform us about personal circumstances and housing costs. Affordable housing is primarily a problem of income or lack of income—a household does not earn enough to afford housing. It is this lack of income that creates housing need—affordable housing need. In this regard, spending more than 30% of household income on housing is not a choice, but a harsh reality that housing creates a significant financial burden and hardship for lower income

households. However, that does not mean that every household spending more than 30% of their income on housing has a need for more affordable housing. Some households, for reasons of personal choice, spend above 30% of their income on housing. Therefore, such households do not suffer from the same burden and hardship that households of lesser means who cannot find housing for less than 30% of their income. So, while such measures of housing affordability provide a metric by which we can measure housing affordability, they can fall short of informing us about personal circumstances and choices that are captured or assumed in the calculations and that effect housing affordability. Therefore, simply because a household is paying more than 30% of their income on housing does not automatically mean that it is a housing affordability issue—even though that is assumed in the calculations.

Ellington’s Housing Characteristics

To start, it is important to assess and discuss the characteristics of Ellington’s housing stock. The characteristics of housing stock are important because they provide context to understanding housing value, housing costs, and housing affordability. Therefore, the characteristics of housing also inform us about demand and how demand is organized around housing products and location. Understanding the housing characteristics, their influence on demand, market strength, and housing affordability, provide insight into housing need and the strategies required to address housing need.

According to the U.S. Census (2017 estimates), Ellington has a total of 6,847 housing units, 98.1% (6,717) of which are occupied and 1.9% of which are vacant (Table 5-3). Vacancy rates of less than 10%, especially in the rental housing market, typically indicate strong demand and often signal the need for new supply. Vacancy of less than 5% in both the rental and homeownership markets indicate very strong market and that the vacancies are most likely the result of naturally occurring turnover.

Table 5-3. Housing Occupancy

Housing Occupancy	Ellington, Connecticut	
	Estimate	Percent
Total housing units	6,847	100
Occupied housing units	6,717	98.1%
Vacant housing units	130	1.9%
Homeowner vacancy rate	0.5	---
Rental vacancy rate	2.5	---

Ellington’s housing stock is dominated by single-unit detached housing—commonly known as single-family housing. Including single-unit attached housing, 65.4% of Ellington’s housing stock is considered single-family housing—a housing stock that is favorable to homeownership (Table 5-4). The remaining 34.6% of housing stock is in various forms of multi-family housing with a diversity of units per structure. Overall, Ellington’s housing stock provides a diversity of housing types and tenure (forms of owner/rental housing).

Table 5-4. Housing Units in Structure

	Ellington, Connecticut	
	Estimate	Percent
Total housing units	6,847	100%
1-unit detached	4,095	59.8%
1-unit attached	381	5.6%
2 units	384	5.6%
3 or 4 units	422	6.2%
5 to 9 units	863	12.6%
10 to 19 units	351	5.1%
20 or more units	351	5.1%
Mobile home	0	0.0%
Boat, RV, van, etc.	0	0.0%

The high percent (65.4%) of Ellington’s single-unit (single-family) housing stock lends itself to homeownership and explains the 65.6% homeownership rate in Ellington—a near mirror image of the single-unit housing (Table 5-5). The average household size of owner-occupied units is 2.62 persons per unit compared to 1.87 persons per rental unit. The difference in persons per unit between owner and rental housing is most likely driven by the number bedrooms available—single-unit owner-occupied housing typically has three or more bedrooms per unit, while rental housing typically has three or fewer—often one and two bedrooms—per unit. As a result, single-unit housing and owner-occupied housing typical attract more families and more children than multi-family and rental housing.

Table 5-5. Housing Tenure

Housing Tenure	Ellington, Connecticut	
	Estimate	Percent
Occupied housing units	6,717	6,717
Owner-occupied	4,408	65.6%
Renter-occupied	2,309	34.4%
Average household size of owner-occupied unit	2.62	(X)
Average household size of renter-occupied unit	1.87	(X)

The median number of rooms per housing unit is 5.8 with 54.4% of Ellington’s housing stock having six rooms or more (Table 5-6). More rooms typically indicate larger homes and more bedrooms per housing unit. 56% of Ellington’s housing stock has three or more bedrooms and nearly 20% of the housing stock has four or more bedrooms (Table 5-7).

Table 5-6. Rooms

Rooms Per Housing Unit	Ellington, Connecticut	
	Estimate	Percent
Total housing units	6,847	100%
1 room	133	1.9%
2 rooms	305	4.5%
3 rooms	723	10.6%
4 rooms	923	13.5%
5 rooms	1,036	15.1%
6 rooms	1,100	16.1%
7 rooms	1,055	15.4%
8 rooms	818	11.9%
9 rooms or more	754	11.0%
Median rooms	5.8	---

Table 5-7. Bedrooms

Bedrooms	Ellington, Connecticut	
	Estimate	Percent
Total housing units	6,847	100%
No bedroom	133	1.9%
1 bedroom	1,433	20.9%
2 bedrooms	1,447	21.1%
3 bedrooms	2,504	36.6%
4 bedrooms	1,225	17.9%
5 or more bedrooms	105	1.5%

Ellington’s housing stock is relatively young, with 43.1% of the housing stock being built since 1980 and 16.8% of housing being built since 2000 (Table 5-8). A young housing stock indicates that the housing stock has modern amenities that mostly likely make the housing product competitive in the overall marketplace. This may help to explain, at least in part, the low vacancy rate and strong occupancy.

Table 5-8. Year Structure Built

Year Structure Built	Ellington, Connecticut	
	Estimate	Percent
Total housing units	6,847	100%
Built 2014 or later	43	0.6%
Built 2010 to 2013	137	2.0%
Built 2000 to 2009	969	14.2%
Built 1990 to 1999	917	13.4%
Built 1980 to 1989	883	12.9%
Built 1970 to 1979	909	13.3%
Built 1960 to 1969	1,052	15.4%
Built 1950 to 1959	881	12.9%
Built 1940 to 1949	366	5.3%
Built 1939 or earlier	690	10.1%

Ellington’s householders are mostly new to the community. Over 90% of the householders moved into their housing unit since 1980 and 63.8% have moved in since 2000. This is consistent with the age of the housing stock and overall movement patterns of householders, especially the rental population. [Cite Census]

Table 5-9. Year Householder Moved into Unit

Year Householder Moved into Unit	Ellington, Connecticut	
	Estimate	Percent
Occupied housing units	6,717	100%
Moved in 2015 or later	276	4.1%
Moved in 2010 to 2014	2,016	30.0%
Moved in 2000 to 2009	1,993	29.7%
Moved in 1990 to 1999	1,393	20.7%
Moved in 1980 to 1989	393	5.9%
Moved in 1979 and earlier	646	9.6%

Housing Cost Characteristics

To understand housing affordability and housing need, it is imperative to understand the cost of housing. This section reviews housing value and costs for owner-occupied and renter-occupied housing. Table 5-10 presents the value of owner-occupied housing, which can be assumed to be mostly single-unit (single-family) housing. Ellington’s median value of housing is \$264,100 with over 75% of owner-occupied housing valued above \$200,000. In addition, 39.8% of the owner-occupied housing is valued above \$300,000.

To afford the median owner-occupied home at \$264,100 in Ellington, a household needs to have a household income of \$73,948 ($\$264,100 \times 0.28$). *[It should be noted, if $0.30 \times \$264,100$ is used for the calculation, the result would be \$79,230, almost identical to Ellington’s median household income. It is interesting that Ellington’s median income and median owner-occupied housing value are almost identical.]* Of the 4,408 owner-occupied housing units, 72.4% (3,191 units) have a mortgage (Table 5-11).

Table 5-10. Value – Owner-Occupied Housing

Value	Ellington, Connecticut	
	Estimate	Percent
Owner-occupied units	4,408	4,408
Less than \$50,000	124	2.8%
\$50,000 to \$99,999	136	3.1%
\$100,000 to \$149,999	193	4.4%
\$150,000 to \$199,999	613	13.9%
\$200,000 to \$299,999	1,582	35.9%
\$300,000 to \$499,999	1,594	36.2%
\$500,000 to \$999,999	157	3.6%
\$1,000,000 or more	9	0.2%
Median	\$264,100	---

Table 5-11. Mortgage Status

Mortgage Status	Ellington, Connecticut	
	Estimate	Percent
Owner-occupied units	4,408	4,408
Housing units with a mortgage	3,191	72.4%
Housing units without a mortgage	1,217	27.6%

Table 5-12 provides the Selected Monthly Owner Costs (SMOC) for housing units with a mortgage and Table 5-13 provides the SMOC for housing units without a mortgage. The SMOC, as explained by the U.S. Census, “are calculated from the sum of payment for mortgages, real estate taxes, various insurances, utilities, fuels, mobile home costs, and condominium fees.” The median SMOC for housing units with a mortgage is \$2,025 and \$902 for housing units without a mortgage.

Table 5-12. Monthly Owner Costs – With Mortgage

Selected Monthly Owner Costs (SMOC)	Ellington, Connecticut	
	Estimate	Percent
Housing units with a mortgage	3,191	3,191
Less than \$500	15	0.5%
\$500 to \$999	251	7.9%
\$1,000 to \$1,499	596	18.7%
\$1,500 to \$1,999	693	21.7%
\$2,000 to \$2,499	801	25.1%
\$2,500 to \$2,999	451	14.1%
\$3,000 or more	384	12.0%
Median	\$2,025	---

Table 5-13. Monthly Owner Costs – Without Mortgage

Selected Monthly Owner Costs (SMOC)	Ellington, Connecticut	
	Estimate	Percent
Housing units without a mortgage	1,217	1,217
Less than \$250	0	0.0%
\$250 to \$399	25	2.1%
\$400 to \$599	159	13.1%
\$600 to \$799	350	28.8%
\$800 to \$999	358	29.4%
\$1,000 or more	325	26.7%
Median (dollars)	902	---

Table 5-14 provides the Selected Monthly Owner Costs as a Percentage of Household Income (SMOCAPI). The U.S. Census explains, the SMOCAPI “is used to measure housing affordability and excessive shelter costs. For example, many government agencies define excessive as costs that exceed 30 percent of household income.” Based on the SMOCAPI, 26.7% of Ellington’s households with a mortgage and 27.4% of households without a mortgage are paying 30% or more of their household income on housing costs. It may be a bit surprising that such a high percentage of households without a mortgage paying 30% or more of their household income for housing. However, this is likely being driven by older and retired households with often lower fixed incomes. Based on this SMOCAPI, approximately 27% (or 1,176) of Ellington’s owner-occupied housing is unaffordable.

Table 5-14. Monthly Owner Costs as Percent of Household Income

Selected Monthly Owner Costs as a Percentage of Housing Income (SMOCAPI)	Ellington, Connecticut	
	Estimate	Percent
Housing units with a mortgage	3,191	3,191
Less than 20.0 percent	1,201	37.6%
20.0 to 24.9 percent	613	19.2%
25.0 to 29.9 percent	526	16.5%
30.0 to 34.9 percent	206	6.5%
35.0 percent or more	645	20.2%
Housing unit without a mortgage	1,185	1,185
Less than 10.0 percent	407	34.3%
10.0 to 14.9 percent	196	16.5%
15.0 to 19.9 percent	141	11.9%
20.0 to 24.9 percent	92	7.8%
25.0 to 29.9 percent	24	2.0%
30.0 to 34.9 percent	50	4.2%
35.0 percent or more	275	23.2%
Not computed	32	(X)

Table 5-15 presents the Gross Rent paid for occupied rental units and Table 14 provides the Gross Rent as a Percentage of Household Income (GRAPI). The median gross rent is \$1,161 and 28.4% of the households pay more than \$1,500 per month for rent. However, 913 (or 41.3%) of the rental households are spending 30% or more of their household income on rent—the unaffordable housing threshold set by government standards.

Table 5-15. Gross Rent

Occupied units paying rent	Ellington, Connecticut	
	Estimate	Percent
Total Units	2,276	2,276
Less than \$500	23	1.0%
\$500 to \$999	754	33.1%
\$1,000 to \$1,499	852	37.4%
\$1,500 to \$1,999	421	18.5%
\$2,000 to \$2,499	226	9.9%
\$2,500 to \$2,999	0	0.0%
\$3,000 or more	0	0.0%
Median (dollars)	\$1,161	---
No rent paid	33	---

Table 5-16. Gross Rent as Percent of Household Income (GRAPI)

Ellington, Connecticut	Estimate	Percent
Occupied units paying rent (excluding units where GRAPI cannot be computed)	2,211	2,211
Less than 15.0 percent	340	15.4%
15.0 to 19.9 percent	459	20.8%
20.0 to 24.9 percent	376	17.0%
25.0 to 29.9 percent	123	5.6%
30.0 to 34.9 percent	249	11.3%
35.0 percent or more	664	30.0%
Not computed	98	---

Based on owner- and renter-occupied housing unit costs and percent of household income being spent on housing costs, 2,089 (31.1%) of the 6,717 occupied housing units have households spending 30% or more on housing. This indicates that Ellington is faced with a housing affordability challenge. However, this does not inform us specifically as to housing need.

Household Income

To better understand and determine housing need, this section will further analyze household income and housing costs. The aim will be to determine, generally, what segments of the housing market are most challenged by housing affordability—at what incomes and price point is housing most needed. To accomplish this, household income, housing value, rent values, and types of household will be analyzed to determine what segments of the housing market are underserved by housing. This will help to inform us and better understand housing need.

Table 5-17. (Income by Household) presents a breakdown of households and household incomes by Total Households, Family Households, Married-Couple Family Households, and Non-Family Households. The Census defines each of these household categories as follow:

Household [Total]: consists of all the people who occupy a housing unit.

Family Household: contain at least one person related to the householder by birth, marriage, or adoption.

Married-Couple Family: is a husband and wife enumerated as members of the same household. The married couple may or may not have children living with them. The expression "married-couple" before the term "family" indicates that the household or family is maintained by a husband and wife.

Nonfamily Household: consists of a householder living alone (a one-person household) or where the householder shares the home exclusively with people to whom he/she is not related.

Table 5-17. Income by Household

Income	Ellington, Connecticut			
	Households	Families	Married-Couple Fam	Nonfamily
Total	6,717	4,188	3,380	2,529
Less than \$14,999	6.0%	1.6%	0.7%	13.4%
\$15,000 to \$24,999	8.4%	2.4%	1.0%	19.2%
\$25,000 to \$34,999	4.2%	1.9%	2.4%	8.0%
\$35,000 to \$49,999	12.3%	7.9%	7.2%	19.7%
\$50,000 to \$74,999	13.2%	9.1%	8.9%	20.0%
\$75,000 to \$99,999	15.8%	24.0%	17.5%	4.5%
\$100,000 to \$149,999	23.8%	30.9%	35.6%	9.6%
\$150,000 or more	16.1%	22.3%	26.9%	5.5%
Median income	\$79,917	\$104,836	\$114,960	\$41,330

The breakdown of income by household groups reveal meaningful differences in household income. While the median household income in Ellington for all households is \$79,917, family median income is \$104,836, married-couple family median income is \$114,960, and non-family median income is \$41,330. For sake of comparison, households, families, and non-family households will be used. Married-couple families, since they are a sub-set with the families' category, will not be used. However, we should keep in mind that that married-couple families—as part of family-households—have the highest median household income.

Families or family-households account for 62.3% of households and non-family households 37.7% of households. Of the family households, 77.2% earn \$75,000 (the approximate median household income of \$79,917) or more per year compared to the 80.3% of non-family households that earn less than \$75,000 per year. This indicates that non-family-households are more likely to experience housing affordability challenges than family-households. However, it should not be assumed that non-family households are of lesser socio-economic status, since 32.1% (2,156) of Ellington's households (22.2% of owner-occupied and 50.8% of renter-occupied housing) are 1-person (or 1-income households).

This difference in family and non-family income by percent of households above and below median household income (\$79,917) is dramatic, but not surprising based on the number of 1-person households and the characteristics of Ellington's housing stock. For example, regarding housing characteristic, 59.8% (or 4,095 units) of Ellington's housing stock is single-unit detached housing—nearly a mirror image of 4,188 family households. The fact is, single unit detached housing is commonly occupied by families. In addition, based on the value of owner-occupied housing—75.9% of Ellington's owner-occupied housing stock is valued over \$200,000, 40% is valued over \$300,000, and the median value is \$264,100—it is understandable that family-households have higher incomes than non-family households.

At this point, it is fair to assume based on family and married-couple family median incomes (\$104,836 and \$114,960, respectively) that most, not all, family households can secure housing in Ellington that is affordable, even though some family households may be paying more than 30% of their household income on housing. It is possible that some or all the family-households paying more than 30% of their household income are doing so by choice, not by need. It is also fair to assume that non-family households, based on a relatively low median household income of \$41,330, face the greatest housing affordability challenges in Ellington. In addition, it is possible that some or many non-family households paying more than 30% of their household income are doing so out of need, not by choice. However, at this point, these assumptions are

simply reasonable speculations based on what we know so far about housing costs and household incomes.

Assessing Housing Need

The aim of this assessment is to determine housing need. To accomplish that, this section will analyze household income by household type (total households, family-households, and non-family households) in comparison to Ellington’s existing housing stock by tenure (owner-occupied and renter-occupied). The method employed, presents the Household Income (Table 15) data in eight cohorts ranging from less than \$15,000 per year to \$150,000 or more per year. Then, based on the higher end of each household income cohorts, the affordable housing value is calculated at 2.8 times household income for owner-occupied housing (mostly likely single-family homes) and the affordable rent value is calculated at 30% of household income. The data for these calculations is sourced from the 2016 Census American Fact Finder estimates.

Census data (Table 15) on the percent (converted to a raw number) of household by income was utilized to determine the number of households in each income cohort. In addition, the Census data (Table 8) was used to determine the number of housing units in the eight housing value cohorts ranging from less than \$50,000 to \$1,000,000 or more for owner-occupied housing. The number of housing units valued within the household income cohort was then assumed to represent the number of households within that income cohort being served by those housing units. The same approach was used for rental housing, gross rents, and the number of units in each gross rent cohort as household (Table 13).

To calculate housing need, the number of households with incomes adequate to afford the estimated affordable home value or rent value were subtracted from the existing housing units at the approximate value or rent. The result of the calculation is the ‘Units Available Vs Adequate Income’ line in the tables below. A negative value indicates fewer units available at the given price point than households with the income to afford them. A positive value indicated more units available than households with the income to afford them. The negative values indicated housing need—regarding affordability—at that price point and housing income segment of the housing market.

[Method Note: Please note, this method and approach are not perfect. Census household income cohorts do not perfectly match housing and rent value cohorts. In addition, calculating home value affordability or rent value affordability at a specific income, does not capture the affordability of the entire income cohort. That said, the calculations do provide a general understand of the relationship between household income and housing value/rent and the distribution of household income and housing value/rent. Therefore, it provides insight as to the housing market segments where households are and are not being served by housing affordability.]

Tables 5-18 (A & B) present the calculations for all households and housing units in Ellington. Table A presents owner-occupied housing and Table B presents rental housing. Tables 25 (A & B) present the calculations for family-households in Ellington. Table A presents owner-occupied

housing and Table B presents rental housing. Tables 26 (A & B) present the calculations for non-family-households in Ellington. Table A presents owner-occupied housing and Table B by rental housing.

Table 5-18-A. Total Households by Income Compared to Existing (Owner-Occupied) Housing Stock by Value

Household Income	<\$15,000	\$15,000- \$24,999	\$25,000- \$34,999	\$35,000- \$49,999	\$50,000- \$74,999	\$75,000- \$99,999	\$100,000- \$149,999	\$150,000+	Totals
Number of Total Households	403	564	282	826	867	1,061	1,599	1,081	6,717
Est. Affordable Home Value (Household Income x 2.8)	\$41,997	\$69,997	\$97,997	\$139,997	\$209,997	\$279,997	\$419,997	\$420,000+	-
Existing Owner-occupied Housing Units (Percent of All Owner-occupied Units)	124 (1.8%)	136 (2.0%)	193 (2.9%)	613 (9.1%)	1,582 (23.5%)	1,594 (23.7%)	157 (2.3%)	9 (0.001%)	4,408
Households w/Adequate Income	403 (6.0%)	564 (8.4%)	282 (4.2%)	826 (12.3%)	867 (12.9%)	1,061 (15.8%)	1,599 (23.8%)	1,081 (16.1%)	6,683
Units Available vs Adequate Income	-279	-428	-89	-213	715	533	-1,442	-1,072	-2,275

The table above compares all households in Ellington, by household income, to the owner-occupied housing stock by value. The table shows that there are more housing units available than household with incomes between \$50,000 and \$99,999, indicating that there is not a housing affordability challenge or need for owner-occupied housing valued between \$150,00 and \$300,000. At incomes above \$100,000 and housing valued above \$300,000 there are fewer housing units available than households that can afford such housing. As a result, there is not a housing affordability need or issue at this higher-end segment of the housing market. However, there is limited housing supply at this higher-end segment of the housing market to serve the higher income households. Therefore, the limited availability of higher-value housing may be creating downward pressure on housing affordability in the housing market segments at or below \$300,000.

It is the lower-income cohorts with household incomes below \$50,000 (approximately 60% of local median household income) where housing need is the greatest with 1,009 fewer ownership housing units available than the total number of households in this market segment who can only afford housing valued below \$150,000. Most concerning, the households at incomes below \$25,000 (approximately 30% of local median household income) total 707 more households than available ownership housing units. This signifies that the greatest need for housing—affordable housing—is at and below 30% local median household income or ownership housing valued below \$80,000. This may, in part, explains why 26.7% of Ellington’s households with a mortgage and 27.4% of households without a mortgage are paying 30% or more of their household income on housing costs. Approximately 15% of Ellington’s households, in the lower-income cohorts, cannot afford owner-occupied housing in Ellington.

It is, however, important to note that Table 5-18-A is focused on ownership housing (primarily single-unit/single-family housing) compared to all household in Ellington. This means that some of those 15% of lower-income household who can't afford owner-occupied housing, may be able to afford rental housing. Table 16-B provides the same comparisons and calculations as above but aimed at rental housing. In this table, the greatest housing affordability challenge is at incomes over \$75,000, where there are no rental housing units available at rents over \$2,500 per month. As stated above, the lack of rental housing product at or above \$2,500 per month may be creating downward pressure on the lower value rental-market.

The area of greatest concern in Table 5-18-B is at incomes below \$15,000 (approximately 20% of median household income) where there are 380 fewer housing units available than households that can afford housing in this very low-income market segment. While some of these households may already being served by housing assistance programs, it is still safe to assume there is a great need at this lowest income segment of the market.

Table 5-18-B. Total Households by Income Compared to Existing (Rental) Housing Stock by Value

Household Income	<\$15,000	\$15,000- \$24,999	\$25,000- \$34,999	\$35,000- \$49,999	\$50,000- \$74,999	\$75,000- \$99,999	\$100,000- \$149,999	\$150,000+	Totals
Number of Total Households	403	564	282	826	867	1,061	1,599	1,081	6,717
Est. Affordable Monthly Rent Value (Household Income x 0.3)	\$375	\$625	\$875	\$1,250	\$1,875	\$2,500	\$3,750	\$3,750+	-
Existing Rental Housing Units (Percent of All Rental Housing Units)	23 (1.0%)	754 (33.1%)	852 (37.4%)	421 (18.5%)	226 (9.9%)	0 (0%)	0 (0%)	0 (0%)	2,276
Households w/Adequate Income	403 (6.0%)	564 (8.4%)	282 (4.2%)	826 (12.3%)	867 (13.2%)	1,067 (15.8%)	1,599 (23.8%)	1,081 (16.1%)	6,689
Units Available vs Adequate Income	-380	190	570	-405	-641	-1,067	-1,599	-1,072	-4,404

Tables 5-18-A and B focus on family-households, the households with the highest local median income of \$104,863. Table 5-18-A compares family-households in Ellington, by household income, to the owner-occupied housing stock by value. The data in this table demonstrate that there are no affordability challenges or housing need for families seeking ownership housing below \$100,000 in Ellington. However, at household incomes above \$100,000 and owner-occupied housing above \$300,000, there are 2,062 fewer housing units available than households that can afford such units. This means the higher-income segment of the market is underserved by housing market. However, as stated above, this does not mean there is a housing affordability need, since such high-income household can afford housing of lesser value. In addition, it is likely that this under-supply of higher-end housing is creating downward pressure on housing affordability for household incomes below \$150,000 and owner-occupied housing between \$300,000 and below \$400,000—the likelihood is that the majority of household are at the lower end of the income cohort.

Table 5-19-A. Family-Households by Income
 Compared to Existing (Owner-Occupied) Housing Stock by Value

Household Income	<\$15,000	\$15,000- \$24,999	\$25,000- \$34,999	\$35,000- \$49,999	\$50,000- \$74,999	\$75,000- \$99,999	\$100,000- \$149,999	\$150,000+	Totals
Number of Family Households	67	101	80	318	381	1,005	1,294	934	4,188
Est. Affordable Home Value (Household Income x 2.8)	\$41,997	\$69,997	\$97,997	\$139,997	\$209,997	\$279,997	\$419,997	\$420,000+	-
Existing Owner-occupied Housing Units (Percent of All Owner-occupied Housing Units)	124 (1.8%)	136 (2.0%)	193 (2.9%)	613 (9.1%)	1,582 (23.5%)	1,594 (23.7%)	157 (2.3%)	9 (0.001%)	4,408
Households w/Adequate Income	67 (1.6%)	101 (2.4%)	80 (1.9%)	318 (7.9%)	381 (9.1%)	1,005 (24.0%)	1,294 (30.9%)	934 (22.3%)	4,180
Units Available vs Adequate Income	57	35	113	295	1,201	589	-1,137	-925	+228

The table above demonstrates there is no rental housing available at household incomes above \$75,000 and rents above \$2,500 per month—a possible affordable housing challenge, but not a housing affordability need. However, a housing affordability need is demonstrated at incomes below \$15,000 (or 20% median household income). This further demonstrates the greatest housing need is most evident at the lower and lowest income segments of the market. However, overall family-households are not suffering greatly from the burden and hardship of affordability challenges and housing need.

Table 5-19-B. Family-Households by Income
 Compared to Existing (Rental) Housing Stock by Rent

Household Income	<\$15,000	\$15,000- \$24,999	\$25,000- \$34,999	\$35,000- \$49,999	\$50,000- \$74,999	\$75,000- \$99,999	\$100,000- \$149,999	\$150,000+	Totals
Number of Family Households	67	101	80	318	381	1,005	1,294	934	4,188
Est. Affordable Monthly Rent Value (Household Income x 0.3)	\$375	\$625	\$875	\$1,250	\$1,875	\$2,500	\$3,750	\$3,750+	-
Existing Rental Housing Units (Percent of All Rental Housing Units)	23 (1.0%)	754 (33.1%)	852 (37.4%)	421 (18.5%)	226 (9.9%)	0 (0%)	0 (0%)	0 (0%)	2,276
Households w/Adequate Income	67 (1.6%)	101 (2.4%)	80 (1.9%)	318 (7.9%)	381 (9.1%)	1,005 (24.0%)	1,294 (30.9%)	934 (22.3%)	4,180
Units Available vs Adequate Income	-44	653	772	103	-155	-1,005	-1,294	-934	-1,904

In Tables 5-20 A and B (non-family households) is where some of the greatest affordability challenges and housing needs are evident. Table 5-20-A demonstrates that ownership housing is mostly unaffordable to *non-family-households* at incomes above \$100,000 (ownership housing over \$300,000) and at low household incomes below \$35,000 (ownership housing under

\$100,000). This means there are some housing affordability concerns in the high-income segment of the housing market and housing affordability needs in the lower-income segments of the housing market for *non-family-households*. This is not surprising and the result of increases in single-person (1-income) *non-family-households* and a much lower media non-family-household income of \$41,330. The single person non-family household would include senior (widow or widower) populations, pointing to a potential need for elderly housing.

Table 5-20-A. Non-Family-Households by Income
Compared to Existing (Owner-Occupied) Housing Stock by Value

Household Income	<\$15,000	\$15,000- \$24,999	\$25,000- \$34,999	\$35,000- \$49,999	\$50,000- \$74,999	\$75,000- \$99,999	\$100,000- \$149,999	\$150,000+	Totals
Number of Non-Family Households	338	486	202	498	506	113	243	139	2,529
Est. Affordable Home Value (Household Income x 2.8)	\$41,997	\$69,997	\$97,997	\$139,997	\$209,997	\$279,997	\$419,997	\$420,000+	-
Existing Owner-occupied Housing Units (Percent of All Owner-occupied Units)	124 (1.8%)	136 (2.0%)	193 (2.9%)	613 (9.1%)	1,582 (23.5%)	1,594 (23.7%)	157 (2.3%)	9 (0.001%)	4,408
Households w/Adequate Income	338 (13.4%)	486 (19.2%)	202 (8.0%)	498 (19.7%)	506 (20.0%)	113 (4.5%)	243 (9.6%)	139 (5.5%)	2,525
Units Available vs Adequate Income	-214	-350	-9	115	1,076	1,483	-86	-130	-1,885

Table 5-20-B demonstrates there is no rental housing available at household incomes above \$75,000 and rents above \$2,500 per month. In addition, there is substantial housing need at incomes below \$15,000 (or 20% median household income). Furthermore, there are rental housing affordability challenges at incomes between \$35,000 and \$75,000. What Tables 5-20-A and -B demonstrate, is that the greatest affordability challenges and greatest housing need exist with the non-family-households, which is understandable with the low median household income in this cohort.

Table 5-20-B. Non-Family-Households by Income
Compared to Existing (Rental) Housing Stock by Rent

Household Income	<\$15,000	\$15,000- \$24,999	\$25,000- \$34,999	\$35,000- \$49,999	\$50,000- \$74,999	\$75,000- \$99,999	\$100,000- \$149,999	\$150,000+	Totals
Number of Non-Family Households	338	486	202	498	506	113	243	139	2,529
Est. Affordable Monthly Rent Value (Household Income x 0.3)	\$375	\$625	\$875	\$1,250	\$1,875	\$2,500	\$3,750	\$3,750+	-
Existing Rental Housing Units (Percent of All Rental Housing Units)	23 (1.0%)	754 (33.1%)	852 (37.4%)	421 (18.5%)	226 (9.9%)	0 (0%)	0 (0%)	0 (0%)	2,276
Households w/Adequate Income	338 (13.4%)	486 (19.2%)	202 (8.0%)	498 (19.7%)	506 (20.0%)	113 (4.5%)	243 (9.6%)	139 (5.5%)	2,525
Units Available vs Adequate Income	-315	268	650	-77	-280	-113	-243	-139	-249

Table 5-21 provides a summary of the findings from all the previous four tables. Shown together, the results of each household group and tenure, reveal that there is an undersupply of housing in the higher-income segments of the housing market—household incomes above \$100,000 and housing values over \$300,000 and rents over \$2,500 per month. As previously discussed, the lack of housing availability in these high-income segments of the market, may be creating downward pressure on housing affordability in the \$75,000 to \$99,999 household income segment (housing valued at \$225,000 to \$299,997). For example, there are 2,680 households with incomes over \$100,000, most of whom are not being served by this segment of the market. If half those households (1,340 household) are pushed into the \$225,000 to \$299,999 housing market—the segment of the market with housing available that these households can afford—the units available in the \$75,000 to \$99,999 household income in the total households (Table 16) and family households (Table 17) categories become negative. This further demonstrates that the limited supply of higher-value housing may be creating downward pressure on the lower-value and lower-income segments of the housing market.

Table 5-21. Summary of Findings

Units Available vs Adequate Income	<\$15,000	\$15,000-\$24,999	\$25,000-\$34,999	\$35,000-\$49,999	\$50,000-\$74,999	\$75,000-\$99,999	\$100,000-\$149,999	\$150,000+	Totals
Table 18. Total Households									
A. Owner-Occupied Gap	-279	-428	-89	-213	715	533	-1,442	-1,072	-2,275
B. Rental Units Gap	-380	190	570	-405	-641	-1,067	-1,599	-1,072	-4,404
Table 19. Family Households									
A. Owner-Occupied Gap	57	35	113	295	1,201	589	-1,137	-925	+228
B. Rental Units Gap	-44	653	772	103	-155	-1,005	-1,294	-934	-1,904
Table 20. Non-Family Households									
A. Owner-Occupied Gap	-214	-350	-9	115	1,076	1,483	-86	-130	-1,885
B. Rental Units Gap	-315	268	650	-77	-280	-113	-243	-139	-249

The Table 27 summary also reasserts what has been evident throughout this assessment. The greatest need, the greatest housing affordability need, is in the less than \$15,000 household income cohort, followed by the \$15,000 - \$24,999 cohort. These lower-income segments of the housing market represent ownership housing below \$80,000 and rental housing below \$700 per month. These are the most vulnerable households, those most likely suffering the greatest affordability hardship, with the greatest need. Based on overall assessment of household and housing data, a fair estimate is that there are between 300 and 400 households (4.5% to 6% of Ellington’s occupied housing) that need more affordable housing in these lower-income cohorts and market segment.

Housing Need Versus Demand

It is important to be clear that need and demand are not the same. Just because there is a need for affordable housing at certain price point, does not mean there is actual demand for the construction of new housing at that price point. Housing demand is driven by job growth, population growth, and ultimately, household formations—new households being formed from growth in jobs, growth in population, or splits of existing households into two or more households (e.g. divorce, adult children moving out of parents, etc.). Connecticut and the Hartford Metropolitan Region have experienced stagnant job and population growth over the past 30-years. Therefore, the housing demand-drivers overall are weak and housing demand—for new housings—has been driven mostly by household formations, functional obsolescence of existing housing units, and the replacement of demolished housing units.

To understand demand in Ellington, specifically the absorption of new housing into the Ellington housing market, we reviewed the Department of Economic and Community Development (DECD) housing permit data from 1997 to 2017 (a 21-year period). During this period, a total 2,018 new housing units were constructed. Of these 2,018 units, 1,357 (67%) were 1-unit dwellings, 8 were 3&4-unit dwellings, and 653 were multi-family (5+) unit dwellings. A total of 48 units were demolished, resulting in a net gain of 1,970 housing units. This results in an absorption rate of 93.8 or 94 (rounded up) units per year over the 21-year period. The highest year was 1998 with 162 units constructed and the lowest year was 2010 with 27 units constructed. This 21-year history includes periods of economic growth, stagnation, and decline, provides confidence in projecting approximately 94 units of housing construction/growth per year over the next 5 to 10 years—the effective period of the new Plan of Conservation and Development.

Table 5-22. Ellington Housing Permits Issued by Year

Permits	Total Units	1 Unit	2 Unit	3 & 4 Units	5 Units or More	Demo	Net Gain
2017	100	42	0	0	58	6	94
2016	90	40	0	0	50	4	86
2015	112	41	0	0	71	3	109
2014	84	44	0	0	40	0	84
2013	40	40	0	0	0	0	40
2012	36	36	0	0	0	0	36
2011	108	28	0	0	80	0	108
2010	27	27	0	0	0	0	27
2009	72	32	0	0	40	0	72
2008	87	47	0	0	40	4	83
2007	95	71	0	0	24	2	93
2006	120	96	0	0	24	0	120
2005	122	90	0	0	32	9	113
2004	74	74	0	0	0	0	74
2003	122	122	0	0	0	3	119
2002	143	111	0	0	32	2	141
2001	84	84	0	0	0	3	81
2000	129	129	0	0	0	1	128
1999	138	94	0	0	44	10	128
1998	162	50	0	8	104	0	162
1997	73	59	0	0	14	1	72
Total	2,0	1,3	0	8	653	48	1,970

This not only provides us with a planning period of 10 years and new housing construction estimates 100 units per year or 1,000 units over the next 10-years, but it also provides a means of estimating the market capacity and planning for the creation of new affordable housing units aimed at addressing housing need. To accomplish this, the first objective should be ensuring that enough affordable housing is created each year to not decrease the percent (5.4%) of qualified units in accordance with 8-30g. The second objective should be working toward meeting the 10% threshold of qualified housing unit in accordance with 8-30g. Today, the 5.4% equals 364 housing units. To achieve 10%, based on the existing 6,717 occupied housing units, Ellington would need 672 qualified housing unit (or 308 more qualified units than exist today). Keeping in mind that numerator and denominator are moving targets, Ellington would need to create approximately 41 affordable qualified housing units per year (a total 410 new qualified units) over the next 10 years, if 1,000 new housing units were built over that period. Adding 41 affordable qualified units per year or 410 such units over 10-years, equals 41% of the project housing to be constructed (per year or total).

It would unreasonable to assume that 41% of new housing per year over 10-years in Ellington could or would be qualified affordable housing units—that is even more than the 8-30g qualifying application minimum of 30%, which most developers and towns deem to be

excessive. An aspirational goal would be 20% or 20 affordable qualified units per year, with a realistic expectation of hitting 15% or 15 affordable qualified units per year. This would produce between 15 and 20 affordable qualified units per year and 150 to 200 affordable qualified units over the next 10 years. That is about half of the housing affordability need, the 300 and 400 households in need.

A Housing Strategy to Address Housing Need

To intervene in the housing market with the aim of addressing housing need, Ellington needs to be intentional and strategic in its interventions. Being intentional means that Ellington must want to address housing need and affordability—having the political will to embrace and help those most vulnerable households. Being strategic means that Ellington must adopt policies and programs aim specifically at the outcome of improving housing affordability. To accomplish this, there are number of strategic interventions that Ellington can adopt and employ that will improve housing affordability, without creating the negative implications that are often assumed to result from affordable housing. Therefore, the Plan recommends strategies that target zoning, permitting, and taxes.

Considerations/Strategies

- **Focus on Housing Need:** Focus on housing need, not tenure (owner vs renter) or type of housing (single vs multi-family). Ellington provides a diversity of housing types by tenure and type. Therefore, Ellington should shift its focus to housing need.
- **Multi-family Unit Mix:** Ellington should seek to provide a mix of 1, 2, and 3-bedroom units in multifamily housing development. As a guideline, the following mix is recommended: 30% - 40% 1-bedrom, 40% - 50% 2-bedroom, and 5% - 15% 3-bedroom units.
- **Maintain Housing Stock Balance:** Ellington provides a good mix, balance, and diversity in housing stock. The Plan recommends that Ellington seek to maintain the balance of both single-detached housing vs multi-family housing and owner-occupied housing vs renter-occupied housing. The recommended mix should be around: 63-65% single-detached and owner-occupied housing with around 35-37% multi-family and renter-occupied housing.

Zoning Strategies

The following are zoning strategies designed to intentionally intervene in housing affordability and housing need:

1. **Inclusionary Zoning:** Create an inclusionary zoning provision that requires 7% of housing, in any housing development, to meet the requirement of affordable housing

under 8-30g.

- This, at the very least, will encourage and provide affordable housing, while ensuring that the percent of qualified affordable units (5.46% today) does not further decline.
 - At a rate of 7% of units in any housing development, the inclusion of affordable housing will not be noticeable, nor will it create any negative impacts. For small housing developments of 10 or 20 units, the actual effective percentage of units will be approximately 10% and would stabilize the existing 5.46% of qualified affordable units.
2. **Workforce Housing:** Provide for greater flexibility regarding the Dimensional and Area Standards (Section 3.6.6 of the Zoning Regulations) in the ‘Workforce Housing Provision’ (Section 3.6.7 of the Zoning Regulations).
 - Amend Section 3.6.6 to allow modification to all or most of the dimensional requirements with the aim of provide an incentive to utilize this provision.
 - Reduce the 1 garage per unit to 0.5 or 0.75 garages per unit with density bonuses for ‘workforce housing’.
 - Reduce the workforce housing percentage required from 20% to 15%.
 3. **Elderly Housing:** Allow private market elderly housing and include an affordability provision of 20% to 30% affordable and compliant with 8-30g.
 - There is need, overall, for elderly housing in Ellington and the greater regional market. The Town can satisfy that need and at the same time provide afford housing for a population that needs affordable housing options.
 4. **8-30g Application:** Create a ‘friendly’ 8-30g zoning regulation (preferably an overlay zone) that allows for and establishes a process for 8-30g development application.
 - The idea is to be proactive. Rather than having an 8-30g application forced upon you, create an 8-30g zoning provision that allow an 8-30g compliant development designed by the Town, not the developer.
 5. **Mixed-Use Development:** Create a mixed-use development housing provision that requires housing in mixed use developments to provide 15% workforce housing.
 - Mixed-use developments, specifically the housing in such developments, appeals most to non-family households. Therefore, such housing provides a good opportunity to provide affordable options.
 - For mixed-use housing, specifically those units above first floor commercial use, allow smaller unit sizes: studio = 500 sf, 1-bedroom = 650, 2-bedroom = 900 sf. I would not focus on (or allow) 3-bedroom units is such situation.

Permitting Strategies

The following are permitting strategies designed to intentionally intervene in housing affordability and housing need:

1. **Permitting Fees:** Provide reduced permitting fees for affordable housing units. This could include land use applications, zoning, and building permits.

- Entitlements and permitting create real costs for housing development. The entitlement processes can cost 3% to 6% of the total development cost. While such percent's sound low, they are meaningful when the return-on-investment run between 12% and 15%. Reducing fees can be a viable means of incentivizing affordable housing.

Tax Strategies

The following are tax strategies designed to intentionally intervene in housing affordability and housing need:

1. **Tax Incentives:** Provide tax incentives for affordable units in workforce, elderly, and mixed-use developments.
 - On the developer side, the barrier to providing affordable units is the reduced return-on-investment. The cost to construct such units, if they are to be to same standard of market units, is as much as the market units. Therefore, reduced sales value or rents can and do undermine the financial feasibility of affordable units and the whole development.
 - Tax incentives, as with reduced permitting fees discussed above, can provide a real incentive to constructing affordable housing units.
 - Tax incentives could range from 10% to 100%, from 1 to 10 years, and could be for the affordable units or the whole development. Note, tax incentives have become common for multi-family residential development. In recent years, many communities, including Bloomfield, Canton, and Wethersfield have provided tax incentives for multi-family residential developments.
 - Recommended Incentive Structure: 100% of post-occupancy taxes for the first two-years, 50% in year three, and 25% in years four and five.

The above strategies can produce 15 to 20 units of qualified affordable housing each year. With an aggressive approach including tax incentives aimed at elderly housing—Town- owned or private market—more units per year could be achieved in excess of the goal of 20 affordable qualified units per year. This would provide a 10 to 20-year plan to provide affordable qualified housing (the 8-30g required 10% affordable) and meet the housing needs of the most vulnerable and burdened populations within Ellington. In addition, adding market-rate housing aimed at the \$75,000 to \$125,000 household income levels (owner-occupied housing between \$210,000 and \$350,000) would go a long way to ease the affordability challenges at the higher-income segment of the Ellington housing market.

Chapter Six: Economic Development – Commercial and Industrial Development

Economic Development Overview

Commercial and industrial development is important to the community and community planning for many reasons. First, it is a source of economic development, both in terms of providing jobs for Ellington residents and tax revenues for local government. Second, commercial and industrial development provide services and amenities for residents and businesses. Last, commercial and industrial development contribute to the overall character of the community.

Ellington has several commercial and industrial areas. These include the Route 83 corridor (from the Vernon town line to the north and the airport to the north); the Town Center Triangle (between Main and Maple Streets and west to Tomoka Avenue); the Five Corners area; the Industrial Park/Windermere area; Crystal Lake area; and Route 140 West (South of Reeves Road). While each of these areas play a role in commercial and industrial development, some of the areas are small, neighborhood scale, and distanced from major arterials. From a macro perspective, Ellington is distanced from the interstate highway system, creating a competitive disadvantage for large-scale commercial and industrial development. However, this does not mean that commercial and industrial development are not important or not possible, but that the locations for such development—in a meaningful scale—is limited mostly to the Route 83 corridor and the Town Center Triangle. Therefore, this Plan recommends focusing on these two areas as the primary opportunities for commercial and industrial development.

The Route 83 corridor, being the primary arterial in Ellington—providing access to south to I-84—with high traffic counts and being mostly included in the sewer service area, is the area most suitable and likely for commercial development. While wetland and floodplain constraints exist to the west, the frontage acreage along Route 83 are suitable for development. In addition, the existing lower density development with large setbacks on the eastside of Route 83 provide opportunity for additional commercial development in the form of pad sites/in-fill development.

The Town Center Triangle, with approximately 230 acres of land and approximately 80 acres of under or un-developed land, and for commercial uses, provides a real opportunity for future development. In addition, the area is within the sewer service area, providing the opportunity for higher density, mixed-use, and walkable development. Most important, the public outreach program as part of the POCD planning process revealed that Ellington residents want a more distinct, compact, and walkable (bikeable) town center.

Ellington airport is a unique asset to Ellington and could provide economic development benefits to the community, if it were strategically planned for and positioned to create economic opportunity. Recognizing the outcome of the *Feasibility Study for Analysis of Municipal*

Purchase of the Ellington Airport by the Town of Ellington, this Chapter/Plan does not recommend the Town to own the airport. This Chapter/Plan recommends the Town consider being a strategic partner in encouraging and facilitating the repositioning of the airport to become a more robust facility and economic asset to the community.

In addition to the conventional commercial and industrial sectors that are the focus of economic development, it is important to understand and recognize that Ellington has a meaningful agricultural sector with many working farms and over 5,000 acres of active agricultural land—approximately 25% of the total land area of Ellington. Therefore, agriculture needs to be included in the Plan of Conservation and Development, not simply in terms of open space and farmland conservation, but as meaningful and viable means of economic development. Changes in consumer behavior and preferences and the shift toward experiential activities has given rise to local and organic products, farm-fresh products, farmers markets, and agricultural tourism. This provides Ellington with a real opportunity to capitalize on these emerging markets and position itself and its local farms to reap the benefits of attracting visitors and consumers to local farms (see Chapter 5 discussion to amend the Zoning Regulations to allow additional commercial activities on farms).

The last area of focus regarding commercial and industrial development is site design. Site design is not simply about parking, stormwater management, landscaping, and lighting. Site design, collectively, is also about the aesthetic qualities and visual appeal of development. In the context of economic development, site design contributes to community character and the image of a community. Therefore, through site design, Ellington should seek to convey an image of pride, confidence, and investment—a place where individuals and businesses are willing to invest their time, energy, and money.

This chapter will focus on these key areas and the overall need and strategies to create an environment conducive to economic development. For a more detail discussion of economic development, see the two reports prepared for the Plan of Conservation and Development Steering Committee (included in the Appendix) titled *The Work of Economic Development and The Practice of Economic Development*.

The Route 83 Corridor

The Route 83 corridor is the most significant economic development area in Ellington. The corridor stretches approximately three miles from the Vernon town line north to Ellington Airport. Most of the corridor, especially the western side is already zoned for commercial and industrial development. With strong traffic counts, the availability of public water and sewer in much of the corridor, and a meaningful concentration of existing businesses and multi-family development, the Route 83 corridor is the logical and likely location of future commercial and industrial development. While the Route 83 Corridor does have some development

challenges and constraints—most notably are the wetlands and floodplain to the west—there is ample acreage along the western frontage of Route 83 and additional developable land along the eastern frontage that provide development opportunities. Most important, the 2015 Route 83 Corridor Study provides a framework for the implementation of a development strategy for this corridor—no further study is needed or required. The Route 83 Corridor Study should continue to guide the Town in this area.

Since the Route 83 area is mostly served by public water and sewer, it should be designated as a receiving area for the transfer of open space and/or development rights. In doing so, a transfer program and associated zoning provisions can be developed to allow density bonuses for development in the Route 83 Corridor. This would overcome some of the development constraints, by maximizing the density of development on the developable acreage within the Corridor. In doing so, it may also create an economic incentive and economic opportunity for commercial development.

Recognizing that Ellington’s location—primarily distance from and access to the interstate highway system—creates limits on type and quantity of commercial and industrial development, it would be advantageous to allow mixed-use residential and commercial development within the Corridor. The residential development could subsidize the commercial development cost and would provide greater market demand for the subsequent commercial development. In addition, through the transfer of open space and/or development rights, allowing mixed-use residential development within the Corridor would most likely drive the preservation of prime agricultural and open space land outside of the receiving area, furthering the conservation goals of this Plan. To accomplish this, the Plan recommends the following strategies for the Route 83 Corridor.

Considerations/Strategies

- Adopted the 2015 Route 83 Corridor study and its recommendations as an appendix to this Plan. By inclusion of the Route 83 Corridor study as part of this Plan, the recommendations of the Corridor Study are included as part of these recommendations.
- Review and update of the Planned Commercial Zone to create a flexible Master Plan development approach and process that creates flexibility and focus more on quality of design (site design and architecture) than on the bulk, area, and density of development.
- The Commission may want to consider allowing the Planned Commercial Zone (as modified in the above recommendation) to also be applicable or applied to other areas of the Route 83 Corridor, since this zone appears to best accommodate the commercial development Ellington wants.
- Create a transfer of open space and/or development rights programs (as discussed in Chapter Three and Chapter Four) to incentivize higher density development within the Corridor. In doing so, designate the areas in the Corridor that are within the sewer service area as receiving areas for the transfer of open space and/or development rights from more rural areas of town. The greater density and residential uses may overcome some of the

challenges of financing commercial development, creating an incentive and greater economic opportunity for commercial development.

- In the process of creating a transfer of open space and/or development rights program, the Commission should explore the utilization of such transfers for commercial density, not just residential. This may include incentives regarding lot coverage, setback, building height, and other bulk and area requirements.
- Improve upon and create more robust site design standards within the Zoning Regulations. Such standards should include robust provisions for low impact development, landscaping, parking, architecture, consolidated parcels, and access management provisions. By improving the site design standards with the aim of improving the quality of development/design within the Route 83 Corridor, such provision will also apply to and improve the quality of development and design in other commercial and industrial areas.

The Town Center Triangle Area

Throughout the public outreach process for this Plan, the residents of Ellington made it clear that they want a more robust, vibrant, distinctive, and accessible Town Center. In addition, it was evident that the community does not want to change or disrupt the historic character and development pattern along Main Street and near the Town Green. The Town Center Triangle Area (the area bounded by Main Street, Maple Street, and Route 83) provide a unique and meaningful opportunity for future development—specifically, the creation of town or village center. The area is approximately 230 acres, with approximately 80 acres of un-developed or under-developed land. In addition, the areas most suitable or potentially available for future development within this area are already zoned for commercial development. In addition, the natural features and area that would typically be viewed as development constraints (specifically wetland) in the area can be master planned into any development concept as opportunities for public spaces and place-making amenities.

As conceptualized in the sketches in Exhibits 6-1 and 6-2, this area is suitable for higher density, village style, mix-use development that is walkable. In addition, the area provides opportunities for public spaces: parklands, walking and bike trails, and functional spaces for public gatherings. In short, the Town Center Triangle could become a focal point, a functional village center, for the Town. To accomplish this, the Plan recommends the following considerations and strategies.

Considerations/Strategies

The creation of an Ellington Center Village Plan.

Such a plan should include an extensive community outreach program, market analysis, and conceptual designs. The aim and outcome should be to create an economically viable conceptual plan to shop/market to the development community to secure a capable developer.

The Village Plan should also explore and consider:

- The creation of a Village District Zone that would provide a flexible master plan approach to development. Such an approach would focus more on site-design, public spaces, and architecture rather than bulk, area, and density.
- That any development in the Village District Zone be a mixed-use commercial (office, retail, service) and residential development. The Plan should include recommendations for the distribution uses: ground floor retail, service, and office; upper floor(s) office and residential; and stand-alone residential buildings and/or town houses.
- Requiring the inclusion of well-designed public spaces: parklands, trails, and community gathering spaces.
- Designating the area as a receiving area for the transfer of open space and/or development rights, providing density bonuses for residential development.
- The inclusion of affordable housing, in accordance with 8-30g and the housing needs assessment in Chapter 6.

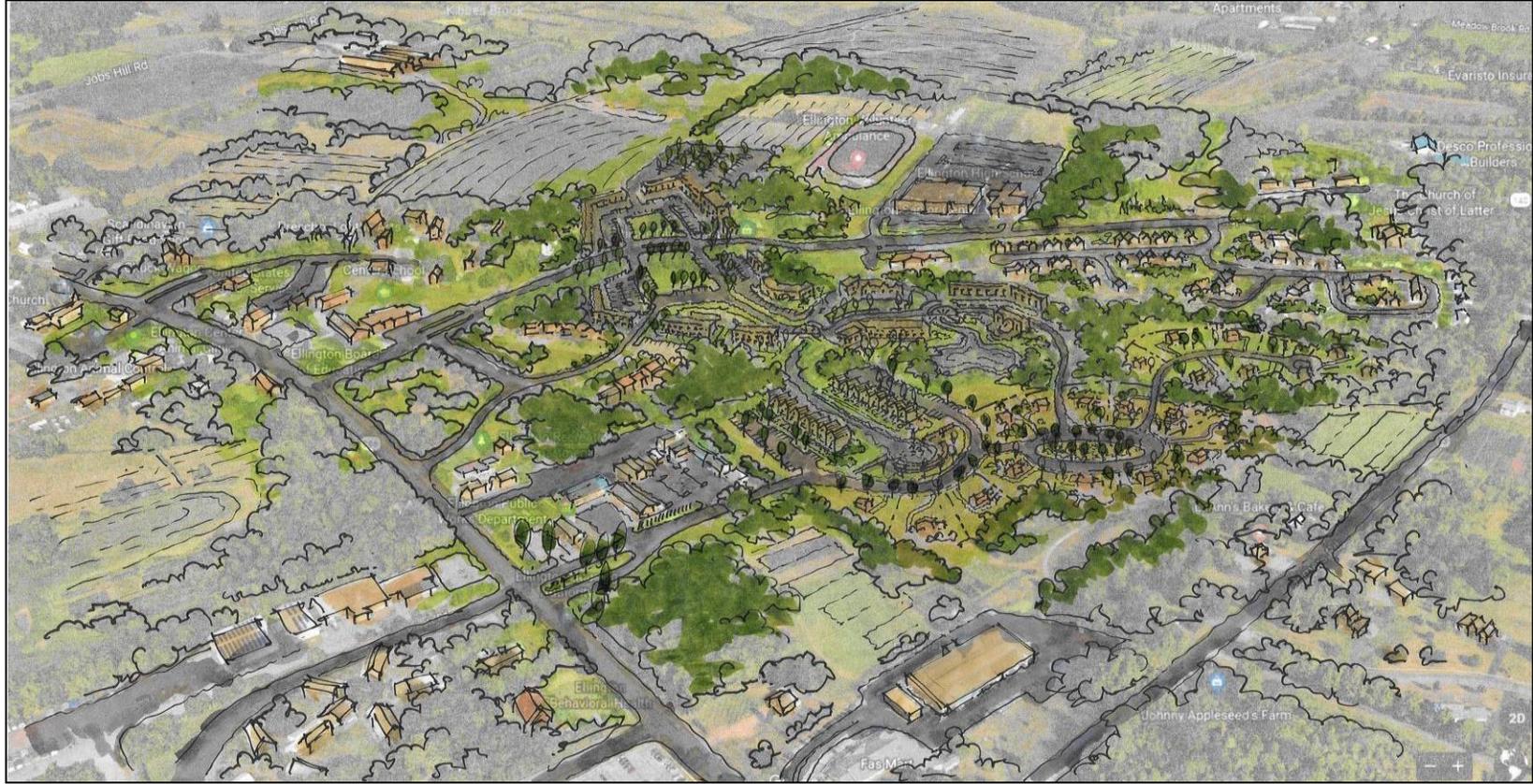


Exhibit 6-1
Conceptual Rendering

Ellington Airport

Ellington airport is a unique asset to Ellington and could provide economic development benefits to the community, if the airport were strategically planned for and positioned to create economic opportunity. To begin, it must be recognized that once an airport closes, a new airport will never open. The number of general aviation airports throughout the country is in decline. Not all communities have general aviation airports. This makes such airports unique and provides host communities with an asset and amenity that distinguishes them from other communities in the competitive world of economic development. Ellington airport is an asset and amenity to Ellington. However, its small size (1800-foot runway) limit its capabilities and restrict its potential. While the decision has been made that it does not make economic sense for Ellington to own and/or operate the airport, the Town is still a stakeholder and has a role to play in the future of airport and its role in the community. A review of the previous airport studies and preliminary look at the airport and surrounding properties revealed that possible opportunities may exist to expand the airport, its runways, and its facilities. In addition, such improvements may free-up additional land for industrial development (see the conceptual sketches below). Therefore, this Plan recommends further exploration of the airport's potential. To accomplish this, the Town should consider the following strategies.

Considerations/Strategies

Create an Airport Advisory Committee.

The committee should be made up of key stakeholders: The Town, airport owners, airport tenants, the Economic Development Commission, Planning and Zoning Commission, Board of Education, and community residents.

- The Airport Advisory Committee should be charged with studying the airport, its potential, and its role in the community and economic development.
- It should provide studies, reports, and other information to Town departments, boards, and commissions.
- It should be an advocate for the airport.

Conduct an Airport Expansion Feasibility Study.

This study should explore:

- The potential for expanding and reorientation of the runway.
- The need and potential for land acquisition for expanding the runway.
- The potential for an instrument approach to an expanded runway.
- The market potential for increased general aviation use and activities.
- The reconfiguration of land and buildings and the potential for new industrial development.
- The creation of an aviation program at the high school and possible partnership with the airport in the creation of such a program.



Exhibit 6-2

Conceptual Rendering of Ellington Airport

Agriculture as an Economic Sector

Agriculture is a meaningful and viable economic sector in Ellington. With many working farms and over 5,000 acres of active agricultural land—approximately 25% of the total land area of Ellington—the agricultural sector must be considered and nurtured as viable means of economic development. In addition, the best way to preserve farmland is to preserve farming and the farmer. Most important, Ellington has some very enthusiastic, creative, and hard-working young farmers—a unique and advantageous circumstance that is not often the case for most communities. Therefore, it is imperative that Ellington work with its agricultural sector to ensure that it remains viable, has the support it needs, and can possibly even grow.

In the context of growing Ellington’s agricultural sector, changes in consumers behaviors, preferences for locally sourced products, and shifts in consumption toward experiential activities has given rise to new opportunities in agriculture, most notably the growth in agritourism. While Ellington have a more robust agricultural sector than most farming communities, it has little in the way of agritourism. The rise of agritourism and Ellington’s lack of agritourism presents an opportunity that should be explored, and if possible, exploit the opportunity. To accomplish this, Ellington should consider the following strategies.

Considerations/Strategies

- The creation of an Agriculture Advisory Commission. The committee should be made up of key stakeholders, including local farmers.
- Review all Town regulations and ordinances with the aim of removing barriers to farming to ensure that the Town is not closing-down opportunities.
- Amend the Zoning Regulations to allow agritourism and specific agritourism uses. This may include banquet spaces or functions, farm-to-table dinners, tasting rooms and restaurants, vineyard, breweries, tours, outdoor activities, bakeries, etc.
- Amend the Zoning Regulations to allow small country inns, and/or other forms of hospitality that may be reasonably associated with farms.
- Create and/or organize harvest events, fairs, and festivals that highlight local farms, their work and products, and draw positive attention to Ellington’s agricultural community.

Site Design Standards

The last area of focus regarding commercial and industrial development is site design. Site design is not simply about parking, stormwater management, landscaping, and lighting. Site design, collectively, is also about the aesthetic qualities and visual appeal of development. In the context of economic development, site design contributes to community character and the image

of a community. Quality site design conveys a message of community pride, confidence, and investment. It tells local residence, visitors, and investors that this community is a place where individuals and businesses are willing to invest their time, energy, and money.

Therefore, Ellington should complete a comprehensive update of the Zoning Regulation’s site design provisions. Such an update should focus on providing modern site design standards that follow best practices. In addition, the Commission should seek to provide flexibility in standards that allow for better design, rather than simple compliance with standards and requirements. Such updated provisions should focus on sustainable practices such a low impact design, shared parking, energy efficient lighting, consolidated parcels, access management, and high-quality landscaping. The Commission should seek to raise the standards and expectations for the quality of design—both site design and architectural design—and insist that land use applications incorporate higher quality designs and materials.

Economic Development

The work of economic development, simply stated, is *the process and practice of creating wealth and attracting investment* to a community. In fact, *creating wealth and attracting investment* is not only the work of economic development, it is the work of community development, community planning, and place-making.

Wealth can be created, and investment can be attracted in many ways and forms that are not simply about providing jobs, marketable goods, and services. For example, wealth can be created through property improvement, infrastructure investment, and increasing homeownership—especially when investments are strategically aimed at increasing property value. In this regard *attracting investment* in housing—ensuring that a community’s housing stock (also a marketable good) remains competitive. Therefore, the work of economic development is about creating a culture of investment by managing the processes of governance and nurturing the economic-ecosystem of the community. What is most important in the work of economic development is that community embrace economic development. A community must want and be committed to economic development and work toward constant improvement.

The practice of economic development recognizes the work of economic development as a system, a complex adaptive ecosystem. Therefore, the practice of economic development focuses on the activities and tools that a community can create and utilized to engage in the work of *creating wealth and attracting investment*. While Ellington is already engaged in and utilizing some economic development practices, programs, tools, and strategies, it should seek to be more proactive in efforts.

The key to economic development—cultivating an environment and economic-ecosystem aimed at creating wealth and investment—for a smaller community such as Ellington, is to raise the level of public awareness around economic development—to embrace economic development

and continuously work towards improving economic development. To accomplish this, there are many small, inexpensive, and incremental things Ellington can do to build upon existing practices and grow its economic development capacity.

The following recommendations are organized into short and long terms strategies that Ellington can implement to improve its economic development efforts. The short-term recommendations are low-cost and easy to implement practices that elevate the work and importance of economic development. The long-term recommendations are more formal and more costly practices that will build upon the short-term recommendations and build greater capacity (resiliency) to create wealth and investment.

Considerations/Strategies

In the **short-term**, implement the following:

- ***Economic Development Training:***

Economic development is everyone’s job. Economic development starts with customer service. Therefore, Ellington should implement a training program for all Town Hall staff, boards, and commissions.

- ***Encouraging What Ellington Most Wants:***

Investment flows to the location of least resistance. Therefore, if Ellington wants certain kinds of economic development and investment, it should encourage such uses and investments. This can be accomplished by conducting a comprehensive review of the permitted and special permitted uses contained in the Zoning Regulations with the aim of allowing the economic development activities/uses the Town most wants by staff approvals and Commission site plan, not the more subjective, time consuming, and costly special permit process.

- ***Business Outreach and Engagement:***

Too often local government spends very little effort cultivating relationships with the business community. Ellington should proactively work to engage the business community. Some simple and time effective ways to do this are to host quarterly meet & greet sessions at town hall with specific businesses sectors, conduct monthly business visitations (even just one business a month), and work with the Chamber of Commerce to host business after-hours networking events.

- ***Celebrate Ellington Businesses:***

The Economic Development Commission, in association with Board of Selectmen, should seek to celebrate Ellington businesses and their investment in Ellington. Some simple ways of doing this include the implementation a ‘ribbon cutting’ program for new businesses and existing business expansions. Another activity would be to implement a yearly ‘Business Investment’ award program. Three award categories could be: Business Expansion, New Business, and Property Maintenance.

- ***Community Information Packet:***

Many small and some large businesses don't have access to good demographic and socio-economic data—data that can be important to their business planning activities and investment decisions. Providing such information is a simple way to assist and inform businesses—to help educate them about your community. Therefore, the Ellington Economic Development Commission should create and maintain a Community Information Packet that can be made available on the Town's website as a downloadable PDF. The CERC Town profile is a good starting point for demographic, socio-economic, and other community-based information. The Town Profile can be supplemented with detailed and robust community data and real estate market information.

In the **long-term**, implement the following:

- ***Economic Development Planning:***

Create a comprehensive Economic Development Strategy. This should include a focus on Ellington's image, community brand, and marketing.

- ***Strategic Community Investment:***

When developing budgets, especially the Capital Improvements Plan (CIP), Ellington should conceptualize government budgets and projects as an opportunity and means of making strategic investments in economic development—investing in Ellington's future. CIP investments aimed at place-making and quality of life, such as walking trails, sidewalks, bike lanes and trails, public/community space can go a long way to creating the economic development ecosystem that businesses and residents seek—providing quality of amenities.

- ***Intentional Development:***

Most communities are reactive to development—allowing the market to propose developments that are then reviewed, debated, and approved or denied. Being intentional about the development Ellington wants, is about investing (time, energy, and money) in planning for development. In the Town Center Triangle and along the Route 83 corridor, Ellington should consider creating conceptual designs for future development and market those designs to the development community. This could also be done in association with an expedited permitting process—if a developer strives to develop the communities conceptualized plan, then a simplified approval process (site plan) is provided to the developer.

The above short- and long-term recommendations are not all an all-inclusive list of activities and strategies, more could be done to further engage in the work and practice of economic development. However, they are a starting point for creating an economic-ecosystem, continuous improvement, and building economic development capacity.

Chapter Seven: Transportation

Transportation Overview

Transportation planning, historically, has focused mostly on commuting and circulation. How we move between home and work and how our transportation networks (primarily roads in the case of Ellington) provide for circulation within the community. Today, transportation is more about mobility, the movement of people and goods within a community and throughout a metropolitan region. Shifting the focus from simply transportation to mobility expands how we conceptualize, understand, and plan for transportation networks.

Other changes in transportation planning today are the changes in transportation technologies, changes in how we live and move around, changes in how we engage in mobility, and changes in what we want from transportation (mobility) systems. For example, the rise of the ‘sharing economy’ has opened the door to car-sharing. The rise of smartphones, apps, and how we purchase products and services have given rise to the ride-hailing industry where we hail car services on-demand. In addition, the advances in artificial intelligence are moving us toward autonomous automobility (self-driving cars and trucks), a technological advance that will likely transform personal mobility (and delivery systems) over the next decade.

In addition to technological advances that are transforming transportation and mobility, social-cultural forces are also at work. How we live and how we work are changing. What we want out of mobility, how we engage in mobility, and why we engage in mobility are also changing. As a society our transportation and mobility has been dominated by the automobile. For most of us, walking and biking have been means of recreation, not transportation. Today, this is changing. While walking and biking are still a means of recreation, they are becoming more common as viable transportation (mobility) alternatives. These changes have given rise to planning for and incorporating multiple modes of transportation into our communities.

Ellington, as a rural-suburban community, has grown up with and around the automobile. This is true of most communities. However, even though the automobile will remain the predominate form of mobility into the future, our needs, wants, and behaviors are changing and the need to plan for the changes discussed above. This means Ellington must continue to focus on the circulation of the road network and ensure that adequate parking is provided to accommodate automobiles. However, this also means Ellington must recognize how changes in technology and lifestyle are changing (decreasing) peak-demand for parking or that residents now want more alternatives—the ability to walk or bike—for moving around town.

This chapter will focus on transportation (mobility) in the context of changing technologies and lifestyles, and what this means for how Ellington’s transportation/mobility for the future. While many of the recommendations will mirror or build upon the recommendations of the prior Plan, all the recommendations look toward the future and changes in technology and lifestyle.

Road Classification and Land Use

The classification of roads is important to matching the design and utilization of roads to their location, adjacent land uses, and functions. Roads are typically classified based on their:

- Function (through traffic versus access)
- Major land use (commercial versus residential)
- Traffic volumes (capacity)
- Location (spatial context)

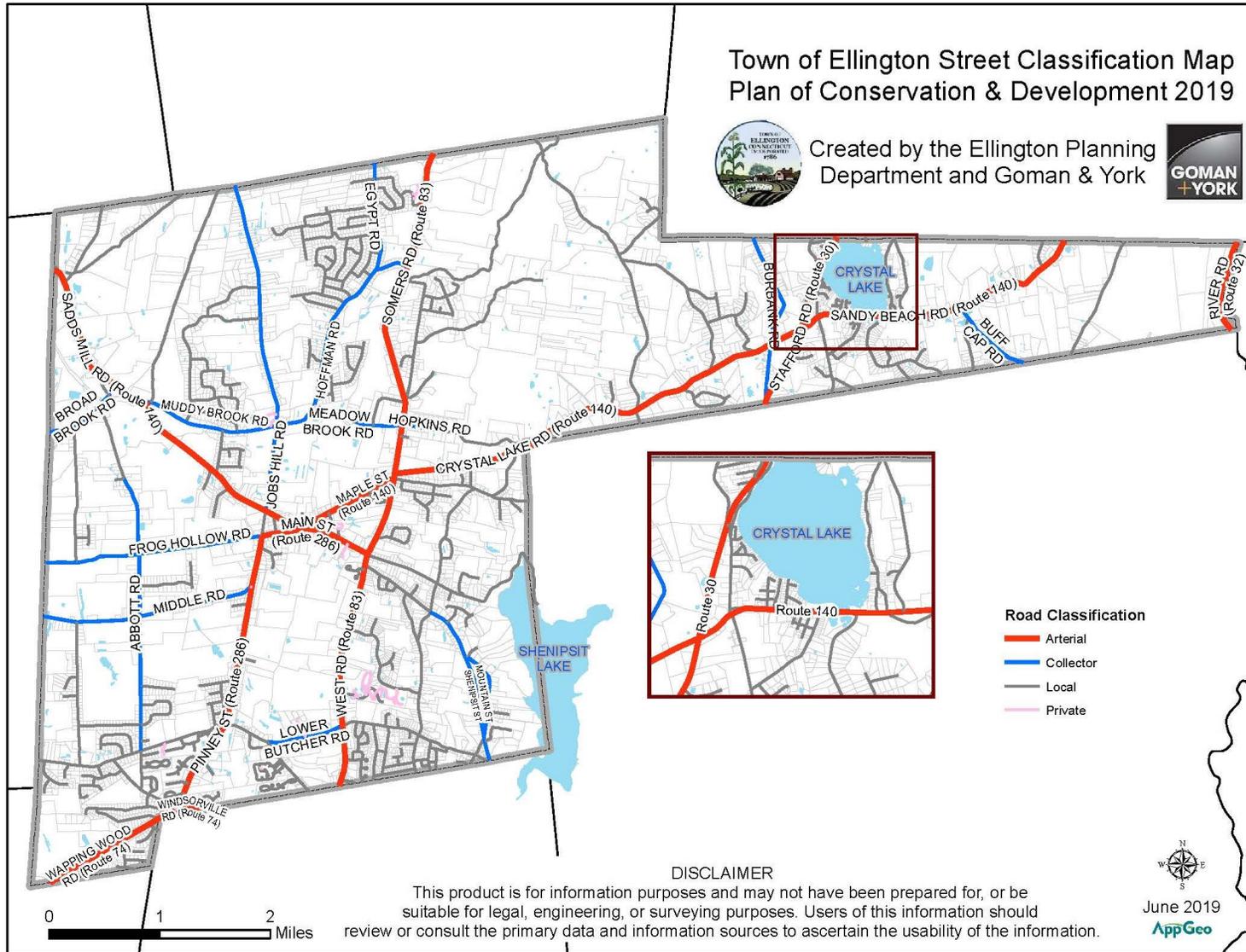
An Arterial Road is a road primarily intended to carry regional and local traffic and serves major activity centers—especially commercial development and high-density residential. Ellington’s arterials roads are:

Route 83	Route 32
Route 30	Route 74
Route 286	Route 140

Direct access to arterials should be restricted, requiring shared driveways, interconnected parking lots, and similar measures to reduce curb cuts and maximize the movement of through traffic. Acceleration, deceleration, and turning lanes should be required, whenever feasible, at access points to facilitate the efficient flow of traffic.

A Collector Road is a road intended to serve business areas and/or distribute traffic between arterial roads and neighborhoods. Collector roads can provide both direct and indirect access to adjacent land uses, but access management measures should be encouraged in commercial and industrial areas. The following are Ellington’s collector roads:

Abbott Road	Mountain Street
Broad Brook Road	Middle Road
Burbank Road	Muddy Brook Road
Buff Cap Road	Pinney Road
Egypt Road	Snipsic Street
Frog Hollow Road	Jobs Hill Road
Lower Butcher Road	Hoffman Road
Meadowbrook Road	



Map 7-1
Town of Ellington Street Classification

A Local Road is a road primarily intended to provide direct access to abutting properties and not serve major through traffic. All roads that are not listed above as arterial or collector roads are local roads.

Matching the width, surface, geometry, and alignment of the road to anticipated traffic needs (access, volume, and speed) creates an efficient circulation system. Roads that are generally straight, flat, and overly wide encourage speeding, require excessive clearing and grading, and can potentially detract from the rural-suburban character of Ellington.

Roads are also a significant source of stormwater and non-point source pollution that must be dealt with under the National Pollutant Discharge Elimination System (NPDES) Phase II guidelines. By reducing pavement widths on collectors and local roads, the volume of stormwater runoff generated by new development can be reduced. Ellington also needs to adopt storm drainage standards for existing streets adjacent to new developments to ensure that stormwater from new development does not overwhelm the Town's drainage system and lead to costly improvements in the future. This Plan recommends the following considerations and strategies.

Considerations/Strategies

- Implementing the recommendations of the Town's 2017 Stormwater Plan.
- Adopt stormwater drainage standards for existing streets.
- Adopt stormwater drainage standards for new developments.
- Update the Subdivision Regulation Road Design Standards with the aim of reducing stormwater runoff. Such updates should consider:
 - Low Impact Development practices
 - Reduced roadway widths.
 - The elimination of curbs on local roads with associated sheet-flow and drainage swale approaches.

Road Extensions

The Planning Commission has traditionally required that, where feasible, residential subdivision streets extend to abutting properties so that the networks of local roads are interconnected to distribute traffic efficiently. It is important that local residential streets continue to be extended and thus contribute to a reasonably efficient and safe circulation pattern. This is of great importance in the northwest quadrant of Ellington.

This Plan acknowledges, in order to promote the safe and convenient movement of traffic in Ellington, that the Planning and Zoning Commission designate certain approved cul-de-sac's as

temporary. This designation is indicated on approved subdivision plans on file with the office of the Ellington Town Clerk. It is the responsibility of all applicants for future developments to research adjacent approvals and determine if a connection to an adjacent roadway is required. An applicant shall then prepare a design which accomplishes this connection and shall be responsible for the costs of all site work, including but not limited to, the removal of portions of the adjacent temporary cul-de-sac, site grading, landscaping, and utility relocation. Design specifications are contained within the Ellington Subdivision Regulations.

Parking Standards

Parking standards and requirements in the Zoning Regulations have traditionally been used to ensure that each use has enough parking to meet its own needs without impairing traffic, public safety, or the use of adjacent land. With changes in the way we engage in work (greater flexibility as to place and time of work) and the way we live, have resulted in parking requirements created in years past that are excessive today. Simply put, the flattening peak-time parking demand, has resulted more parking be provided than is needed today. Unfortunately, excessive parking requirements can drive up development costs, be a barrier to economic investment, waste valuable land, create additional stormwater runoff, and detract from the overall aesthetic appeal of a community, undermining community character.

This Plan recommends that the Planning and Zoning Commission examine the parking ratios for each use in the Zoning Regulations and make modifications where necessary to ensure the most efficient provision of parking. Reductions in required parking, along with shared parking and consolidated parcels, can provide new opportunities for existing commercial developments to expand and/or create new developments on existing site. As part of the parking review, the Commission should consider utilizing shared parking, deferred parking, consolidated parcels, and other techniques to reduce the requirements for and potential overbuilding of parking areas and spaces. The shift toward ridesharing, ride-hailing, on-line shopping, remote working, and ultimate move toward autonomous automobility will continue to reduce the amount of required parking needs to service commercial office, retail, and other uses. Reductions in required parking for residential uses, especially multi-family residential and residential uses as part of mixed used developments should also be explored and implemented wherever possible.

Access Management

Access management is an important tool for providing safe movement of vehicles and orderly movement of traffic. Regulation of vehicle access is necessary to maintain the efficient and smooth flow of traffic and to maximize the traffic capacity of arterial and collector roads. An access management plan functions by:

- Limiting the number of driveways (ingress and egress points)
- Choosing driveway locations to reduce conflicts
- Designing driveways to reduce conflicts and the severity of conflicts
- Required roadway improvements that reduce or control conflicts

Access management is most effectively used in commercial corridors and is implemented by the zoning regulations through the site plan review process. In accordance with the recommendations of the 2015 Route 83 Corridor study, assessment management regulations should be incorporated into the Zoning Regulations Site Development Standards and should be applicable to all developments along arterial and collector roads.

Exhibit 7-1

Access Management – Sample Regulation

Purpose: This section is intended to control the number, size, and location of driveways and access points for business uses in order to promote overall traffic control and promote public safety and welfare.

A. Commercial Access.

Commercial access is defined as an access way for vehicles providing a connection from a public or private roadway to parking area serving commercial, recreational, institutional, office, multi-family, mixed use, or industrial land uses.

B. Design Standards

1. Commercial access shall be designed to be as perpendicular to the street line as possible, and in no case, may the angle between the street line and the access-way centerline be less than 60 degrees.
2. Access shall be designed and located to provide a minimum sight distance clear of all obstructions, natural or man-made, for at least 250 feet in either direction in local access roads, 325 feet on collector roads, and 375 feet on arterial roads.
3. The portion of driveway through the right-of-way connecting the property with the physical roadway shall be the shortest perpendicular distance possible. Any grading, filling, or drainage design in the right-of-way that is not part of a subdivision shall be require a Zoning Permit and the approval of the Town Engineer.
4. Commercial access shall be placed so the following minimum distances are maintained to any street intersection, including a T-intersection on the opposite side of the street from a property where access is proposed.
 - a. Local access or low volume road: a minimum distance of 50 feet from driveway curve return to edge of right-of-way at the intersection, shall be maintained.
 - b. Collector or larger road: a minimum distance consisting of the left turn stacking distance plus 20 feet, as measured from intersection curve return to driveway curve return, shall be maintained.
 - c. The left turn stacking distance shall be calculated using the following formula (or based on a traffic study, if available or required):
 - i. Peak Hour Traffic = ADT/10
 - ii. Peak hour left turns = 1/6 of peak hour traffic for 4-way intersections
 - iii. Peak hour left turns = ¼ of peak hour traffic for T-intersections
 - iv. $[1.5 \times \text{peak hour left turns} \times 20'] + 20' = \text{driveway to intersection spacing}$

C. Commission Authority:

Where street geometry, traffic volumes or traffic patterns warrant, the Commission may:

- limit the number of driveways that serve a specific site;
- designate the location of any driveway;
- require the use or provision of a shared driveway with associated easements;
- limit access to a major street and require access from a minor street.

D. Requirements for Future Interconnections:

As part of application approval, the Commission may require an applicant or owner to:

- a. Prepare a site layout which allows for future connections to adjoining properties. This plan shall define easement areas to accomplish these connections.

- b. File easements on the land records in favor of the abutting property owners and/or the Town of Ellington to facilitate interconnections with adjacent properties, as shall be acceptable to the Commission and the Town Attorney.
- c. In their review of future applications for adjacent properties, the Commission may at its discretion, require these properties to also convey an easement to accomplish these connections. These easements shall be exchanged at no cost to either party. For the purposes of these regulations, it shall be assumed each property receives an equal benefit. The cost of making physical improvements to accomplish the interconnection, including any work which may be required on the adjoining parcel, shall be borne by the developer of the most recently approved property.

Alternative Modes of Transportation

Ellington, because of its rural-suburban character, is dependent on the private automobile for meeting most of its transportation needs. While technology and lifestyle may impact how we own, access, and use automobiles, it is likely that the automobile will remain Ellington’s predominant means of transportation. In addition, and related to this, it is unlikely that public transit (bus and/or rail) will be available or is viable in Ellington at this time. However, whenever possible, the Town should pursue opportunities for public transit, especially bus service from Vernon Center. Currently, walking and biking are the most realistic and feasible transportation alternatives in Ellington.

Ellington’s subdivision regulations require that in new subdivisions sidewalks be installed on at least one side of the street. This requirement has not been consistently applied. It is understandable that under certain conditions sidewalks may be neither needed nor desired. However, the general rule should be that sidewalks be installed. In order to have a consistent policy on sidewalk installation, the Subdivision Regulations should be modified to provide specific standards applicable to any site waiver. Considerations such as drainage, overall size of the subdivision, and connectivity to other existing or future sidewalks would be appropriate criteria within which to consider a waiver. The Planning and Zoning Commission may also want to differentiate the need for and waiver of sidewalks within the sewer service area and along arterial and collector road—as these may be areas not to waive the installation of sidewalks.

Extensive sidewalks exist in the center of town along Main Street and Maple Street and the Town has been working to implement the recommendations of the ‘*Ellington Town Center Walkway: Creating a Walkable Environment*’ strategy that includes sidewalk additions and improvements in and near town center.

The Town may want to consider reviewing the need for sidewalks in existing residential areas to determine where sidewalk installation may be appropriate. This would be especially advantageous if new sidewalks could provide pedestrian access to existing schools, parks, or commercial areas.

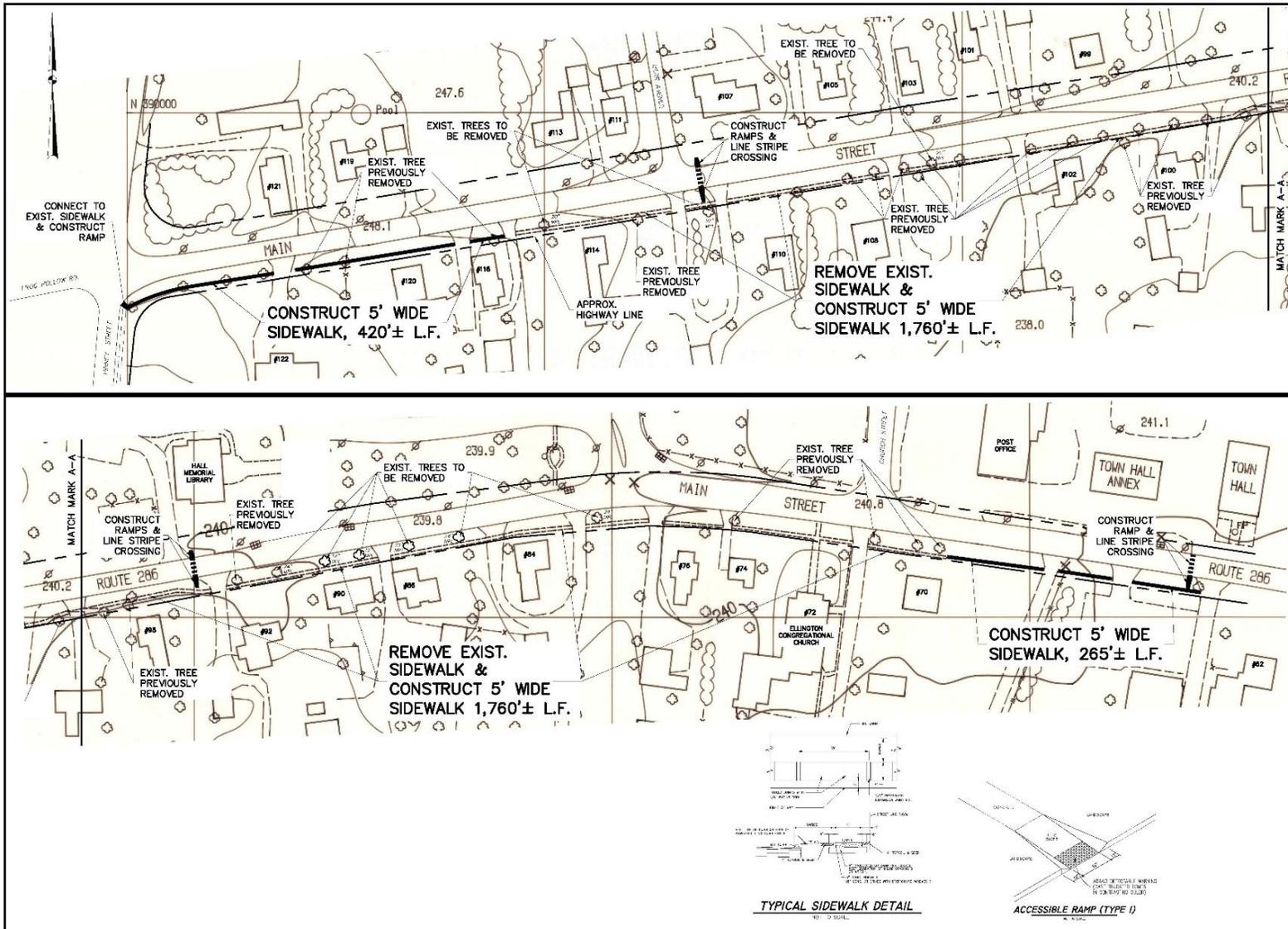
New commercial development should be reviewed relative to the need for sidewalk access to nearby residential areas. Pedestrian traffic does exist within the Route 83 corridor and there are virtually no sidewalks in the area. It is recommended that sidewalks be provided on Route 83

from Main Street south to the Meadowview Plaza. In addition, new development along Route 83 should be required to provide sidewalks. New commercial, multi-family, and mixed-use developments should be required (by zoning) to provide sidewalk construction as part of the site plan approval process. Sidewalks could be provided on private property (with easements) as to not interfere with future needs of State roads and make it clear that maintenance and repair is the obligation of the private property owner.

Overall, Ellington should consider shifting the focus away from simply providing sidewalks, to providing a town-wide network of walking and biking trails. Trails could be provided in new residential developments in-lieu-of-sidewalks and overroad connections could be made with the addition of bike lanes. Once again, priority should be given to the sewer service areas, arterials, and collector roads. In addition, the creation of town-wide network of trails should be recognized as an amenity to the quality of life in Ellington, not simply as a means or mode of transportation.

Considerations/Strategies

- Evaluate the parking requirements by use and adjust as necessary to ensure adequate yet efficient numbers of parking spaces.
- Modernize site design requirements (landscaping, parking, lighting, stormwater management (LID), etc.) in the Zoning Regulations.
 - Reduce impervious surfaces: use of porous pavement systems, deferred parking, and shared parking requirements where appropriate.
 - Implement access management and consolidated parcel requirements
- Continuously work toward creating a connected road network to ensure circulation and flow—including road extensions and cul-de-sac connections (continue to require temporary cul-de-sacs).
- Create a comprehensive sidewalk and trails plan aimed at creating a town-wide network.
 - A cycling network, on roads and trails, should be included as part of the sidewalk and trails plan.
- Create flexible local road design standards that allow road width reductions and incorporate LID approaches to stormwater management.
- Adopt the ‘*Ellington Town Center Walkway: Creating a Walkable Environment*’ and
 - ‘*Route 83 Corridor Study*’ as addendum to the Plan of Conservation and Development.
- Amend Zoning Regulations to require sidewalks in new develop in the Route 83 corridor and Town Center.



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REVISIONS

Ellington Town Center West
Sidewalk Reconstruction & Extension
Portion of Main Street to Pinney Street
Ellington, Connecticut

Sidewalk Reconstruction & Extension

DATE: July 28, 2017
SCALE: 1"=50'
JOB NUMBER: 2017-002
SHEET: 1 of 1

Exhibit 7-2
Main Street Sidewalk Plan (submitted July 28, 2017)

Chapter Eight: Public Facilities and Infrastructure

This chapter reviews various municipally owned buildings and properties as well as municipally owned utilities that serve residents of Ellington. The plan provides commentary on the where improvements need to be focused over the next 10-year planning period in order to meet current and projected needs.

Town Hall Complex

One of two recommendations contained in the 2008 POCD has been accomplished. A generator and automatic transfer switch have been installed at the Town Hall.

Additional improvements to the Town Hall Complex are still needed. A scope of work was prepared by Fuss & O'Neil Design Build, LLC and James Vance and Associates Architects in 2016, and includes the addition of a one story 5,900 addition north of the main Town Hall building. The scope of work includes the following:

- Renovations and reconfiguration of the existing Town Hall to provide improved facilities for the First Selectman, the Finance Department, Emergency Management, the Registrars of Voters and Human Resources, improvements to vaults, meeting rooms, staff facilities, lavatories, and improvements to boiler/mechanical, service and storage spaces;
- Site improvements including a patio, an outdoor foyer, sidewalks, a crosswalk and landscaping



Exhibit 8-1
Ellington Town Hall building

The Town received a STEAP grant from the State in the amount of \$500k which may be applied to this project. The estimated additional cost to the Town for these improvements is 1.6 million. A referendum took place in November 2018. It was defeated by a vote of 4,665 to 2,564. The Town is moving forward with renovations to Town Hall utilizing the STEAP grant to meet basic needs.

Public Works Complex

As recommended in the 2008 POCD additional land was purchased by the Town and expanded storage areas were created for material storage. No additional improvements are needed at this time.



Exhibit 8-2

Overhead view of 21 Main St – Public Works Facility

Senior Center

As recommended in the 2008 POCD a new senior center was built in 2013 located at 40 Maple Street and consists of an 11,000 square foot building. No additional needs have been identified as of 2019.

Fire Protection

The 2008 POCD recommended the construction of 2 new satellite stations, one in the northern end of Town and one in the south. A new station was added in the southern end located on Nutmeg Drive. An existing building consisting of a 6,000 square foot garage and 2,500 square feet of office space was purchased in 2016 at a cost of \$1.3 million.

The Ellington volunteer fire department has recently hired a consultant to review the adequacy of facilities as well as response time.

Recreation

Several recommendations contained in the 2008 POCD have been accomplished. They include the addition of 4 tennis courts at Brookside Park is planned modest amount of increased parking. A one-mile walking trail at Brookside Park is currently planned as part of capital improvements by the Ellington Department of Public Works. A sketch of the trail is shown in Exhibit 8-3.



Exhibit 8-3
Planned Walking Trail at Brookside Park. One mile.

The Parks and Recreation Department has reported that there has been increased demand from “outside” organizations to use Town Recreational facilities which has made it challenging at times to schedule Town activities. Outside organizations include all those groups or individuals utilizing Town owned recreational facilities other than activities which are sponsored by the Ellington Parks and Recreation Commission or the Ellington Board of Education. This situation will need to be monitored to ensure that Town sponsored activities can be offered without significant impediment. The Parks and Recreation Committee may also wish to initiate a dialogue with the Board of Education and Board of Selectman to discuss the sharing of recreational facilities on a limited basis and the budget implications of such an arrangement.

A referendum was held in November 2018 on the possible construction of an all-weather playing field at Ellington High School. Although there were many proponents for this project the referendum was defeated by a substantial margin. The vote was 5,065 (no) to 2,278 (yes) and

represents a very high voter turnout. A long-term needs assessment should be conducted with a town-wide advisory committee overseeing the study.

Schools

Ellington has experienced significant growth in school enrollment over the past 10 years. Many towns in Connecticut have seen reductions in school enrollment with an expectation that this trend will continue. This is not the case in Ellington where enrollment has increased over the past 10 years and where modest increases in student population is expected over the next 10-year planning period. Please see the end of this report for supplemental information including a discussion on existing demographic conditions and trends.

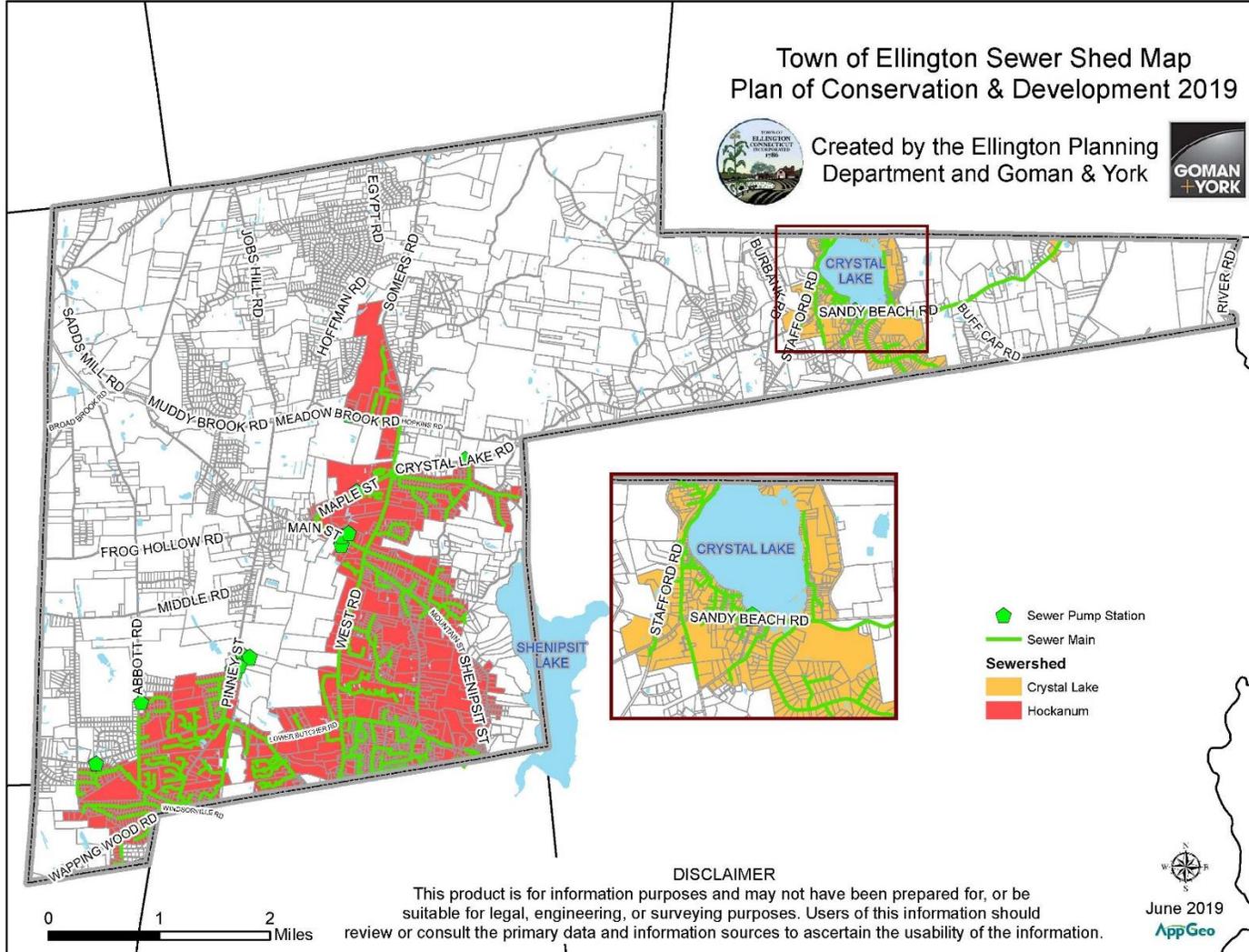
Significant investments were made to the Middle School and the High School between 2002 and 2006, and since the adoption of the 2008 POCD significant improvements were made to Crystal Lake School and Windermere School.

The Board of Education (BOE) has initiated a school facility study and is working to develop enrollment projections as well as a school facilities study. The Board has hired two consultants to assist in this effort: Drummy, Rosane, Anderson and Educational Resources Management. Public workshops were held in October and November and a third is scheduled for January. The Town Planner has also been assisting the Board of Education in this effort.

The conclusions of this study are expected following the adoption of this plan. It is recommended that the Planning and Zoning Commission review the findings of these studies, consult with the Board of Selectmen, and modify this Plan to reflect capital needs that have been identified.

Sewers

Properties which may be served by public sewer are established through the Town's Master Sewer Facilities plan. These are divided into the Hockanum and Crystal Lake Districts. These 2 areas are served by treatment plants located in Vernon and Stafford Springs. The master plan establishes the limits of sewer service areas (those properties which may connect to the public sewer system) and reflects limitations based on the capacities of these plants and the intermunicipal agreements that exist between Ellington and these two towns. Map 8-1 depicts the Hockanum and Crystal Lake Sewer service districts.



Map 8-1
Hockunum and Crystal Lake Sewer Districts

The capacity limits established in the agreement with Vernon has been a source of concern to the Town over the past several decades. Both the Planning and Zoning Commission and Water Pollution Control Authority (WPCA) have established regulations, zoning districts, and policies that reflect these limits. Since 1990 the Town has purchased an additional 600,000 gallons per day (GPD) for a total maximum allowable flow of 1.42 million GPD from Ellington at the Vernon plant. Table 7-1 presents information on how the amount of contracted flow with Vernon has changed since 1990.

Year	Contracted Maximum Flow
1990	820,000 GPD
2004	1,020,000 GPD
2013	1,400,000 GPD
2016	1,420,000 GPD

Table 8-1
Contracted Flow with Town of Vernon 1990-present

There are a total of 3,226 existing sewer connections as of October, 2018. Table 8-2 shows the number residential and commercial customers in the Vernon and Crystal Lake service areas.

	Hockanum (Vernon)	Crystal Lake (Stafford Springs)
Number of existing connections	2,846	380

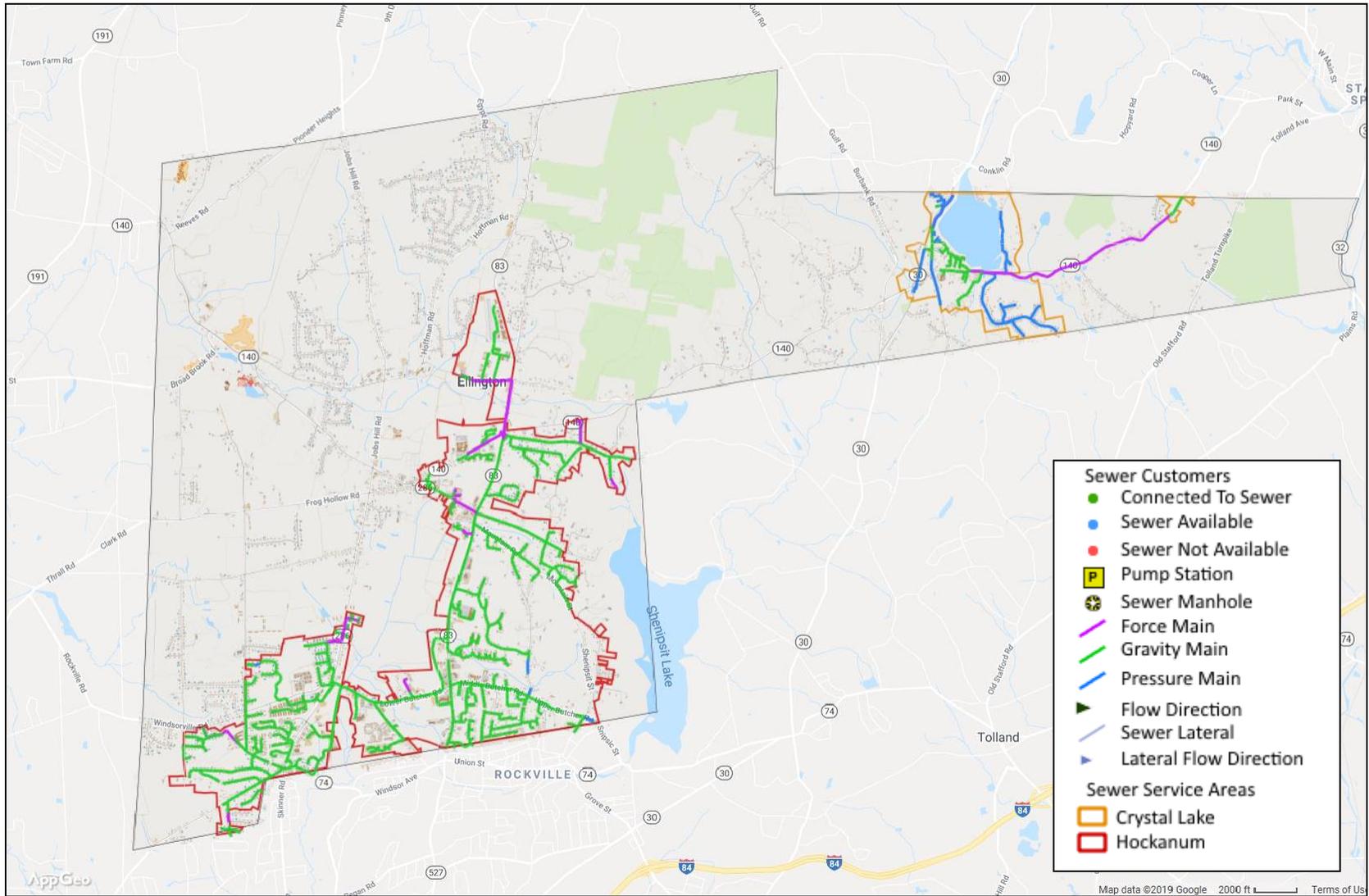
Table 8-2
Number of Existing Connections Hockanum and Crystal Lake Sewer Systems

The average daily metered flow between September 2012 and August 2013 to the Vernon plant was 685,040 GPD. The WPCA’s Master Sewer Facilities plan was last updated in 1998. This plan assigns a specific sewer capacity to every parcel of land within the Hockanum Sewer Service Area. The WPCA has recently entered into a contract with Fuss and O’Neil Engineers to update the plan. This plan will consider the growth which has occurred over the past 20 years. In addition, there are certain factors that have changed since the preparation of the last plan which can affect sewerage flows (both more and less). These include certain demographic shifts such as smaller household size, an aging population, and increased numbers of multi-family units as well as other state and federal mandated water conserving measures such as low flow appliances and other regulations related to commercial and industrial operations. It should be noted that 2 recent changes to the Zoning Regulations, adoption of a density-based approach in calculating the maximum number of permitted single family homes (2013) and zoning changes that will limit the number of new multi-family housing should have the effect of reducing maximum sewer flow at buildout.

While the update to the 1998 plan is under way it is recommended that both the Planning and Zoning Commission and the Water Pollution Control Authority strictly adhere to the allocations

contained in the 1998 plan.

The Department of Public Works with the assistance of the Town's GIS consultant has built a valuable data base of information related to sewers which is available to the public. It depicts existing sewer lines including force mains, gravity mains, and pressure mains. It also shows all existing sewer connections and those properties not currently connected but where sewers are available (there are 1,047 additional properties that can connect). Data also includes location of sewer manholes and sewer lateral connections relative to property lines. Map 8-3 depicts the information which is available on the Town's web page.



Map 8-3
Sewer System GIS Tool

The WPCA has also tasked Fuss and O’Neil with several priority projects. These are also adopted as priorities of this plan. They include the following:

- Update plan for flow distribution for Tomoka Avenue and Woodside Acres
- Begin design for upgrades to aging pump station at Crystal Lake
- Begin design upgrades to aging pump station to the Vernon plant
- Conduct an inflow and infiltration study
- Design sewer replacement for the Longview area, High Ridge Road, and Stein Road.
- Assist the WPCA in preparing a Capital Improvement Plan (CIP) and updated sewer user fees
- Various updates to WPCA regulations

Considerations/Strategies

- Develop a modified building plan for improvements to the Town Hall Complex that will meet the basic needs of the Town.
- Review the findings of the facility needs study now being prepared by the Board of Education. After consultation with the Board of Selectmen consider an amendment to this plan which supports the finding of this study.
- Complete an update of the 1998 Master Sewer Facilities Plan as a priority. Reserve enough capacity to service Rt. 83 and Town Center triangle areas. Complete other high priority work tasks identified by the WPCA and shown in chapter 8.

Additional Considerations

The following additional considerations should be studied by the Planning and Zoning Commission, WPCA, and/or Board of Selectmen:

- Consider a sewer trading allocation program.
- Consider approaching the Towns of Vernon and Stafford Springs for the purchase of additional sewer capacity if the latest update to the Master Sewer Facilities Plan predicts a shortfall over the next 10-year period. In addition, flows should be monitored in a vigilant manner so that discussions may take place if warranted.
- If additional capacity is purchased in either the Crystal Lake or Hockanum system and made available to properties not currently in the sewer service area (no capacity assigned to them in the 1998 plan) then they should pay their fair share if they connect. The WPCA will need to establish an equitable formula (should this occur the official map showing sewer service areas should be amended).
- Ensure that enough sewer capacity is reserved to serve the full buildout of the Commercial Corridor on Rt. 83 from the Vernon town line to Ellington Center plus the Ellington Center triangle area discussed in Chapter 7.
- Consider extending sewers outside of the boundaries of the sewer service area in instances where established single-family homes or businesses have failing septic systems and where repairs cannot be made which meet requirements established in the public health code.
- Consider extending public sewer to properties outside of the sewer service district in instances where the property is critical in providing essential Town services, such as, but not

limited to Public Schools and parks.

- Additional coordination should be pursued regarding plan review between the Planning and Zoning Commission and the WPCA. This can begin with a joint staff report prepared by the Town Planner and Public Works Director to outline recommendations.

Chapter Nine: Consistency with State and Regional Plans

Comparison with the Connecticut Conservation and Development Policies Plan 2013-2018.

The Planning and Zoning Commission believes this Plan of Conservation and Development is consistent with the Connecticut Conservation and Development Policies Plan 2013-2018. (At the time of this review a new State Plan had been drafted but not yet acted upon by the State Legislature). The State Plan establishes 6 growth management principles. A more detailed explanation of the Plan and map may be found at www.ct.gov/OPM. The following is a review of how this Plan is consistent with each of these principles.

Growth Management Principle #1: Redevelop and revitalize regional centers and areas with existing or currently planned physical infrastructure.

The Ellington POCD establishes a priority for the development of a mixed-use project in Ellington Village Center. This area currently houses many important facilities including the Town Hall, High School, Library, Public Works Facility, Senior Center, and Post Office. It also has several structures that are of historic importance. It is served by public water and sewer and is framed by 3 state roadways. It presents a unique development opportunity due to these assets and the available land in the immediate area. It may be appropriate to consider this area as a “village priority funding area” with the next update to the State Plan. Also, the Planning and Zoning Commission recognizes the service area established by the WPCA and honors the boundaries of the service area when making decisions on new development.

Growth Management Principle #2: Extend housing opportunities and design choices to accommodate a variety of household types and needs.

Ellington's current housing stock consists of a desirable mix of single family (65%) and Multi-family (35%) units. Multi-family units consist of a mix of condominiums and rental units. The number of current “affordable” housing units falls short of the 10% threshold established under section 8-30g of the Connecticut General Statutes. Opportunities are presented in this Plan to add affordable housing units. These include the ability to transfer development rights from high priority undeveloped areas to areas such as Ellington Village Center. Chapter 5 also discusses ways to incentivize developers to offer affordable housing units.

Growth Management Principle #3: Concentrate development around transportation nodes and along major transportation corridors to support the viability of transportation options.

This plan includes a recommendation that bus service be established to service Ellington's main existing commercial corridor along Rt. 83 from the Vernon Town line to Ellington Village Center. This service would be available to Ellington residents commuting to Hartford as well as Hartford residents commuting to businesses along this corridor in Ellington. The Plan also recognizes the Route 83 corridor as most appropriate for future commercial development.

Growth Management Principle #4: Conserve and restore the natural environment, cultural and historic resources, and traditional rural lands.

This Plan contains numerous recommendations that are consistent with this objective. Although Ellington has experienced consistent growth over the past several decades it still possesses elements of rural character and valuable natural resources valued highly by Town residents. Goals established in this Plan include prioritizing the acquisition of certain open space parcels, adoption of a forestry management program, adoption of a Transfer of Development Rights Program (TDR) program, enhancements to the official wetlands map, and producing a detailed inventory of historic structures in Ellington Center.

Growth Management Principle #5: Protect and ensure the integrity of environmental assets critical to public health and safety.

This plan contains several recommendations that are consistent with this policy. They include a recommendation to adopt a more robust set of flood plain regulations consistent with DEEP's 2005 Model regulations. Ellington does not have the aquifer resources which mandate the adoption of aquifer protection regulations under state law. Nevertheless, there are significant resources present and this plan recommends the adoption of regulations which would make it less likely that these resources are compromised by incompatible land uses and practices.

Growth Management Principle #6: Promote integrated planning across all levels of government to address issues on a statewide, regional, and local basis.

There are many recommendations contained in this plan which will require review and/or funding by one or more state agencies. These include improvements to the Ellington sewer system, the consolidation of driveways serving commercial properties along Route 83, construction of sidewalks along Rt 83, revisions to floodplain regulations, acquisition of key open space properties and farmland, and the possible establishment of bus service to Ellington. We believe that these and other recommendations in the plan are consistent with State policies, those of adjacent communities, as well as the 2014 Capitol Region Plan of Conservation and Development.

Comparison with the Capitol Region Plan of Conservation and Development: 2014-2024

The Ellington Plan of Conservation and Development advances many of the same policies contained in the Capitol Region Plan of Conservation and Development: 2014-2024 and is consistent with the goals established in this regionwide plan.

The Ellington Plan discusses the importance of sustainability throughout and places a priority on integrating social, economic, and environmental principles. Sustainable initiatives include recommendations to broaden opportunities in the Zoning regulations aimed at farmland preservation, the adoption of Low Impact Development methods for the handling of stormwater, and the creation of a walkable mixed-use development in the center of town. The Plan contains recommendations for the construction of sidewalks along Route 83 and the introduction of bus service for commuters into Hartford as well as Hartford residents who commute from Hartford to Ellington.

The Plan establishes a priority to update the 1998 Master Sewer Facilities plan to ensure that on buildout sewer flow will not exceed the contracted amount with the Town of Vernon. Priorities are also adopted to design upgrades to 2 existing aging pump stations in Town in the interest of reliability and environmental compliance.

There are several important priorities established in the area areas of Natural Resource Protection and preservation consistent with goals established in the Regional Plan. These include the adoption of the 2015 DEEP Model Flood Plain Regulations, the development of a more comprehensive map relating to wetland protection, adoption of a forestry management program, adoption of an aquifer protection program, and a comprehensive stormwater management program including all objectives established in the Town's 2017 MS-4 plan.

This Plan also includes conservation strategies related to preservation. These include identifying a list of properties that have the highest priority for preservation and the adoption of an innovative program of Transfer of Development Rights (TDR) where development rights from high priority preservation parcels may be transferred to areas such as a proposed mixed-use development are in Ellington Village Center. The Plan also recommends conducting a comprehensive inventory of historic structures as a first step to preserving these valuable cultural resources.

In the area of housing Ellington currently offers a diverse range of housing opportunities with approximately 35% of all housing being comprised of multi-family units (rental and condominiums). This plan includes recommendations which will provide additional opportunities to add even more diversity in housing type including affordable units as defined by State law.

The municipal focus areas for Ellington, described in the Appendix of the CRCOG Plan, continue to accurately reflect many of the goals and policies contained within this 2019 Ellington Plan of Conservation and Development.

In accordance with State Law, this Plan was submitted to the Capitol Region Council of Governments. Review comments were received on _____. This review found “no apparent conflicts with the Regional Plans and Policies, the growth management principles of the State Plan of Conservation and Development, Plans of Conservation and Development of other municipalities in the region, or the concerns of neighboring Towns.”

Chapter Ten: Implementation

Implementation Overview

Many of the recommendations in this Plan of Conservation and Development can and will be implemented by the Planning and Zoning Commission through regulation amendments, application reviews, and other means. The Commission is the primary agency responsible for implementing the Plan's recommendations.

Other recommendations require the cooperation of, and actions by, other Town boards and commissions such as the Board of Selectmen, Board of Finance, Conservation Commission, Water Pollution Control Authority, and similar agencies. However, for the Plan of Conservation and Development to be successfully implemented and realized, it must serve as a guide to all residents, applicants, agencies, and individuals interested in the orderly, sustainable, and efficient growth of Ellington.

Implementation Tools

Ellington has several tools that are available to implement the recommendations of this Plan of Conservation and Development. These tools include:

- an annual implementation work program,
- the Plan of Conservation and Development,
- Zoning and Subdivision Regulations,
- Capital Improvements Program, and
- Referral of Municipal Improvements (CGS 8-24).

Annual Implementation Work Program

The implementation schedules that follow can be used by the Planning Commission to develop an annual implementation work program, both for itself and other boards and commissions, as a reminder of issues to be addressed in the next budget year. The Planning and Zoning, to accomplish this, may want to host an 'all boards and commission' meeting once a year to review the Plan recommendation and create a work program for the year.

Plan of Conservation and Development

Using the Plan of Conservation and Development as a basis for land use decisions by the Planning and Zoning Commission will assist in achieving the goals and objectives of the Plan.

All land use proposals should be measured and evaluated in terms of the Plan and its various elements.

Subdivision Regulations

The Subdivision Regulations provide specific criteria for land subdivision, road layout, infrastructure, and open space. As a result, these regulations are an important tool for implementing the recommendations of the Plan of Conservation and Development. Therefore, the Planning and Zoning Commission should review the Subdivision Regulations to assure they are consistent with the recommendations of this Plan and make whatever revisions are necessary to implement this Plan.

Zoning Regulations

The Zoning Regulations and Zoning Map together set forth the Comprehensive Plan of Zoning—the plan for future land use and development. In doing so, the Zoning Regulations provide the specific criteria for land uses, including the desired density and intensity of development. Therefore, the Zoning Regulations are an important tool for implementing the recommendations of the Plan of Conservation and Development. In order to implement the recommendations of this Plan, the Planning and Zoning Commission should review the Zoning Regulations and Zoning Map and make whatever revisions are necessary to implement this Plan.

Capital Budget

The Capital Budget (or Capital Improvement Program) is the tool a municipality uses for planning major capital investments (expenditures) so that community needs can be identified, prioritized, and planned for within any fiscal constraints that may exist.

This Plan of Conservation and Development contains proposals whose implementation may require the expenditure of town funds. The Plan of Conservation and Development recommends that these (and other) items be included in the town's Capital Improvements Program and that funding for them be included as part of the Capital Budget. In addition, the Planning and Zoning Commission request that the Board of Selectman and Board of Finance consider the Plan of Conservation and Development when preparing and adopting the Capital Improvement Program to ensure that all communities investments are forwarding the goals and objectives of this Plan.

Referral of Municipal Improvements

Section 8-24 of the Connecticut General Statutes requires that municipal improvements (defined in the statute) be referred to the Planning and Zoning Commission for a report before any Town action is taken. A proposal disapproved by the Commission can only be implemented after a

two-thirds vote. All Town boards and agencies should be notified of Section 8-24 and its mandatory nature so that proposals can be considered and prepared in compliance with its requirements. The Planning and Zoning Commission, when considering 8-24 referrals should consider the Plan of Conservation and Development to ensure such municipal improvements forward the goals and objectives of this Plan.

Implementation Schedule

Implementation of the Plan is a gradual and continual process—a continuous process of working towards improvement through achieving the goals and objectives of the Plan. While some recommendations can be carried out in a relatively short period of time, others may only be realized towards the end of the plan implementation period, and some may be even more long-term in nature. Furthermore, since some recommendations may involve additional study or a commitment of fiscal resources, their implementation may take place over several years or occur in stages or phases.

The charts on the following pages identify primary responsibilities and preliminary priorities to the Plan recommendations. In many instances, the responsibilities are shared by several entities.

In addition, the implementation charts identify both strategies and tasks. Strategies are long-term, macro-scaled, and continuing policies and practices. Tasks are specific actions that can typically be scheduled and/or measured, and their implementation can be readily identified.

Implementation Schedule Legend

	Reference
PZC	Planning and Zoning Commission
IWC	Inland Wetlands Commission
CC	Conservation Commission
BOS	Board of Selectmen
WPCA	Water Pollution Control Authority
Town	Town Departments, Officials and Staff
Other	Other Boards, Agencies, or Persons

	Priority
High	Years 1 to 3
Medium	Years 4 to 7
Low	Years 8 to 10

Chapter Ten: Implementation

Conservation – Natural Resource Protection								
	PZC	IWC	CC	BOS	WPCA	Town	Other	X
Adopt comprehensive floodplain regulations using the 2015 DEEP model	X					Town Planner		
Prepare a more detailed flood study for selected “non-studied” areas						Town Engineer	Engineering Consultant FEMA	
Build a more detailed “official” wetlands map incorporating field delineated wetlands		X				Town Planner	GIS consultant	
Evaluate larger wetland systems utilizing a ranking system to establish relative wetland values		X				Town Planner	Wetland Consultant	
Develop a searchable data base of past wetland applications and outcomes		X				Town Planner	GIS consultant	
Adopt a forestry management program				X		Town Planner Director of Public Works Parks and Recreation Director	Licensed Forester	
Map aquifer resources adopt an overlay zone, and aquifer protection regulations.	X			X		Town Planner	Environmental Consultant Planning Consultant	
Require Best Management Practices within major aquifer areas	X					Town Planner		
Assist in the implementation of recommendations in the 2017 Stormwater Management Plan when appropriate	X					Town Planner Director of Public Works		
Adopt Low Impact Development (LID) standards for the management of stormwater in Zoning and Subdivision Regulations	X					Town Engineer Town Planner		
Adopt LID requirements for the village center development as discussed in chapter 6.	X					Town Engineer Town Planner		

Chapter Ten: Implementation

Amend zoning and subdivision regulations to offer bonuses in the area of lot coverage, density, and/or yard setbacks for voluntary use of LID techniques	X					Town Engineer Town Planner Director of Public Works		
Amend Zoning Regulations to ensure compliance with approved site grading plans	X					Town Planner Town Engineer		

Conservation – Preservation								
	PZC	IWC	CC	BOS	WPCA	Town	Other	X
Work with the Conservation Commission to develop a list of the highest priorities for acquisition	X		X			Town Planner		
Adopt a program of Transfer of Development Rights (TDR)	X		X			Town Planner	Planning Consultant	
Broaden opportunities in Zoning Regulations for farm wineries and breweries. Permit some commercial opportunities such as special events.	X					Town Planner		
Adjust metrics of open space subdivision regulations to encourage use of this technique.	X					Town Planner		
Consider permitting this type of development as of right in selected areas (requiring a special permit for large lot development)	X							
Conduct an inventory of historic structures. Implement recommendations in the 2008 POCD.	X					Town Planner	Historic resource consultant.	Ellington Historical Society
Consider adopting a demolition delay ordinance				X		Town Planner		

Chapter Ten: Implementation

Housing							
	PZC	IWC	CC	BOS	WPCA	Town	Other
Crumbling Foundations							
- Waive zoning and building permit fees for affected properties requesting permits for reconstruction.	X			X		Town Planner, Building Official	
- Simplify the zoning permitting process for the reconstruction, replacing, or relocation of an affected foundation.	X					Town Planner, Building Official	
- Amend the Zoning Regulations to allow 'variation' to the yard setbacks (for affected buildings) without the need to demonstrate zoning hardship.	X						
- Allowing a 'reasonable accommodation' to the zoning requirements by staff review and the approval process.	X					Town Planner	
- Allowing temporary housing and/or temporary storage trailers on a site during reconstruction.	X					Town Planner, Building Official	
- Support regional, state, and federal efforts to address the foundation issues.	X			X		X	
- Adopt a property tax abatement program that reduces the property taxes of properties with replaced or repaired foundation.				X		Assessor	
- Monitor the 'crumbling foundation' issue so that additional strategies can be implemented as appropriate.	X			X		Building Official, Town Assessor	
Mixed-Use Residential Development	PZC	IWC	CC	BOS	WPCA	Town	Other
- Adopt a mixed-use residential and commercial development regulation that allows higher density development, transfer of open space/development rights, and flexible site design.	X						
Housing Need (Affordable Housing)	PZC	IWC	CC	BOS	WPCA	Town	Other
- Create an inclusionary zoning provision that requires 7% of housing, in any housing development, to meet the requirement of affordable housing under 8-30g.	X						

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- Amend the Workforce Housing (Sec. 3.6.7) regulations to provide for greater flexibility regarding the Dimensional and Area Standards (Sec. 3.6.6).	X						
- Allow private market elderly housing and include an affordability provision of 20% to 30% affordable and compliant with 8-30g.	X						
- Create a 'friendly' 8-30g zoning regulation (preferably an overlay zone) that allows for and establishes a process for 8-30g development application.	X						
- Create a mixed-use development housing provision that requires housing in mixed use developments to provide 15% workforce housing.	X						
- Provide reduced permitting fees for affordable housing units. This could include land use applications, zoning, and building permits.	X			X			

Economic Development							
	PZC	IWC	CC	BOS	WPCA	Town	Other
Route 83 Corridor							
- Formally adopt the 2015 Route 83 Corridor as part of this Plan.	X						
- Review and update the Planned Commercial Zone to create a flexible Master Plan development approach.	X						
- Allow the Planned Commercial Zone in other areas of the Route 83 corridor.	X						
- Create a transfer of open space and/or development rights programs incentivize higher density development within the Route 83 corridor.	X			X	X		
- Modernize Site Design Requirements (landscaping, parking, lighting, stormwater (LID), etc.)	X						
Town Center Triangle	PZC	IWC	CC	BOS	WPCA	Town	Other
- Create a Center Village Plan.	X	X			X		

Chapter Ten: Implementation

Ellington Airport							
- Create an Airport Advisory Committee.				X			
- Conduct an Airport Expansion Feasibility Study.	X			X	X	EDC	
Agriculture as an Economic Sector	PZC	IWC	CC	BOS	WPCA	Town	Other
- Create an Agriculture Advisory Commission (AAC).				X			
- Review regulations and ordinances with the aim of removing barriers to farming.	X		X			AAC	
- Amend the Zoning Regulations to allow agritourism and specific agritourism uses.	X					AAC	
- Amend the Zoning Regulations to allow bed & breakfast, small country inns, and/or other forms of hospitality uses.	X						
- Create and/or organize harvest events, fairs, and festivals that highlight local farms and draw positive attention to Ellington's agricultural community.				X		AAC	
Economic Development	PZC	IWC	CC	BOS	WPCA	Town	Other
- Implement a training program				X		EDC	
- Through zoning, encourage the uses and development Ellington most wants.	X					EDC	
- Create a business outreach and engagement program.				X		EDC	
- Create a Celebrate Ellington Businesses program.				X		EDC	
- Create a Community Information Packs						EDC Town Planner	
- Create an Economic Development Strategy				X		EDC	
- Utilize CIP as a strategic investment tool.				X		EDC BOF	

Transportation	PZC	IWC	CC	BOS	WPCA	Town	Other	X
Evaluate Parking Requirements and revise as needed	X							
Modernize Site Design Requirements (Landscaping, parking, lighting, stormwater (LID), etc.	X							
- Reduce Impervious surfaces	X							
- Implement Access Management	X							

Chapter Ten: Implementation

Continuously work to create a connected road network	X							
Create a comprehensive sidewalk and trails plan aimed at creating a town-wide network	X			X			X	
- A cycling network, on roads and trails, should be included as part of the sidewalk and trails plan	X			X		X	X	
Create flexible local road design standards that allow road width reductions and incorporate LID approaches to stormwater management	X							
Adopt the 'Ellington Town Center Walkway: Creating a Walkable Environment' and 'Route 83 Corridor Study' as addendum to the Plan of Conservation and Development	X							
Amend Zoning Regulations to require sidewalks for development in the Route 83 corridor and Town Center	X							

Public Facilities & Infrastructure								
	PZC	IWC	CC	BOS	WPCA	Town	Other	X
Prepare a modified building improvement plan for Town Hall that will meet basic needs of the Town				X			Architect	
Review the findings of the facilities needs study now being conducted by the Board of Education. Consider amendments to this plan which set priorities for capital improvements as indicated in the study.	X			X		Town Planner	Board of Education	
Complete an update of the 1998 Master Sewer Facilities Plan. Reserve enough capacity for Ellington Town Center. Complete priority tasks which have been identified by the WPCA and incorporated into this plan.	X			X	X	Director of Public Works	Engineering Consultant to WPCA	

Appendix A: Summary of Considerations/Strategies by Chapter

Chapter Three Summary: Considerations/Strategies for Conservation: Natural Resource Protection

- Adopt comprehensive floodplain regulations utilizing the 2015 model regulations published by DEEP.
- Prepare a more detailed flood study for "non-studied" areas.
- Build a more detailed "official" wetlands map that incorporates field delineated wetlands collected since 1974.
- Evaluate larger wetland systems utilizing a ranking system to establish relative wetland values.
- Develop a searchable data base of prior wetland applications/outcomes.
- Adopt a forestry management program.
- Map aquifer resources establish an overlay zone and adopt a limited aquifer protection program.
- Require the use of best management practices within the aquifer overlay zone.
- Assist wherever possible in the implementation of the 2017 Stormwater Management Plan.
- Adopt Low Impact Development (LID) standards for the management of stormwater in both Zoning and Subdivision Regulations.
- Adopt mandatory LID design standards in association with Village Center development discussed in Chapter Three.
- Offer bonuses in the area of lot coverage, density, and/or yard setbacks for the voluntary use of LID techniques.
- Amend Zoning Regulations to ensure compliance with approved site grading plans resulting in fewer erosion related problems.
- Working with the North Central District Health Department (NCDHD), develop an educational program relating to the proper use and maintenance of a septic system.

Chapter Four Summary: Considerations/ Conservation Strategies for Preservation

- Working with the Conservation Commission develop a list of properties with the highest priority for open space preservation. Use this list as a tool when making decisions regarding acquisition, purchase of development rights, encouraging open space subdivisions, and encouraging the use of a transfer of development rights program.
- Adopt a program of transfer of development rights (TDR)

- Broaden opportunities in the Zoning Regulations to permit farm wineries and breweries along with the ability to conduct special events such as weddings subject to the parameters discussed in this chapter.
- Adjust the metrics in the Open Space Subdivision regulations to provide a greater incentive for its use. Consider identify a list of properties where an open space subdivision would be permitted as of right (requiring a special permit for a traditional large lot subdivision).
- Conduct an inventory of historic structures as a first step toward implementing the strategies contained in the 2008 POCD.
- Consider adopting a demolition delay ordinance.

Chapter Five Summary: Considerations/Strategies for Housing and Residential Development

Crumbing Foundations

- Waive the zoning and building permit fees for properties with failing foundations.
- Amend the Zoning Regulation to allow ‘variation’ to the yard setbacks (for affected buildings to be relocated to a new foundation on the property) without the need to demonstrate zoning hardship.
- Allowing a ‘reasonable accommodation’ to the zoning requirements by staff review and the approval process.
- Allowing temporary housing and/or temporary storage trailers on a site during reconstruction.
- Support efforts at the regional, state, and federal level to address the foundation issues.
- Adopt a property tax abatement program that reduces the property taxes of properties with replaced or repaired foundation by 10% per year for up to 10 years to off-set the cost of repairs or replacement.

Mixed Use Residential Development

- Allow residential density, by right, of 8 to 10 units per acre and provide density bonuses of an additional 2 to 4 units per acre (12 to 14 unit per acre total).
- Create a Transfer of Open Space and Transfer of Development Rights program for mixed-use residential developments.
- Require a minimum of 1,000 square feet commercial space per 10 units of housing, excluding the density bonuses.
- Allow flexibility in site design requirements aimed at favoring ‘good’ design over rigid standards and requirements.

Housing Need - Affordability

- Focus on housing need, not tenure (owner vs renter) or type of housing (single vs multi-family).
- Seek to provide a mix of 1, 2, and 3-bedroom units in multifamily housing development. As a guideline, the following mix is recommended: 30% - 40% 1-bedroom, 40% - 50% 2-bedroom, and 5% - 15% 3-bedroom units.
- Continue to provide a mix, balance, and diversity of housing stock. Ellington should seek to maintain the balance of both single-detached housing vs multi-family housing and owner-occupied housing vs renter-occupied housing—the mix should be: 63-65% single-detached and owner-occupied housing with around 35-37% multi-family and renter-occupied housing.

Zoning

- Create an inclusionary zoning provision that requires 7% of housing, in any housing development, to meet the requirement of affordable housing under 8-30g.
- Provide greater flexibility regarding the Dimensional and Area Standards (Section 3.6.6 of the Zoning Regulations) in the ‘Workforce Housing Provision’ (Section 3.6.7 of the Zoning Regulations).
- Allow private market elderly housing and include an affordability provision of 20% to 30% affordable and compliant with 8-30g.
- Create a ‘friendly’ 8-30g zoning regulation (preferably an overlay zone) that allows for and establishes a process for 8-30g development application.
- Create a mixed-use development housing provision that requires housing in mixed use developments to provide 15% workforce housing.
- Provide reduced permitting fees for affordable housing units. This could include land use applications, zoning, and building permits.

Chapter Six Summary: Considerations/Strategies for Economic and Commercial Development

Route 83 Corridor

- Adopted the 2015 Route 83 Corridor study and its recommendations as an appendix to this Plan. By inclusion of the Route 83 Corridor study as part of this Plan, the recommendations of the Corridor Study are included as part of these recommendations.
- Review and update of the Planned Commercial Zone to create a flexible Master Plan development approach and process that creates flexibility and focus more on quality of design (site design and architecture) than on the bulk, area, and density of development.
- The Commission may want to consider allowing the Planned Commercial Zone (as modified in the above recommendation) to also be applicable or applied to other areas of the Route 83 Corridor, since this zone appears to best accommodate the commercial development Ellington wants.

- Create a transfer of open space and/or development rights programs (as discussed in Chapter 6 and Chapter 5) to incentivize higher density development within the Corridor. In doing so, designate the areas in the Corridor that are within the sewer service area as receiving areas for the transfer of open space and/or development rights from more rural areas of town. The greater density and residential uses may overcome some of the challenges of financing commercial development, creating an incentive and greater economic opportunity for commercial development.
- In the process of creating a transfer of open space and/or development rights program, the Commission should explore the utilization of such transfers for commercial density, not just residential. This may include incentives regarding lot coverage, setback, building height, and other bulk and area requirements.
- Improve upon and create more robust site design standards within the Zoning Regulations. Such standards should include robust provisions for low impact development, landscaping, parking, architecture, consolidated parcels, and access management provisions. By improving the site design standards with the aim of improving the quality of development/design within the Route 83 Corridor, such provision will also apply to and improve the quality of development and design in other commercial and industrial areas.

Village Area Strategies

- The creation of an Ellington Center Village Plan. Such a plan should include an extensive community outreach program, market analysis, and conceptual designs. The aim and outcome should be to create an economically viable conceptual plan to shop/market to the development community to secure a capable developer.
- The Village Plan should also explore and consider:
 - The creation of a Village District Zone that would provide a flexible master plan approach to development. Such an approach would focus more on site-design, public spaces, and architecture rather than bulk, area, and density.
 - That any development in the Village District Zone be a mixed-use commercial (office, retail, service) and residential development. The Plan should include recommendations for the distribution uses: ground floor retail, service, and office; upper floor(s) office and residential; and stand-alone residential buildings and/or town houses.
 - Requiring the inclusion of well-designed public spaces: parklands, trails, and community gathering spaces.
 - Designating the area as a receiving area for the transfer of open space and/or development rights, providing density bonuses for residential development.
 - The inclusion of affordable housing, in accordance with 8-30g and the housing needs assessment in Chapter Five.

Ellington Airport Strategies

- Create an Airport Advisory Committee. The committee should be made up of key stakeholders: The Town, airport owners, airport tenants, the Economic Development Commission, Planning and Zoning Commission, Board of Education, and community residents.
 - The Airport Advisory Committee should be charged with studying the airport, its potential, and its role in the community and economic development.
 - It should provide studies, reports, and other information to Town departments, boards, and commissions.
 - It should be an advocate for the airport.
- Conduct an Airport Expansion Feasibility Study. This study should explore:
 - The potential for expanding and reorientation of the runway.
 - The need and potential for land acquisition for expanding the runway.
 - The potential for an instrument approach to an expanded runway.
 - The market potential for increased general aviation use and activities.
 - The reconfiguration of land and buildings and the potential for new industrial development.
 - The creation of an aviation program at the high school and possible partnership with the airport in the creation of such a program.

Agriculture Economic Sector

- The creation of an Agriculture Advisory Commission. The committee should be made up of key stakeholders, including local farmers.
- Review all Town regulations and ordinances with the aim of removing barriers to farming to ensure that the Town is not closing-down opportunities.
- Amend the Zoning Regulations to allow agritourism and specific agritourism uses. This may include banquet spaces or functions, farm-to-table dinners, tasting rooms and restaurants, vineyard, breweries, tours, outdoor activities, bakeries, etc.
- Amend the Zoning Regulations to allow small country inns, and/or other forms of hospitality that may be reasonably associated with farms.
- Create and/or organize harvest events, fairs, and festivals that highlight local farms, their work and products, and draw positive attention to Ellington's agricultural community.

In the **short-term**, implement the following:

- **Economic Development Training:**
 - Economic development is everyone's job. Economic development starts with customer service. Therefore, Ellington should implement a training program for all Town Hall staff, boards, and commissions.
- **Encouraging What Ellington Most Wants:**
 - Investment flows to the location of least resistance. Therefore, if Ellington wants certain kinds of economic development and investment, it should encourage such uses and investments. This can be accomplished by conducting a comprehensive review of the permitted and special permitted uses contained in the Zoning Regulations with the aim of allowing the economic development activities/uses the Town most wants by staff approvals and Commission site plan, not the more subjective, time consuming, and costly special permit process.

- **Business Outreach and Engagement:** Too often local government spends very little
 - effort cultivating relationships with the business community. Ellington should proactively work to engage the business community. Some simple and time effective ways to do this are to host quarterly meet & greet sessions at town hall with specific businesses sectors, conduct monthly business visitations (even just one business a month), and work with the Chamber of Commerce to host business after-hours networking events.
- **Celebrate Ellington Businesses:** The Economic Development Commission, in association with Board of Selectmen, should seek to celebrate Ellington businesses and their investment in Ellington. Some simple ways of doing this include the implementation a ‘ribbon cutting’ program for new businesses and existing business expansions. Another activity would be to implement a yearly ‘Business Investment’ award program. Three award categories could be: Business Expansion, New Business, and Property Maintenance.
- **Community Information Packet:** Many small and some large businesses don’t have
 - access to good demographic and socio-economic data—data that can be important to their business planning activities and investment decisions. Providing such information is a simple way to assist and inform businesses—to help educate them about your community. Therefore, the Ellington Economic Development Commission should create and maintain a Community Information Packet that can be made available on the Town’s website as a downloadable PDF. The CERC Town profile is a good starting point for demographic, socio-economic, and other community-based information. The Town Profile can be supplemented with detailed and robust community data and real estate market information.

In the **long-term**, implement the following:

- **Economic Development Planning:** Create a comprehensive Economic Development
 - Strategy. This should include a focus on Ellington’s image, community brand, and marketing.
- **Strategic Community Investment:** When developing budgets, especially the Capital
 - Improvements Plan (CIP), Ellington should conceptualize government budgets and projects as an opportunity and means of making strategic investments in economic development—investing in Ellington’s future. CIP investments aimed at place-making and quality of life, such as walking trails, sidewalks, bike lanes and trails, public/community space can go a long way to creating the economic development ecosystem that businesses and residents seek—providing quality of amenities.
- **Intentional Development:** Most communities are reactive to development—allowing the
 - market to propose developments that are then reviewed, debated, and approved or denied. Being intention about the development Ellington wants, is about investing (time, energy, and money) in planning for development. In the Town Center Triangle and along the Route 83 corridor, Ellington should consider creating conceptual designs for future development and market those designs to the development community. This could also be done in association with an expedited permitting process—if a developer strives to develop the communities conceptualized plan, then a simplified approval process (site plan) is provided to the developer.

The above short- and long-term recommendations are not all an all-inclusive list of activities and strategies, more could be done to further engage in the work and practice of economic development. However, they are a starting point for creating an economic- ecosystem, continuous improvement, and building economic development capacity.

Chapter Seven Summary: Considerations/Strategies for Transportation

Road Classification and Land Use

- Implementing the recommendations of the Town’s 2017 Stormwater Plan.
- Adopt stormwater drainage standards for existing streets.
- Adopt stormwater drainage standards for new developments.
- Update the Subdivision Regulation Road Design Standards with the aim of reducing stormwater runoff. Such updates should consider:
 - Low Impact Development practices
 - Reduced roadway widths.
 - The elimination of curbs on local roads with associated sheet-flow and drainage swale approaches.

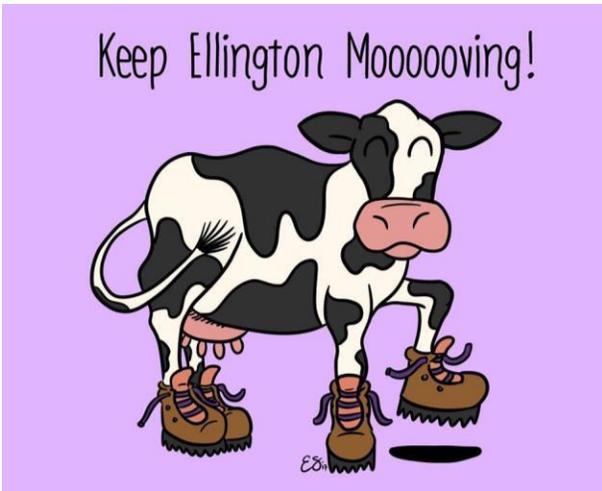
Alternative Modes of Transportation

- Evaluate the parking requirements by use and adjust as necessary to ensure adequate yet efficient numbers of parking spaces.
- Modernize site design requirements (landscaping, parking, lighting, stormwater management (LID), etc.) in the Zoning Regulations.
 - Reduce impervious surfaces: use of porous pavement systems, deferred parking, and shared parking requirements where appropriate.
 - Implemented access management and consolidated parcel requirements
- Continuously work toward creating a connected road network to ensure circulation and flow—including road extensions and cul-de-sac connections (continue to require temporary cul-de-sacs).
- Create a comprehensive sidewalk and trails plan aimed at creating a town-wide network.
 - A cycling network, on roads and trails, should be included as part of the sidewalk and trails plan.
- Create flexible local road design standards that allow road width reductions and incorporate LID approaches to stormwater management.
- Adopt the ‘*Ellington Town Center Walkway: Creating a Walkable Environment*’ and ‘*Route 83 Corridor Study*’ as addendum to the Plan of Conservation and Development.
- Amend Zoning Regulations to require sidewalks in new develop in the Route 83 corridor and Town Center.

**Chapter Eight Summary:
Considerations/Strategies for Public Facilities and Infrastructure**

- Develop a modified building plan for improvements to the Town Hall Complex that will meet the basic needs of the Town.
- A long-term needs assessment for the possible construction of a synthetic turf field should be conducted with a town-wide advisory committee overseeing the study.
- Review the findings of the facility needs study now being prepared by the Board of
- Education. After consultation with the Board of Selectman consider an amendment to this plan which supports the finding of this study.
- Complete an update of the 1998 Master Sewer Facilities Plan as a priority. Reserve enough capacity to service the Rt. 83 and Town Center triangle area. Complete other high priority work tasks identified by the WPCA and shown in Chapter 8.

Back Cover



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