Town of Enfield Connecticut

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Plan of Conservation & Development

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Acknowledgments

Town of Enfield

Scott R. Kaupin, Mayor

Matthew W. Coppler, Town Manager

José Giner, Director of Planning

Roger Alsbaugh, Assistant Planner

POCD Steering Committee

Martha McLeod, Chair

Tom Arnone, Board of Education

Susan Lavelli-Hozempa, Board of Education

Mike Dynia, Conservation Commission

Joanne B. Parlante, Economic Development Commission

Michael Littlejohn, Inland Wetlands & Watercourses Agency

Fran Walenta, North Central Connecticut Chamber of Commerce

Elizabeth Ballard, Planning & Zoning Commission

Michael Dumont, Planning & Zoning Commission

Charles Ladd, Planning & Zoning Commission

Jack Lopes, Revitalization Strategy Committee

Cynthia Mangini, Town Council

Ken Nelson, Town Council

William Ragno, Town Council

Peter Yarum, Zoning Board of Appeals

James Bailey Brislin, Member At Large

Alan Drinan, Member At Large

Charles Duren, Member At Large

Wendy Lavoie, Member At Large

Project Consultant

peter j. smith & company, inc.

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Introduction

Introduction

Introduction

A Plan of Conservation and Development (POCD) rationalizes and substantiates a community's planning and zoning regulations, capital improvements, and future provision of public services. The Plan is community-based, resulting from numerous public input activities. It prescribes the highest and best land uses after examining:

- demographic, economic and political characteristics and trends
- housing stock and need for affordable housing
- natural environment, including its soils, topography, hydrography, plants and wildlife
- need to protect surface and underground water supplies and open space
- infrastructure capacity, including energy, waste water and solid waste management systems
- need for public services, such as public safety, health, education and recreation
- existing transportation systems and services, and
- existing land use patterns and zoning regulations

Section 8-23 of the Connecticut General Statutes requires municipalities to update their POCD at least once every ten years. Regular updates are needed to ensure that the Plan remains relevant to the needs of the community as time passes and conditions change. Updates are vital: while the POCD itself is not legally binding on planning and zoning commissions, the POCD is the basis for adopting or amending municipal zoning regulations.

An updated POCD for the Town of Enfield, Connecticut is due in 2009. The Town's current POCD was completed in 1999. More than simply meeting a statutory requirement, the updated POCD should illustrate ten years of change and provide clear direction as the community continues to evolve.

Historic Background and Issues for the POCD to Address

The Town of Enfield is located in North Central Connecticut, right along the border of Connecticut and Massachusetts. Its western border is marked by the Connecticut River; its northern border by the Town of Longmeadow, Massachusetts; its eastern boundary by the Town of Somers; and the southern boundary by the Towns of East Windsor and Ellington.

Enfield's recorded history dates back to 1614, when European explorers first came into contact with the area's Native Americans. However, it wasn't until 1679, when the area was a part of the Town of Springfield, Massachusetts, that the area was actually settled. Approximately 70 years later, Enfield seceded from Massachusetts to become part of the Connecticut Colony.

Economic Evolution

Significant industrial development took place in Enfield through the early part of the 20th century. Two of the most notable were the carpet and gunpowder manufacturing industries. The Thompsonville Carpet Company grew along the banks of the Connecticut River as the sale of carpets throughout the Northeastern United States expanded. The development of Thompsonville, one of the largest and most diverse worker housing developments in the country, accompanied the facility's expansions. Further inland, the Hazard Gunpowder Company established its operations on the escarpment and the banks of the Scantic River, at one time producing most of the gunpowder used in the Civil War.

The Town continued to evolve as a manufacturing and warehousing center throughout the 20th century. As the world has become more global in nature since the 1970s, the Town lost jobs and industry to overseas locations. There is currently a significant surplus of industrial and warehouse space awaiting potential reuse. Fortunately, the region's strategic northeast location and able workforce has enabled Enfield to retain some level of industry, including several corporate headquarter operations. The Town is also located at the center of the Knowledge Corridor, a regional economic development initiative that has designated an area between Springfield, Massachusetts to Harford, Connecticut as one with exceptional opportunities in the finance, insurance and education industries. Enfield's Asnuntuck Community College is one of the 32 colleges and universities of the Corridor. In addition, Enfield offers the region's largest shopping area, a key asset that capitalizes on Enfield's strategic location within the regional road network.

Agriculture in Enfield also remains viable even as its role has changed throughout the course of local history. While the overall size and total production of farms is decreasing, the number of farms is increasing. Enfield currently has the highest concentration of tobacco crops in the entire state of Connecticut. As land comes under pressure to develop residentially, the POCD will seek to preserve the most productive agricultural land and establish local regulations that enhance economic opportunity for farmers. Similarly, a goal of the POCD is to enable locally grown agriculture to be sold more successfully in local outlets.

One of the challenges the POCD seeks to embrace is to enable the Town to evolve and prosper as economic conditions continue to evolve. Manufacturing, Warehousing, Corporate Headquarters, Retail and Agriculture are all essential and viable uses in Enfield's future economic mosaic.

Balancing Conservation with Development

The people of Enfield appreciate the character of their community. Many public services are of high quality and residents have expressed their satisfaction through the public input process. The area is safe, and the quality of education is high. Recreation and social services are accessible and affordable, and the housing is relatively affordable when compared to similar regional communities. Ensuring that the current level of service can be maintained, even during a recessionary environment when less municipal revenue is generated, is one of the challenges of the plan.

Some residents have expressed, despite the wealth of resources, that there is not a lot to do in Enfield. While the area offers significant and attractive open space, these spaces aren't connected and its pristine waterfront areas are not accessible. The POCD seeks to direct efforts toward connecting the region's open spaces and enhancing waterfront locations for the local community to discover and enjoy.

Historic Preservation & Cultural Development

Enfield's rich historic past has produced a legacy of architectural and archaeological assets that residents seek to protect and restore. Revitalization of the quaint hamlet of Thompsonville, for example, could provide a unique mixed-use environment and new economic generator for the Town.

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Structure of the Plan of Conservation & Development

In this section, we describe what is Enfield's POCD and how it works. It is meant to help readers understand what can be done with this document and to encourage them to use it. It is a description of how the Plan is structured and how the different elements of the Plan work together to achieve the community's goals and objectives. We also indicate how this update of the Plan is different than previous ones, highlighting the features that should make it easier for the town to implement the recommendations.

NOTE: Please be aware that "Town" is used to refer to the town government, and "town" to refer to the geographic area known as the Town of Enfield. When the "Town of Enfield" is used, it should be possible to disambiguate the term based on its context.

Plan Components

The POCD for the Town of Enfield is comprised of six major components:

- **An inventory of the community's resources** - The POCD provides a thorough inventory of Enfield's resources. The inventory documents existing conditions and trends regarding population composition, land use patterns, the natural environment, economic development and provision of public services. It provides a snapshot of the region at the present moment in the context of its historic and recent development. The inventory reveals future service needs and has significant influence on the Plan's recommendations.
- **The community's vision for the future** - The vision describes an end state of development. It reflects the hopes and aspirations for the future of Enfield as expressed by members of the community throughout this planning process. While the Plan itself will most likely change with every update, the vision relates to the long term future and may take more than ten years to be fulfilled.
- **Goals, objectives, policies and actions** – This section of the Plan can be thought of as a set of organizational tools the community can use to realize the vision. The goals and objectives stem directly from the comments received from participants in this planning process. They reflect community-based priorities for government efforts and investments. Policies also stem from public input, as well as from a comprehensive analysis of different elements of the community. They resolve important issues that may not have emerged during the public input process and help the town to be consistent with state laws and policies. Actions are the specific tasks that the Town could complete to implement the POCD.
- **Future Potentials** - The Future Potentials represents an inventory of opportunity and an ideal toward which the Town can strive. Many of the concepts described in the Plan can lead to employment opportunities in a variety of industries; others find ways to integrate Enfield with projects underway in adjacent communities. All of the concepts have the potential to help residents lead healthier lifestyles.
- **A Future Land Use Plan** - The Future Land Use Plan is arguably the capstone of the POCD. It describes and illustrates the land use patterns that should be used to achieve the goals and objectives of the Plan. The Future Land Use Plan is the basis for the Town's zoning. It is based on a thorough review of existing zoning as well as the town's organization and built environment, and its character. The Future Land Use Plan is developed to preserve the best elements of the community's character, and enable new development to contribute to and enhance this character.

- **An Implementation Plan** - The implementation plan is the assembly of actions described previously in the Plan. They are organized according to the timeframe in which they must be completed and presented as a matrix for ease of use by local departments.

In addition, a record of public comment received throughout the planning process is included in the appendix to the Plan.

Different or New in 2009

To be most effective as a living, accessible working document, Enfield's Plan of Conservation and Development has been reorganized and reformatted in a more structured style that makes it easy to identify background information from recommendations for planning and zoning, capital improvements and supporting town policies. Furthermore, the 2009 update of Enfield's POCD systematically examines and is consistent with the State and Regional Plans of Conservation and Development.

Potential Uses

Enfield's POCD can be used as a:

- benchmark for evaluating the compatibility of individual development proposals with the long range development objectives of the community
- comprehensive source of current information that can be used to secure state and federal funding
- marketing tool to attract business, visitors and prospective residents to Enfield
- guide for open space conservation and heritage preservation
- foundation for cooperative efforts between the town and its neighbors

Implementing the Plan

Enfield's POCD outlines the principles for local governance, planning and development. It sets strategic targets for achieving the community's goals and objectives. The POCD describes the town's resources, issues and role within the region. It shows the specific ways in which the Town can fulfill its vision for the future.

Enfield's POCD can be applied by any government agency, the general public, and the private sector. The Plan can be used by:

- **Town staff** to interpret legislative mandates, make administrative decisions, enforce development-related codes and prioritize work efforts
- **Planning and Zoning Commissioners** to measure the desirability of proposed developments by their conformity with the Plan
- **Elected officials** to learn about their constituents' vision for the community's future and to adopt local codes and ordinances to support those goals
- **Local residents** as a reference when making residential location choices and evaluating the effectiveness of local government
- The **Enfield Economic Development Department** and the **North Central Connecticut Chamber of Commerce**, for example, can market the town as an attractive location for business

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and industry; and the **Central Regional Tourism District** can use it to negotiate and advertise tourism opportunities.

However, the Plan's implementation actions fall specifically under the town government's jurisdiction. Many implementation actions, however, can and should be completed in collaboration with other regional and state agencies.

Vision for the Future

Vision Statement

To guide the planning process, a Vision Statement was prepared during the public input process of the POCD update. The Statement was gradually compiled as a series of public meetings, focus groups, and personal interviews were completed during the year 2009. The overall community vision is outlined below:

Our community, the Town of Enfield, is North Central Connecticut's hidden gem. A warm and welcoming community, Enfield has the small town feel that we associate with "home" with all the conveniences of a larger community.

Enfield truly offers something for everyone. Nestled between Springfield, Massachusetts and Hartford, Connecticut, Enfield maintains a privileged position as the shopping and employment center of the region.

Our people and neighborhoods are diverse because we embrace people of all ethnicities, incomes and educational achievements; and offer safe and well cared for places in which to live, whether it be in an urban, suburban or rural setting.

History and nature have evolved in lockstep, and together we will preserve and enhance them for our enjoyment and sharing with visitors and future generations. We are proud of the role our town has played in the development of this country, and lovingly preserve the architectural legacy. We treasure our vast natural resources, specially our two major waterways, the Connecticut and the Scantic Rivers. We see our extensive wetlands as a valuable resource to be protected and used wisely. They are an oasis of water, vegetation and wildlife that gives us respite. We are committed to making them accessible to everyone and every neighborhood.

Agriculture is also central to our identity. While we understand that not all land will remain agricultural in perpetuity, we seek to preserve and protect the highest quality land, assist our farmers, and encourage agribusiness through policy.

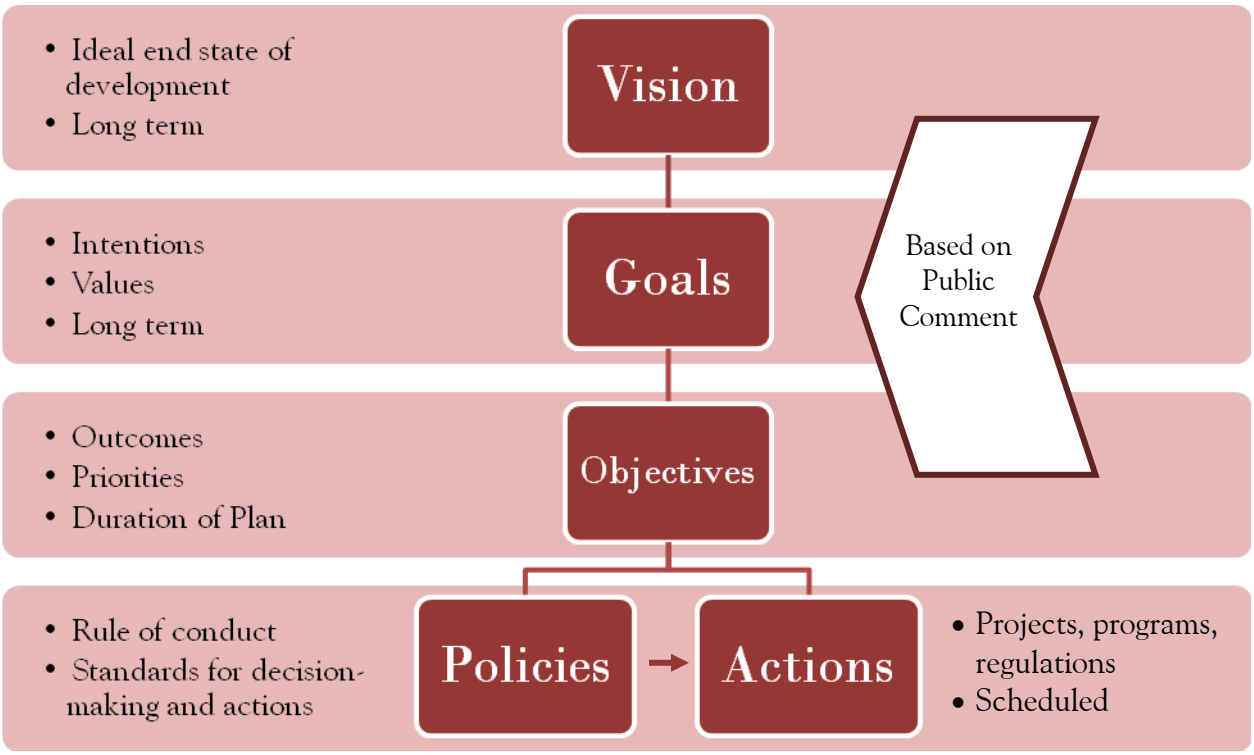
Our ultimate goal is to connect our community physically and enhance our spectacular waterfront by sensitively using the greenspace nature provides. We want to be a complete community that offers walkable neighborhoods, a variety of living and working opportunities, and the ability to meet our retail needs close to home.

Goals, Objectives, Policies & Actions

The goals and objectives are two of the most crucial elements of the planning process. They determine the direction and focus of the Plan. *Goals* express what the community wants to be or do to fulfill the vision and reflect common values. *Objectives* reflect public priorities for time and resource investments.

Policies describe the approach or "rules of conduct" that the community will use to meet its objectives. They are principles that guide public and private actions, and help determine consistency with the Plan.

Actions are specific tasks the municipality must undertake to implement the Plan. There are various types of actions: planning and zoning; capital improvements; and supporting policies, programs and regulations. Actions indicate the parties responsible for implementing each action and the timeframe in which they must be completed. Actions are measurable to allow the community to determine implementation progress.



Goal 1: We strive to be a community of diverse leaders who are proactively engaged in local governance

Objectives:

- Use the Plan of Conservation and Development as the public policy tool for directing and assessing future development decisions in the Town of Enfield
- Carry out the recommendations of the Plan of Conservation and Development within the next 10 years
- Bring local laws, zoning and other regulations into conformance with the 2009 Plan of Conservation and Development
- Promote cooperation, coordination and collaboration between Enfield and other local, regional and state government or organizations in both Connecticut and Massachusetts

Policy 1.1: Town residents will ensure that the POCD is being implemented by Town staff, elected and appointed leaders and that there is adequate progress

Action: Assign responsibility and authority to implement the POCD – The Town Council will assign responsibility and authority to the appropriate Town departments and Commissions to carry out the recommendations of the POCD as suggested in the Implementation Plan.

Action: Create a committee or expand the responsibilities of the existing Steering Committee to oversee the implementation of the POCD - This group should include representatives from neighborhood associations, local businesses, environmental groups, public schools, and local government. The group could meet annually with each of the agencies or organizations that are accountable for carrying out the actions outlined in this plan. These agencies or organizations could provide a progress report during that meeting and discuss with the group achievements, obstacles and ideas for improving their ability to carry out the plan.

Policy 1.2: All local government agencies will ensure that their projects and activities will be consistent with the goals, objectives, policies and actions outlined in the POCD

Action: Distribute the adopted POCD – The Planning and Zoning Department should distribute the copies of the adopted POCD to other Town agencies. Sharing the POCD will allow other Town staff to be aware of new Town policies and implementation actions for which their department will be responsible.

Policy 1.3: Private individuals and businesses in the Town of Enfield will be encouraged to help fulfill the community's vision for the future

Action: Provide hard and digital copies of the adopted POCD – The Town should make hard copies of the POCD available for public review at the Planning and Zoning Department and the Public Library. Digital copies of the POCD should also be posted on the Town website for download.

Policy 1.4: The Town of Enfield will seek consistency between its planning efforts and those of neighboring towns and regional and state governments or organizations in both Connecticut and Massachusetts

Action: Distribute the adopted POCD – The Town of Enfield should distribute the copies of the adopted POCD to the planning agencies of neighboring towns, and regional and state governments or organizations in both Connecticut and Massachusetts. Sharing the POCD will allow others to identify common issues and projects, which could lead to formalizing collaborative work on projects that cross municipal boundaries or that may have "spillover" effects.

Policy 1.5: The POCD will reflect the most current information about the community

Action: Reschedule future updates to the POCD after the release of the US Census Bureau's Decennial Census – The POCD is required by state law to be updated every 10 years. This requirement is meant to provide a means to determine whether the Plan remains relevant to the characteristics and needs of the community. However, Enfield's current POCD update schedule is one year before the Decennial Census. If the new Census reveals dramatically different data, the POCD will become outdated in less than 2 years after it is completed. Rescheduling future updates to occur after the release of the Decennial Census will ensure that the POCD is always based on the most current census data available.

Action: Conduct a periodic systematic review of the Assessor's parcel data and the Planning Department's land use / zoning data – Consistent parcel-level information between the Assessor's and the Planning Department's database is necessary to provide accurate information. Conducting periodic reviews of both databases, particularly after every update of the POCD will ensure that contradictions between both databases are eliminated. Changes to zoning and historic property designations should also be consistent between both databases.

Policy 1.6: Ensure that the Town's permit approval processes and requirements are predictable and clear to applicants

Action: Streamline the permit approval process – The Town of Enfield should simplify and streamline the permit approval process so that it does not discourage people from doing business in Enfield or from applying for permits and instead doing work illegally. There should be a clear outline of the permits required for each kind of project, the departments, boards or commissions that review and/or approve each permit and the order in which each board or commission is required to issue a decision. Boards or commissions that create extra steps should be consolidated. In particular, the historic preservation review process should be integrated into all other permit approval processes.

Action: Complete the certification process to become a Certified Local Government – Attaining Certified Local Government status with the National Park Service will allow the Town to institutionalize a process for historic preservation activities. It will also qualify the Town to participate in a wide variety of technical assistance and funding programs.

Policy 1.7: Ensure that Town officials and board members are current in their professional training and understanding of how to apply and enforce local land use and zoning laws

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Action: Organize continued education opportunities for Town Officials and Commissioners – Town Planning and Zoning staff and members of the Planning and Zoning, Conservation, Inland Wetlands and Watercourses, and Historic Preservation Commissions must have a thorough understanding of the federal, state and local policies, laws and regulations they are responsible for enforcing. Continuing education opportunities allows experienced and new staff and commissioners to have the same understanding of the laws and the permit process, and remain up-to-date in the latest changes in policy, laws and procedures.

Policy 1.8: Ensure that planning staff levels are adequate to conduct work effectively, in a timely manner, and proactively

Action: Create additional Planning and Zoning staff positions – The current number of staff people handling permits and long-range planning is insufficient. Additional staff is needed for processing permits, long-range planning and working with the different commissions and community organizations.

Goal 2: We will become a community of diverse, unique and unified neighborhoods that preserves, enhances and strengthens its historic and natural heritage

Objectives:

- Offer a diverse array of housing and employment choices for people of all incomes and ages
- Respect and encourage the racial, cultural, socio-economic and generational diversity of Enfield's residents
- Revitalize Enfield's historic communities
- Match housing and commercial development to neighborhood character
- Recognize the importance of historical and cultural resources to development patterns in the Town
- Encourage the development of mixed-use neighborhoods

Policy 2.1: The Town of Enfield will work with other public and private housing developers to: (1) stop fraudulent practices that inflate the cost of affordable rental housing in Thompsonville; (2) expand the supply of quality affordable housing throughout the town; and (3) improve the ability of low and moderate income residents to access rental and homeownership opportunities in Enfield's urban, suburban and rural areas

Action: Advertise local affordable housing and financial assistance programs – The Town of Enfield should develop an advertising campaign about the affordable housing and financial assistance programs available in Enfield. The purpose of the campaign would be to offer local individuals and families an

incentive to remain in town while economic conditions stabilize. It would also help homeowners to make major repairs needed to maintain property in good condition.

Action: Schedule and conduct annual housing inspections – Scheduling and conducting annual housing inspections will enable code enforcement officers to be proactive about dealing with problem properties and citing negligent property owners for code violations.

Action: Create a comprehensive program to deal with negligent and/or absentee landlords – Planners, zoning, building, fire code enforcement officers, and the Town attorneys need to work together in order for the Town to be more effective in getting negligent and/or absentee landlords to adequately maintain their property.

Action: Consolidate affordable housing agencies - The Town of Enfield will consolidate the efforts of the Fair Rent Commission, Building Code Board of Appeals, Enfield Housing Partnership, Housing Authority, Housing Code Appeals Board and Loan Review Committee to ensure that housing issues are dealt with in a more efficient and comprehensive manner.

Policy 2.2: The Town of Enfield will work with other public and private housing developers to address the shelter, housing, and service needs of the homeless, poor and others with special needs

Action: Encourage development of mixed-income housing in areas that currently under serve low and moderate income households

Action: Deconcentrate poverty by ensuring that the town offers choice in housing for different ages, incomes and locational preferences, as expressed in state policy

Policy 2.3: The Town of Enfield will adopt inclusionary zoning practices and ensure that zoning regulations do not effectively exclude people due to income, rental, race and other characteristics

Action: Conduct a local housing and zoning study - The Town of Enfield should conduct periodic studies of housing cost patterns and zoning practices in Enfield to monitor its progress in achieving state, regional and local goals and policies regarding affordable housing and inclusionary zoning. Enfield should maintain a cooperative relationship with the Capitol Region Council of Governments to continue and enhance their housing studies.

Policy 2.4: The Town of Enfield will protect its historic resources and maintain an up-to-date record of all historic buildings, structures, sites, and districts in the town

Action: Create local historic preservation regulations – The Town should create regulations for historic preservation that will be applicable to all properties listed in the Local Register of Historic Places, regardless of their location within a historic district. The regulations should provide for public outreach to educate property owners about the kind of work that requires a Certificate of Appropriateness, and the range of work that is subject to general oversight. This will add predictability to the permit process and help quell concerns about inflexible or excessive regulations. The regulations should provide for Historic Preservation Commissioners training.

Action: Expand the role of the Historic Preservation Commission – The Town should expand the role of the Historic Preservation Commission to govern historic preservation processes in all of Enfield, not just within the Enfield St. Historic District.

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Action: Conduct a town-wide historic resources survey – The Town of Enfield should conduct a town-wide survey to identify and create a formal record of all historic properties in Enfield. This will enable the Town to develop strategies to preserve, rehabilitate, restore or reconstruct public and private historic resources. It will also help to identify properties that have the potential for listing in the State and National Register of Historic Places. Federal funding is available for this task, particularly if Certified Local Government status is attained.

Action: Conduct an assessment of historic resources in the Enfield Shakers Historic District – An assessment of the ownership status and condition of all properties in the Enfield Shakers Historic District is crucial to understand what needs to be done to adequately protect the few remnants of the Enfield Shakers settlement that still exist.

Action: Prepare a preservation and acquisition strategy for the Enfield Shakers Historic District – Work with the private property owners, the State of Connecticut Corrections Department, and the State Trust for Historic Preservation to develop a preservation and acquisition strategy of the properties within the Enfield Shakers Historic District.

Action: Conduct structural assessments of former Higgins school and Strand Theater – The Town of Enfield should conduct an objective assessment of the former Higgins school and the Strand Theater buildings and grounds to determine the best reuse and alternatives for rehabilitation, restoration or facade preservation. The study should also outline alternatives to acquire funding for the projects.

Policy 2.5: The Town of Enfield will promote greater awareness of local, state and federal financial assistance and tax incentive programs for properties in revitalization and historic areas

Action: Advertise financial assistance and tax incentive programs for historic preservation – The Historic Preservation Commission should educate town residents about local, state and federal programs that can help private property owners finance historic preservation work. The purpose of the campaign would be to motivate private property owners to work with the Town to do appropriate repair and construction work on their historic property.

Policy 2.6: The Town will encourage the development of mixed-use neighborhoods and the retention and enhancement of existing mixed-use neighborhoods

Action: Preserve and/or enhance existing mixed-use neighborhoods, and encourage new mixed-use development where there is greater access to commercial areas and multiple transportation services

Policy 2.7: The Town of Enfield will offer residents and visitors the opportunity to learn about the community's heritage

Action: Develop master plans for the historic interpretive centers – The Town should begin a master planning process to develop the interpretive centers for Hazardville, Scantic River, Enfield Shakers and the Connecticut River. The concepts described in the Future Potentials provide a starting point for this process. Once completed, the Town can move forward with funding applications, design development, construction documents, and construction.

Action: Create a Heritage Trail along Enfield Street - Improve the pedestrian amenities and historic interpretation opportunities in the Enfield Street Historic District to create a comprehensive visitor experience.

Goal 3: We will maintain and improve an efficient circulation system that provides diverse transportation options for our wide range of mobility needs

Objectives:

- Provide greater variety of transportation alternatives for Town residents and the regional labor force
- Coordinate new development with transportation improvements to create residential and employment areas that are concentrated in accessible areas
- Develop additional transportation and circulation corridors with respect to natural resource and environmental protection
- Improve traffic safety, circulation and neighborhood connectivity to shopping, services and recreation areas
- Address access and transportation issues and impacts regionally

Policy 3.1: The Town of Enfield will work with the Greater Hartford Regional Transportation Council and other state and federal transportation organizations to improve public transportation in all of Enfield

Action: Reuse the former Casket Factory building as an intermodal transportation station – Reuse the former Casket Factory building located parallel to the Connecticut River in Thompsonville as a rail station. The facility should be restricted to a rail station for train passengers; there should be a complimentary area east of the rail line where buses and cars can pick up and shuttle passengers to a transfer station in the town's central business district.

Action: Identify and develop a second intermodal transportation center - Create a bus depot to provide a place for storage and maintenance of buses that serve the waterfront rail station. This facility should be located near the town's central business district close to I-91 and the town's main arteries.

Action: Conduct a local bus service feasibility study – The Town of Enfield should conduct a study to determine what kind of public transportation system would be most cost-effective for town-wide service, as well as reassess the feasibility of offering service from Thompsonville to Asnuntuck Community College. The study should explore smaller bus systems, such as shuttle buses, since previous studies already demonstrated that conventional public buses were not cost-effective. The study should also consider the potential impact that the proposed rail station might have on passenger numbers.

Action: Work with the RTC to establish incentives for residents to live within walking distance of public transportation facilities

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Policy 3.2: The Town of Enfield will make transportation system improvements that enable seniors and persons with disabilities to be independent and to have greater mobility and better access to local and regional shopping, services, and cultural and recreational opportunities

Action: Evaluate elderly transportation and paratransit programs in Enfield – The Town of Enfield should bring together all the government agencies, private companies and non-profit organizations that provide transportation services to seniors and persons with disabilities. The group should evaluate program effectiveness, limitations, and user needs to create a strategy to improve these services.

Policy 3.3: The Town of Enfield will maintain a safe and efficient transportation system that respects the character of the community and encourages healthy lifestyles

Action: Ensure that traffic management systems operating in the Town of Enfield produce efficient traffic circulation and promote vehicular and pedestrian safety – The Town of Enfield should undertake necessary roadway improvements at problem intersections as identified in this Plan's Public Input section and by traffic accident reports.

Action: Identify and redesign key intersections as community gateways – The Town of Enfield should identify access points or intersections that function as entrances to key parts of the community. These should then be redesigned to maximize visitor interest, wayfinding, circulation and safety in busy areas. (See Future Potentials section, Community Gateways for a preliminary list of intersections)

Action: Complete a continuous network of sidewalks and bike paths – The Town of Enfield should complete sidewalk and path construction to ensure that residents can walk, bike, skate or take a bus safely to and from school, work, shopping, recreation areas and other destinations.

Action: Adopt a complete streets policy – The Town of Enfield should establish a complete streets policy, which ensures that all modes of transportation are reasonably accommodated for in roadway projects. Wherever possible, new road construction, as well as reconstruction, must accommodate all forms, including pedestrians and bicycles.

Action: Offer public education about transportation modes – The Town of Enfield must ensure that the public is educated about current laws regarding both bicycle and pedestrian travel to ensure that motorists, cyclists and pedestrians, alike, understand regulations for all modes of transportation

Action: Complete Route 190 bikeway trail – Town of Enfield should complete construction of the Route 190 bikeway trail from Freshwater Boulevard to U.S. 5 and across the Connecticut River

Action: Work with private business to participate in programs that create or support affordable transportation alternatives for the local labor force

Action: Update street design standards to incorporate stormwater management features that prevent runoff or reduce the amount of water entering the storm sewer system

Policy 3.4: The Town of Enfield will work with neighboring and regional municipalities to develop a local transportation network that is an important piece of a larger, successful regional transportation system.

Action: Implement the Route 190 Corridor Transportation Plan – The Town of Enfield should continue to implement the Route 190 Corridor Transportation Plan that was developed in 2004. The

plan improves transportation efficiency while preserving and enhancing the character of the neighborhoods along Route 190.

Action: Develop strong intercity transportation elements - The Town of Enfield should create strong, local connections for pedestrian, bicycle and automobile traffic to all regional transportation infrastructure, including the proposed intermodal rail station in Thompsonville, intercity bus stops, interstate 91 and major road thoroughfares

Action: Expand the local on-road bicycle network – The Town of Enfield should expand its local on-road bicycle network as a part of the Capitol Region's network.

Policy 3.5: The Town of Enfield will encourage transit-oriented development in the Village of Thompsonville, centered on the proposed intermodal transportation station at the former Casket Factory building.

Action: Ensure that all areas of the Village of Thompsonville are connected to the intermodal transportation center and accessible to pedestrian, bicycle (e.g. sidewalks/trails) and automobile traffic

Action: Require all new public and private development projects to include access and accommodations for bicycles and pedestrians

Goal 4: We will develop in a manner that preserves and enhances the aesthetic, recreational and ecological values of our natural resources

Objectives:

- Preserve the quality of local water resources
- Enhance public access to the Connecticut and Scantic River waterfronts
- Protect prime agricultural soils from non-rural development and contamination
- Protect additional open space and create more conservation areas
- Limit development on steep slopes, wetlands, habitat and other critical natural areas
- Encourage new development that avoids creating negative environmental impacts or that mitigates negative impacts
- Develop and link greenways throughout the Town as the mainstay of Enfield's community design

Policy 4.1: The Town of Enfield will support activities, projects and land use regulations that restore the ecological functions and high quality of local water resources, particularly of the Scantic and Connecticut Rivers

Action: Create a conservation or no development zone along the Scantic and Connecticut Rivers that restricts development with 200 feet of the water.

Action: Create an inventory of actual and potential contamination sources, and analyze the susceptibility of water sources to contamination, including point and non-point sources

Action: Create local stormwater regulations to supplement federal and state regulations with measurable goals

Action: Revise zoning to incorporate new land use regulations – The Town of Enfield should revise the zoning code to incorporate new building height requirements for development along the Connecticut River.

Action: Create green building standards – The Town of Enfield should initiate a process to identify building standards that will help public and private development in Enfield be energy efficient and innovative in protecting land, air and water resources. These standards should include BMPs for stormwater management.

Action: Explore alternative energy production – The Town of Enfield should support efforts to explore alternative energy production facilities such as a plant that reuses sludge from the waste treatment plant, a hydroelectric power plant on the Connecticut River, and solar. Efforts should provide insight on the potential costs and savings over time

Action: Encourage homeowners to adopt residential best management practices that minimize the use of hazardous materials or generation of hazardous waste.

Action: Proactively work with local officials and developers to insure that only low-risk development occurs within the aquifer protection areas.

Action: Encourage residential property owners to conduct scheduled inspections and maintenance of underground fuel storage tanks and on-site septic systems.

Action: Support and encourage the acquisition of open space land within aquifer protection areas.

Policy 4.2: The Town of Enfield will ensure that there are adequate facilities for passive recreation

Action: Create a continuous public greenway along the Connecticut River in Thompsonville – The Town of Enfield should concentrate efforts in securing the remaining properties in the Thompsonville area needed to create a continuous public greenway along the Connecticut River. Acquisition of those properties will allow the Town to proceed to master planning phase of that portion of the greenway.

Action: Develop a master plan for the Connecticut Greenway Ecological Education Center – The Town should begin a master planning process to develop the interpretive center for the Connecticut River ecological education center as described in the Future Potentials. Once completed, the Town can move forward with funding applications, design development, construction documents, and construction.

Action: Complete implementation of the Mancuso Park master plan – Finalizing implementation of this Plan will provide a much needed space for passive recreation, including but not limited to picnic areas, fishing, family ball games and possibly open air concerts

Action: Conduct a master planning process for a multi-use trail development – The Town of Enfield should begin a master planning process to develop a multi-use trail system. This would allow the town to identify strategies to connect existing trails to each other and create visible access points and interpretive opportunities at different locations. It will also help to coordinate existing trail development projects such

as the one showcasing the historic resources on the site of the Hazard Powder Company along the Scantic River, which has been spearheaded by the Scantic River Watershed Association.

Action: Identify and construct key scenic overlooks and interpretive trailheads – As indicated in the Future Potentials, the Town should conduct a planning process to identify the location of key scenic overlooks and interpretive trailheads. It should coordinate this process with community organizations that are actively involved in this work already. The planning process should prioritize the overlooks and trailheads for implementation and identify funding opportunities.

Action: Complete and distribute maps of the town's public trails - Complete mapping and publish maps of trails that are open to the public. Make these maps available through the Town website, the Recreation Program brochures, and the Public Library. Incorporate the efforts of local organizations that have already begun this process.

Action: Preserve prime agricultural lands as an industry, while also protecting as open space – This will ensure that agricultural productivity is not hindered by inappropriate preservation measures and will help to preserve natural elements that enhance the quality of agricultural production and the general community. Similar to what is expected of residential and commercial uses, it will ensure that agricultural uses contribute positively to the community's character.

Policy 4.3: The Town of Enfield will strengthen its relationship with community organizations such as the Scantic River Watershed Association and the Connecticut Water Trails Association to further develop water-based activities on the Connecticut and Scantic Rivers

Action: Conduct a master planning process for blueway trail development – The Town of Enfield should initiate a master planning process to develop a blueway trail system along the Scantic River. This will help the Town coordinate its efforts with those of local groups. The document will also be valuable in obtaining funding from state and federal sources, which often require evidence of public support for the projects seeking public funds.

Policy 4.4: The Town of Enfield will ensure that there are adequate facilities for active recreation

Action: Authorize the completion of a master planning process to determine the need and potential location for additional sport-specific facilities

Action: Revise zoning to incorporate new building height requirements – The Town of Enfield should revise the zoning code to incorporate new building height requirements for development along the Connecticut River.

Action: Relocate Recreation Department administrative offices to a larger facility

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Goal 5: We will maintain and improve our regional competitiveness through cooperative economic development ventures and strategies

Objectives:

- Attract and retain high-quality jobs
- Adopt land use regulations that encourage mixed-use, "green" and live/work residential choices
- Enhance Asnuntuck Community College's presence in Enfield and encourage cooperative ventures between the school and the local business community
- Maintain and enhance existing relationships with Enfield's major employers

Policy 5.1: Integrate agriculture, historic preservation, and tourism into the Town's economic development activities

Action: Use the Town website as a promotional tool and as a gateway to community resources – The Town government website should improve its image and be more user-friendly to inform online visitors about what there is to do in Enfield, and what quality of life amenities there are for prospective residents and business. It should maintain its current role as a gateway to public services, but be much more user-friendly. Digital copies of all plans should be available for download from the town website.

Action: Expand and promote cultural events and attractions - The Town of Enfield should work with community organizations and businesses to develop year-round events to attract residents and other visitors to Enfield, in particular to Thompsonville. The Town should take advantage of regional and statewide advertising networks and services such as the Connecticut Public Broadcasting Network's "Culture Connect" website to promote Enfield's cultural events and attractions.

Action: Publicize Enfield's recreational facilities locally and throughout the region – The Town should publicize the location of trails, trailheads, and boat launches, including a description of the trail terrain and difficulty and uses allowed on the trail. This information is not currently available on the Town's or other regional recreation/trail-related websites (such as trails.com, the New England Mountain Bike Association, Connecticut Water Trails, Connecticut Forest Parks Association, etc.) The Town should also promote Enfield's unique location between two long distance trails: Metacomet and Shenipsit.

Action: Evaluate parking needs in Thompsonville and Hazardville – To promote tourism in these hamlets, any revitalization plan must include an evaluation of the existing parking network to ensure safe and efficient opportunities for future visitors.

Policy 5.2: Preserve, support and promote a vibrant agricultural industry in Enfield

Action: Establish Municipal Farmland Preservation Fund – To compliment the state's Farmland Preservation Program and Purchase of Development Rights Program, establish a Municipal Farmland Preservation Fund designed to preserve smaller, yet important, farmland in Enfield. The program would purchase the development rights of farmland, allowing the farmer to continue to farm and remain viable, while also protecting the land from future development.

Action: Recognize farming as a viable industry in Enfield – Farmlands are often located in industrial zones. As such, they often are not included in preservation programs because industrial zones are viewed as prime for future development. Recognizing farming as a viable industry that should be supported would encourage the preservation of these lands for future farming, despite their location in an industrial zone.

Action: Encourage alternative initiatives to promote agricultural viability – Make changes to land use regulations that would allow appropriate development or expansion of uses on farms, including bed and breakfasts, roadside stands, small retail and farming museum. As such, this would help develop an agri-tourism and retail market that would provide further viability for the farming industry.

Action: Maintain the area southeast of the Scantic River as agricultural land

Policy 5.3: Encourage rehabilitation and reuse of vacant and dilapidated buildings and commercial and industrial sites

Action: Identify key vacant buildings for potential reuse – With recent corporate closures and relocations, the Town of Enfield has been left with a glut of nearly two million square feet of vacant commercial and industrial space. The Town should conduct an assessment of vacant and dilapidated buildings to determine their structural condition and identify key buildings to be the focus of rehabilitation and reuse.

Action: Develop a coordinated marketing strategy focused on attracting business to vacant buildings – The Town should identify incentives with which to attract business and industry to Enfield's vacant commercial and industrial buildings. Incentives could include construction and financial assistance with site rehabilitation. Create a business marketing program for the town that focuses on the positive aspects of land and building availability as a counterpoint to the negative image created by the vacancies.

Policy 5.4: The Town of Enfield will invest in the revitalization of Thompsonville, North Thompsonville and Hazardville

Action: Complete implementation of the 1992 Thompsonville Revitalization Strategy – The Town of Enfield should resume implementation of the Thompsonville Revitalization Strategy. The Plan should be revised to account for new population and market changes since 1992, and for consistency with the updated POCD. The Town should ensure that all appropriate departments and community organizations are assigned implementation responsibilities and coordinate work among the departments/organizations.

Action: Reactivate the dormant Enfield Community Development Corporation – Dormant since 1992, the Enfield Community Development Corporation was a local development organization that distributed grants for housing development in Thompsonville. This Corporation still has approximately $200,000 in the bank. Reactivate this organization to take on a new role in Thompsonville, promoting commercial, residential and mixed use development.

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Action: Foster transit-oriented development (TOD) centering on the proposed new rail station in Thompsonville – Focused around the proposed new rail station, foster transit-oriented development by creating pedestrian friendly infrastructure extending into Thompsonville from the rail station. Mixed use development in this area should be catered to those who commute to and from of Enfield for work, shopping and recreation.

Action: Pursue designation of Neighborhood Revitalization Zone in Thompsonville – The State of Connecticut has a program to help communities get organized and access funds for conducting neighborhood revitalization projects. Participation in the program depends on municipal designation of a Neighborhood Revitalization Zone (NRZ)and documentation of a significant number of deteriorated, abandoned, vacant, or foreclosed properties or public hazards in the designated neighborhood. Once the designation is given, the community must produce a state-approved Strategic Plan in collaboration with resident and business organizations before it can access state funds. Having a strategic plan also grants special powers within the NRZ that will help the community meet its goals.

Action: Create a Thompsonville Façade Improvement and Commercial Rehabilitation Program – A façade improvement and commercial rehabilitation program is needed in Thompsonville to assist commercial property owners with repairs to parts of their properties that are visible from the street, in accordance with design guidelines or standards for the area. The program should also work to retire signs that no longer conform to the area's sign regulations.

Action: Develop a simultaneous and complementary economic development strategy for Thompsonville – The Town of Enfield should work with Thompsonville residents and merchants' associations to develop economic development programs that occur simultaneously with the physical planning and development efforts taking place in the neighborhood. Creating new events and expanding existing events in the Thompsonville area before physical revitalization is completed will allow people to see reinvestment in the area as it happens and create interest that can inspire additional reinvestment.

Action: Reactivate the Small Business Incubator in Thompsonville – The North School Enterprises Business Incubator in Thompsonville is a great resource for that community, but the Town must ensure that it offers more than just a low-cost workspace and shared equipment. Business incubators should offer a suite of services to help entrepreneurs develop a stable business and be able to become independent within a short period of time (1-2 years); this will allow new entrepreneurs to enter the program. Services that could be offered by business incubators are: mentoring or coaching with basic business management; assistance with accounting, finance, regulatory compliance, intellectual property management and marketing; and access to banks and investors. This presents a great partnership between the Town and Asnuntuck Community College. The College can play a role in recruiting and further training entrepreneurs, while the Town provides building facilities and guidance with moving to another location in Thompsonville after the program is successfully completed.

Action: Create design guidelines for commercial buildings along Enfield Street – The Town of Enfield should create design guidelines to control the appearance of commercial buildings along Enfield Street. The guidelines will ensure that new commercial development is consistent with the historic character of the area, as described in the Future Potentials.

Action: Relocate the Farmer's Market to Hazardville – The Town of Enfield should relocate the Sunday Farmer's Market to Hazardville and strive to develop Hazard Avenue as a farm-to-market road where residents and visitors can enjoy shopping for local agricultural products in a quaint village setting. A smaller market could be maintained in Thompsonville, but it should also be relocated to a site that is more central and stimulates more commercial activity in the area.

Action: Evaluate the impacts of existing tax structure – An evaluation of tax structure and mechanism in Enfield could help determine how people earning low income are affected or whether residents in the downtown area have a greater tax burden. The result should be to develop strategies to make the Town's tax structure more equitable and reduce disparities between neighborhoods. Look for alternative ways to fund public services or save money on local government operations, such as fees for service, cost-sharing between departments, sub-contracting, etc.

Action: Revise zoning and building codes to accommodate mixed uses and create design guidelines for the Central Business District – the Town should revise its zoning to accommodate the changes needed to create the mixed-use area designated in the Future Potentials as the Central Business District. The revisions should ensure that residential development and innovative design elements such as high rise towers and green roofs are allowed.

Goal 6: To undertake and support activities which enhance the quality of life in the Town of Enfield

Objectives:

- Develop and maintain connections with communities throughout the region, including physical, social and cultural connections
- Maintain and enhance Enfield's reputation as a center for superior education in its public and private schools
- Develop, communicate and celebrate the identity of the Town of Enfield as a unique destination in the Hartford and Springfield regions
- Deliver services to Town residents in a cost-effective manner

Policy 6.1: Preserve accessibility to community services by maintaining public facilities within walking distance of residential areas

Action: Ensure that neighborhood schools and community services remain within walking distance of residential areas – The Town of Enfield provides many social and educational services right in the neighborhood they serve, particularly in Thompsonville. This is a positive thing because support services can be accessed or continued more successfully when they are within reach of the people they are meant to serve.

Action: Consider alternative uses for school buildings that become vacant as student populations decline – The Town of Enfield should work more closely with Enfield Public Schools to find alternative or temporary uses for school facilities that will no longer be used for classroom space due to declining enrollment.

Action: Determine what agencies or departments could benefit from sharing the same building - The current building sharing between the Town's various social services should be seen as a positive attribute and maintained while addressing each agency's needs for expansion. Sharing facilities helps collaboration

between different agencies. Their current location within the neighborhoods they serve is also a positive quality and should be preserved to ensure that clients have easy access to social services.

Policy 6.2: Ensure that the Enfield's community facilities are always able to provide the highest quality of service

Action: Expand and upgrade Enfield Public Library – The Enfield Public Library needs additional storage space for its collections and better wireless internet infrastructure. Expanding and upgrading library facilities will ensure that the library will be able to continue to provide its excellent service to its customer base. More staff should also be hired.

Action: Expand North Central Health District facilities – The Town should work with the North Central Health District to redesign and expand the offices on North Main Street. The facility should match the setbacks and exterior design of neighboring buildings and provide enough office and clinical space to meet needs and service goals. Relocating District Offices to a more central location in Thompsonville, making the current site available for facilities in the Culture and Arts District, should also be explored.

Policy 6.3: Ensure that public safety facilities have regular maintenance and capital improvements as needed to provide rapid response and safety of staff

Action: Relocate the Thompsonville Fire Department – The Town of Enfield should find an alternate location for the Thompsonville Fire Department. The new location should meet all new public safety regulations. The existing building, which is a "sick" building, should be demolished and the site redeveloped as public park space along Freshwater Pond.

The Future of Enfield

The Future Potentials is an inventory of development opportunities for the Town of Enfield, Connecticut. It blends the organizational understanding of urban design and with the functionality of land use planning. Together with the vision statement, the Future Potentials is the basis for the Future Land Use Plan.

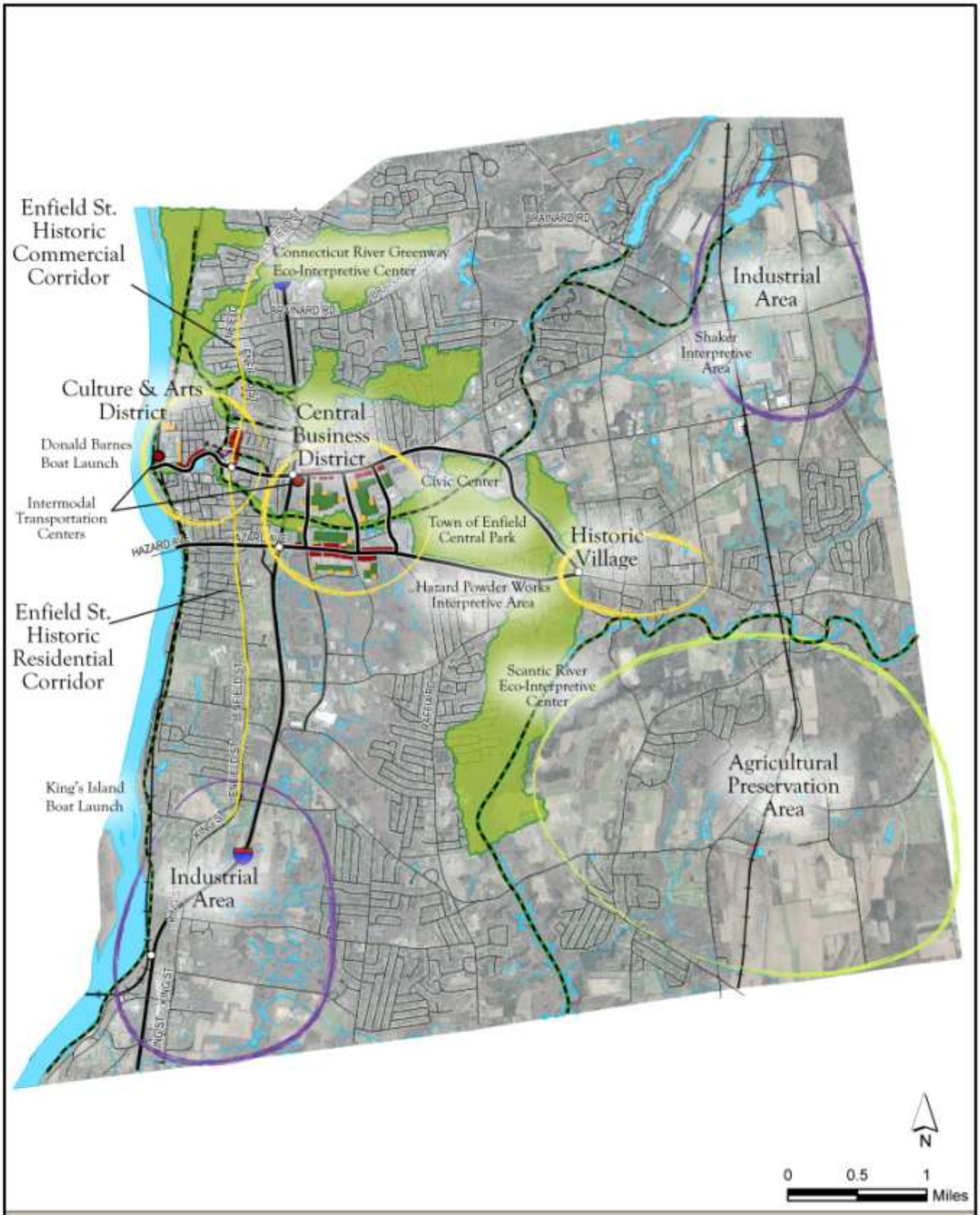
The Future Potentials promotes a comprehensive understanding of how the community is structured. It identifies key areas and sites according to their function, internally and in the context of the Springfield-Hartford region. It is integrative, showing how existing and proposed features interrelate and create a physical environment that effectively supports well-being in the entire community. The Future Potentials depicts the town as a single community with unique neighborhoods, rather than a collage of independent hamlets, to help forge a collective identity and reduce issues of competition. In addition, the Future Potentials provides continuity to many of the concepts presented in previous Town and State plans.

Future Potentials

After evaluating the character of the community, and exploring the potential of the built and natural environment, the Town of Enfield has been divided into the following nine area types:

- Culture and Arts District
- Central Business District
- Civic Center
- Historic Areas
- Industrial Areas
- Agricultural Preservation Areas
- Outdoor Recreation and Learning Areas
- Interpretive Centers
- Transportation Facilities

These areas can help the Town strategically direct its attention and investment efforts in the next ten years. This section describes how each of these areas should work and function. While specific projects are suggested, the Future Potentials offers development concepts that can be tailored through subsequent master planning processes. The spirit of the Future Potentials is to point out those areas and resources in Enfield that have significant potential to stimulate change in the community. These ideas have been the product of analysis of the potential of the community through the inventory process, combined with the issues and desires expressed by various individuals living and working in Enfield. The specific actions needed to implement the projects presented here are listed in the actions section of this Plan.



Future Potentials

Plan of Conservation & Development - Town of Enfield, CT

Agricultural Preservation Areas

Agricultural areas will be preserved with a variety of planning tools that ensure the continued viability of agricultural operations in Enfield. These planning tools could ensure that farmers are able to switch without difficulty between agricultural activities depending on market demands, and that they can benefit from selling directly to people that visit the farm. Special provisions could be used to ensure that small retail or agri-tourism facilities do not alter the rural character of the area, conflict with or take over agricultural lands.

Culture & Arts District

Enfield's traditional downtown area has the potential to be revitalized and transformed into the town's Culture and Arts District. The area has many attractive buildings that can provide the space needed to expand the Town's arts and recreation programs. There is also a continuous park-like promenade along Freshwater Brook that spans the width of the area, from Enfield Street to the Connecticut River. This promenade and the numerous civic monuments and gathering places near it are the perfect foundation for an urban destination that locals and visitors can enjoy. The variety of small shops, restaurants and services dispersed through the area can be leisurely explored on foot, as can be the surrounding residential streets, which offer an eclectic collection of Greek, Gothic, Colonial, Victorian and many other architectural styles.

Town Hall Redevelopment

To help this area achieve its full potential, the Future Potentials recommends relocating town government offices to the new Civic Center. Town Hall building and grounds should be redeveloped as a landmark culture and arts center. The Town Hall redevelopment could incorporate the Higgins School building and grounds to create a campus environment, complete with a central courtyard linked to several pathways connecting the site to Main Street and to the town's greenway trail system. Possible uses for these buildings include a community center, visual or performing arts school, a museum, or library.

Infill Development

Further west along North Main Street, the Future Potentials recommends filling in the gaps between existing buildings with commercial uses. Infill

Figure 1 Proposed Area for the Culture and Arts District

Shown in red blocks is potential commercial infill development. In orange is multi-family residential. In purple is the Culture and Arts campus. Red and black circles identify intermodal transportation centers, while white ones indicate visitor centers or traffic circles. Black and green dashed lines indicate trails, while the solid yellow line highlights the historic walking trail. Green areas represent protected open space.

development should maximize the use of the land fronting the street, and create a stronger sense of visual continuity by requiring façades to conform to a common building scale and sign style.

Streetscape Improvements

Streetscape improvements to North Main Street will continue to create a pleasant pathway linking the culture and arts center to the commercial establishments in the Thompsonville center and the Connecticut River waterfront. Redeveloping the Strand Theater (even doing cosmetic improvements to the façade only) will have a significant impact on the quality and vitality of the area because it is at the end of the sightline when entering North Main Street from Enfield Street. Uses that have been discussed for this Art-Deco building include a performing arts center and an extension of the Lamagna Activity Center. Continuing to landscape Freshwater Pond attractively is also crucial to making the area feel like an urban oasis to be enjoyed by all. Removing lower branches from trees to provide visibility of Freshwater Brook can enhance the perception of safety along the section of Main Street from the dam to the railroad underpass. Enhancing the sense of safety by increasing visibility at eye level can make walking down to the river on the only sidewalk on that portion of Main Street much more appealing.

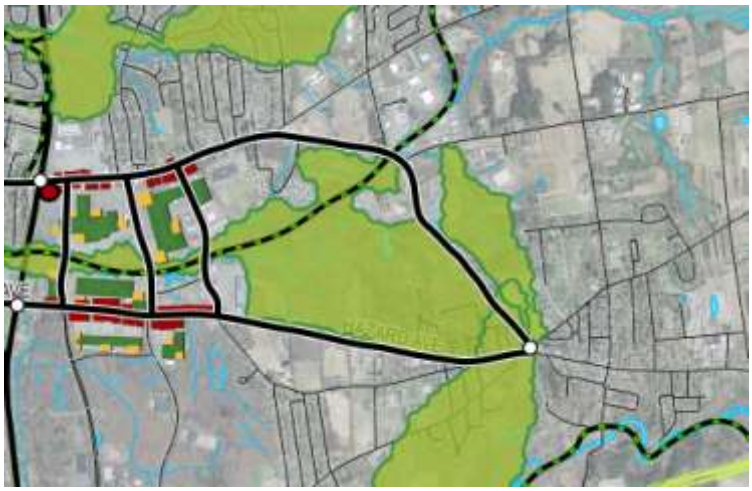
Residential Development

A variety of housing units, such as townhouses and apartment buildings, can replace dilapidated single-family housing in the area. A height of approximately five to seven stories will be sufficient to offer views of the Connecticut River. Residents of this area will have access to the Intermodal Transportation Center. If the neighborhood surrounding the Bigelow Complex is developed at 15 units per acre (Garden Apartments and Townhouses), 425 new residential units could be established. If the lumber yard and surrounding neighborhood is developed at 30 units per acre (midrise apartments), 470 new residential units could be created.

The area near the lumber yard could evolve to offer mid-rise apartments with impressive views of the Connecticut River. If developed at 30 units per acre, 470 new residential units could be created. The actual lumber yard site could be redeveloped to include a connection to the Connecticut River Greenway raised over the rail line.

Central Business District

Enfield's big box retail and office complex area is the commercial center of the community. Nearly all of the town's retail, restaurant and office establishments are located here. The area also offers unparalleled access to the town's arterial roads and the interstate highway system. These arterials transport visitors from all over Enfield and the broader region. To capitalize further on this area, the Town should increase the density of commercial and residential development over time. It should create a more organized internal



Central Business District and Central Park area
This image shows how the CBD is linked to other parts of town through the road, trail and greenway networks. A detailed view of how the area might look at full build-out is shown on Figure x.

street network that relates better to the function of the roads surrounding the area. Finally, the Town can take measures to ensure that civic and open spaces are integrated better into each development.

Residential Development

Higher density residential tower structures can be incorporated into existing buildings, or built as freestanding structures. New residential development can be accomplished by building where there are now excessively large parking lots. Lost parking space can be replaced by creating multi-story parking structures. Increasing the density of development will make a more efficient use of the land in the area. It will also help the area to evolve into a mixed use development in which businesses have a continuous influx of clients and residents have direct access to a great variety of goods and services. The area could accommodate approximately 20 residential towers with seven to ten floors and eight to ten dwelling units on each floor, for a total of 1,120 – 2,000 units.

Commercial Development

Existing commercial buildings can convert unused roof areas into green roofs. Green roofs reduce energy costs and, when integrated with residential structures, can double as open space to provide pleasant outdoor areas for shoppers and residents. New commercial buildings should be developed as mixed-use buildings in which commercial uses occupy the lower floors and residential uses occupy upper floors. New mixed-use buildings should be oriented toward the roadways and have relatively small building setbacks. This makes access more convenient for pedestrians, and the activity created by their movement conveys a sense of vitality that can motivate more people to drop by the shopping area.

Another feature that is helpful to shoppers is a common building scale and signage. This helps both pedestrians and drivers quickly find what they want and easily navigate to it. Parking can be provided behind the building or in a shared parking structure. Adequate access from the parking lot or multi-level structure should also be provided so that shoppers can conveniently return to their vehicles to store their purchases. Approximately, 700,000 square feet of commercial space could be added along roadways. Residential use on the second story could add 260 - 300 additional residential units.

Integrated Open Space

One of the unique features of the Central Business District (CBD) is that it has direct access to the town greenway system. This strip of wetland and forest should be preserved and developed with trails or boardwalks. Shoppers, store employees and area residents should be able to access the greenway from various points in the neighboring commercial or residential development. There should be options for a quick respite from the hustle and bustle of the mall and from work, as well the chance to go for a longer walk or bike ride. The trails in this part of the greenway should allow people to go all the way to the Culture and Arts District, the Intermodal Transportation Center, and the Connecticut River greenway, as well as to the Town's Central park and Historic Village.

Civic Center

Enfield's Civic Center will extend from the Central Business District to take advantage of proximity to Asnuntuck Community College and other services frequently used by town residents. Town government offices could be relocated to a new building in this area. Both Asnuntuck Community College and the new Town Hall will be linked to a central park and greenway trail. Situated at the heart of the community, the new central park will take advantage of the lush wetlands between Elm St. and Hazard Ave. The park will be linked through greenway trails to the Connecticut River, the Culture & Arts District, the Central Business District, the Historic Village, the Scantic River, and Shaker Pines.

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Central Business District

Shown in this image in light yellow are residential towers; in light orange, mixed-use commercial buildings; in burgundy, sidewalks; in pink, existing commercial buildings; in pale blue, civic buildings. Shown in various shades of green are green roofs, street trees, and the greenway. A trail, shown in brown winds through the greenway and links to other trails.

The purpose is to illustrate how the Central Business District could look and function if developed according to this Plan. The key ideas are that: (1) the area's flow and organization can be greatly improved by using a grid road pattern; (2) the need for additional housing in close proximity to goods and services and public transportation can also be effectively addressed here; (3) a balance between development open space conservation can be achieved with conscientious planning and design.

Historic Areas

There are several historic areas in Enfield that require special treatment. A variety of planning tools can be used to ensure that the historic character of each area is preserved. Each of these historic areas has a unique identity that will be strengthened to ensure that they do not compete against each other. The Future Potentials highlights the story/theme predominant in each of these areas, and provides guidance on how to make it a destination, giving locals and visitors a reason to come here and the opportunity to learn more about the areas' history.

Enfield Street Historic Residential Corridor

Historic buildings along this segment of Enfield St. will be rehabilitated to conform to local historic preservation regulations. National, state and local register buildings or other culturally significant sites should be properly identified with interpretive signs. Proper signage will allow visitors to the area to understand the history of the area and the individuals that lived there, as well as the architectural value of the structures.

Enfield Street Historic Residential Corridor

Minor streetscape improvements can bring major changes to people's ability to visit the historic sites along Enfield Street. The most significant feature needed is a continuous sidewalk on both sides of the street. Ample and level sidewalks ensure that people can travel safely along the corridor, regardless of their degree of mobility. Trees add comfort and beauty during the warmer months, and streetlamps convey a sense of security in the late afternoon. A mini plaza with facing benches offers a place for visitors to rest while on their walking tour, and an interpretive panel describes the architectural features and historic significance of the adjacent building or site.

Enfield Street Historic Commercial Corridor

The appearance of this segment of Enfield Street will be gradually modified to resemble the historic architectural style of remnant residential properties in the area. This will be achieved through the use of design standards that promote commercial development that has shorter setbacks from the street and maintains street amenities that are attractive and accessible to a wide range of mobility needs.

Enfield Street Historic Commercial Corridor
The northern portion of Enfield Street / Route 5 is an area that is slowly shifting from residential use to commercial use. Residential uses however are still the most common land use. The Plan proposes to guide future commercial development in the area in a manner that respects the character and scale of existing residential buildings in the area. Major changes include reducing building setbacks and providing better streetside landscaping and pedestrian amenities.

Historic Village

The Hazardville center retains a charming, small village character and many buildings from its early development. Historic preservation regulations should be used to ensure that the architectural features and buildings that define Hazardville's identity are protected and enhanced. Infill development in this area should be encouraged, but required to match the scale and architectural style of the area. Mixed-use is predominant along Hazard Avenue and should be preserved to sustain local small businesses that rely on a direct customer base. An orderly traffic management system that maintains good traffic flow and a streetscape design that provides temporary space for deliveries and customer parking are also important

for commercial vitality. Continuous sidewalks with adequate curb cuts/ramps are needed on both sides of Hazard Avenue to ensure that area residents can walk safely to shops.

In addition to attracting local residents, the village has the potential to attract people from a broader area by becoming an agricultural marketplace. Its proximity to farmland and the regional transportation network give the village an edge as a destination where people can buy local or handmade tobacco products, trees and flowers, and produce.

Outdoor Recreation & Learning Areas

Parks

The Town of Enfield has many active recreation areas, but very few passive recreation areas. Expanding the supply of passive recreational parks should become a Town priority. There are many areas that have potential for passive recreation; one that is often mentioned by Enfield residents is the Mancuso/Town Farm. This property is already in public ownership and is within the Scantic River Greenway, but it is also the site of the Town waste transfer station. Signage is needed to make residents aware that the area is also open for recreation, as well as park amenities to make people feel welcome in the area.

Another location with potential as a passive recreation area is the vast amount of undeveloped land between Elm Street and Hazard Avenue. This area could be developed as the Town Central Park with nature trails and boardwalks above the wetlands and along Freshwater Brook. This park could be the midpoint between the Connecticut River and the Scantic River Greenway.

In addition to developing more parks for passive recreation, the Town should ensure that as many parks as possible are connected to the greenway system and/or to the adjacent neighborhoods. Park connections could be as simple as a path or sidewalk leading to a park, or an open space corridor joining two parks or a park to a neighborhood. One park that should be connected to the greenway is Brainard Memorial Park. Access to Powder Hollow Park from Hazard Avenue and the adjacent residential areas should also be improved.

Trails

- Connecticut River Greenway trail – create a continuous multi-use trail along the Connecticut River waterfront from the town boundary with the Town of Longmeadow, Massachusetts to the town boundary with East Windsor. This trail should connect to the Eco-Interpretive Center on Enfield St.
- Create a walkway across the railroad tracks from the lumber yard building to South River St. to provide access to the waterfront.
- Enfield Street Historic Residential Corridor - Create an eight foot sidewalk on each side of the road and place interpretive plaques of historic builders at every significant building.
- Urban wetlands trail – Create a trail or boardwalk along the creek from the Connecticut River, Freshwater Pond, the CBD and Town Central Park.
- Scantic River Greenway trail – create a continuous trail along the Scantic River that has interpretive structures to educate visitors about the area's natural resources and the history of the Hazard Powder Company. See section on Interpretive Centers for further information about attractions along the trail.

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Interpretive Centers

These facilities offer interactive learning opportunities, display panels with information about the site or history of the area, etc. Other facilities may be included depending on the amount of resources and staff or volunteers available to operate the center. The facilities can also function as shelters for people who have been using the hiking or canoe trails. Local government or community organizations could operate the interpretative centers.

- **Hazardville Institute** - Complete restoration work promptly to allow its return to use by the community. The building could also be an ideal location to tell visitors about the history of the Hazardville.
- **Scantic River Park** - Create a small shelter or other structure and provide visitors with a description of the area's natural resources and unique species.
- **Enfield Shakers** – Create an interpretive facility or structure to tell visitors about the history of the Enfield Shakers and their legacy.
- **Connecticut River Greenway** - Old water filtration bed property and adjacent school building can be reused as an ecological interpretation and environmental teaching center.

Interpretive Trailheads

Interpretive trailheads are formal access points to the trail system. They should be visible from the roadway and provide information about the trail and nearby sights. An ideal location for an interpretive trailhead is at the intersection of Phoenix Ave. and Vella Ave.

Interpretive Trailheads

This graphic shows a model interpretive trailhead. Tall panels on opposite sides of the road provide interpretative information and make the trailheads visible from the roadway. A raised crosswalk with distinctive markings or contrasting pavement color is designed to encourage drivers to slow down near the trail. Benches let users prepare for or rest from their walk. Limited roadside parking is also provided.

Connecticut River Greenway Interpretive Center

This image illustrates a concept for redeveloping the site of the old water filtration bed and the adjacent abandoned school property. Removing the filtration beds and leveling the site would provide sufficient surface area to create an interpretive facility in a park setting. The site is ideal due to its proximity to various protected open spaces in Enfield and Longmeadow, Massachusetts, the Connecticut River and Route 5. This location would allow area residents and visitors to easily access the center by various modes of transportation. Pedestrian and bicycle traffic could reach the site through new sidewalks and crosswalks along or across Route 5, or through trails coming from the river or from neighboring parks.

The concept proposes redeveloping existing buildings on the site as a physical forum in which visitors can learn about the natural resources and ecology of the area, as well as about green building construction. The buildings themselves should be models of how building renovations can be accomplished efficiently and affordably with the environment in mind. Important features to consider are green roofs, greywater reuse systems, passive lighting, and landscaping with native plantings. Outside, the site can provide shelters, benches, paths, gardens and informal play areas. Interpretive signs around the park could educate visitors about the Connecticut River, the plant and wildlife of the area, the greenway program or other environmental protection efforts. It could also offer suggestions for trails that can be accessed from the site.

Stream Overlooks

Enfield's roads traverse many beautiful streams that are hidden away from sight. Creating scenic overlooks at key locations will help make streams more prominent natural features of the community. Locations that could be prioritized for the short-term are the bridge on Water St. and Rt. 191, just south of Scitico; and the pedestrian bridge on High St. and Enfield St.

Stream Overlook on Water St. and Rt. 191

This illustration presents an example of the concept for stream overlooks in Enfield. The concept is simple: a minimal facility that draws attention to the waterway below and allows passersby to observe it. Where there are noteworthy resources, interpretive panels can also be incorporated.

An ideal location for such a facility is on the bridge on Water St. and Rt. 191. The concept for this site includes an overlook centered over the stream with a set of interpretive panels, and a paved pull-off with space for two cars. The same is repeated on the opposite side of the road. In this case, the interpretive panels could make reference to the historic industrial building and railroad that can be seen from the overlook, as well as directions to nearby parks and trails.

Boat Launches

There are only two boat launches in Enfield, both on the Connecticut River. One is a Town boat launch on River Street. The other is King's Island Boat Launch, which is owned by the Connecticut DEP and is located at Parsons Road. No major improvements are currently needed in these sites, but signage from the main road could be used to identify and guide users to them.

Industrial Areas

The numerous industrial spaces throughout the Town of Enfield that are slowly becoming vacant as economic conditions change locally and nationally can be reused for industrial or other uses, depending on site-specific conditions. New industrial development should remain within current industrial areas to maximize exiting infrastructure, limit potential contamination and preserve open space. The industrial area on the northeastern corner of Enfield has potential for agricultural products processing due to its proximity to farmland. Its proximity to rail can eventually be exploited as a cost and time effective means of moving freight. Relatively clean industrial uses regulated with performance standards are suitable for these areas. Industrial uses in these areas should focus on minimizing negative impacts to the area's water quality. Types of industries that could be attracted to the area include processing of agricultural products, manufacturing, and technology and research.

Transportation Facilities

Roads

The role of roads is primarily to facilitate transportation, but they also have the function of defining a space for other activities. To improve circulation and create an orderly urban form, the Town of Enfield could:

- Create a more direct road from George Washington Blvd. to Elm St.
- Create a new road from Elm St. to Hazard Ave. between I-91 and Freshwater Blvd.

Community Gateways

As mentioned, roads have more functions than just transportation. Major streets and intersections can shape visitors' first impression of Enfield. Signage can affect their ability to find their way in an unfamiliar place. Traffic circles and roundabouts are structures that can improve traffic flow while providing aesthetic benefits. Proper signage at key entrance points and intersections can guide visitors to the community's attractions. Locations that should be considered for improvements are:

- Enfield St. near the I-91 overpass
- Intersection of Enfield St., North Main St. and Elm St.
- Elm St. near the I-91 overpass
- Hazard Ave. near the I-91 overpass
- Intersection of Hazard Ave., Elm St. and North St.

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Visitor Centers

Visitor Centers are facilities located near highway off-ramps. Here, visitors can buy goods and services en route to other locations and be enticed to visit Enfield's attractions, stores and restaurants. To be successful, proper signage along the highway should direct drivers to the facility. The facility should showcase and offer a sample of what makes Enfield unique and provide good directions to the showcased sites.

Intermodal Transportation Centers

Intermodal Transportation Centers are facilities that serve commuters and mass transit users. They provide a centralized location where transit riders can easily connect between different modes of transportation to get to where they need to go. Enfield has the potential to develop two Intermodal Transportation Centers at two strategic locations:

- **Casket Factory** – The Casket Factory is a historic building adjacent to the rail line in Thompsonville. This building can be rehabilitated and reused as an intermodal transportation center where commuters can get on and off the train to Springfield and Hartford.
- **New facility** – A second intermodal transportation center can be developed near Elm Street and the I-91 interchange. This facility should function as a "park and ride" facility where drivers coming from various parts of Enfield could park and take a shuttle to the train station in Thompsonville or take a bus to another location. The facility could also be the location for the proposed bus depot.

Future Land Use

The Future Land Use Plan is the capstone of Enfield's POCD. As the basis for zoning, the Future Land Use Plan describes the highest and best land uses. It outlines the characteristics that make or would make existing and new development in each area appropriate in the context of the area's character and potential.

Proposed Land Uses

Agricultural Preservation

Agricultural land should be preserved for agricultural use. Once developed for residential, commercial and industrial land uses, the land may never again be returned to agricultural use due to pervasive contamination problems, loss of soil nutrients, and insufficient farm acreage to obtain economies of scale, among other things. Zoning and purchase of development rights programs are two mechanisms the Town of Enfield can use to ensure that agricultural land remains in agricultural use.

The area specifically designated for agricultural preservation is located immediately south of the Scantic River, extending east to Somers and south to Ellington. This area includes several residential subdivisions, which should not continue to expand and which should remain at current densities.

Downtown Mixed-Use

This land use category will enable the town's mall area to transition from a single-use development to a mixed-use development. This is achieved by allowing residential structures up to ten stories tall to be developed as part of an existing or new commercial development, either as a stand-alone or integrated building. New commercial establishments in this area should have short or no setbacks from the public

right-of-way and multi-level parking garages. Existing commercial establishments should replace surface parking lots with parking garages, and use the land that is freed up as additional commercial space or as open space. Allowing higher densities and building heights in this area gives room for new retail and office development without having to encroach on the adjacent wetlands and woodlands.

The Downtown Mixed-Use area roughly encompasses the area described in the Future Potentials as the Central Business District, and as the Big Box Retail and Office Complex in the Community Character chapter.

Village Mixed-Use

Along with the prevalence of certain architectural features, the small scale of their buildings and streets is what gives Hazardville and Scitico their characteristic charm. The combination of two different land uses within the same building, particularly commercial uses on the bottom floor and residential uses on the second floor, makes the area continuously active and vibrant. This land use aims to maintain those elements, and preserve their connection to the Scantic River and the Powder Hollow area. Existing densities should be maintained.

Waterfront Village

As with the Village Mixed-Use category, the purpose of this land use is to maintain the unique urban form of the Thompsonville area, while allowing redevelopment to modernize certain aspects. The Waterfront Village land use enables the area to increase residential densities progressively. To accomplish this, the Town should make provisions to replace single-family residential structures with garden apartments or townhouses, when those structures deteriorate past the point to which it is worthwhile to rehabilitate them. For example, redeveloping the neighborhood surrounding the Bigelow Complex at 15 units per acre could accommodate 425 units. Another potential redevelopment could take place near the lumber yard on Prospect St. This area could evolve into mid-rise apartments that would have impressive views of the Connecticut River. If developed at 30 units per acre, 470 units could be created. Zoning for higher densities would allow redevelopment by public or private developers at a future time.

The Waterfront Village land use category corresponds to the Thompsonville and North Thompsonville neighborhoods, from the I-91 to the rail line along the Connecticut River. It is referred to as the Culture & Arts District in the Future Potentials and as the Traditional Downtown in the Community Character chapter.

Residential

Residential land use is the most extensive. Most of the town has already been developed as single-family housing. However, a greater variety and mix of housing choices can be achieved by encouraging higher density residential development in strategic areas. Lower density residential development can occur in places that should maintain the rural character of the area. Recreational and commercial development could also be allowed within this type of land use as long as it complements the density, scale and character of the neighborhood and the proposed use does not conflict with those typically associated with residential land uses.

Greenway

This land use is intended to protect the recreational and environmental values of the land along the Connecticut and Scantic Rivers, as well as to protect and expand the public's access to the rivers.

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Under this land use category, limited development is allowed in order to accommodate activities that are compatible with the area's recreational and environmental values. Examples of compatible activities include parks for passive recreation, multi-use trails, canoe/boat launches, fishing areas, and wildlife viewing areas. However, new residential and commercial development within this area will not be allowed because they effectively create a barrier on the waterfront, interrupting public access and the views of the river. Furthermore, residential and commercial development on the waterfront is vulnerable to flooding. Phasing out over time those land uses that are incompatible with the greenway land use category will eventually create continuous public access along the entire length of both rivers, improve the quality of the environment, reduce flooding hazards and prevent costly damages to private property. In addition to local land use regulations, the Town can take advantage of state programs to acquire public ownership of these lands.

Whereas current regulations protect the Connecticut River with a 100 foot buffer, the greenway land use category will protect a greater area of the waterfront. All the land to the west of the railway corridor and south of the Old Depot Road railroad crossing over the Connecticut River is included in this land use. This category also includes the lands that have already been designated by the State of Connecticut as the Scantic River Greenway, regardless of their current ownership status.

Industrial

The Future Land Use Plan identifies two areas for industrial development. Both areas have already seen some industrial development, but there is still land that can be developed for industrial uses. The Future Land Use Plan allots a much smaller area for industrial development than the current zoning. Within the industrial areas, corporate office buildings and retail uses that provide services for the workforce would also be permitted.

Institutional

This land use category is reserved for the area currently in use by correctional institutions. These are relatively new facilities and they are not expected to close or relocate within the next ten years. The land use is intended to maintain the current use and protect it from uses that may compromise security.

Build-Out Capacity of the Future Land Use Plan

The following build-out capacity analysis provides an approximation of the amount of development that can take place in Enfield if the Future Land Use Plan is implemented. The results reflect the maximum development potential of the existing vacant land in Enfield, but not the pace of development or the timeframe for complete build-out. Development potential on currently developed land is presented within the Future Potentials section.

Prior to conducting this analysis, undevelopable lands were removed from the analysis. Undevelopable lands include farms participating in the State's purchase of development rights program, protected open space, floodplains, steep slopes, and all lands protected by Inland Wetlands and Watercourses Regulations.

Table 1 Build-Out Capacity Based on Future Land Use Plan					
Future Land Use	**Undeveloped Area**		**Maximum Development Potential**		
	Area	**Acres**	**Residential Units**	**Commercial (ft^2)**	**Industrial (ft^2)**
Residential	51,045,895	1,172	1,200 – 1,500	-	-
Waterfront Mixed-Use	1,406,641	32	200 – 300	316,000 – 527,000	-
Downtown Mixed-Use	435,180	10	100 – 100	163,000 – 272,000	-
Industrial	23,471,283	539	-	-	7,041,000 – 11,736,000
Greenway	No build-out	-	-	-	-
Agricultural	No build-out	-	-	-	-
Village Mixed-Use	No significant area for new development	-	-	-	-
Total			**1,500 – 1,900**	**479,000 – 799,000**	**7,041,000 – 11,736,000**

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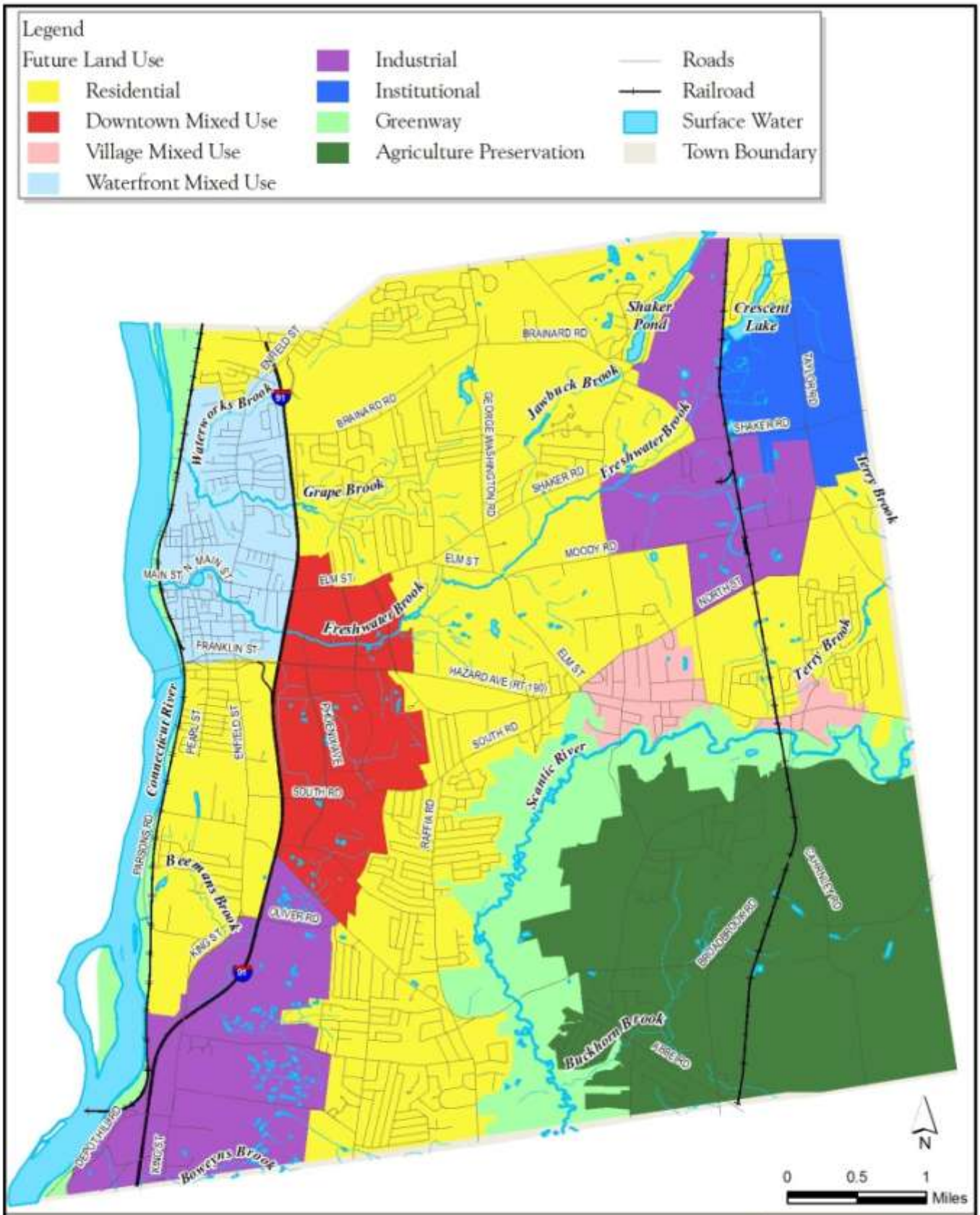

Future Land Use

Plan of Conservation & Development - Town of Enfield, CT

DESIGN Linked PLANNING, INC.
peter j. smith & company, inc.

Implementation Plan

The Implementation Plan for Enfield's POCD is a listing of all the actions presented previously in the "Goals, Objectives, Policies & Actions" chapter. The difference is that we skipped the details and show them in the order in which they should be initiated, along with information about the parties accountable for their implementation and the timeline in which they should be completed. This is intended as a visual and organizational aid. However, this chapter begins with a brief discussion of the accomplishments and challenges faced while implementing the 1998 POCD, which provides a justification for the structure of the 2009 Implementation Plan.

Review of 1998 POCD Implementation

Enfield's accomplishments involve those recommendations that were directly related to the functions conducted by the Planning and Zoning Department and for which there was an institutional process in place already. However, some of the recommendations that were reported to have been accomplished are not tied to a specific measurable goal, which can lead to a loose interpretation of how well the recommendation was completed.

Recommendations reported as being in progress are mainly long-term or on-going activities. Examples of long-term activities are capital improvement projects that normally take several years to complete from design stage to construction. Examples of on-going activities are services routinely provided by an agency as part of their intended operations. While progress on these types of activities is positive, the Town could benefit from actions that provide slightly more detail regarding the acceptable timeline for completion of certain projects, or criteria that can help to evaluate progress in activities that are inherently on-going, such as infrastructure services.

Recommendations that have not been initiated or completed are mostly construction and acquisition activities. There is insufficient information to determine why they may not have been accomplished, but they appear to be activities that are not directly under the control of the Planning and Zoning Department. This suggests that the Department may not have sufficient capacity to sustain effective working relationships with other government agencies in order to complete long-term projects. It also suggests that projects falling directly under the purview of other agencies are not in those agencies' priorities.

Also, many recommendations were unrealistically assigned a short-term timeline. Approximately, 75% of all recommendations were to be completed over the short term. All of the recommendations that were accomplished were short-term projects, which indicate good implementation progress. However, the majority of the recommendations that are in progress or not completed were identified as short-term projects. This does not indicate good progress, as all or most short-term projects should be completed within the ten years between POCD updates.

The Town of Enfield could benefit from a more structured implementation strategy that outlines products the Town should obtain as a result of carrying out the Plan's recommendations. The new POCD should also differentiate between on-going governmental activities and projects that should be completed within a specific timeframe. Priority should also be outlined separately from implementation timeline, as it should refer to the intensity of efforts and resources dedicated to complete the project within the timeframe that

is most appropriate for each type of project. Furthermore, the priority assigned to each project should correspond to the degree of priority identified by the public throughout the POCD planning process.

Implementing the 2009 POCD

Until the Town of Enfield's legislative body adopts the POCD, all of the policies, development projects, land use and zoning regulations, and supporting programs are only recommendations. Once adopted, the Town is committed to carrying out the Plan's recommendations. Enfield's POCD can be implemented by any government agency and member of the public, even the private sector. The Plan can be used by:

- **Elected officials** to learn about their constituents' vision for the community's future and to adopt local codes and ordinances to support those goals;
- **Town staff** to interpret legislative mandates, make administrative decisions, enforce development-related codes and prioritize work efforts;
- **Planning and Zoning Commissioners** to measure the desirability of proposed developments by their conformity with the Plan;
- **Local residents** as a reference when making residential location choices and evaluating the effectiveness of local government
- The **Enfield Economic Development Department** and the **North Central Connecticut Chamber of Commerce**, for example, can market the town as an attractive location for business and industry; and the **Central Regional Tourism District** can use it to negotiate and advertise tourism opportunities.

Any of these entities can base their actions on the goals, objectives and policies of the Plan. However, we have written the actions as those implementation tasks that fall specifically under the town government's jurisdiction. In spite of this, many implementation actions can and should be completed in collaboration with other regional and state agencies, community organizations or private sector.

Implementing the Future Land Use Plan

The Future Land Use Plan is not the Town's zoning map. However, state regulations require the Town's Planning and Zoning Commission to consider the Future Land Use Plan when amending the Town's zoning. Consistency between the two is crucial in order to implement the POCD effectively. Furthermore, consistency between the zoning ordinance and the POCD will help the Town enforce regional and state policies or regulations. For this reason, making amendments to the zoning code based on the Future Land Use Plan is one of the first implementation actions the Town should work on.

To implement the Future Land Use Plan, the Town should consider the functions proposed in each land use category. It can develop zones that preserve or enhance those functions and that vary slightly from the exact boundary between land uses drawn on the Plan. For example, a small neighborhood commercial zone within the residential land use category is compatible because it preserves the scale of development of the area, and does not significantly alter its character or function as a residential area. A recreation zone that accommodates a park or open space would also be compatible with a residential land use.

The densities established in the Future Land Use Plan for each land use category are general averages of the number of residential, commercial or industrial units that should exist in each area. Taking its cue from the Future Land Use Plan, zoning districts can specify lesser or greater densities as long as they keep with the general character of the area. Each land use category could even be served by more than one zoning district. This would add flexibility to the zoning code and prevent monotonous development.

Implementation Matrix

The recommendations range from items requiring immediate attention to those for which implementation will take place over the entire term of the Plan. It is anticipated that new actions for implementation will be developed during the five-year update to replace those that have been successfully implemented.

	Action	Responsibility	Estimated Cost	Timeframe
	GENERAL AND OVERALL			
1	Adopt the POCD	Town Council Planning and Zoning Commission POCD Update Committee	N/A	Adopt Immediately Review Policy Annually Update Plan Every 5 Yrs.
2	Assign responsibility for Plan Implementation	POCD Update Committee Town Planner	N/A	Immediately
3	Create a new Committee or expand the responsibilities of the existing Committee	Town Council	N/A	Short-Term
4	Distribute the POCD to appropriate departments	Town Planner POCD Update Committee	N/A	On-Going
5	Post the POCD on the Town Website	Webmaster	N/A	Short-Term
6	Reschedule future updates to the POCD to coincide with the release of the decennial Census	Town Council POCD Update Committee Town Planner	N/A	Short-Term
	POPULATION AND HOUSING			
7	Conduct a periodic systematic review of the Assessor's parcel data	Assessor's Office Town Planner Residential Real Estate Industry Commercial Real Estate Industry	N/A	On-Going
8	Advertise local affordable housing and financial assistance programs	Town Board	N/A	On-Going
9	Schedule and conduct annual housing inspections	Building Inspections Community Development	N/A	On-Going
10	Create a comprehensive program to deal with absentee landlords	Building Inspections POCD Update Committee	$18,000	On-Going
11	Consolidate affordable housing agencies	Various	Varies	On-Going
	HISTORIC PRESERVATION			
12	Create local historic preservation regulations	Planning and Zoning Commission	$15,000	1 year

	Action	Responsibility	Estimated Cost	Timeframe
13	Expand the role of the Historic Preservation Commission	Planning and Zoning Commission	N/A	Immediate
14	Conduct a Town-wide historic resources survey	Planning and Zoning Commission Community Development	$25,000	1-2 years
15	Conduct an assessment of historic resources in the Enfield Shakers Historic District	Planning and Zoning Commission Community Development	$8,000	1 year
16	Prepare a preservation and acquisition strategy for the Enfield Shakers Historic District	Historic Preservation Commission	$10,000	1 year
17	Conduct structural assessment of the former Higgins school and Strand Theater	Planning and Zoning Commission Cultural Arts Commission	$15,000	1-2 years
18	Advertise financial assistance and tax incentive programs for historic preservation	Community Development	N/A	Immediate
19	Develop Master Plans for the proposed historic interpretive centers	Community Development	$25,000 for planning	1-2 years
20	Create a Heritage Trail along Enfield Street	Planning and Zoning Commission Community Development	$30,000 for planning	1-3 years
	TRANSPORTATION			
21	Reuse Casket Factory for future intermodal center	Highway Maintenance Engineering Division Community Development	$40 – 50K for planning study	1-3 years
22	Identify a site for a second intermodal center near CBD and I-91 based on Future Potentials	Community Development GHRTC	N/A	Immediate
23	Address problematic intersections by undertaking roadway improvements	Highway Maintenance Engineering Division	Varies	1-3 years
24	Identify and redesign key intersections	Highway Maintenance Engineering Division ConnDOT GHRTC	Varies	Immediate – 5 years
25	Complete a continuous network of sidewalks and bike paths by developing a Comprehensive Circulation Plan	Community Development Recreation Department Planning and Zoning Commission Residents	40K for Planning Study	1-3 years

	Action	Responsibility	Estimated Cost	Timeframe
26	Adopt a "Complete Streets" policy	Planning and Zoning Commission Highway Maintenance Engineering Division GHRTC	N/A	Immediate
27	Offer public education promoting alternative transportation	Town Council Community Development GHRTC	N/A	Immediate
28	Complete Route 1-90 bike trail	GHRTC	Varies	Immediate
29	Ensure all areas of Thompsonville are accessible to the new Intermodal Center via sidewalks/trails, bicycles and automobiles	Highway Maintenance Engineering Division Community Develoiopment	N/A	1 – 3 years
30	Require all new public and private development projects to accommodate bicycles and pedestrians	Highway Maintenance Engineering Division Community Develoiopment	N/A	1-3 years
31	Implement the Route 190 Corridor Transportation Plan	Town Council Planning and Zoning Commission GHRTC	N/A	Immediate
	LAND CONSERVATION AND DEVELOPMENT			
32	Secure properties along Thompsonville waterfront to ensure continuous waterfront access	Town Council Planning and Zoning Commission	N/A	Immediate – 5 years
33	Develop a Master Plan for the proposed Connecticut Greenway Ecological Education Center	Town Council Planning and Zoning Commission Inland Wetlands Commission Community Development	80K for Planning Study	3-5 years
34	Implement the Mancuso Park Master Plan	Recreation Community Development	N/A	Immediate
35	Identify and Construct Key Scenic overlooks and Trailheads as outlined in POCD Future Potentials	Town Council Planning and Zoning Commission Inland Wetlands Commission Community Development Engineering Division ConnDOT GHRTC	Part of Circulation Plan	2-4 years
36	Cooperate with existing Organizations to Complete and Distribute Maps of all Town Public Trails	Recreation Community Development	Varies	1-3 Years

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	Action	Responsibility	Estimated Cost	Timeframe
37	Prepare a Parks and Recreation Master Plan	Recreation Planning and Zoning Commission Community Development Residents	75K for Planning Study	On-going
38	Revise POCD Zoning based on the Future Land Use Plan	Town Council Planning and Zoning Commission Town Planner	$70-80K for new Zoning Ordinance	5-7 Years
39	Create Green Building Standards	Town Council Planning and Zoning Commission	$15-25K to Create New Standards	1 year
40	Preserve Prime Agricultural Lands as Proposed on the Future Land Use Plan	Town Council Planning and Zoning Commission Inland Wetlands Commission Economic Development State	N/A	Immediate
	INFRASTRUCTURE			
41	Explore Alternative Energy Production	Town Council Clean Energy Committee	Varies	Immediate
42	Assure Enforcement and Education on Regulations for On-Site Systems	Town Council Town Staff North Central CT Health District	N/A	On-Going
43	Coordinate with Utility and Infrastructure Providers to Ensure that Adequate Service is Available to users	Varies	Varies	Immediate
	ECONOMIC DEVELOPMENT and REGIONAL COMPETETIVENESS			
44	Integrate agriculture, historic preservation and tourism into the Town's economic development activities	Town Council Economic Development	N/A	Immediate
45	Establish a Municipal Farmland Preservation Fund	Town Council Planning and Zoning Commission	N/A	1 year
46	Enable changes to land use regulations that encourage agribusiness including roadside stands, B&B's, small retail operations	Town Council Planning and Zoning Commission Economic Development	Varies	1 year
47	Identify, Catalog and keep updated an Inventory of Existing Buildings for Reuse	Economic Development Assessor's Office	40-60K	1 year and update each year

	Action	Responsibility	Estimated Cost	Timeframe
48	Complete Implementation of 1992 Thompsonville Revitalization Strategy	Planning and Zoning Commission Community Development Economic Development	N/A	Immediate
49	Reactivate the dormant Enfield Community Development Corporation	Town Council Economic Development	N/A	1 year
50	Pursue Designation of Neighborhood Revitalization Zone in Thompsonville	Community Development Beautification Committee	N/A	1 year
51	Create a Thompsonville Façade Improvement and Commercial Rehabilitation Program	Planning and Zoning Commission Community Development	$24-35K for program development	1 year
52	Develop a Simultaneous and Complementary Economic Development Strategy for Thompsonville	Economic Development	$18-24K	1 year
53	Reactivate the small business incubator in Thompsonville	Economic Development	N/A	1 year
54	Create design guidelines for commercial buildings along Enfield Street	Planning and Zoning Commission Cultural Arts Commission Community Development	$20-30K	1 year
55	Relocate the Farmers Market to Hazardville	Community Development	N/A	1 year
56	Revise zoning and building code to create Design Guidelines for Central Business District	Town Attorney Planning Board Economic Development	$40-50K	1 year
	COMMUNITY FACILITIES			
57	Expand and Upgrade Enfield Public Library	Town Council Development Services Residents	N/A	1-3 years
58	Expand North Central Health District Facilities	Town Council Development Services Residents	N/A	1-3 years
59	Relocate Thompsonville Fire Department	Town Council Development Services Fire Department	N/A	1-3 years

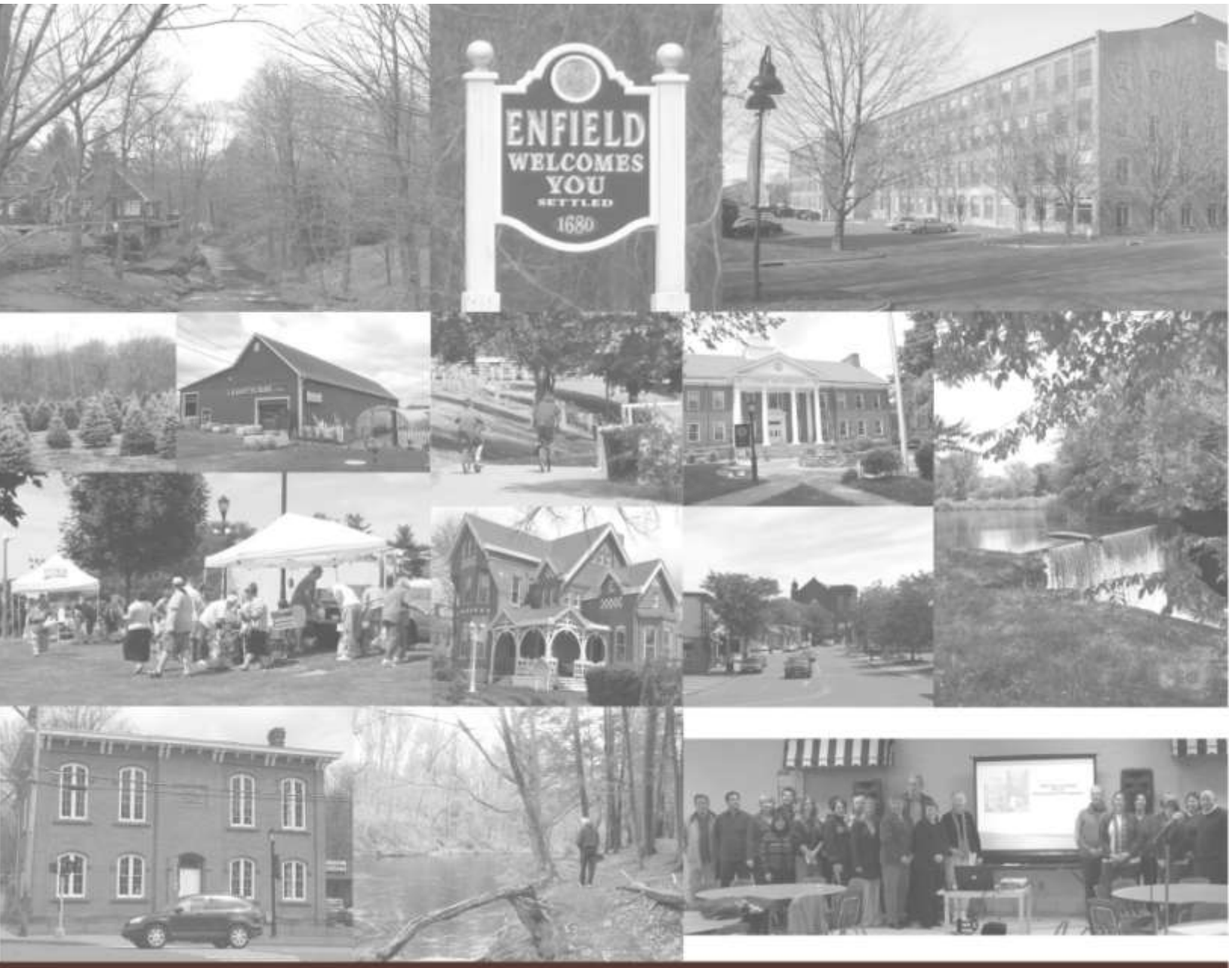
Source: peter j. smith & company, inc.

DRAFT

Evaluating implementation progress

Verifying the progress that has been made implementing the POCD should be a straightforward process. The Town should look at each action and be able to answer with a simple yes or no if it has completed each action. Progress is made if the proportion of "yes" is greater than the proportion of "no". Ongoing activities should not automatically be counted as "yes". The Town should first make sure that ongoing activities are meeting adequate level of service. If this is satisfactory, then they can be labeled with a "yes". Activities that are "in progress" should be included under "no", but the Town should make sure that they will be completed within the specified timeframe. Once the Town has tallied the "no" items, it should evaluate why those actions have not been completed. Then, it should consider whether or not to pursue the action in the future. If an action will not be pursued, the Town should determine whether this reflects a significant change in the community's vision, which should be addressed at the following plan update.

In between decennial updates, it might not be necessary to make changes to the main elements of the plan. Interim updates should involve a revision of all data in the inventory, noting major changes in population, economics or community services that significantly depart from the trend presented in the current POCD. Major changes may necessitate a complete update of the Plan to ensure that it is still relevant. Another useful interim update task could a community survey conducted to determine if any public preferences and priorities have changed.



Inventory

Regional Context

Section 8-3b of the Connecticut General Statutes requires municipalities to inform the regional planning agency and neighboring municipalities of any zoning changes or regulations that may take place within five hundred feet of the boundary of another municipality within the area of operation of a regional planning agency. The purpose of this is to ensure that compatible land uses will exist along town boundaries. It is also used to ensure that local plans are consistent with regional and state plans of conservation and development.

This chapter outlines the major findings or provisions of the plans of conservation and development of neighboring municipalities to help the Town of Enfield understand what common goals and objectives they may have with them. This will help the communities work together.

The Town of Somers, CT

The Town of Somers, Connecticut is located at the eastern border of Enfield. Somers has just over 10,000 people, living within what is a largely residential and agricultural community. Unlike Enfield, Somers serves much more as a bedroom community, without a dominating presence of major corporations, employers or retail centers.

Plan of Conservation & Development

In 2004, the Town drafted its POCD to define its vision for the future of the community. The plan defines its guiding philosophy as to "Balance conservation and development to protect and enhance community character and improve Somers' quality of life." With these principles set forth, the plan does not aim to achieve a tremendous level of growth in population or economics, but rather it promotes strategies to conserve and maintain the rural, small town qualities that already exist, and which in some cases are threatened.

The Somers POCD does not emphasize the regional contexts of its settings, nor does it strive to produce significant region-wide impacts. The plan is organized into three primary themes: protecting important resources, guiding appropriate development and addressing community needs. Each theme identifies major components to be addressed.

Environmental Protection

The plan places an emphasis on the protection of the community's natural and open space resources. It encourages the development of programs to preserve and promote the existing agriculture industry and its valuable landscapes. The plan is cautious of the pressures that the Town faces, or will face, for new residential, commercial and industrial development. It is sensitive to the concept that new development has the potential to significantly alter the landscape and character of the town and provide threats to the natural environment. Among the strategies to preserve the landscape is to develop a system of greenways that interconnect open space areas and allow for public accessibility and recreation. The plan supports the protection of water resources through storm water management, riparian plantings and regulations regarding development around aquifers.

Development Strategies

The development strategies of Somers are focused upon improving the patterns and quality of development in ways that enhance the existing development. The plan does not target significant growth in development as a goal. Instead, it suggests that new commercial and retail development should meet the everyday needs of residents. Guidelines should be established to regulate the aesthetics of commercial and industrial development and incentives should be created to enhance the appearance of existing businesses. The plan also encourages the prohibition of retail, restaurant and personal service uses outside of village areas as a means of curtailing sprawl and strengthen small urban cores. A major focus is placed upon providing alternative housing for elderly residents as the local population continues to increase in age.

Infrastructure & Transportation Services

The plan also recommends strategies to ensure that the town continues to adequately serve local needs in regards to transportation, infrastructure and municipal service delivery. It recommends enhancements to the multi-modal transportation infrastructure, not only recommending improved automobile accommodations, but also expanding the sidewalk and multi-use trail network connecting villages and major activity nodes. Again, new and expanding growth is not the focus, instead goals tailored to enhancing quality services and infrastructure for the present community.

Somers is a Connecticut Town that has experienced some limited growth and projections anticipate continued growth. However, the Town has clearly set its vision on maintaining its high rural character, preserving its agricultural industries and enhancing the quality of life for existing residents. Impacts upon surrounding municipalities such as Enfield will be minimal, with Somers continuing to serve as a bedroom community, offering residential opportunities for those seeking a rural, agrarian place to live.

The Town of East Windsor, CT

Characteristics & Trends

According to the population projections presented in the East Windsor POCD, the East Windsor's population is expected to reach 10,440 to 10,870 by the year 2010. By 2020, the population is expected to increase by 3.4% to a total between 10,800 and 11,720.

During the past decade (1990-1999), construction in the Town of East Windsor has averaged 22 units of single family homes per year, 8.3 units of multi-family homes per year, 3.9 units of mobile homes per year, and 5.7 units of commercial and industrial facilities per year. There were no projections of future construction trends.

The local economies of East Windsor and Enfield are closely related. East Windsor's primary economic development area is Route 5, which extends into Enfield's southern warehouse and office park area. In addition, Enfield has a role as an employment center for East Windsor residents. In 2000, approximately 14% of East Windsor's labor force commuted to Enfield.

The Town of East Windsor offers residents several public parks, which are used mainly for baseball and soccer. Indoor recreation is offered at school facilities, which implies limited availability. There are no community centers in town, and all activities offered by the Town occur in Town Hall, the Town Hall Annex in Warehouse Point, or the senior center in Broad Brook. There is also a town library.

Plan of Conservation & Development

The Town of East Windsor completed its most recent Plan of Conservation and Development in 2004. East Windsor's Plan of Conservation and Development had three core strategies: (1) preserve community resources, including open space and the quality of the environment; (2) guide the development of residential and commercial uses; (3) meet the needs of the community with adequate public services, including infrastructure.

Open Space Preservation

At the time the East Windsor POCD was completed, approximately 80% of the total land area of the Town of East Windsor was undeveloped, but zoned for residential use. Although not formally designated, many of these undeveloped lands are perceived and valued as open space. East Windsor residents expressed concern that residential growth might negatively impact the character of their community. In fact, open space conservation had overwhelming support from participants in the town's planning process: 87% agreed that the Town should be actively involved in open space preservation. Approximately, 294 acres of land are owned by the Town of East Windsor for open space, while an additional 675 acres are owned by the Connecticut Department of Environmental Protection.

To further the community's environmental goals, East Windsor's objectives included preserving open space as continuous swaths of protected undeveloped land that are linked to parks through wildlife corridors and pedestrian trails. In addition to this, two recommendations stood out: (1) changing the Town's subdivision requirements to set aside a portion of the land for open space from 10% to 20%; and (2) pursuing inclusion in the Connecticut River and Scantic River greenway designation. The Plan mentioned that the Town could take advantage of its status as a "distressed municipality" under the Department of Economic and Community Development. This designation made the Town eligible for a 65% funding match for open space conservation and 50% funding match for resource enhancement or protection.

Farmland Preservation

Preservation of agricultural land also ranked high in residents' priorities: over 86% of residents that participated in the planning process said the Town of East Windsor should take measures to protect agriculture. They determined that agricultural lands, and historic places and scenic roads in rural areas contribute to the character of their community. Three notable recommendations included using the State's purchase of development rights program, designating a sewer avoidance area east of the Scantic River, and adopting a right to farm policy in accordance with the Connecticut General Statutes Section 19a-341, which sets criteria to evaluate agricultural leases on Town land.

Wetlands and Water Quality

Like Enfield, the Town of East Windsor is abundant in wetlands. The East Windsor POCD identified the presence of two rare black spruce bogs, which have very unique species of plants and insects found in very few places elsewhere in the state. Unfortunately, water quality has not always been the best. The Plan mentioned that there several areas where pesticide use to control damage to tobacco crops has caused water quality issues in the past.

At the time the East Windsor POCD was completed, the Town had floodplain regulations in place. Recommendations to continue improving water quality included developing aquifer protection regulations with assistance from the CT DEP, and new impervious surface standards to control stormwater pollution.

Historic Preservation

East Windsor residents also consider historic preservation a significant planning issue in their community. According to the POCD, approximately 65% of residents said the Town could do a better job of protecting its historic resources. A total of five buildings in East Windsor are listed in the State and National Register of Historic Places. Many of these resources are located close to the Scantic River, in an area known as Melrose, and near the Connecticut River on Warehouse Point. The Trolley Museum and the Broad Brook Opera House.

Future Land Use

Enfield and East Windsor share one boundary and land uses on either side do not appear to be in conflict. There is, however, a small village on the waterfront known as Warehouse Point. This area has historic resources and residential uses, which may have to be considered when determining the types of activities allowed in the industrial area. As shown on Figure x in pink, business, industry and warehousing in East Windsor are conglomerated close to the Connecticut River and along Route 5. The town has another residential and commercial center to the east of the Scantic River near Broad Brook. There are several large parcels of protected open space along the Scantic River, but most of the land is identified for residential use.

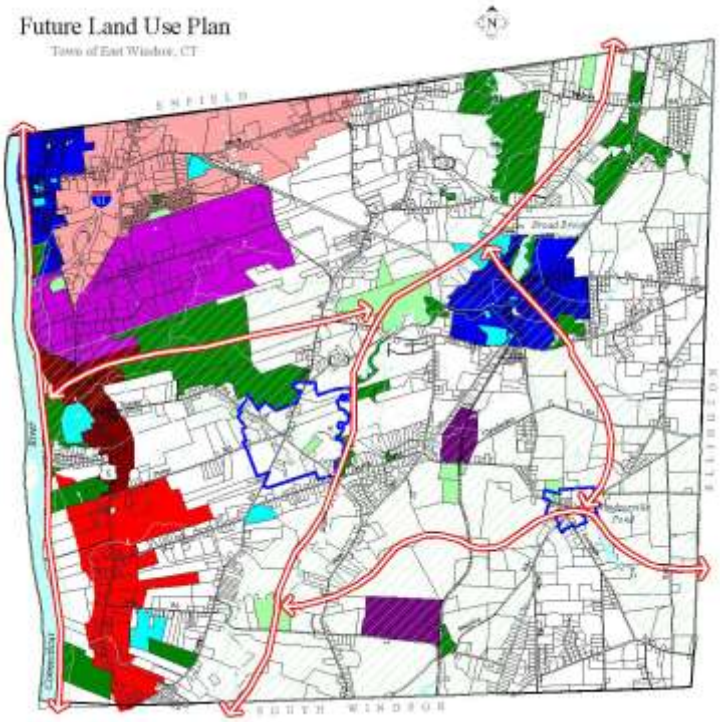


Figure 2 East Windsor's Future Land Use Plan

The Town of Suffield, CT

Suffield residents have been very concerned about the changing character of their community at least since the 1980s. According to the 1999 POCD, Suffield's 1987 POCD declared that it was the last opportunity for Suffield residents to determine the future of agriculture, open space, residential and industrial development, and transportation in their community. The Town of Suffield has gone through many changes since the 1990s, most notably urbanization near the southern town line. A predominantly agricultural community within the Hartford area, the Town of Suffield feels that its ability to control its own growth and rural character has been severely limited by the expansion of Bradley International Airport and the subsequent growth in Windsor Locks.

Transportation & Land Use

The impact of aircraft noise from Bradley International Airport led to a recommendation to rezone residential areas affected by the airport. Traffic problems have also been created by the airport's growing

activity levels. As a result, the Plan supported construction of a bypass to and from the airport to help alleviate growing traffic problems. The State of Connecticut also made plans to expand Route 75 up to the border with Massachusetts to alleviate traffic problems in this area.

While air transportation is very convenient, one of the main disadvantages of living in Suffield is that there is no mass transit. Bus and train services are not available in Suffield, and the closest public transportation locations are in Enfield and Windsor Locks.

Open Space Conservation

The Town of Suffield has the second largest land area of all towns in the Capitol Region. In 1999, approximately 66% of its land was undeveloped. The area with the most intense development is the eastern half of the town, which is closer to the Connecticut River waterfront and is away from hilly and very wet lands that are best suited for agriculture and open space.

The Plan recommended conserving 55% of the land currently zoned for residential use as open space. Protection measures include acquiring land for recreation, watershed protection, wildlife, agriculture, forest and other compatible uses. In addition, the Plan talked about taking advantage of the land trusts, conservation easements, and state purchase of development rights programs for farmland preservation.

Wetlands & Water Quality

Wet soils are a widespread constraint for development in Suffield, just as it is in Enfield. However, because the Town's goal is to preserve agriculture, higher density residential uses, and commercial and industrial uses have been directed to other parts of town. Flooding is another common issue in Suffield. The Town has developed a sewer avoidance plan to limit how much to extend public sewer infrastructure. This has also helped Town officials and residents understand that sewer infrastructure is not the only effective alternative for water problems.

Development & Construction Activity

In 2005, Suffield's population was 11,750. During the past decade (1990-1999), the Town of Suffield has had an average of 34 housing units per year. According to the Plan, the Town's goal is to continue to offer housing in a rural setting, and to offer more diverse housing opportunities such as senior and multi-family housing. In terms of affordable housing, 15% of existing housing was affordable. The Plan recommended revising this allocation, but did not suggest a standard.

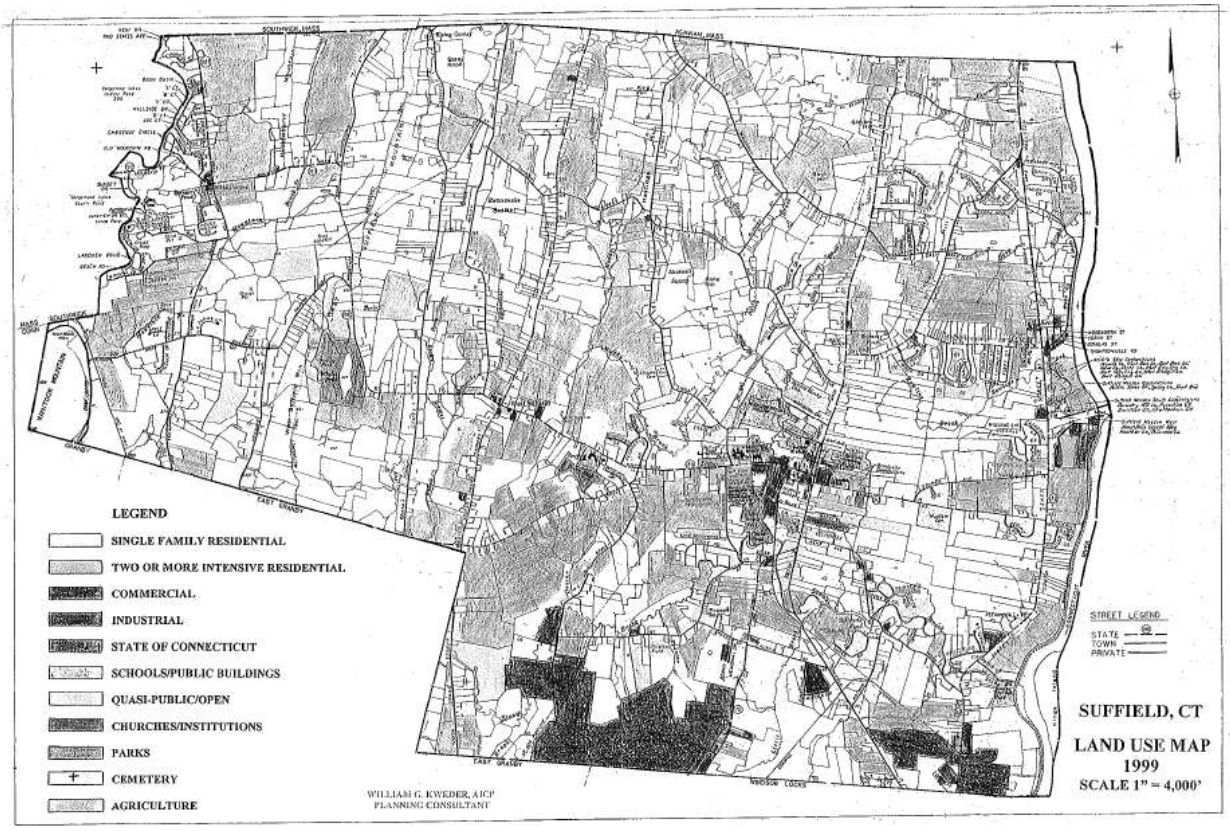


Figure 3 Town of Suffield Land Use Map

The Town of Longmeadow, MA

Longmeadow Long Range Plan

According to the Longmeadow Long Range Plan, the Town had about 15,633 residents in the year 2000. The growth rate over the past decade (1990-1999) was 5.5% per year, but population projections indicated that by the year 2020, the population will actually decline by 13.4%. Current population composition is dominated by individuals over 55 years of age. The report explains that one factor of expected population decline is that the amount of elderly persons living below the poverty level is a growing concern, as well as the fact that there is few rental housing for younger households. As people age and look for smaller housing that is also more accessible to services, and as younger households are forced to move elsewhere to find housing they can afford, the population can reasonably be expected to continue to decline.

Housing Development

The Longmeadow Long Range Plan indicates that about 23% of the town is in agricultural use. Most of the town (74%) is in residential use. Housing in Longmeadow is relatively affordable to a majority of residents and covers a broad range of values. Unfortunately, less than 3% of all housing is considered affordable housing. This low proportion of affordable housing is considerably less than the state's goal of 10% affordable housing.

New housing construction in the Town of Longmeadow is becoming increasingly more difficult because most of the town is already built out. However, new housing construction has been dominated by construction of rental housing. In 2000, over 36% of the increase in the town's housing stock consisted of rental housing. Very low vacancy rates were deemed to be a good sign (less than 2% vacancy rate), but there appears to be a lot of turnover, which is not a good sign of residential stability. According to the Plan, more than 75% of renters and 30% of homeowners lived in their house 5 years or less in 2000. Another disadvantage of Longmeadow's rental housing stock is that most rental housing is single family homes; there is very limited supply of typical 2-bedroom apartments.

The Town's strategy to enable more housing development is to allow multi-family housing to expand where feasible, building of accessory apartments, and infill development in character with the area.

Commercial Development

The Town of Longmeadow has a limited non-residential tax base that consists mainly of health care, retail and other professional services. According to the Plan, the town has the potential to develop between 100,00 to 150,000 square feet of retail or office. There is also the potential to accommodate a 130,500 square feet suburban business park for office, manufacturing or flex space. This type of development could be possible through the sale of town-owned land.

In addition to that, the Plan suggested turning Longmeadow Street / Route 5 into a commercial corridor. If pursued, this would entail conversion of residential buildings to commercial ones. While feasible, the Plan did mention that this alternative was unpopular.

Recreation & Open Space

While 90% of the town is built out, the Town of Longmeadow is committed to expanding protected open space areas for recreational and wildlife conservation purposes. The Town has Wolf Swamp Fields and the Fannie Stebbins Memorial Wildlife Refuge (338 acres), which is listed as a National Landmark. Both are close to the boundary with Enfield. A riverfront park will be created after the Town acquires property along 200/216 Anthony Rd. This property will help the Town meet its goals for conservation and passive recreation. It will also help secure public access to the Connecticut River. However, there will only be access for non-motorized watercraft to protect environmentally sensitive areas. The Town is also planning to complete a bike path system that would connect it to the Springfield, Massachusetts bikeway.

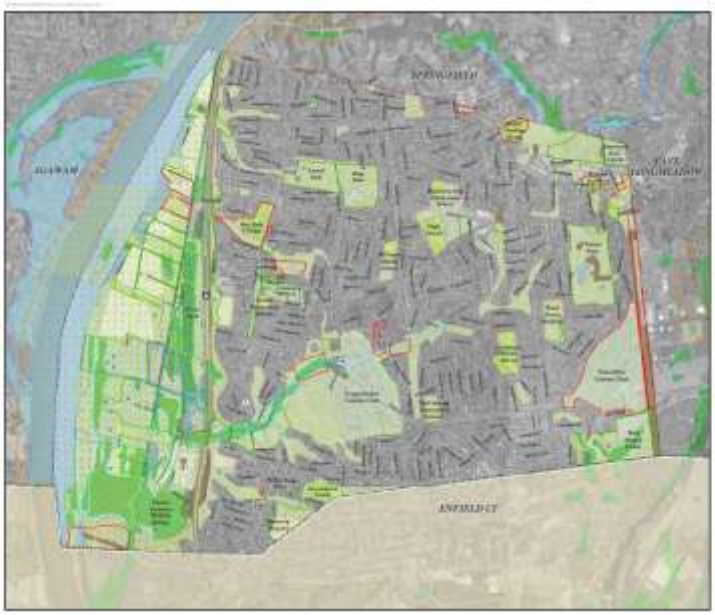


Figure 4 Town of Longmeadow, MA Land Use Suitability Map

Communication & Transparency

One of the issues identified in the town planning process was poor communication between town residents and town government. This problem was found to result in considerable misunderstanding about town government functions and use of public funds. Many residents had the perception that the local government was inefficient and wasteful. Giving a more transparent appearance about government functions was resolved to be achieved by making public information more easily accessible to town residents through various media. In addition, the plan proposed that the town should establish collaborative relationships with local community organizations to provide additional communication channels and find more ways for local government and residents to align their goals.

Population

This chapter provides an analysis of current and projected populations within the Town of Enfield, Connecticut. A review of current population trends is invaluable to understanding how the community is structured and determining whether the level of services offered is sufficient. It can also act as a benchmark when evaluating the effectiveness of plan implementation, or simply to see how the community has changed since the plan was drafted. Existing population projections are helpful to prepare for future needs; but they can also help to get a better sense of the factors that have greater or lesser influence over the community's population changes.

For comparative purposes, the chapter also presents demographic data about the Capitol Region, Hartford County and the State of Connecticut. Often, the changes experienced by communities that are located on the fringe or in the middle of larger metropolitan areas, as is Enfield, are much more influenced by regional conditions. Knowing how Enfield is affected by what is happening in the region can help it understand the role, importance and limitations of the services offered to residents of the town and its extended community.

Ultimately, the information presented in this chapter will assist the Town of Enfield to manage future growth in a manner that is consistent with local, regional and statewide goals.

Population Characteristics

Total Population

Enfield is part of the Hartford Metropolitan Statistical Area (MSA), which is an area that had a population of 1,183,110 in 2000. Enfield's population was 45,212 in 2000, which represented 3.8% of the Hartford MSA population. Enfield's estimated population for the period between 2005 and 2007 was 46,422. This was a 2.6% increase in population since 2000.

Table 1 shows the total population and the percentage change in total population since 1950. Over the past five decades, Enfield's population increased by 29,748, which is 192% more than the population in 1950. Most of this population growth occurred during the 1950s and 60s. After 1970, growth occurred at a much slower rate. There were even several periods during which the town's population declined.

Table 2 Population changes in Enfield, CT from 1950 to 2007

	1950	1960	1970	1980	1990	2000	2005-2007 Population Estimate
Total Population	15,464	31,464	46,189	42,695	45,532	45,212	46,422
Growth Rate		103.5 %	46.8 %	-7.6 %	6.6 %	-0.7 %	2.6 %

Source: Capitol Region Council of Governments. "Appendix 12: Total Population, 1950-2000." Trends Shaping Our Region: A Census Data Profile of Connecticut's Capitol Region. January 2003; US Census Bureau. B01003. Total Population. 2005-2007 ACS 3-Year Estimates.

The small fluctuations in population since 2000 suggest that the town's population is stable. This idea is supported by the town's age distribution, and its birth, death and migration statistics, which are discussed later in this chapter.

Natural Increase

Natural increase is the difference between the number of births and deaths in a population. It is used to get a better understanding of the factors that contribute to population change because it shows the net number of new individuals in a community, excluding those that migrated to the community.

The State of Connecticut documents the number of births and deaths among Enfield residents. Since 2000, the difference in the number of births and deaths in Enfield has been very small from year to year. The number of deaths has been very close to the number of births, demonstrating that natural increase currently has a negligible effect on Enfield's population growth.

Table 2 shows the natural increase in 2000 and 2006, and the percentage of the population represented by net new individuals. Enfield's natural increase is dramatically different to what occurred at the county and state levels in 2000 and 2006. At both the county and state levels, the number of births and deaths were less each year, but births outnumbered the amount of deaths. As a result, natural increase contributed more to population growth in Hartford County and in Connecticut as a whole.

Table 3 Comparison of Natural Increase Statistics

Year	Enfield		Hartford County		State of Connecticut	
	Natural Increase	Percent of Population (%)	Natural Increase	Percent of Population (%)	Natural Increase	Percent of Population (%)
2000	106	0.23	2,631	5.81	12,935	28.60
2006	64	0.13	2,596	5.59	12,633	27.21

Source: Connecticut Dept. of Health. Table 2A. Population, Births, Deaths, Fetal Deaths, Infant Deaths by Place of Occurrence and Residence and Marriages by Place of Occurrence. Vital Statistics (Registration Reports). 2000 and 2006.

Migration

The US Census Bureau determined how many people lived in a different house five years prior to conducting the 2000 Census; and how many lived in a different house one year prior to conducting the 2005-2007 American Community Survey (ACS). This data is used (1) to determine how much the population increased due to migration, and (2) to examine how the population redistributes itself throughout various geographic areas. There are two limitations with this data. One is that migration statistics between the 2000 Census and the 2005-2007 ACS are not comparable due to the different intervals of change in residence measured. The second is that internal mobility within Enfield cannot be distinguished from migration to Enfield because the 2000 Census does not show how many individuals changed residence within the same city or town. Notwithstanding, this information will help compare the role of migration in Enfield to that of natural increase as a factor in the town's population growth trends.

A total of 15,583 Enfield residents (36% of the total population) lived in a different house five years prior to the 2000 Census. The 2005-2007 ACS revealed that approximately 6,969 Enfield residents (15% of the total population) lived in a different house one year prior to the survey. At the MSA level, 462,438 individuals (41% of the total population) lived in a different house in 1995. The 2007 ACS showed that in 2006, 152,706 people (12% of the total population) lived outside the West H.-East H.-Hartford Metro

Area. These statistics show that the proportion of newcomers in Enfield and the MSA was similar. Comparing these figures to the natural increase demonstrates that migration has had a greater impact in population changes in both Enfield and the Hartford area as a whole.

Table 3 shows from where people moved to Enfield. Slightly more than half of all people who moved to Enfield already lived within Hartford County.

Table 4 Migration Statistics

Previous location	Percent of Population that Lived in a Different House (%)			
	Town of Enfield		Hartford MSA	East H. - West H. - Hartford Metro Area
	2000	2005-2007 Estimate	2000	2007 Estimate
Within Hartford County / Same county	59.91	68.76	59.49	62.58
Another county within the state	18.31	16.54	17.47	18.60
Another state	18.72	13.53	15.99	15.54
Puerto Rico	0.34	0	1.54	0.42
A foreign country	2.69	1.16	5.48	2.84

Source: US Census Bureau. P24. Residence in 1995 for the Population 5 Years and Over- State and County Level. Census 2000 Summary File 3 Sample Data; C07204. Geographical Mobility in the Past Year for Current Residence-State, County and Place Level in the United States for the Population 1 Year and Over. 2005-2007 ACS 3-Year Estimates; B07204. Geographical Mobility in the Past Year for Current Residence-State, County and Place Level in the United States for the Population 1 Year and Over. 2005-2007 ACS 1-Year Estimates.

Population Density

Within Connecticut's Capitol Region, Enfield is considered a "Fully Suburban" community. Fully Suburban communities have between 1,251 to 3,000 persons per square mile. This is consistent with population density in 2000 as shown on Table 4. Table 4 also shows that population density in the Town of Enfield has been increasing over time.

Table 5 Population Density Changes in Enfield, CT from 1970 to 2000

	1950	1960	1970	1980	1990	2000
Total Population Density per Sq. Mi.	463	941	1,382	1,277	1,362	1,352
Percent Change		103.5 %	46.8 %	-7.6 %	6.6 %	-0.7 %

Note: Enfield's total area was based on 33 Sq. Mi.

Source: Capitol Region Council of Governments. "Appendix 14: Population Density Per Square Mile, 1970-2000." Trends Shaping Our Region: A Census Data Profile of Connecticut's Capitol Region. January 2003.

Figure 1 illustrates how population density varies within the Town. The density units shown are persons per acre and the geographic unit used to determine density was the census tract, which was the smallest

geographic unit used by the Census Bureau for Enfield in 2000. Population density in the Town of Enfield is relatively low, but there is a greater concentration of people north and west of the I-91 interchange.

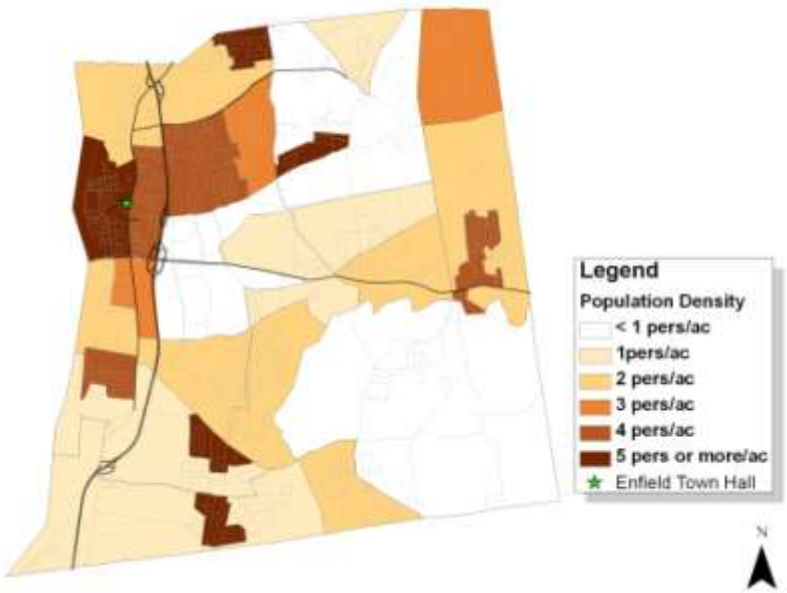


Figure 5 Population Density by 2000 Census Tract

Age

Enfield's population was distributed fairly equally across age groups in 2000 and 2005-2007, as shown on Table 5. This distribution resembles the pattern observed for the Hartford MSA and Metro Area. Table 5 also shows that the proportion of individuals in Enfield between the ages of 18 and 49 decreased from 2000 to 2005-2007. During that same period, the proportion of individuals in Enfield that are 50 years and older increased.

Table 6 Comparison of Age Distribution

Age Group	Percent of Total Population (%)			
	Enfield		Hartford MSA	East H. - West H. - Hartford Metro Area
	2000	2005-2007 Estimate	2000	2007 Estimate
Under 18	22.6	23.03	24.32	22.68
18 to 34	22.7	20.71	21.65	21.38
35 to 49	25.8	24.73	24.67	23.02
50 to 64	15.1	16.37	15.67	19.25
65 +	13.7	15.14	13.68	13.65

Source: US Census Bureau. P12. Sex by Age. Census 2000 Summary File 1 100-Percent Data; B01001. Sex by Age. 2005-2007 ACS 3-Year Estimates; B01001. Sex by Age. Total Population. 2007 ACS 1-Year Estimates.

Race/Ethnicity

While Enfield's population includes individuals from several racial or ethnic groups, the majority of town residents are identified as White. This contrasts greatly with the Capitol Region, where the minority population in 2000 was 27.5%.[1] In 2005-2007, the proportion of minorities in Enfield increased to 14.87%, with the Hispanic population showing the greatest increase.

Table 7 Race/Ethnicity in 2000

Racial/Ethnic Category	Percent of Total Population (%)			
	Enfield		Hartford MSA	East H. - West H. - Hartford Metro Area
	2000	2005-2007 Estimates	2000	2007 Estimate
White	88.32	85.09	77.33	74.40
Black	5.27	5.61	8.83	9.53
Asian	1.32	1.46	2.25	3.20
Native American	0.17	0.18	0.18	0.17
Hispanic	3.74	6.62	9.59	10.87
Other	1.19	1	1.79	1.80

Note: "Native American" combines "American Indian and Alaska Native alone", and "Native Hawaiian and Other Pacific Islanders" classifications; "Other" combines "Some other race alone", and "Population of two or more races" classifications.

Source: US Census Bureau. P4. Hispanic or Latino, and Not Hispanic or Latino by Race. Census 2000 Summary File 1 100-Percent Data.

Population Projections through 2020

Enfield's population has remained stable in recent years, and it is expected to continue to grow slowly in the next 10 years. The population projections shown in Table 4 indicate one percent growth every five years. If the projection for 2010 holds true, the growth rate from 2007 to 2010, which would be approximately 1%, would be consistent with the growth patterns of the past. (See Table 1)

These projections, however, are based on the total population and rate of growth in 1990. While the population in 2007 (46,422) has not yet surpassed the projection for 2010 (and therefore does not appear to invalidate these projections), certain factors may have changed since 1990 that could result in different population trends.

[1] Capitol Region Council of Governments. Appendix 9: Estimated Minority Population Share of Capitol Region Population Growth, 1990 to 2000. Trends Shaping Our Region: A Census Data Profile of Connecticut's Capitol Region. January 2003.

Table 8 Population Projections for Enfield							
	BaseYear	Projections					
Town	1990	1995	2000	2005	2010	2015	2020
Enfield	45,532	45,680	45,750	46,220	46,880	47,390	47,830
State Total	3,287,116	3,289,090	3,316,120	3,364,080	3,435,400	3,512,240	3,593,860
Note: Projections based on 1990 population and growth rate.							
Source: State of Connecticut, Office of Policy and Management. Connecticut Population Projections, Series 95.1: Population Projections for Connecticut and its Municipalities. Retrieved on December 29, 2008 from: http://www.ct.gov/opm/cwp/view.asp?a=2993&q=383326							

Findings

- The demographic data available for Enfield suggests that its population is stable, but vulnerable to population loss. Historic data shows that population growth has occurred very slowly in recent decades, and current data shows an age distribution that reflects a steady replacement of individuals across all age groups. However, current birth and migration data suggest a trend of population decline. If everything stays the same, the population may remain stable; however, dramatic changes in economic conditions, for example, might exacerbate population loss.
- Population growth in Enfield has been mostly the result of an influx of people from other parts of the Hartford area.
- Enfield's population changes have mirrored those occurring at the regional level.
- Population density in Enfield is greatest near the Thompsonville area, but the density is still relatively low at 5 persons per acre.
- Enfield's population can be generally described as racially homogenous. Black and Hispanic are the main minority groups represented within the community.
- Existing population projections for the Town of Enfield are based on very old data, which dates from 1990. New population projections using a more recent base year are needed to help the community plan ahead for its future with more accuracy.
- The upcoming 2010 US Census will provide much needed up-to-date demographic data for all communities across the nation. After 2010, the US Census Bureau will also have enough data to begin providing population estimates between decennial censuses for smaller communities like Enfield. Unfortunately, the current POCD revision schedule occurs just one year before the decennial census. Dramatic population changes revealed by the census so soon after the POCD update could quickly show the Plan to be out of touch with current trends.

Community Character

Community character is the identity of a place, as determined by the presence, type and quality of certain elements of the physical environment. It reflects the processes and forces that have affected a place's natural resources, economy, history and society through time. Describing the character of a community raises awareness of what makes a place unique, and is the basis for judging what elements of the community to preserve and celebrate. Often, this guides the creation of future zoning and design standards.

This chapter identifies character areas for the Town of Enfield. Character areas are broad generalizations about a community's natural and built environments. Character areas show parts of town that share similar physical characteristics, as well as parts that are unique. Character areas are defined through field observations and by reviewing maps and aerial photography. The characteristics observed to define character areas were: land use, density, setbacks, age of development, building style and materials, streetscape and landscape.

Character Areas

Types of areas we have identified:

- Agricultural
- Traditional Downtown
- Big Box Retail and Office Complex
- Suburban Residential
- Industrial
- Historic Village
- Historic Estates
- River Greenway
- Strip Commercial

Agricultural

The Town of Enfield has several different agricultural areas. The largest agricultural area is located on the southeastern corner of town. It is roughly bounded on the north and west by the Scantic River, the Town of Somers on the east, and by the Town of East Windsor on the south.

Tree nurseries and tobacco fields are common in this area. There numerous large, abandoned barns with graffiti over them. The area is served by a rail line that cuts through the eastern portion of town from north to south. The State is currently rehabilitating a portion of the railroad.

Agricultural areas in Enfield have roads with one-lane in each direction. There are no shoulders or sidewalks along the road.

There are single-family houses are dispersed throughout most of agricultural areas in Enfield.

Figure 6 Reflecting a decline in economic conditions, a barn rests on an empty field covered with graffiti. However, tobacco fields and tree nurseries are prosperous.

Traditional Downtown

Enfield's downtown area roughly corresponds to the Thompsonville neighborhood. It is bounded on the east by I-91, on the west by the Connecticut River, and on the south by Rt. 190. The area extends north up to Montano Rd.

The northern end of this area has a lot of remnant residential buildings next to commercial development from the 1950s. Towards the center, housing is at a higher density.

Thompsonville is described as a small town with a "walk around" scale and lots of historic character. Architectural styles prevalent in Thompsonville are Greek Revival, Gothic Revival, Italianate, Queen Anne and Princess Anne, Colonial Revival, Neoclassical Revival, and Bungalow.

Most streets have sidewalks on both sides. Most parking is on the street as many houses lack an attached garage.

There are no good views of the Connecticut River from the street level, and direct access to the waterfront is limited by a rail line that stretches along the entire length of the town, from north to south. The portion of land across the rail line and adjacent to the shoreline is mostly residential homes. There are several abandoned industrial buildings; there are also a number of utility infrastructure properties enclosed by chain link fences.

Freshwater Pond, Creek and the river

typical land uses include halfway houses, offices, bakeries, social services, churches

vacant land and cemeteries

house and properties in the area west of the train tracks is more neglected than other parts of the downtown.

Figure 7 Enfield Town Hall, Thompsonville Fire Department, and two residential streets in Thompsonville.

Big Box Retail and Office Complex

The shopping mall and office complex area is bounded by Rt. 220 on the north, South Rd. to the south, and I-91 on the west. It extends east as far as Olmstead Rd.

Most commercial development in this area is of the "big box" kind, with large square or rectangular buildings similar to warehouses surrounded by large parking lots. Some buildings, particularly restaurants, have landscaping around the building. Some parking areas have trees spaced out throughout the lot.

There is no street grid or marked circulation pattern throughout the development, making vehicular access slow and confusing.

Many shopping malls and office complexes are surrounded by large forested areas, but provide no access to them.

Figure 8 Large shopping center surrounded by extensive parking. Most of the land on these kinds of development is dedicated to parking rather than actual store area.

Figure 9 The backside of shopping plazas south of Hazard Avenue faces a large swath of forested land and wetlands.

Figure 10 Hartford Courant building in the office park on Phoenix Avenue

Suburban Residential

There are two Suburban areas in Enfield. One on the north; the other on the south central part of town. The northern Suburban area is bounded by I-91 to the west, Rt. 220 to the south, Shaker Pine Lake to the east and the state line to the north. The south central Suburban area is bounded by the Scantic River to the east, the Town of East Windsor to the south, I-91 to the west, and South Road to the north.

Suburban residential areas are characterized by houses setback from the road, often without sidewalks. The architectural style of housing varies by area, but it can be generally described as single-family housing with driveway.

Figure 11 Views of streets in three of Enfield's suburban residential areas.

Suburban Commercial

Enfield's main suburban commercial area is the area surrounding the northern segment of Enfield Street. It begins approximately from Brainard Road all the way to the boundary with Massachusetts.

While there is a mix of residential and commercial development, the area is predominantly residential. Commercial development has taken the shape of strip malls and car dealerships, which have expansive parking lots between the buildings and the road. Often, there are no sidewalks along the road. Where there is a sidewalk, there often lacks a path leading to the building, which forces pedestrians to cut across the lawn or between parked cars.

Figure 12 Views of the northern segment of Enfield Street.

Industrial

The Town of Enfield has two different Industrial areas. The first is located on the northeastern corner of town, and the second is located on the southwestern corner.

The one in the northern part has warehouses, several corporate headquarters, and a large prison complex made up by six correctional facilities. Roads in this area are two-lanes in opposite directions. There are no sidewalks.

The one in the southern part of the Town is a mix of warehouses, small office buildings, single-family homes and old farmsteads. There are many large tracts of land, some still in agricultural use. The railroad from Springfield to Hartford crosses the Connecticut River in this area. Enfield St. / Rt. 5 is the main local road in this area, and it is a two-lane road going in opposite directions with an occasional center turning lane. Sidewalks are sporadic. Interstate 91 is located east of Enfield St. and is the area's major regional road.

A significant amount of land in both Industrial Areas is prime farmland and farmland of statewide importance. Wetlands are also widespread here.

Figure 13 Industrial areas in Enfield's northeastern corner. Bottom picture shows correctional facilities on Rt. 220.

Figure 14 Industrial area in Enfield's southwestern corner. Top picture was taken at the Enfield - East Windsor town line.

Historic Village

The Historic Village area encompasses the Hazardville Center area and residential areas to the east up to Scitico. It is bounded on the south by the Scantic River and on the north by Moody Rd.

The streetscape along Hazard Avenue is quaint, and has small shops and mixed use buildings.

Hazard Avenue is the defining feature of the Hazardville neighborhood. It is a principal arterial, also known as Route 190, which runs east-west and connects local roads to the I-91. It is the only road that crosses the Connecticut River and provides access to Suffield. Development is most intense near Hazardville Center. The community has a small, main street feel near towards Somers, becoming more rural the farther east one goes.[2]

Figure 15 View of street approaching Hazard Avenue from North Maple St.

Figure 16 Streetscape on Hazard Avenue looking west.

Figure 17 Early Spring on the Scantic River in the Powder Hollow area.

[2] Plan of Conservation and Development. 1999. Pg. 94

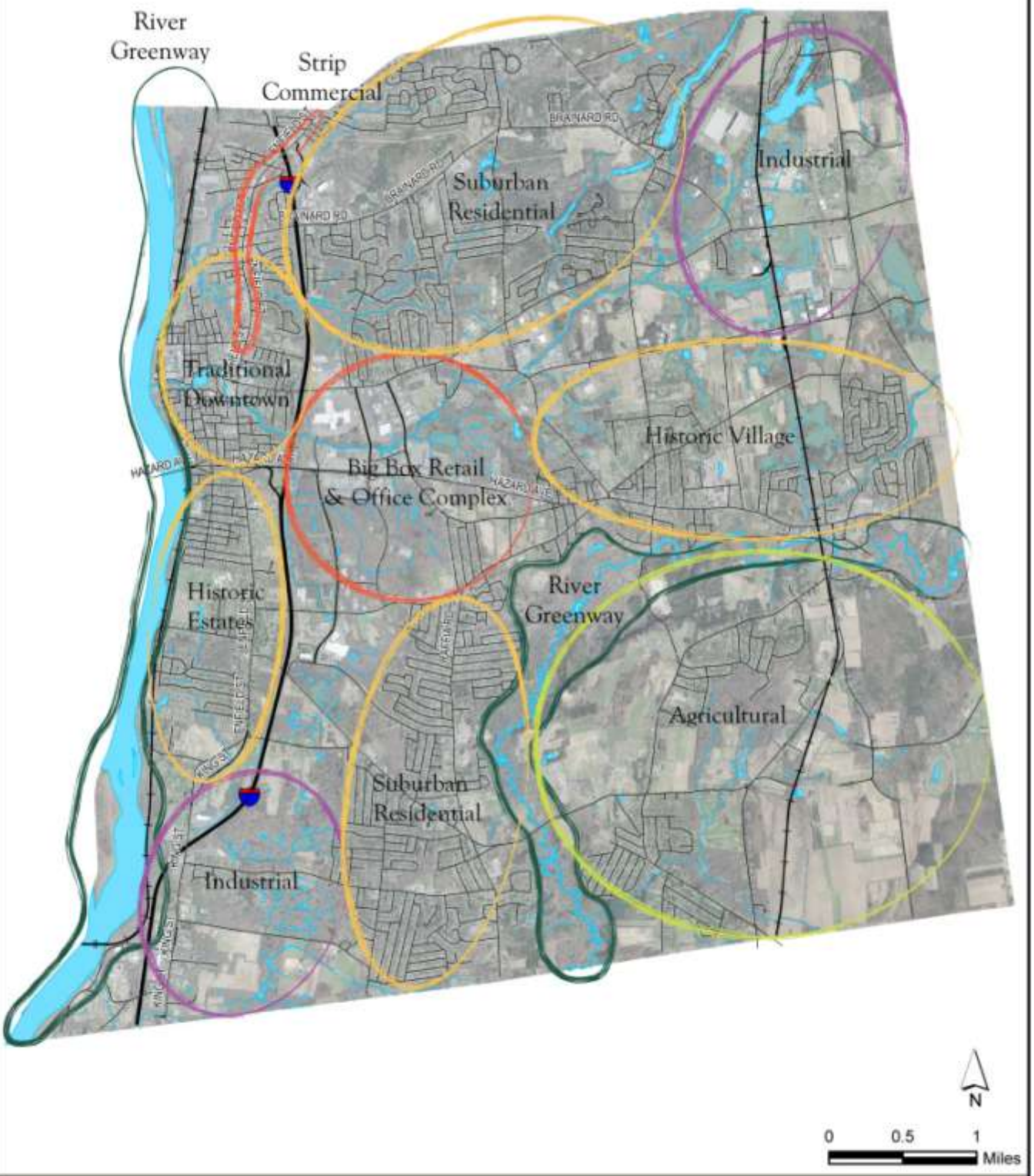
Historic Estates

The Historic Estates area encompasses most of the middle section of Route 5/Enfield St. It begins south of Hazard Avenue and extends all the way south to King St. It includes the Enfield St. Historic District, and all the residential area west of Enfield St. up to the Connecticut River. Its eastern boundary is the I-91 and its northern boundary is Rt. 190.

Institutional and residential land uses predominate. The most common architectural styles are Federal, Greek Revival and Georgian Colonial. Houses are typically situated within large lots and set back considerably from the front. Landscaping in this area is predominantly wide, lush green lawns with large trees along the street and ornamental trees closer to the homes. Most houses are in fairly good condition, but several are in a bad state of disrepair.

Enfield St. is a two-lane road with traffic going in opposite directions, but sidewalks are not always continuous or on both sides.

Figure 18 View of Enfield Street looking north.



Community Character

Plan of Conservation & Development - Town of Enfield, CT

Housing

Housing is the most basic element of a community. Determining that a community's housing stock is sufficient to meet the needs of its population is one of the main objectives of comprehensive planning. Equally important is ensuring that people have access to diverse and affordable housing options, regardless of their physical, social, cultural or economic status.

This chapter provides information about Enfield's housing stock, such as the total number of housing units, the number of units in a structure, age of structure, occupancy rates and tenure, housing values and affordability. Important housing studies and policy documents are examined too, to ensure consistency with other plans and laws. The conclusions derived from this information will be used to identify problems and opportunities in the local housing market and as a basis for the development of housing policies that will guide the community over the next 10 years.

Housing Studies, Plans & Policies

There are several policy and planning documents that have concepts and recommendations relevant to Enfield's housing issues. The Town's updated POCD can benefit from being consistent with the documents summarized in the following section. In addition, there are certain housing laws and regulations that municipalities and individuals must comply with. A complete listing of fair housing laws is available at: http://www.hud.gov/offices/fheo/FHLaws/index.cfm

Connecticut General Statutes

The Connecticut General Statutes define the powers delegated to municipalities by the State. Section 8-2 of the Connecticut General Statutes prescribes the objectives of municipal zoning regulations. The section states that every Connecticut municipality shall:

> *"encourage the development of housing opportunities, including opportunities for multifamily dwellings, consistent with soil types, terrain and infrastructure capacity, for all residents of the municipality and the planning region in which the municipality is located, as designated by the Secretary of the Office of Policy and Management under section 16a-4a. Such regulations shall also promote housing choice and economic diversity in housing, including housing for both low and moderate income households..."*

In spite of this, the Report of the Blue Ribbon Commission to Study Affordable Housing, dated February 1, 2000, found that over half of Connecticut's municipalities have not followed this legislative directive.[3] (See page 3)

State Conservation and Development Policy Plan 2005-2010

The State Conservation and Development Policy Plan for 2005 through 2010 described the aspirations for housing development, management and finance in all of Connecticut. The Plan recognized that urban

[3] Office of Policy and Management, State of Connecticut. Conservation and Development Policies Plan for Connecticut 2005-2010. Pg. 37

and suburban communities have different development opportunities, and that each community's development decisions have an impact within their region. For the sake of efficiency, cost and the natural environment, the Plan encouraged –and required in some cases– state agencies and municipalities to be consistent with state housing policies and to collaborate in creating and implementing effective housing controls. Specifically, the State Policy Plan said:

> *"Housing policy needs to be managed in a manner that promotes inclusionary zoning practices at the municipal level, affords municipalities the ability to maintain the unique character of their communities and address housing choice and mobility on a regional basis."*

In addition, the Plan specifically called for a balance between rental ownership units, density, greenspace and income diversity.

Long Range State Housing Plan/Consolidated Housing Plan 2005-2009

The Long Range State Housing Plan of 2005-2009 was completed by the Connecticut Department of Economic and Community Development simultaneously with the Consolidated Housing Plan. The Long Range State Housing Plan determines how the agency will administrate housing development and subsidy programs that use state funds, while the Consolidated Housing Plan addresses the use of federal funds. The plan assesses current housing needs and market issues, and creates a strategic plan to address those needs. The key points of the plan are summarized here to provide an idea of how Enfield can align its housing projects with the State's funding priorities.

The State's top priority is to improve the ability of low and moderate income residents to access homeownership and rental housing opportunities. To address this, one of the Plan's key strategies is to support mixed-income development in areas where there are few low and moderate income households. The second priority is helping persons who are homeless or have special needs to get a decent and accessible place in which to live. Also, the State talks about the importance of making support services accessible to those who need them. Preventing homelessness was mentioned as one of the State's greatest challenges given first the limited amount of funds now available as a result of the economic crisis, and second the dramatic loss of jobs seen in the state, particularly in the Hartford area.

To improve housing development for all, the State wants to promote, among other things, the following:

- Reusing historic structures and adapting them for residential use
- Building new development within walking distance of public transportation, or motivating people to move to places served by public transportation
- Maximizing the use of existing infrastructure by promoting infill development and redevelopment rather than extending infrastructure to new developments in areas without such services
- Discouraging development that is not consistent with state, regional and local land use policy

Finally, the Plan talks about the importance of monitoring housing cost patterns and zoning practices in each region, and creating plans that support inclusionary, affordable, fair-share housing policies.

Blue Ribbon Commission on Property Tax Burdens and Smart Growth Incentives[4]

This report hypothesizes that the state's overreliance on property taxes as a way to fund local activities encourages sprawl. The report explains that dense urban areas require more services than sub-urban and

[4] State of Connecticut Blue Ribbon Commission. Report on Property Tax Burdens and Smart Growth Incentives. October 2003.

rural areas. Consequently, higher taxes are required to fund services in urban areas. Sub-urban and rural areas tend to provide fewer services and require lower taxes. This motivates people to move to areas where they will pay lower taxes. As urban areas lose population, the tax base shrinks while the level of services remains the same. Taxes are raised to compensate, but at the expense of the population who is less able to pay them. The report further suggests that promoting smart growth would promote efficiency in public services, resulting in lower taxes.

The Commission recommended that the state reduce its overreliance on property taxes and find alternative funding mechanisms. The Commission identified that there was not a good balance between property wealth and income wealth and determined that the state's objective should be to fund public services through more equitable means. The three most significant recommendations were to:

- change land use enabling legislation to designate "preferred growth areas" and that those designations should be consistent across local, regional and state plans
- use fiscal policies as incentives for smart growth
- use taxation measures that encourage the highest and best use of unused real property without requiring additional government funding (no subsidies)
- encourage transfer of development rights within municipalities and between municipalities

Achieving the Balance: A Plan of Conservation and Development for the Capitol Region

The Capitol Region Council of Governments created a set of housing policies with the goal of increasing housing choices throughout the region for residents of a variety of ages, incomes and location preferences. The Plan encouraged local municipalities to explore new planning and zoning approaches that can expand the diversity of housing options in the community, integrate households of different incomes, and deconcentrate poverty. It gave particular importance to meeting the housing needs of the region's youngest and oldest households, whose incomes tend to be lower than the rest of the population. Recognizing the role housing plays in economic development, the plan emphasized on preserving affordable rental housing as a strategy to retain and attract young workers. Finally, the Plan talks about improving the regional transportation system and its connection to residential and employment areas.

1998 Town of Enfield Plan of Conservation and Development

The Town's 1998 POCD underscored the wide range of housing types and state and federal housing/financing programs offered in Enfield, enabling people of all income levels and housing needs to live in the Town. The goal was to continue providing this variety of housing and government assistance programs by using appropriate zoning tools and participating in state and federal housing assistance and community development programs. In addition, the Plan had a section dedicated to specific neighborhood strategies designed to deal in a fresh, new way with the Town's two recurring goals since 1965:

- Reversing the deterioration of Thompsonville, North Thompsonville and Hazardville; and
- Protecting newer neighborhoods from undesired commercial use, inappropriate residential densities, and intrusive traffic

The neighborhood strategies, however, addressed more than housing issues and included recommendations for financial support and incentives, building and site reuse, transportation improvements, open space acquisition, zoning and urban design.

1992 Thompsonville Revitalization Strategy

The Thompsonville Revitalization Strategy was a thorough housing and retail market analysis for Thompsonville in 1992. While almost 20 years have passed and few of the recommendations have been implemented, many of the Strategy's conclusions still seem to be relevant in 2009. The Strategy described Thompsonville as a community of young, small and low income households where rental units predominate and housing values for owner-occupied units are lower than in other parts of Enfield. It also described it as a "neighborhood-scaled market area" where the key attraction for area residents was the convenience and ability to walk short distances on the way to or from work for shopping.

The Strategy concluded that there was a moderate demand for new housing units in Thompsonville, but also warned that satisfying that demand would not be a profitable endeavor unless public subsidies were available. The reason for this was that higher rental prices, and higher land, construction and conventional financing costs would put the new units out of reach of the market for which they were intended. According to the Strategy, the market for new housing development in Thompsonville was comprised of moderate-income families that sought affordable but high quality design, strong property management and a moderate level of amenities. The projected housing demand was approximately 33 to 40 rental apartment units and three to four owner-occupied housing units over the following three years.

Similarly, the report indicated that the demand in the rest of Enfield was being generated by households desiring affordable units. The study also mentioned that there was an opportunity to develop multi-family residential units in central Enfield in the area adjacent to Thompsonville.

White Paper: Enfield Key Issues, Key Opportunities and Recommended Strategies

White Paper: Enfield Key Issues, Key Opportunities and Recommended Strategies was completed in 2000, and was intended to be an update to the Thompsonville Revitalization Strategy. However, the White Paper is problematic as a planning document because it lacks data to support the validity or appropriateness of its recommendations. The Paper claims that the vision presented in the Thompsonville Revitalization Strategy is unrealistic because the scale of proposed developments is larger than the area's current market. Also, it claimed that new construction would be more expensive than the prevailing rents in the area. The Paper proposed promoting homeownership in the area as a solution to the high rate of turnover, transiency and poor property maintenance associated with rental housing. It proposed this under the assumption that homeowners will care better for their properties than renters. The Paper also echoes fears that promoting homeownership alone will not be successful because the neighborhood is not perceived to give prospective investors enough confidence in the future value of their property.

The White Paper's recommendations involving housing included:

- Using historic preservation assistance programs to stimulate reinvestment in the neighborhood
- Creating residential property acquisition incentives such as homesteading and tax credit programs
- Encouraging developers and area residents to use alternative property ownership models such as "mutual housing" as a way to get renters more involved in property maintenance
- Taking a team approach to code enforcement
- Using the special powers given under Sec. 7-606 of the Neighborhood Revitalization Zone program (if the area was given such a designation) to deal with problem property owners who have buildings with unresolved building code violations
- Allowing Bigelow Commons to expand rental housing units

- Targeting housing reinvestment programs in Enfield St.; Elm St. and North Main St.; and lower Pearl St. south of High St.
- Spreading public funds for modest rehabilitation work over the entire target area to achieve greater visibility, instead using funds on a single, large project

Local Housing Agencies

The following agencies address housing issues in the Town of Enfield:

Enfield Housing Partnership is a currently inactive committee that grouped members from various town committees and commissions and the Mayor to increase the supply and availability of affordable housing in Enfield.

Fair Rent Commission was established under provision 274 of the State of Connecticut Public Acts of 1969. Its purpose is to receive and hear complaints of excessive rents, study the charges, control and eliminate excessive rents. Committee members are appointed by the Town Manager, consisting of 2 tenants, 2 landlords and 3 homeowners. In addition, there are two Complaint Investigators. The Commission meets as needed.

Enfield Housing Authority was established under Section 8-40 of the Connecticut General Statutes to oversee the operation and management of low and moderate income properties owned by the Authority. There are five members, one tenant living in Authority property, two liaisons of the Town Council, and the Authority's Executive Director. The Authority meets monthly.

The Enfield Housing Authority recently submitted and got approved its 2009 Annual Agency Plan required by US Dept. of HUD. It has also been working on maintaining its properties and redeveloping Enfield Manor. A total of $168,000 was invested in about 80 renovation projects and site improvements. The Enfield Manor redevelopment plans, however, are on standby until funding is restored (funding sources withheld money in light of the economic crisis). The Authority indicates that the improvements helped reduce vacancies in the elderly, moderate rental, and congregate housing programs.

The **Housing Code Appeals Board** was created under Section 5A-7 of the Enfield Town Code in accordance with the Connecticut General Statutes. Its purpose is to hear appeals from homeowners who have been issued notices that their property is unfit for habitation (condemned) or does not comply with minimum standards. There are five members, of the following professions: a fire chief; a licensed architect or civil engineer; a building, plumbing or electrical contractor; a licensed physician or registered nurse; a professional psychologist or social worker. The board meets as needed.

The **Loan Review Committee** was established in 1983 by Town Council to review and approve loan applications, deferred payment applications and forgiveness loans; and to recommend policy and guideline changes to the Residential Rehabilitation Program. The committee meets monthly and has 5 regular members and 2 alternates (two are councilpersons, the rest are residents or business owners from one of the three target areas).

Housing Characteristics

Total Units

The total number of housing units in Enfield in 1998 was 16,853.[5] In 2000, it increased to a total of 17,043 units.[6] According to census estimates for the period 2005-2007, Enfield's housing stock decreased to a total of 16,894 units. In contrast, the Connecticut Department of Economic and Community Development (DECD) estimates that there are now 17,293 housing units in Enfield.[7] DECD records show that an average of 50 building permits was given annually in Enfield from 1990 to 2007. The total number of residential building permits given in Enfield from 2000 to 2007 is 310.[8]

Occupancy

Vacant housing was not a significant problem in Enfield in 2000: only three percent of all housing units (625) were vacant. Of those units that were vacant, 44% were waiting to be rented and 26% were waiting to be sold. The remaining units remained vacant for other reasons. Of the units that were occupied, 75% were occupied by their owners.

By 2005-2007, the total number of housing units decreased, leading to a lower percentage of both occupied and vacant units. However, the proportion of owner-occupied housing was higher in 2005-2007 than in 2000. In 2005-2007, there were 3.6 owner-occupied units for every renter-occupied unit.

Figure 1 illustrates how the proportion of owners to renters varied by area in 2000. The Thompsonville neighborhood appears to have a higher proportion of renters than other parts of the Town of Enfield. Figure 2 shows how the reasons for which certain units are vacant varied by area in 2000. The Thompsonville neighborhood stands out because it had a greater diversity of reasons for which certain units were vacant. Most census tracts had one or two reasons why certain housing units were vacant in 2000.

Housing Type

The majority of houses in Enfield in 2000 were single-family, detached houses. The percentage of single-family, detached houses and 2-family houses in 2005-2007 increased, while 3 or 4-family houses decreased.

Household Size

Approximately 50% of occupied housing units in Enfield were 1 and 2-person households in both 2000 and 2005-2007. Three and four-person households accounted for approximately 30% of all occupied housing units. Three and five-person households increased slightly between 2000 and 2005-2007.

[5] Town of Enfield, CT and Harrall-Michalowski Associates, Inc. Plan of Conservation and Development for the Town of Enfield, CT. May 20, 1999. Pg. 42
[6] US Census Bureau. H1. Housing Units. Census 2000 Summary File 3, Sample Data.
[7] Connecticut Department of Economic and Community Development. Connecticut Housing Inventory by Town 1990-2007. Retrieved on Jan. 14, 2009 from: http://www.ct.gov/ecd/cwp/view.asp?A=1106&Q=250640
[8] Connecticut Department of Economic and Community Development. Annual Housing Permit Data by Town 1990-2007. Retrieved on Jan. 14, 2009 from: http://www.ct.gov/ecd/cwp/view.asp?A=1106&Q=250640

Table 9 Housing Occupancy Statistics for Enfield				
	Percent (%)			
	Town of Enfield		Hartford MSA	
	2000	2005-2007 Estimate	2000	2007 Estimate
Occupied Units	96.33	95.57	94.78	92.54
Owner-occupied	75.64	78.37	65.99	69.08
Renter-occupied	24.35	21.62	34	30.91
Vacant Units	3.67	3.42	5.21	7.45
For rent	44	*	40.75	31.22
For sale only	26.08	*	15.31	9.05
Rented or sold, but not occupied	9.92	*	8.83	10.26
For seasonal, recreational, or occasional use	10.88	*	18.72	14.84
For migrant workers	0	*	0.14	0.43
Other reasons for vacancy	9.12	*	16.23	34.17

* Due to issues with a small sample size, the 2005-2007 ACS data on reasons for vacancy was limited to the following: For rent, for sale only, and rented or sold, not occupied: 404 units; All other vacant units: 174 units.

Source: US Census Bureau. H6. Occupancy Status, H7. Tenure and H8. Vacancy Status. Census 2000 SF 3, Sample Data; B25002. Occupancy Status, B25003 Tenure, and B25004. Vacancy Status. 2007 ACS 1-Year Estimates; B25003. Tenure and C25004. Vacancy Status. 2005-2007 ACS 3-Year Estimates.

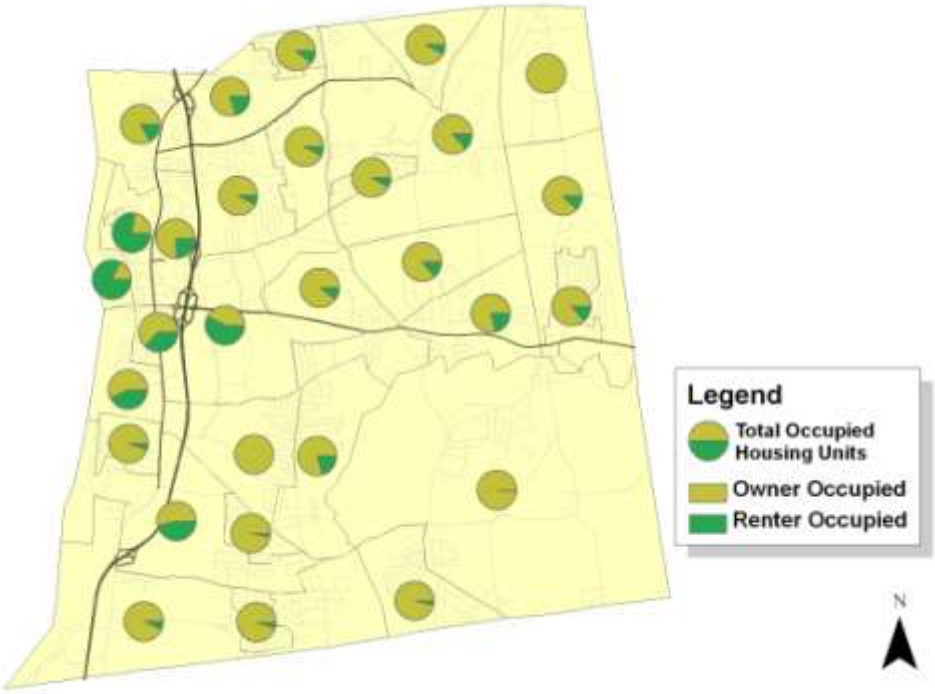


Figure 19 Tenure by 2000 Census Tract

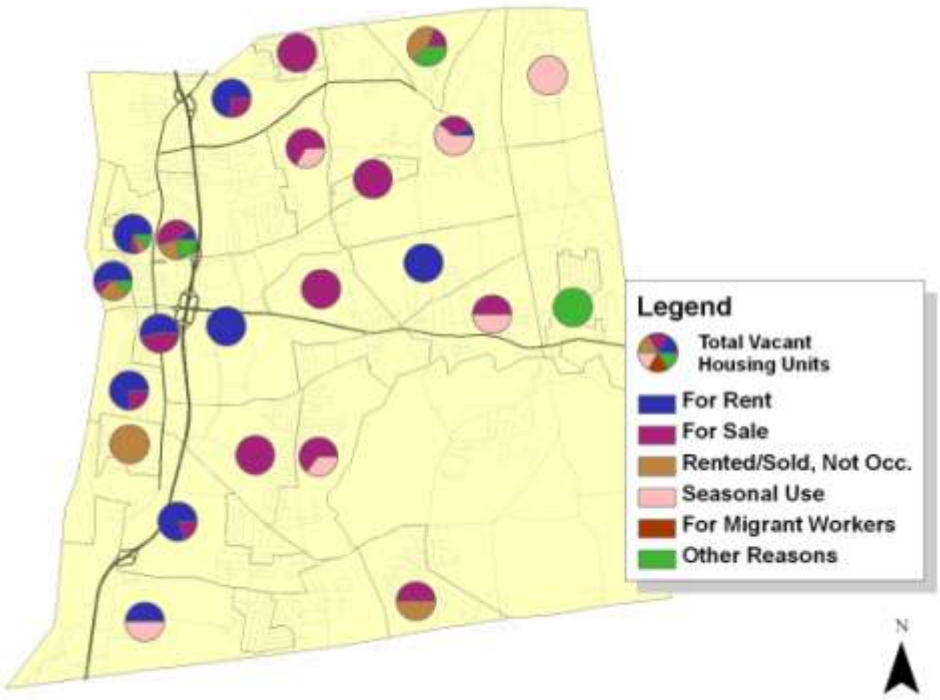


Figure 20 Reasons for Vacancy by 2000 Census Tract

Table 10 Number of Housing Units in a Structure in Enfield

Number of Units/Type of Unit	Percent (%)			
	Town of Enfield		Hartford MSA	Hartford-West and East Hartford MSA
	2000	2005-2007 Estimates	2000	2007 Estimates
1, detached	68.94	71.90	58.2	59.10
1, attached	4.9	4.7	5.05	4.43
2	6.8	8.5	7.63	6.64
3 or 4	7.77	5.36	9.31	9.26
5 to 9	4.17	3.39	6.45	5.88
10 to 19	2.49	2.66	4.42	4.47
20 to 49	1.31	1.02	3.55	3.97
50 or more	3.50	2.17	4.6	5.51
Mobile Home	0.12	0.1	0.71	0.64
Boat, RV, van, etc.	0	0	0.01	0.04

Source: US Census Bureau. H30. Units in Structure. Census 2000 Summary File 3, Sample Data.

Table 11 Household Size for Enfield				
Persons per Household	Percent of Households (%)			
	Town of Enfield		Hartford MSA	East H.-West H.-Hartford Metro Area
	2000	2005-2007 Estimate	2000	2007 Estimate
1	24.92	22.49	27.11	27.75
2	34.10	34.92	33.24	33.68
3	16.78	19.04	16.32	16.32
4	15.15	14.40	14.69	13.97
5	6.48	7.3	6.16	5.92
6	2.16	0.91	1.7	1.65
7 or more	0.4	0.89	0.77	0.67

Source: US Census Bureau. H16. Household Size. Census 2000 Summary File 3, Sample Data; B25009. Tenure by Household Size, 2007 ACS, 1-Yr Estimates.

Age of Housing

Houses in Enfield were built, on average, in 1960. Figure 3 shows how the age of housing varied by area in 2000. The Thompsonville neighborhood stands out by having the greatest proportion of houses in Enfield that were built on or before 1939. The housing in most other parts of town were built during the 1950s and 60s, which corresponds to the population increases described in Chapter 1.

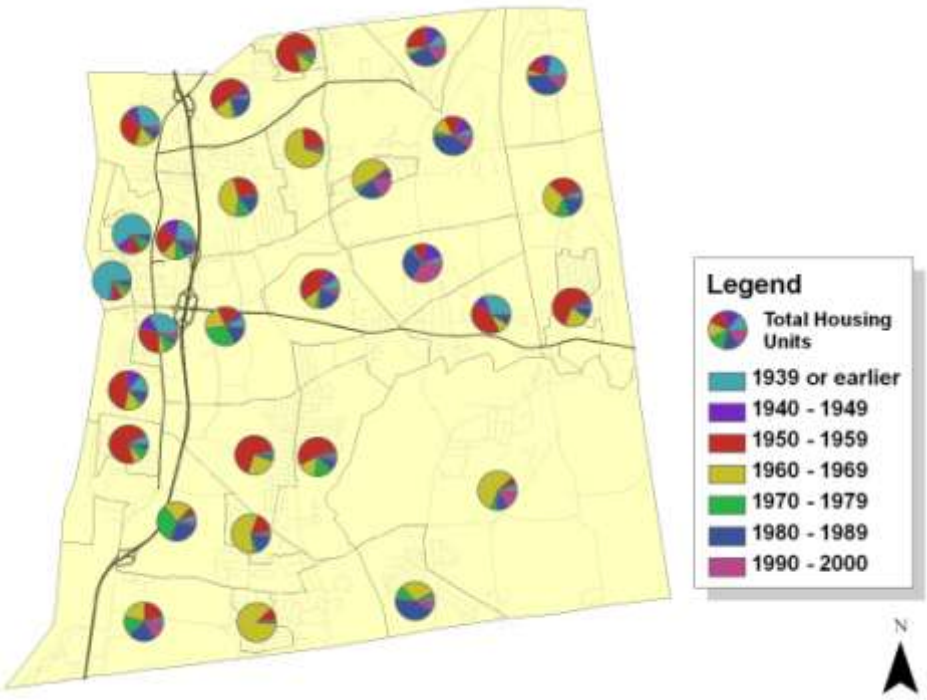


Figure 21 Age of Housing by 2000 Census Tract

Housing Value & Rent

In Enfield, the median value for a house occupied by its owner in 2000 was $124,500. At the regional level, the median value for specified owner-occupied housing units in 2000 was $151,220; slightly higher than average home values in Enfield.

In 2005-2007, the median value for an owner-occupied house in Enfield was $203,900. In 2007, the median value for owner-occupied housing units in the region was $255,300, still slightly higher than in Enfield.

Table x shows the proportion of housing units in each value category in 2000 and 2007 in Enfield and the Hartford Metro Area. The data indicates that 65% of all housing units in Enfield were valued at $100,000 to $149,999. Housing values increased in 2005-2007, with most houses now in the $150,000 to $299,999 range.

Table 12 Housing Values

	Percent of Housing Units (%)			
	Town of Enfield		Hartford MSA	East H.-West H.-Hartford Metro Area
	2000	2005-2007 Estimate	2000	2007 Estimate
Less than $ 50,000	0.76	0.32	2.38	0.72
$ 50,000 to $ 99,999	15.95	1.66	16.45	2.16

$ 100,000 to $ 149,999	65.60	10.98	35.88	7.53
$ 150,000 to $ 199,999	13.84	34.59	23.06	16.46
$ 200,000 to $ 299,999	3.12	39.84	15.73	33.45
$ 300,000 to $ 499,999	0.53	11.63	5.17	30.21
$ 500,000 to $ 999,999	0.15	0.93	1.09	8.57
$ 1000,000 or more	0	0	0.2	0.85

Source: US Census Bureau. H84. Value for All Owner-Occupied Housing Units. Census 2000 SF3- Sample Data; C25075. Value for Owner-Occupied Housing Units. 2005-2007 ACS 3-Year Estimates; B25075. Value for Owner-Occupied Housing Units. 2007 ACS 1-Year Estimates.

Median gross rent in Enfield was $719 in 2000.[9] By 2005-2007, median rent in Enfield increased to $942.[10] The Fair Market Rents computed by Department of Urban Housing and Development (HUD) show similar changes. Fair market rent (FMR) is an estimate of gross rent, which includes rent for shelter and all tenant-paid utilities, except phone, cable or other television and internet services. HUD computes FMR to ensure that there is sufficient supply of rental housing for program participants in a given area.[11] FMR excludes non-market rental housing such as public housing. HUD uses FMRs to determine payment amounts for the following programs:

- Housing Choice Voucher programs,
- certain Section 8 contracts,
- Housing Assistance Payment (HAP) contracts in the Moderate Rehabilitation Single Room Occupancy (Mod Rehab) program, and
- the HOME rental assistance program

All Hartford MSA/FMRA FMRs apply to Enfield. Table 6 shows FMRs for Enfield for selected years and their change over that time.

Table 13 Fair Market Rents by Type of Unit for Enfield ($)

Year	Efficiency	1-Bdrm	2-Bdrm	3-Bdrm	4-Bdrm
2000	438	545	697	875	1,062
2005	593	710	873	1,053	1,214
2006	669	801	979	1,176	1,460
2009	697	835	1,021	1,226	1,522
Change from 2000 to 2005	35.38 %	30.27 %	25.25 %	20.34 %	14.31 %
Change from 2006 to 2009	4.18 %	4.24 %	4.29 %	4.25 %	4.24 %

Source: US Dept. of HUD. Fair Market Rent Documentation. Retrieved on Jan. 9, 2009 from: http://www.huduser.org/datasets/fmr.html

[9] Capitol Region Council of Governments. Appendix 17: Median Gross Rent & Median Home Value, 1980-2000. Trends Shaping Our Region: A Census Data Profile of Connecticut's Capitol Region.
[10] US Census Bureau. B25064. Median Gross Rent. 2005-2007 ACS 3-Year Estimates.
[11] US Dept. of Housing and Urban Development. Fair Market Rents: An Overview. Retrieved on Jan. 13, 2009 from: http://www.huduser.org/datasets/fmr.html

Housing Sales

Between 2005 and 2006, a total of 727 houses were sold in Enfield. Seventy-five percent of them were single-family homes, and 19% were condominiums. Enfield's house sales represented 5.6% of house sales in the Capitol Region. They were sold for an average $212,299, which is approximately $27,000 less than the average sales price in the Capitol Region as a whole ($284,317).

Housing Issues

Housing Affordability

Housing affordability in Connecticut is an issue of great concern. Housing prices and rents in Connecticut are high compared to the average housing cost in the country as a whole. Low and moderate income households gain greater risk of losing their home or being unable to find one they can afford given three significant economic conditions:

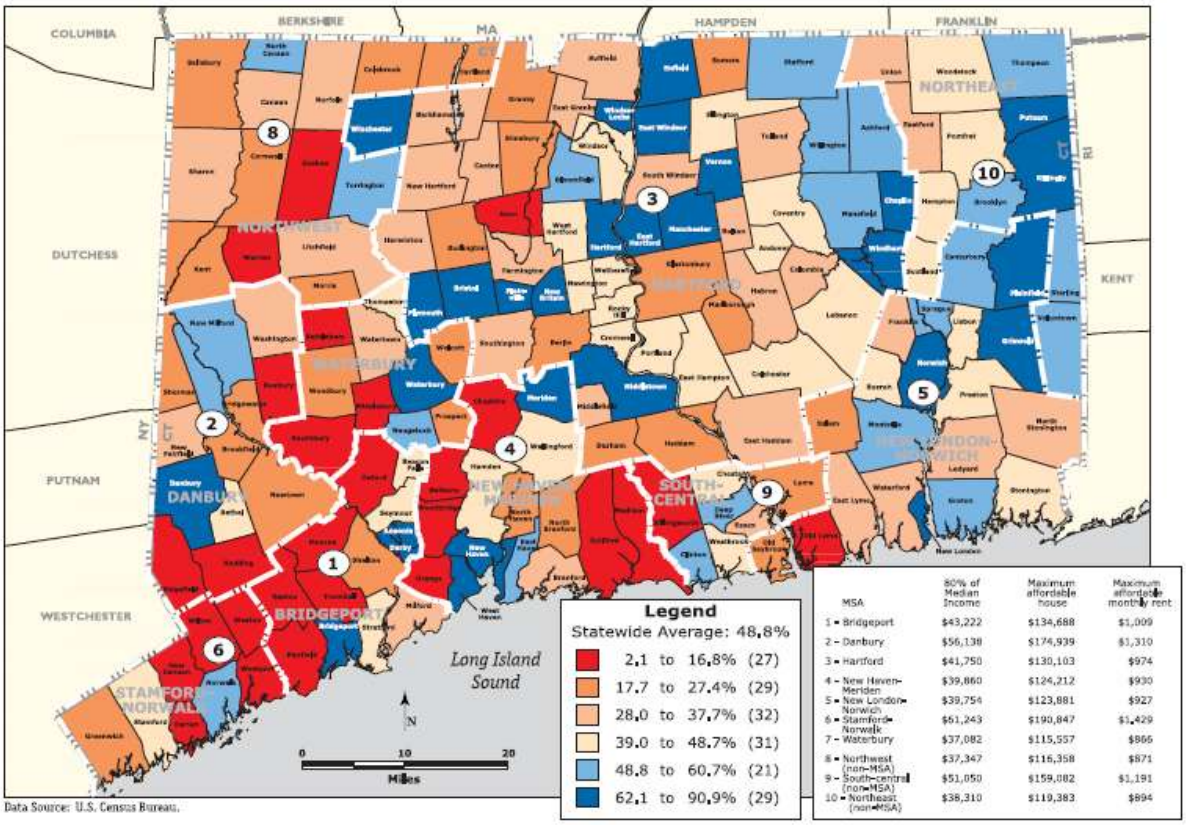
- rising housing construction costs due to the increasing costs of building materials such as lumber, steel and concrete,
- rising energy costs, and
- rising unemployment throughout all industry sectors and communities in Connecticut.[12]

Housing affordability refers to the proportion of a household's income that is used to pay for housing costs compared to the proportion of income used to pay for other living expenses. Generally, if housing costs require 40% or less of a household's annual income, housing is considered affordable. However, the percentage used to determine affordability may vary from agency to agency.

The 2003 Connecticut MetroPatterns study considered housing to be affordable if annual mortgage costs do not exceed 25% of the household income. This study used data from the US Census 2000 to show how housing affordability varied throughout the State of Connecticut. Figure x illustrates their finding that in the year 2000 approximately 48% of all housing units in the State of Connecticut were "affordable to households with 80% of the median income for their region." As shown in Figure x, the Town of Enfield had one of the highest percentages (62 - 90%) of housing affordability in the Connecticut.[13]

[12] Dept. of Economic and Community Development. Long Range State Housing Plan 2005-2009.
[13] Orfield, Myron and Thomas Luce. Connecticut Metropatterns: A Regional Agenda for Community and Prosperity in Connecticut. AMEREGIS Metropolitan Area Research Corporation. March 2003.

MAP 12: PERCENTAGE OF HOUSING UNITS AFFORDABLE TO HOUSEHOLDS WITH 80 PERCENT OF THE REGIONAL MEDIAN INCOME BY MUNICIPALITY, 2000



MSA	80% of Median Income	Maximum affordable house	Maximum affordable monthly rent
1 - Bridgeport	$43,222	$134,688	$1,009
2 - Danbury	$56,138	$174,939	$1,310
3 - Hartford	$41,750	$130,103	$974
4 - New Haven-Meriden	$39,860	$124,212	$930
5 - New London-Norwich	$39,754	$123,881	$927
6 - Stamford-Norwalk	$61,243	$190,847	$1,429
7 - Waterbury	$37,082	$115,557	$866
8 - Northwest (non-MSA)	$37,347	$116,358	$871
9 - South-central (non-MSA)	$51,050	$159,082	$1,191
10 - Northeast (non-MSA)	$38,310	$119,383	$894

Data Source: U.S. Census Bureau.

Figure 22 Affordable Housing in Connecticut

Another study, the Capitol Region Home Sales Price Report, suggested that the affordability situation remained the same as of September 2006. This study focused on Connecticut's Capitol Region, and looked at new and existing housing sales price reports, which were supposed to reflect market trends better than census data based on income and housing value alone. The study revealed, "74% of all [home] sales in the region exceeded affordable prices for those earning the median income."[14] The report suggested that "moderate-income households [households earning $44,655 on average] have limited choices in homeownership and may be forced either to take on risky mortgages or put off homeownership. Low income households, earning $28,535, face even more challenges."[15]

The 2006 Home Sales Price Report listed the Town of Enfield among the eight municipalities within the Capitol Region in which "more than 20% of sales [were] affordable to moderate-income households."[16] Table 14 compares housing affordability in Enfield to that of the region as a whole.

[14] Capitol Region Council of Governments. Capitol Region Home Sales Price Report, July 2001 to June 2006. Sept. 2006. Pg. 5

[15] Capitol Region Council of Governments. Capitol Region Home Sales Price Report, July 2001 to June 2006. Sept. 2006. Pg. 5

[16] Capitol Region Council of Governments. Capitol Region Home Sales Price Report, July 2001 to June 2006. Sept. 2006. Pg. 1

Table 14 Comparison of Housing Affordability in 2006					
	Single Family	Two Family	Three Family	Condo	All Categories
Enfield	118	118	114	121	118
Capitol Region	90	102	98	131	99

Source: Capitol Region Council of Governments. Capitol Region Home Sales Price Report, July 2001 to June 2006. Sept. 2006. Pg. 20

These housing affordability values were determined using a housing affordability index based on a formula developed by the National Association of Realtors. The formula considered median sales prices and median household income for each municipality and the region as a whole, and the national average mortgage rate. The formula compares the income needed to qualify for a typical 30-year fixed-rate mortgage at a 6.5% interest on a home at the median sales price to the median household income in 2005 for each municipality and for the region as a whole. The index is used to show how affordable the average house sales price is. Higher index numbers represent greater affordability.

Housing Assistance

This section presents data about the amount of housing units that participate in a government housing assistance program. According to the 1999 Enfield POCD, 11.43% of all housing units in the town participated in a housing assistance program. In 2007 (as shown in Table x), 12.15% of all housing units in Enfield participated in some sort of housing assistance program. This was less than the percentage of units in the state as a whole that participated in those programs.

Table 15 Comparison of Assisted Housing Units in Enfield and the State of Connecticut						
	2000 Census Housing Units	Governmentally Assisted Units	CHFA Mortgages	Deed Restricted Units	Total Assisted Units	Assisted Housing Units (%)
Enfield	17,043	1,572	491	7	2,070	12.15
Total Exempt Municipalities	639,517	96,761	16,573	2,883	116,217	18.17

Note: The number of units that receive assistance will vary from year to year depending on tenants' or buyers' use of government assistance programs since these figures exclude public housing projects.

Source: State of Connecticut, Department of Economic and Community Development. 2007 Affordable Housing Appeals List – Exempt Municipalities. Retrieved on December 29, 2008 from: http://www.ct.gov/ecd/lib/ecd/housing_reports/2007_affordable_appeal_list.pdf

Table 16 lists some of the housing opportunities offered by the Enfield Housing Authority. In fiscal year 2008-2009, the Enfield Housing Authority administrated 414 housing units. In addition, the Authority managed several programs under contract with US Dept. of HUD, including the Freshwater Pond 75-unit apartment complex and the Section 8 Housing Choice Voucher program. The Authority accepted 136

vouchers from Enfield residents, and 6 from other jurisdictions. There currently are lengthy waiting lists for all of its properties and programs.

Table 16 Error! No text of specified style in document.**Enfield Housing Authority Housing Units**

Housing Type	Complex Name	# of Units	Base Rent ($)				
			Efficiency	1-Bdrm	2-Bdrm	3-Bdm	4-Bdrm
Family Housing	Green Valley Village	84	–	–	230	245	255
Family Housing	Laurel Park	90	–	–	230	245	255
Elderly Housing	Enfield Manor & Extension	80	235	250	–	–	–
Elderly Housing	Windsor Court	40	–	195	–	–	–
Elderly Housing	Ella Grasso Manor	40	195	210	–	–	–
State Financed Congregate Housing	Mark Twain Congregate Living Center	80	$310 - $375 including all utilities + $192 service fee				
Total # Units		414					

Source: Enfield Housing Authority. Annual Report FY2008-2009.

Effective January 1, 2009, the Enfield Housing Authority is using a new rental rate structure, the first increase in five years. The new rates are:

- Moderate Income Rental - $313 per month
- Elderly Housing Rental - $285 per month
- Congregate Housing Rental - $344 + $192 service fees

Homelessness

According to the Long Range State Housing Plan 2005-2009, homelessness is a problem throughout the entire State of Connecticut. Homeless people, as defined by the McKinney Act, include persons living in streets, abandoned buildings, cars and substandard housing. Estimates suggest that there may be 3,000 to 5,000 homeless individuals in the state, and state-funded shelters report not having sufficient capacity to accommodate all the people that seek assistance. An alarming 16.5% of Connecticut's homeless shelter clients are individuals under 18 years of age. The study listed the top factors leading to homelessness: substance abuse (28.2%), unemployment (21.7%), and expenses that exceed income (19.2%).[17] The study did not indicate whether any of these factors were correlated amongst themselves, but high unemployment rates and housing prices suggest that economic conditions are contributing more to today's homelessness than other typical factors.

[17] Connecticut Dept. of Economic and Community Development. Long Range State Housing Plan 2005-2009. Pg. 46-48

Special Needs Groups

Elderly Persons

Throughout the nation and the state, the elderly population is increasing and requiring a different form of support and care than did previous generations of elderly people. The Long Range State Housing Plan 2005-2009 indicates that elderly people are facing many housing challenges. Many elderly people do not work and have a fixed income that does not adjust to rising costs of living. They also tend to become increasingly isolated and dependent on the help of others as their ability to drive diminishes. As a result, many elderly persons are forced to seek new housing. Many look for housing that is affordable and located in areas where services such as medical care, pharmacies, food stores, and public transportation systems are easily accessible.[18] Others who wish or require more support may look for group housing with full-time staff and services.

People with Disabilities

According to the Long Range State Housing Plan 2005-2009, there is an acute affordable housing crisis for persons with disabilities living in Connecticut. Due to the state's high rental and housing costs, a person with disabilities who receives Federal Supplemental Security Income and State Supplemental Income benefits cannot pay only 30% of their monthly income on rent regardless of the town or city in which they live.[19]

Supportive Housing for People with AIDS

Many of the AIDS housing programs in Connecticut serve only individuals. Connecticut also has a higher rate of women living with AIDS than in the nation as a whole. Providers must develop mechanisms to include consumers in the planning and development of housing for persons living with HIV/AIDS. As people have become empowered and have learned to live with HIV/AIDS, they have developed a greater desire to be involved in the decisions regarding their lives. People are more concerned with social and economic issues than with their health issues.[20]

De-incarcerated Persons

People who are released from prison find many obstacles to rehabilitation and reintegration to society. Difficulties finding work and adequate housing are two factors that deter them from succeeding. According to the Long Range State Housing Plan for 2005-2009, many de-incarcerated persons return to major urban areas where there are no jobs, and to neighborhoods that have deteriorated housing and high rates of unemployment and crime. Most of them also depend on public transportation, which makes travel between home and work difficult. Often many of the jobs available are not within reach of existing bus routes.[21]

Property Taxes

Property taxes in the Northeast are generally higher than in other parts of the country. The State of Connecticut is one of the highest, and Hartford County ranked 57th highest real estate taxes paid in the

[18] Connecticut Dept. of Economic and Community Development. Long Range State Housing Plan 2005-2009. Pg. 90
[19] Ibid.
[20] Ibid. Pg. 91-92
[21] Ibid. Pg. 92-93

country in 2005-2007.[22] The information presented here can help to better understand the impact that property taxes may have in the community.

Property Taxes Paid in Enfield

Table 17 Property Taxes Paid for Specified Owner-Occupied Housing Units

	Percent of Specified Owner-Occupied Units (%)			
	Town of Enfield		Hartford MSA	East H.-West H.-Hartford Metro Area
	2000	2005-2007 Estimate	2000	2007
Less than $800	1.96	1.49	1.68	1.65
$ 800 to $ 1,499	6.52	2.98	5.64	2.94
$ 1,500 or more	91.51	95.4	92.59	94.88
No real estate taxes paid	0	0.11	0.07	0.5
Median real estate taxes in Enfield				$ 2,483
Note: 2007 1-Year Estimates not available for the Town of Enfield.				

Source: US Census Bureau. HCT19. Real Estate Taxes. Census 2000 Summary File 3, Sample Data; B25102. Mortage Status by Real Estate Taxes Paid. 2005-2007 ACS 3-Year Estimates; B25102. Mortgage Status by Real Estate Taxes Paid. 2007 ACS 1-Year Estimates.

In 2008-2009, the Town of Enfield offered Real Estate Tax Exemption and Homeowner's Credits for homeowners age 65 or older and those who are totally disabled. Eligibility for tax credit is based on state income guidelines, while exemptions are based on military and disability status.[23]

[22] Property Tax on Owner-Occupied Housing, by County, Ranked by Property Taxes Paid, 2005-2007 Average. Retrieved on June 11, 2009 from: http://www.taxfoundation.org/taxdata/show/24052.html

[23] Retrieved on March 26, 2009 from: http://www.enfield-ct.gov/filestorage/91/803/121/Tax_Collector_Town_of_Enfield.pdf

Findings

- There are different sources of information about the total number of housing units in Enfield. Some sources indicate that Enfield's housing stock has been decreasing since 2000, while others show that it has increased. The upcoming 2010 Census may provide a more accurate assessment of Enfield's total housing units.
- Vacant housing is not a significant problem in Enfield. Only three percent of houses are vacant and they are either available for rent or on sale.
- The majority of housing sales in Enfield were affordable to moderate income households; more so than sales in other parts of the Capitol Region.
- The Town of Enfield has five agencies that deal with a variety of housing issues. There is a need for these agencies to communicate and continue to work together to address the breadth of housing issues present in Enfield.
- The proportion of housing units that receive government assistance in Enfield is similar to the statewide proportion.
- The deterioration of the Thompsonville, North Thompsonville and Hazardville neighborhoods is a recurring issue.
- Most residents in the State of Connecticut, and consequently in the Town of Enfield, pay relatively high property taxes.
- The Capitol Region Council of Governments calls for integration of households of different incomes and deconcentration of poverty. The Town's demographics show that the Town is fairly segregated.
- The regional plan also supports the idea that neighborhoods have to be better connected to regional transportation system, validating public comments about the need to provide better public transportation in Enfield and the possibility of reestablishing rail service to Enfield.
- The State of Connecticut's laws and plans call for an integrated approach to housing and infrastructure development to ensure that development occurs in an orderly manner and that there are sufficient and affordable housing choices, particularly to meet the needs of young and elderly households. While the Town of Enfield's housing data show that housing is relatively affordable, there is still a gap in housing alternatives for young and elderly households that needs to be addressed in the future in order to comply with state mandates.
- State legislation promotes and requires state agencies and municipalities to have consistent housing policies and implement effective controls. The town needs to ensure that its plans and zoning ordinances reflect state policies.
- Public input reveals that many Enfield residents believe that the key to solving neighborhood problems in areas like Thompsonville is to encourage homeownership. However, the Capitol Region Council of Governments emphasizes on preserving rental housing that is affordable to attract and retain young workers. This suggests that the Town will have to take a different approach to problems associated to rental housing. The current approach threatens to push away the very age groups that can help the community grow and prosper. Assuming that homeowners have a greater motivation to maintain their properties ignores that there are homeowners who don't have the means to afford to maintain their property at a certain level, that there are people

who just don't care, can't or don't know how to do repairs on their own. Negligent/absentee landlords have to be dealt with directly by the town for code violation or abandonment. Rental housing in urban areas can be considered an asset because it suits the needs of people that can't buy a home, yet prefer smaller living arrangements and greater accessibility to services without depending on cars. Also, absentee landlords are not inherently irresponsible, nor are tenants inherently problem people. The current national housing lending crisis attests to the fact that not everyone can realistically be a homeowner and that options for greater residential options are needed for a wide range of demographic groups. Housing that is affordable and does not have long-term commitment is also a valuable asset for families who have to make the transition between the realities of job loss.

Economic Conditions

In order to maintain a high quality of life in any community, the economic conditions must meet the needs and goals of the local population. Not only is it healthy to maintain a diversified and growing economy, it is also important to ensure that local economic development strategies reflect the conditions of the local and regional population, business climate and infrastructure.

In 2009, the Town of Enfield faces significant economic and financial obstacles. Industries, such as finance and insurance, long held as the backbone of the Town and larger metropolitan area, have declined. Recent years have seen several major corporations downsize or relocate, leaving Enfield with rising unemployment and poverty rates as well as an expanding surplus of vacant industrial and commercial space. Meanwhile, the struggle between conservation and development continues as the local agriculture community shrinks and pressure exists for development. Enfield is poised to take appropriate measures to reorganize and find new ways to grow the economy.

The Economic Conditions Chapter provides an assessment of the existing economy of the Town of Enfield and the Hartford Capitol region. This analysis is used to identify the strengths and weaknesses of the local economy and provide a foundation upon which economic policy can be created to shape the future of Enfield.

Regional Economic Conditions

The Town of Enfield is located within the Metro Harford capitol region, 18 miles north of the City of Hartford. Hartford has long been regarded as the "Insurance Capital of the United States," featuring a heavy concentration of insurance and financial corporations, headquartered throughout the region. Additional major employment sectors include defense, utilities, industrial manufacturing, health services and transportation.[24]

Similar to Enfield, the entire metropolitan region faces significant economic and financial hurdles. According to a 2008 study, Connecticut was ranked as the fourth most expensive state for doing business.[25] The area's stature as the "Insurance Capitol" is declining. As of 2009, Des Moines, IA had the highest percentage of insurance employment of any city. The region has also seen its traditional labor industries, including manufacturing, decline in recent years as many companies such as Lego have shipped production out of the country.

The Hartford area is located in the southern half of the two-state "knowledge corridor" stretching between Hartford and Springfield, MA along Interstate 91. The Town of Enfield has a very central location within the Knowledge Corridor, 18 miles north of Hartford and 8 miles south of Springfield. This corridor is home to 32 college and universities, including Asnuntuck Community College in Enfield and has a high concentration of "knowledge-based jobs," such as finance, insurance and education.[26]

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[24] Metro Hartford Alliance. 2005. Metro Hartford Regional Assessment. p. 2-8, 71-77.
[25] CNBC. 2008. America's Top States for Doing Business. <http://www.cnbc.com/id/25501954>
[26] The Hartford-Springfield Economic Partnership. 2009. The Knowledge Corridor. <http://www.hartfordspringfield.com/>

Planning within the Hartford Capitol region as well as the Town of Enfield is focused around the idea of "achieving balance between conservation and development." According to the Town of Enfield Economic Development Department, this is the most significant challenge: spurring economic development while also preserving the high community character, environment and quality of life in Connecticut.[27] The POCD for the Capitol Region, drafted in 2003, identifies the priorities for regional planning for the Hartford Metropolitan area. The plan has set a series of five economic goals for the region. These goals, aimed to reposition the Hartford metro for economic growth are:

- Revitalize Hartford as the economic, residential, entertainment and cultural center of the Connecticut Capitol region.
- Coordinate and promote regional land use, infrastructure and fiscal policies for economic development.
- Increase the recognition of a regional identity.
- Maintain a focus on workforce development.
- Support and improve regional business development strategies and efforts. [28]

For each of these goals, the plan has recommended policies for achievement at the local municipal levels. A 2008 update to this plan features several major themes supporting redevelopment and revitalization of established areas that have gone underutilized, respecting and preserving existing community character and natural resources.[29] The region intends to diversify its economy to become less heavily dependent upon the finance and insurance industries targeting health care, education, arts and entertainment as major growth sectors. Serving as the headquarters for several of the area's largest companies, The Town of Enfield will play a significant role in the future of the Hartford Region.

Municipal Health & Stability

The Town of Enfield operates under a council-manager form of government. Legislative power and development of policy responsibilities reside with the Town Council, which is comprised of 11 members of which one is designated Mayor. The Council is also charged with adopting a budget each fiscal year. The Town Manager carries out policy and ordinances and oversees the day-to-day operations of the Town and the appointments of various department heads.

[27] Warren, Raymond. Director, Town of Enfield Economic Development Department. April 7, 2009. Personal Interview.
[28] State of Connecticut. 2008. Plan of Conservation and Development for the Capitol Region.
[29] Ibid.

During the 2008-2009 fiscal year, the Town government has faced significant economic challenges, reflective of current local, state and national industry trends. Enfield has had to strongly consider the ongoing national economic recession in its own financial budgeting. Unemployment has sharply increased since 2007 and several major companies have closed, downsized or relocated, reducing the Town's taxable income base. According to the Enfield finance department, October 2008 saw an overall drop in the Town's grand list, which is the basis for taxation, including real estate and motor vehicles. A significant portion of this trend is due to vacated commercial space within the Town. It is anticipated that 2009 will see an additional drop resulting from more recent closures, such as Westvaco Corp, a manufacturer of paper and print products.[30] This overall economic strain has caused the Town to forecast decreases in both taxes as well as interest earnings, which have dropped due to the struggling stock market, resulting in an overall budget revenue shortfall.[31] Consequently, Enfield has been forced to take action to stabilize its financial standing. Negotiations have taken place with the local unions, most of which have agreed to concessions including a temporary wage freeze.[32] The Town has also enacted additional stoppages on new hiring and has frozen spending for capital improvement projects, allowing projects to be funded to the maximum extent possible given revenue allocations. It is anticipated that these actions will allow the Town to sustain itself in present conditions as the economy corrects itself.[33]

Table 18 Town of Enfield Building Activity

Fiscal Year	Total Project Budgets
2003	$29.9 Million
2004	$45.6 Million
2005	$66.8 Million
2006	$49.2 Million
2007	$39.8 Million
2008	$32.3 Million
2009*	$20.5 Million

*Note: Through March, 2009 (75% of Fiscal Year)

Source: Town of Enfield Economic Development Department

Despite struggles within the local economy, the 2008-2009 fiscal health of the Town government is still characterized as good, however with caution. During the 2007-2008 fiscal year, Enfield saw increases in its total net assets from the previous year, as well as a year-end budgetary surplus, in which revenues exceeded expenses by $1,141. However, this is a significant decrease from the previous year in which the surplus was $7,648. The Town also took on a greater outstanding debt of $38,500 in 2008, compared with $22,500 in 2007. Enfield maintains an "AA" bond rating from Standard and Poor's, which is the second highest level and characterizes it as a high quality, high grade borrower. Similarly, Moody's has given the Town an AA3 bond rating, which carries a similar "high quality borrower" association.[34] The government's relative good health should enable Enfield to endure its present economic hardship to prepare for a more prosperous future.

Development Activity

Development in the Town of Enfield has slowed considerably. According to the Town's Economic Development Department, there are no major development projects underway in 2009, but rather a collection of smaller projects, dominated by building improvements, renovations and small expansions, rather than new construction.

[30] Nenni, A. Lynn. Director, Town of Enfield Finance Department. June 1, 2009. Personal Interview.
[31] Town of Enfield. 2008. Comprehensive Annual Financial Report: Fiscal Year Ended June 30, 2008. p. iv-vii, 1-10.
[32] Nenni, A. Lynn. Director, Town of Enfield Finance Department. June 1, 2009. Personal Interview.
[33] Town of Enfield. 2008. Comprehensive Annual Financial Report: Fiscal Year Ended June 30, 2008. p. iv-vii, 1-10.
[34] Town of Enfield. 2008. Comprehensive Annual Financial Report: Fiscal Year Ended June 30, 2008. p. iv-vii, 1-10.

Through the first eight months of the 2008-2009 fiscal year, there were $20.5 million in projects taking place. Extrapolated to continue at the same rate, the full 2009 fiscal year would see $27.3 million in building activity. This would be the lowest level of development in six years.[35]

Proposed Enfield Intermodal Rail Station

A proposed new commuter line extending from New Haven, CT to Springfield, MA, including a stop in Enfield, presents a tremendous economic opportunity. This station will expand the ability for residents of Enfield to commute to Connecticut's major cities for employment opportunities. It also strengthens connections to a larger labor market that potentially new employers in Enfield can consider. Additionally, the station provides the Town opportunity to expand its own tourism industry. A new station would be constructed as a part of the proposal in the Thompsonville historic district. This is a neighborhood filled with historic character, containing structures of several important architectural styles. The neighborhood features good pedestrian access and connectivity to the neighboring Enfield Street Historic District.[36] Future tourism has the potential to focus around this area as a regional historic urban neighborhood attraction, drawing visitors from along the New Haven-Hartford-Springfield Commuter Rail line.

Labor Force, Employment & Educational Characteristics

Labor Force

The labor force is composed of all residents 16 years and older who are employed or actively seeking employment. An examination of the labor force in the Town of Enfield and the greater Hartford labor market area (LMA) outlines the present unemployment trends. It also indicates the availability of workers for prospective employers who are considering relocation or expansion within the town.

The Town of Enfield, as well as the entire Hartford labor market area, has seen significant growth in unemployment rates since the year 2000. Between 2000 and

Table 19 Labor Force Statistics for Enfield

Year	Town of Enfield		Hartford Labor Market Area	
	Labor Force	Unemployment (%)	Labor Force	Unemployment (%)
2000	22,856	2.3	546,054	2.3
2001	23,255	3.0	551,600	3.2
2002	23,429	4.4	556,361	4.5
2003	23,581	5.7	560,261	5.7
2004	23,449	5.2	560,233	5.2
2005	23,526	4.8	570,875	5.0
2006	23,756	4.7	575,620	4.5
2007	23,755	4.7	581,065	4.7
2008	24,017	5.7	591,376	5.8
2009*	**23,903**	**7.8**	**591,804**	**7.9**

*Note: Through April, 2009

Source: Connecticut Department of Labor: labor market information.

[35] Warren, Raymond. Director, Town of Enfield Economic Development Department. April 7, 2009. Personal Interview.

[36] Connecticut Department of Transportation. 2004. New Haven Hartford Springfield Commuter Rail Implementation Study. Chapter 4: Service Implementation Plan. p. 4-1–4-13

2007, the town experienced a gradual increase in unemployment rates from 2.3% in 2000 to 4.7% in 2007. However, in 2008, the unemployment rate increased by 21% to 5.7%. Through 2009, the rise in unemployment was even more dramatic, jumping an additional 40% over the year to 7.8%. Overall, during the ten-year period from 2000 to 2009, the unemployment rate for the Town of Enfield rose by 240%. The strain on the entire Hartford Labor Market has been slightly more significant, reaching a 7.9% unemployment rate by 2009.

Industry

As indicated in the table that follows, in 2000, the primary employment sectors for the Town of Enfield were manufacturing (17.08%), retail trade (12.54%), health care and social assistance (10.77%) and finance and insurance (10.72%). These industries were also among the predominant employers for the Hartford MSA. While estimated data for the 2005-2007 period is not available for the Town of Enfield, the statistics for the Hartford MSA show health care and social assistance as a field that is growing, increasing from 13.02% of the workforce to 14.24%. Conversely, fields significantly dropping in employment between 2000 and the 2005-2007 period are agriculture, forestry fishing and hunting (0.47% to 0.28%), finance and insurance (10.94% to 9.92%) and manufacturing (14.40% to 12.47%). It is significant to note that the loss of employment in the finance and insurance industries, considered to be the signature industries for the Hartford area, was 10% during the study period. These trends for the Hartford MSA may be significant indicators for employment trends also occurring within the Town of Enfield.

Table 20 Industry Statistics for Enfield

Industry	Percent of Labor Force (%)		
	Town of Enfield	Hartford MSA	
	2000	2000	2005-2007 Estimate
Agriculture, forestry, fishing and hunting	0.30	0.47	0.28
Mining	0.01	0.04	0.03
Construction	5.35	5.43	5.99
Manufacturing	17.08	14.40	12.47
Wholesale trade	5.72	3.22	3.14
Retail trade	12.54	10.89	10.73
Transportation and warehousing	5.58	2.98	3.27
Utilities	0.99	1.07	0.79
Information	1.75	2.59	2.45
Finance and insurance	10.72	10.94	9.92
Real estate and rental and leasing	1.50	1.57	1.69
Professional, scientific, and technical services	4.01	5.83	6.13
Management of companies and enterprises	0.03	0.03	0.09
Administrative & support & waste management services	2.15	2.87	3.51
Educational services	6.43	9.51	9.49
Health care and social assistance	10.77	13.02	14.24
Arts, entertainment, and recreation	0.97	1.45	1.74
Accommodation and food services	5.37	4.65	5.31
Other services, except public administration	3.70	4.22	4.20
Public administration	5.03	4.82	4.52

Source: US Census Bureau. P49 Sex by Industry for the Employed Civilian Population 16+ years. Census 2000 Summary File 3. B24030 Sex by Industry for the Employed Civilian Population 16 Years and Over. 2005-2007 American Community survey 3-Year Estimates

Occupations

In 2000, the predominant occupations for the Town of Enfield were office and administrative support occupations (19.78%), professional occupations (17.91%), management, business and financial occupations (13.63%) and sales occupations (11.84%). These occupations also have the highest concentration of workers for the Hartford MSA. While the metropolitan area saw most occupations remain relatively stable or experience moderate growth, significant drops were witnessed in production, installation, maintenance and repair industries. This is reflective of trends of many of the area's "blue collar" jobs moving to other parts of the United States or out of the Country.[37]

Table 21 Occupation Statistics for Enfield

Occupation	Percent of Labor Force (%)		
	Town of Enfield	Hartford MSA	
	2000	2000	2005-2007 Estimate
Management, business, and financial occupations	13.63	15.54	15.47
Professional and related occupations	17.91	23.59	23.79
Healthcare support occupations	2.14	2.51	2.78
Protective service occupations	2.25	1.83	1.97
Food preparation and serving related occupations	4.28	4.17	4.61
Building and grounds cleaning and maintenance occupations	1.79	2.71	3.30
Personal care and service occupations	3.02	2.69	2.79
Sales and related occupations	11.84	10.77	11.40
Office and administrative support occupations	19.78	16.21	15.24
Farming, fishing, and forestry occupations	0.22	0.24	0.10
Construction and extraction occupations	4.15	4.22	4.67
Installation, maintenance, and repair occupations	4.60	3.22	3.05
Production occupations	8.37	7.91	6.39
Transportation and material moving occupations	6.01	4.40	4.44

Source: US Census Bureau. P50 Sex by Occupation for the Employed Civilian Population 16+ years. Census 2000 Summary File 3. B24010 Sex by Occupation for the Employed Civilian Population 16 Years and Over. 2005-2007 American Community survey 3-Year Estimates

[37] Warren, Raymond. Director, Town of Enfield Economic Development Department. April 7, 2009. Personal Interview.

Income

Two primary measures of income, per capita and median household, are used to assess the wealth in a community. Per capita income is total personal income within a municipality, divided by the total population. Therefore, per capita is a good indicator of the total wealth of the community. Median household income, however, better reflects the distribution of income because it identifies the level at which there are an equal number of households with higher income as there are with lower income.

The Town of Enfield median household income in 1999 was $52,810. It has been estimated to significantly increase by 31% to $69,360 for the period of 2005 to 2007. This increase is larger than experienced by the Hartford MSA as a whole, which saw a growth in median household income of 25% from $52,188 in 1999 to $64,989 for the 2005-2007 period. A similar trend is reflected in the per capita incomes for both Enfield and the Hartford MSA. Additionally, while Enfield has experienced significant growth in both median household and per capita incomes, it has also had a significant increase in its poverty rate. In 1999, 3.98% of Enfield households had incomes below the poverty level. This rate increased 81% between 2000 and the 2005-2007 period. According to the Town of Enfield Economic Development Department, the unemployment trends represent the major companies that have either left town or moved significant portions of their operations. An example of this is Lego Building Corp, who was the top employer in Enfield in 1998, with more than 1,000 local employees. Ten years later, in 2008, Lego is now the sixth largest employer with less than 400 employees, a result of moving its production facility to Mexico.[38]

Table 22 Income Statistics for Enfield

Income	Percent of Labor Force (%)			
	Town of Enfield		Hartford MSA	
	2000	2005-2007 Estimate	2000	2005-2007 Estimate
Less than $25,000	17.78	13.01	22.16	18.28
$25,000 to $49,999	28.92	20.26	25.45	20.33
$50,000 to $74,999	27.05	22.57	21.22	18.15
$75,000 to $99,999	14.90	20.64	13.78	15.53
$100,000 to $124,999	6.38	12.57	7.69	9.87
$125,000 to $149,999	2.19	4.25	3.76	6.38
$150,000 to $199,999	1.98	4.81	3.09	6.16
$200,000 or more	0.79	1.88	2.84	5.28
Median Household Income	$52,810	$69,360	$52,188	$64,989
Per Capita Income	$21,967	$27,538	$25,874	$32,358
Income below poverty level	3.98%	7.21%	8.38%	8.72%

Source: US Census Bureau. P52 Household Income in 1999. P53 Median Household Income in 1999. P82 Per Capita Income in 1999. P87 Poverty Status in 1999 by Age. Census 2000 Summary File 3. B19001 Household Income. B19013 Median Household Income. B19301 Per Capita Income. B17001 Poverty Status in the Past 12 Months by Sex by Age. 2005-2007 American Community survey 3-Year Estimates

[38] Warren, Raymond. Director, Town of Enfield Economic Development Department. April 7, 2009. Personal Interview.

Educational Attainment

As the Town of Enfield continues to transition its job base away from labor oriented employment to more office- and white-collar based industries, education levels become increasingly important because more employers are looking for a well trained workforce when deciding where to expand. The population of the Town of Enfield has historically lagged behind the Hartford metropolitan area, as a whole, in educational achievement. In 2000, 26.52% of Enfield residents held a college degree, compared to 36.84% of all people in the metro. An additional 21.54% of Enfield residents have attended some college, but left with no degree in hand and 35.84% have graduated high school, but no further.

Education levels, however, are showing significant signs of increasing for the Town of Enfield, according to 2005-2007 estimates. The amount of residents who hold a college degree, have increased to 31.42% and significantly fewer students end their education prior to graduating high school. This trend is consistent with the entire Hartford metropolitan area in which the percentage of the population with college degrees is significantly on the rise. These statistics represent positive indicators for employers looking to locate or expand within areas that have a well educated workforce.

Table 23 Education Statistics for Enfield

Level of Education Completed	Percent of Labor Force (%)			
	Town of Enfield		Hartford MSA	
	2000	2005-2007 Estimate	2000	2005-2007 Estimate
No schooling completed	0.41	0.15	0.86	0.58
8th grade or less completed	3.77	3.16	5.00	4.17
Some high school (no degree)	11.93	8.36	10.57	7.57
High school graduate (includes equivalency)	35.84	35.55	29.01	29.40
Some college (no degree)	21.54	21.35	17.72	17.36
Associate's degree	8.32	9.00	7.05	7.87
Bachelor's degree	12.09	14.70	17.65	18.95
Master's degree	4.66	6.75	8.67	10.10
Professional school degree	1.10	0.79	2.35	2.67
Doctorate degree	0.35	0.20	1.12	1.32
Any college degree	26.52	31.42	36.84	40.92

Source: US Census Bureau. P37 Sex by Educational Attainment for the Population 25+. Census 2000 Summary File 3. B15002 Sex by Educational Attainment for the Population 25 years and over. 2005-2007 American Community survey 3-Year Estimates

Town Assets & Issues

Thompsonville Revitalization Strategy

In 1992, the Town of Enfield commissioned the Thompsonville Revitalization Strategy as a means to identify and focus efforts to rejuvenate the historic Thompsonville central business district. The plan included an intensive investigation into the Thompsonville neighborhood, analyzing existing conditions, projected demand and identifying new opportunities for growth. Based upon this analysis, the plan made recommendations for enhancements and new development in the Village.

The final document included a series of recommendations broken down into two categories: specific site uses and district-wide initiatives. The specific site uses are a set of development recommendations targeted for key areas of the Village to improve infrastructure, building stock, green space and aesthetics. They include the establishment of gateway features, improving access and accommodations for bicycles, pedestrians and automobiles, the development of new mixed-use structures and streetscape improvements. Included with the plan are a set of graphic representations, illustrating the recommended developments throughout the Village and visualizing the style and density in which the developments should occur.

In conjunction with the specific site uses, the Revitalization Strategy also suggests initiatives to be implemented to support the recommended development. The initiatives focus on economic viability of businesses within the Village, encouraging organization, promotion, local investment, adaptive reuse and financial assistance. Among the primary recommendations is the creation of a district-wide economic development organization to prioritize, focus and support all revitalization efforts.[39]

Since the drafting of the Thompsonville Revitalization Strategy in 1992, the plan has remained largely dormant. Very few of the recommendations have reached implementation and many of the same issues remain in the Village. However, it can be noted that the recent support by the New Haven-Hartford-Springfield Commuter Rail Project to build a new station in Enfield can be attributed to the presence of the Thompsonville Revitalization Strategy, which showed that the Town already had a plan for a station and redevelopment around it.[40]

Recognizing the relative lack of movement on the 1992 Strategy, an update to the Thompsonville Revitalization Strategy was released in 2001, which evaluates the previous version and provides new recommendations more reflective of current conditions. The plan suggests a comprehensive approach, including, again, the establishment of a community development corporation (CDC) to act as the "main street manager," facilitating revitalization efforts. Those efforts would be centered on the following issues:

- Enhancing the retail mix
- Creating civic attractions
- Promoting a walkable business district
- Quality parking
- Urban design
- Housing reinvestment
- Image enhancement

[39] Town of Enfield. 1992. Thompsonville Revitalization Strategy. p. 44-64.
[40] Alsbaugh, Roger. July 22, 2009. Personal Interview.

These issues are all referred to under the umbrella of the suggested community development corporation, which will focus upon problem solving, facilitating cooperation between government, developers, merchants and property owners. The CDC will ensure that all Thompsonville projects, developments, initiatives and other efforts are completed in the best interest of the Village. The organization will serve as a mediating agent between the entities involved. Recently, efforts have been made by the Town of Enfield Economic Development Department to re-activate the dormant Enfield Community Development Corporation, which existed prior to each the 1992 and 2001 revitalization plans. The organization granted housing loans until 1992 and as of July 2009, it still has approximately $200,000 in the bank. An accountant has been hired to bring the organization up to date with the Internal Revenue Service. Future recommendations will include changes to the board and bylaws so that the organization can be revitalized and take on a new role in the economic development of Thompsonville.[41]

Unlike the 1992 Strategy, which was focused upon business and economic development, making recommendations for major retail and infrastructure investments, the 2001 plan identifies home ownership and residential improvements as the main priority. It argues that the Village cannot support the amount of business growth suggested in the previous plan. Stabilizing the residential market locally is the most important initiative for revitalizing the Village. Business development should then be tailored to accommodating that residential market. The plan states that 25-40 percent of Thompsonville residents do not own automobiles, so it is important to ensure that new retail has the ability to serve the daily needs of the Town, within a walkable distance. The plan also recommends the addition of a farmer's market and a flea market, to appeal to the diverse interests and incomes of residents. Since the plan was drafted in 2001, a Farmer's Market has been established on the Enfield Town Green at the intersection of Enfield and Elm Streets. As a civic attraction to complement the Town Hall and the Lamagna Center, a community theatre is suggested, possibly within the former Strand Theatre, which has been vacated since the early 1990's. Additional recommendations in the Thompsonville Neighborhood Revitalization Strategy include improvements to the current housing stock as well as the built environment. It is foreseen that these enhancements will increase density and strengthen the vibrancy of the Village, supporting the local business and enhancing the quality of life of Thompsonville.[42]

Asnuntuck Community College

The Town of Enfield is home to Asnuntuck Community College. The college offers associates degrees in 20 individual liberal arts and science programs. Additionally, the Asnuntuck Community College provides the Enfield population with the opportunity to earn official certificates in 31 fields.[43] The College had a Spring 2009 enrollment of 1,600 students on its main campus in addition to 150 inmate students. Of these students, 48% are full time, a three percent increase from 2008. Of the total enrollment, 81% are from the immediate region, which includes Enfield and seven neighboring Connecticut municipalities. Overall, 93% of the students are from the State of Connecticut, with the remaining seven percent commuting from Massachusetts.[44] The college has a transfer agreement with the University of Connecticut for psychology majors in which credits are guaranteed to be valid at UConn.[45]

The Plan for Conservation and Development for the Capital Region prioritizes partnerships with local colleges for workforce development as a recommendation for regional economic development.[46] In

[41] Warren, Raymond. Director, Town of Enfield Economic Development Department. July 28, 2009. Personal Interview.
[42] Abeles, Phillips, Preiss & Shapiro, Inc. 2001. Thompsonville Neighborhood Revitalization Strategy. p. 14-
[43] Asnuntuck Community College. 2009. <http://www.acc.commnet.edu/academicprograms/index.htm>
[44] Asnuntuck Community College: Office of Institutional Research. 2009. Spring 2009 Enrollment Brief.
[45] Asnuntuck Community College. 2009. <http://www.acc.commnet.edu/academicprograms/index.htm>
[46] State of Connecticut. 2008. Plan of Conservation and Development for the Capitol Region.

addition to providing educational services to the local population, Asnuntuck Community College also has a significant economic impact on the region. It is a major priority of the College to partner with area industry and businesses. The college specifically cites a goal to "serve as a critical economic development and lifelong learning resource to business, social service and community constituents."[47] An economic contribution study, completed in May 2008, cites a total benefit of $172.8 million to the regional economy. This figure is comprised from a number of factors. College operations spending accounts for a $10.8 million impact. This includes the earnings of the faculty and staff, as well as operating and capital expenditures incurred by the college. Students who commute to the College from outside the region are estimated to spend $28,100, annually, in the local economy. Finally, past students who have earned credits and degrees at Asnuntuck earn $162 million more, combined annually, than they would have without their education at the College.[48]

North School Enterprises

The North School Enterprises is a small business incubator located at 51 College Street in Thompsonville. Located in an historic school building that was later converted to office space, the facility offers affordable amenities for start-up businesses including: low lease rates, a digital copier, conference room, security, internet access, a lounge/kitchen and networking opportunities. The overall intention of this incubator is to provide new businesses with minimal start up costs by offering facilities that are shared with other start-up entities. As businesses establish themselves and develop their revenue streams, they are then able to move out of the incubator space and into their own space, providing opportunity for another new business to take its place in the incubator.[49]

Major Employers

The Town of Enfield has a diverse private sector employment base, anchored by corporate headquarters, financial companies and production and distribution operations. This diversity is an indicator of economic stability within the Town of Enfield. There are also several large employers in neighboring communities that serve as major sources for jobs

Massachusetts Mutual Life Insurance Company is the largest employer within the Town of Enfield, located at 100 Bright Meadow Blvd. Employing 1,900, the company's Enfield location is host site for MassMutual Trust Company, C.M. Life Insurance Company and MML Bay State Life Insurance Company, all subsidiaries of Massachusetts Mutual life Insurance. The company's strong presence in Enfield is a part of the Hartford region's strength as a center for the insurance and financial industries.

Hallmark Cards has one of its two National distribution centers in the Town of Enfield, located at 25 Bacon Road. This center employs approximately 800 workers. It is the remaining facility in the Town of Enfield, following a consolidation effort by Hallmark Cards in 2007, which closed a second distribution facility in the town. This closure was the result of continuing national trends that have seen sales for the greeting cards manufacturer decline.[50]

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[47] Asnuntuck Community College. 2009. System Priority Matrix.
[48] Robison, M. Henry & Christophersen, Kjell A. 2008. The Economic Contribution of Asnuntuck Community College: Executive Summary. p. 1-5.
[49] North School Enterprises. 2009. < http http://www.ct.gov/doag/cwp/view.asp?a=3260&q=398982://enfield-ct.gov/content/91/160/788/2706.aspx>
[50] http://www.journalinquirer.com/articles/2009/03/23/business/doc49c7c890901cc404248564.txt

Precision Camera markets itself as the "world's largest camera repair facility." Located at 3 Annginna Dr. in the Town of Enfield, the facility employs 500 people and represents the third largest employer in the town.

CUNO Incorporated is a leader in the manufacturing of filtration systems and employs 400 people in the Town of Enfield. Founded in 1912, Connecticut serves as the headquarters for CUNO, located at 400 Research Pkwy. in Meriden, CT.

Retail Brand Alliance, founded in 2001, is headquartered at 100 Phoenix Ave. in the Town of Enfield. The parent company for clothing giant Brooks Brothers, Retail Brand Alliance operates retail apparel stores in mall-locations for men and women. The company employs approximately 400 people in Enfield.

Lego Systems Incorporated, a Dutch corporation, has had a United States Headquarters location in Enfield at 555 Taylor Road since 1975. The company employs nearly 400 workers at this location in administration, marketing and retail sales. The Enfield Lego campus also formerly housed production and distribution operations; however, those jobs have been moved to other locations worldwide.

The Connecticut Department of Corrections runs the Enfield Correctional Institution at 289 Shaker Road. This is a medium-security facility constructed in 1960 and employing more than 300 workers.

Martin-Brower has a major distribution facility in Enfield, employing 250 people. The company is the world's largest distributor of food products to McDonald's. The facility is located at 191 Moody Road in the town.

Mead-Westvaco Corporation has a U.S. envelope division in the Town of Enfield. This facility currently employs 225 people in the town at 180 Moody Road. However, in January of 2009, the company announced the closure of this location, which will see Enfield lose all of those positions and left with approximately 200,000 square feet of vacant space.

Table 7 shows the major employers in the Town of Enfield, their employment and their respective shares of the total employment within the town.

Table 24 Town of Enfield Major Employers (2008)

Company	Nature of Business	Employees	Percent of Total Employment in Enfield (%)
Massachusetts Mutual Insurance	Insurance	1,900	8.70
Hallmark Cards, Inc.	Greeting Cards	803	3.68
Precision Camera	Camera Repair	500	2.29
CUNO Inc.	Water Filters	400	1.83
Retail Brand Alliance	Retail	400	1.83
Lego Building Corp.	Plastic Games & Toys	394	1.80
CT. Dept. of Corrections	Detention Facilities	311	1.42
Martin Brower	Transportation	250	1.15

Source: Town of Enfield Economic Development Department

Industrial & Commercial Vacancies

Among the major concerns held by local economic development officials is the increasing inventory of vacant commercial and industrial spaces in the town. As noted throughout this chapter, several major

companies have closed or downsized locations in Enfield, leaving the inventory of commercial and industrial space with an unhealthy surplus. An estimated 2 million square feet of space has become available as the result of four recent downsizings/closures at Lego Building Corp., Hallmark Cards, Inc., Casual Corner retail and Westvaco Corp. Finding productive reuses of these vacant spaces is a top priority for local economic development.[51]

Agriculture

A primary goal for planning within Connecticut municipalities is finding a balance between economic development and conservation of the land. In Enfield, this is particularly important in regards to agricultural development and the ability of farming to remain a viable industry in the face of development pressures. Trends throughout Connecticut, as well as the entire nation, have seen farmland continuously developed into residential subdivisions, sprawling office parks and other forms of the built environment. In the Capitol Region, much of the farmland is at risk for future development. Sustaining farmland use maintains valuable open space and preserves rural aesthetics.[52]

Hartford County has seen a significant portion of its agricultural economy shrink since the 1990s. From 2000 to the three year census period of 2005-2007, it is estimated that Hartford County lost nearly 15% of its agriculture, forestry, fishing and hunting jobs. This is a decrease of nearly 50 jobs every year. The table below illustrates these trends.

Table 25 Agriculture Employment for Hartford County (2000-2007)

Industry	2000	2005-2007 Estimate	Percent Change
Agriculture, forestry, fishing and hunting employees	1,957	1,671	-14.6%

Source: US Census Bureau. P49 Sex by Industry for the Employed Civilian Population 16+ years. Census 2000 Summary File 3. B24030 Sex by Industry for the Employed Civilian Population 16 Years and Over. 2005-2007 American Community survey 3-Year Estimates

In addition to employment, the physical presence and productive values of agriculture in the County have also experienced decline, indicating the struggling nature of the industry, as well as the low relative values of the land compared to potential profits of sale for new development. During the period from 1997 to 2007, Hartford County has actually seen its quantity of farms increase by more than one quarter, from 627 to 790. However, at the same time, the average farm size has decreased by 19%, indicating that the likely cause for the majority of the growth in numbers of farms is land being divided and handed down or parceled off for sale. The total acreage of farmland also saw an increase, but at a more moderate rate of just over one percent during the period, which included an initial reduction of 2,730 acres between 1997 and 2002. Farm production has also felt significant decline. From 1997 to 2007, total production for all farms in the County fell by 7.5% and due to the increase in the quantity of farms, the average farm produced 26.6% less in 2007 than 1997.

[51] Warren, Raymond. Director, Town of Enfield Economic Development Department. April 7, 2009. Personal Interview.
[52] Capitol Region Council of Governments. 2007. Regulating the Farm: Improving Agriculture's Viability in the Capitol Region. p. 2-8

Table 26 Agriculture Land & Production for Hartford County (1997-2007)				
Category	1997	2002	2007	Percent Change
Number of Farms	627	724	790	26.0%
Farmland (acres)	52,922	50,192	53,504	1.1%
Average Farm Size (acres)	84	69	68	-19.0%
Market Value of Production*	$144,424,000	$145,406,000	$133,582,000	-7.5%
Average Production Per Farm*	$230,340	$200,838	$169,091	-26.6%
*Note: Adjusted for inflation to 2007 Dollars				

Source: 2007 Census of Agriculture. County Profile: Hartford, Connecticut. <http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Connecticut/cp09003.pdf>

Distribution of Agriculture

An analysis of farm activities provides information for what types of agriculture are important to the area. Hartford County (735 square miles) accounts for 15% of the total land mass of the State of Connecticut (4,845 square miles).[53] Similarly, the County has 16% of all farms and 13% of the total farmland in the State.[54] According to the 2007 United States Department of Agriculture Census, each livestock and poultry farming as well as crop farming continue to play important roles in the local agriculture industry. Cattle and layers (egg-laying chickens) each exist on more than 14% of Hartford County farms; however each is less prominent when compared to State rates, where nearly 25% of farms have cattle and 17% of farms have layers. The only animal-related farming that is more prominent in Hartford County than across the State of Connecticut is for hogs and pigs.

Hartford County plays a much more prominent role in the State's crop agriculture. More than one quarter (190 farms) of the State's vegetable farms is in Hartford County. Similarly, nearly 28% of State farms that harvest corn for grain are in Hartford County. Perhaps most significant, the County, and notably the Town of Enfield, have a major concentration of Tobacco farms. Of Connecticut's 76 tobacco farms, 93% (71 farms) are located in Hartford County. The neighboring town of Windsor is home to the Luddy/Taylor Connecticut Valley Tobacco Museum and the Enfield Conservation Commission has identified Tobacco as one of the major local agricultural industries with opportunities for growth as an agri-tourism destination.[55] The following tables display the individual distribution of each type of farming activity for Hartford County, as well as a comparison for what percentage of each type of farm in the State is located in Hartford County:

[53] United State Census Bureau. 2000. Quickfacts for Hartford County. < http://quickfacts.census.gov/qfd/states/09/09003.html>
[54] 2007 Census of Agriculture. County Profile: Hartford, Connecticut. <http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Connecticut/cp09003.pdf>
[55] Town of Enfield Conservation Commission. 1999. A Program of Action: Open Space and Farmland Preservation in Enfield. p. 16.

Table 27 Livestock and Poultry Farms in Connecticut and Hartford County (2007)

Livestock and Poultry	Connecticut		Hartford County		
	Number of Farms	Percent of Farms (%)	Number of Farms	Percent of Farms (%)	Percent of Farms in State (%)
Cattle and calves	1210	24.61	114	14.43	9.42
Beef Cows	754	15.34	63	7.97	8.36
Milk Cows	269	5.47	24	3.04	8.92
Hogs and Pigs	244	4.96	40	5.06	16.39
Sheep and Lambs	399	8.12	46	5.82	11.53
Layers (chicken)	822	16.72	116	14.68	14.11
Meat-type chickens	72	1.46	9	1.14	12.50

Note: Farm production and acreage is not represented in this table because the United States Department of Agriculture does not provide complete data for acreage and production for each agricultural sector due to confidentiality reasons.

Source: 2007 Census of Agriculture. County Profile: Hartford, Connecticut. <http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Connecticut/cp09003.pdf>

Table 28 Crop Farms in Connecticut and Hartford County (2007)

Crops for harvest	Connecticut		Hartford County		
	Number of Farms	Percent of Farms (%)	Number of Farms	Percent of Farms (%)	Percent of Farms in State (%)
Corn for grain	61	1.24	17	2.15	27.87
Corn for silage	253	5.15	25	3.16	9.88
Wheat for grain	3	0.06	1	0.13	33.33
Oats for grain	2	0.04	1	0.13	50.00
Sorghum for silage	5	0.10	0	0.00	0.00
Soybeans for beans	6	0.12	0	0.00	0.00
Dry edible beans	3	0.06	0	0.00	0.00
Tobacco	76	1.55	71	8.99	93.42
Forage (hay)	2060	41.90	250	31.65	12.14
Vegetables	735	14.95	190	24.05	25.85
Orchards	338	6.88	23	2.91	6.80

Note: Farm production and acreage is not represented in this table because the United States Department of Agriculture does not provide complete data for acreage and production for each agricultural sector due to confidentiality reasons.

Source: 2007 Census of Agriculture. County Profile: Hartford, Connecticut. <http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Connecticut/cp09003.pdf>

Preserving the Viability of Agriculture

Policy is changing in the State of Connecticut to protect farmland and promote the industry's viability. In July of 2007, the Capitol Region Council of Governments invited local municipalities and farm owners to a consortium designed to evaluate the present regulatory conditions on agriculture and investigate means to improve the industry's viability. Among the major findings was that farms increasingly have to find new, creative ways to preserve their own viability. These include the presence of retail on their farmland with product stands, "you-pick" operations and signage establishment on their property. However, the regulatory practices of the local municipalities are cited as being excessively overbearing or prohibitive to developing retail components on individual farms and use of signs for promotion. Often requirements are deemed unnecessarily exhaustive and permitting fees are cost prohibitive. Additionally, the regulation of signage and farming operations is often inconsistent, creating an ambiguous environment in which farmer's are often not clear about what they allowed to do.[56]

The resulting report from the consortium recommends a series of policy and regulatory actions to preserve farmland and promote economic viability. The report advocates for better education of Town officials about agriculture and the adoption of regional consistency in agriculture representation and regulation. It recommends creating an "agricultural uses" section in all local zoning codes to increase clarity and consistency of zoning requirements for farms across the Capitol region. This section would include clear definitions of farming practices as well as permissible actions. It would also include increased flexibility for farmers, such as release clauses for retail requirements in the event of crop failure. Additionally, the report recommends development policy that encourages new development 'to occur in a way in which the negative effects of farming are mitigated on new neighboring uses, reducing nuisance complaints and preserving the "right to farm."[57]

The state of Connecticut has also enacted several programs to protect and promote farming. The most prominent and successful tool for protecting productive farming is the Farmland Preservation Program, also known as the Purchase of Development Rights (PDR). This program reduces development upon farmland by allowing the State to purchase agricultural conservation easements from landowners, preserving that land for agricultural use in perpetuity. Farmers are able to receive compensation for their land while continuing to farm, providing a viable alternative to selling land off to private developers.[58] In 1963, the State enacted Public Act 490 ("Differential Tax Assessment"). This program reduces the tax burden upon farmers and foresters as a means to increase the industry's viability. Nearly all farms in the Town of Enfield are enrolled in Public Act 490, as the program increases their ability to be competitive through a reduction in costs.

The State of Connecticut also offers a series of Agriculture Viability Grants to provide funding for the farming industry. The three major programs are the Farm Reinvestment Grant, the Farm Transition Grant and the Farm Viability Grant Program for Municipalities. The Farm Reinvestment Grant is funding that is made available for capital enhancement to farms to expand facilities or for diversification-expansion into new production areas. The Farm Transition Grant is a matching funds program that offers 50% rebates for projects performed by Connecticut Farms, agricultural non-profit organizations and farming cooperatives. The program offers grants of up to $50,000 and requires a match by the grantee. Finally, the Farm Viability Grant Program for Municipalities is a 50% matching grant available to local municipalities, associations of municipalities or regional planning associations. The funding, up to

[56] Capitol Region Council of Governments. 2007. Regulating the Farm: Improving Agriculture's Viability in the Capitol Region. p. 3-8
[57] Capitol Region Council of Governments. 2007. Regulating the Farm: Improving Agriculture's Viability in the Capitol Region. p. 9-14
[58] Working Lands Alliance. 2005. A Mid-Decade Look at Connecticut's Agricultural Lands. p. 2-4

$50,000, can be used for capital projects, agriculture friendly land use regulations, planning projects or initiatives to support agriculture.[59] As the state continues to develop, Connecticut continues to maintain and create policy and regulations to preserve the future balance between farmland conservation and new development.

Open Space and Farmland Preservation in Enfield

In 1999, the Enfield Conservation Commission, in conjunction with the Capitol Region Council of Governments and the Enfield planning and community development department, drafted A Program of Action: Open Space and Farmland Preservation in Enfield. The document was created to provide information and recommendations for the management of open space and protection of the viability of farmland in the Town of Enfield. It serves to represent the local interests and efforts for preserving the farming industry.

Among the major goals of the plan is to preserve farming and prime agricultural lands as an industry and open space amenity. Several policies are recommended for the Town to adopt in order to achieve this goal:

- Evaluate existing agriculture land preservation programs and ways to support them.
- Improve the viability of farming in Enfield by implementing innovative ways to market farm products.
- Identify farms of special significance for priority protection/possible Town venture.
- Investigate opportunities for coordination with North Central Connecticut Tourism District.

The report recognizes the State's Farmland Preservation Program as the most valuable tool for promoting farmland viability and continuing to preserve the industry. At the writing of the report, five farms in Enfield had participated in the program, preserving 761 acres of farmland for the future. This program provides a permanent and effective means to maintain farmland and aids farm viability by providing farmers with immediate capital dollars. However, local criticism emphasizes that the program does not address all critical parcels, especially those of smaller acreage. The Enfield Conservation Commission proposes the establishment of a Municipal Preservation Fund, to serve as a local complement to the state program.[60] The focus of this program would be on smaller, yet critical pieces of land to preserve the agricultural landscape.

In conjunction with the farmland preservation programs, the commission would like to enact local changes for the programs to be utilized more effectively. A major hurdle to farms qualifying for the programs is their location within industrial zones. Industrial zones are considered to be highly likely for new development; therefore, there is an unwillingness to allow any of those lands, including farmlands, to gain a permanent preservation status. The commission would like to see agriculture locally recognized as an industry that is viable and economically sustainable. Doing so would enable farmlands located in industrial zones to be eligible for the Farmland Preservation Program.[61]

The Commission also recommends initiatives to promote agriculture in Enfield. They cite numerous ways to promote agriculture tourism, following a growing trend across Connecticut. The report suggests making changes to land use regulations that would allow appropriate development or expansion of uses on

[59] Connecticut Department of Agriculture. 2009. <http://www.ct.gov/doag/cwp/view.asp?a=3260&q=398982>
[60] Town of Enfield Conservation Commission. 1999. A Program of Action: Open Space and Farmland Preservation in Enfield. p. 5, 15-16, 34-35.
[61] Alsbaugh, Roger. July 22, 2009. Personal Interview.

farms, including bed & breakfasts, roadside stands, small retail and farming museums.[62] By developing the tourism and retail elements for local agriculture, Enfield farmers will have greater access to economic revenues, less susceptibility to economic and environmental changes and more opportunities for the land to continue to be viable for future generations.

Retail

The Town of Enfield is a significant retail hub for the Hartford Capitol Region. In 2000, the retail industry was the second largest employer in the town, with more than 12.5% of residents. The major factor is the presence of the Enfield Square Mall, located at 90 Elm Street (Route 220). The mall sits on a 93 acre site, features 800,000 square feet of space and 80 retailers. The malls location in proximity to the I-91 interchange allows it to serve the Capitol Region population.[63] Located near the mall, Freshwater Stateline Plaza is another major shopping center, featuring over 400,000 square feet of commercial space and 14 retail units. This plaza is dominated by major big-box retailers.[64] Additional major retail centers in the town include Freshwater Common, Enfield Common, Elm Plaza, the Stop and Shop Plaza and the Brookside Plaza. These are all located in close proximity to the Enfield Square Mall and I-91. Additional smaller retail, including locally owned shops, is concentrated within the villages of Thompsonville and Hazardville.

Tourism

Tourism plays a significant role in the Connecticut economy; however, its role in the present Enfield economy is much more limited. Enfield is located within the River Valley tourism region of Connecticut, which is centered along the Connecticut River, extending from the Long Island Sound, north, into Massachusetts. In the state of Connecticut, tourism is directly responsible for more than 110,000 jobs and generates nearly $9 billion in revenue throughout the State, annually. Additionally, the industry generates $87 billion in hotel tax revenue and an additional $1.3 billion in federal, state and local taxes are directly attributed to tourism, each year.[65] Within the River Valley in 2006, $162 million in revenues were projected for accommodations in the region. This was the second highest regional projection in the state. Forty two percent of those visiting cited leisure as their purpose for visiting, while 28% were in the region for business.[66] The River Valley cites outdoor recreation, historic towns and the presence of a major metropolitan area as the primary draw for the tourist industry.

Economic Development Initiatives & Organizations

Efforts to stimulate the economy, besides the Town of Enfield Economic Development Department, often occur on a regional level for the Metro Hartford Area. Following are the most significant organizations and initiatives for economic development in the region serving Enfield.

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[62] Town of Enfield Conservation Commission. 1999. A Program of Action: Open Space and Farmland Preservation in Enfield. p. 16.
[63] Centro Properties Group. 2009. Enfield Square Mall Listing. < http://www.centroprop.com/PropertyProfile_long.asp?ProjectID=PCTENFLD1>
[64] Centro Properties Group. 2009. Freshwater Stateline Plaza Listing. <http://www.centroprop.com/PropertyProfile_short.asp?ProjectID=PCTFWSTL1>
[65] Tourism Fact Sheet from CCEA
[66] Connecticut Center for Economic Analysis, University of Connecticut. 2006. The Economic Impact of the Arts, Film, History and Tourism Industries in Connecticut. p. 223-229.

Metro Hartford Alliance

The leading agency for economic development in the Hartford Capitol Region is the Metro Hartford Alliance. This organization is comprised of 1,000 businesses, institutions, municipalities, non-profit organizations and government leaders from throughout the region. The mission of the organization "is to compete aggressively and successfully for jobs, talent and capital for the Hartford region and to ensure that the Hartford Region is a premier place for all people to life, work, play and raise a family."[67]

North Central Connecticut Chamber of Commerce (NCCCC)

The North Central Connecticut Chamber of commerce is an organization whose mission is to provide benefit for its north central Connecticut area member companies by increasing their general prosperity and profitability. The NCCCC functions in a leadership role, supplying representation of the business community through advocacy to local and state government, development opportunities, and membership services. Among the Chamber's services offered are advertising opportunities, networking functions, group insurance and special events.[68]

The Knowledge Corridor

The Hartford-Springfield Economic Partnership - The Town of Enfield is located within the two-state "Knowledge Corridor." This is a designated area, stretching between the cities of Hartford, CT and Springfield, MA. Featuring a total population of more than 1.7 million, the Knowledge Corridor has been recognized for its high concentration of colleges and universities (29) with more than 100,000 students. Already home to nearly 1 million employees and 40,000 companies, the designation is utilized by the Hartford-Springfield Economic Partnership to promote the region as an ideal location for economic development and corporate expansion.[69] The Town of Enfield is positioned in the center of the corridor, approximately equidistant between each of the anchor cities.

Financial Business Incentives

The economic development strategies for the Town of Enfield include financial business development incentives to assist in drawing new companies to the area and aid existing enterprises expand. There are state-wide incentives for business relocation or expansion for communities throughout the State of Connecticut.

Business Funding Sources

Similar to neighboring New England States, Connecticut suffers from a prohibitive tax environment for new and expanding businesses. According to a 2008 study by the national Small Business and Entrepreneurship Council, Connecticut's tax environment for businesses ranks it 33rd in the United States. While this result is ahead of several of neighboring states, such as New York, Massachusetts, Rhode Island and Maine, it still compares unfavorably with the rest of the United States.[70] As a means of compensation for a financially difficult business climate many financial resources and statewide tax incentives have been developed to foster new business growth throughout the state.

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[67] Metro Hartford Alliance. 2009. < http://www.metrohartford.com/>
[68] North Central Connecticut Chamber of Commerce. 2009. <http://www.ncccc.org/>
[69] Economic Development Council of Western Massachusetts. 2009. <http://www.westernmassedc.com/Data__Demographics/knowledgecorridor/>
[70] Small Business and Entrepreneurship Council. 2008. Business Tax Index 2008. p. 2-15.

Metro Hartford Alliance offers a number of programs and incentives to local employers including:

MetroHartford Growth Fund – a revolving loan program, funded by a State of Connecticut Grant, providing below-market-rate financing for new and expanding companies in the Capitol region. Designed to provide gap-financing, the fund identifies the following "growth clusters" as eligible for funding:

- Manufacturing
- Financial services
- Health care
- Information technology
- Distribution
- Tourism/entertainment
- Environmental protection
- The funding can be utilized for the following activities:
- Land acquisition
- Expansion
- Building rehabilitation & construction
- Site remediation & preparation
- Utility upgrades
- Roadway improvements
- Machinery and equipment purchase
- Workforce development training

A company has the ability to borrow up to $20,000 in funding for each new, full-time permanent job that is created over a three-year period, with a total cap of $350,000 for the loan. The established term limit is up to 10 years, for an interest rate at or below prime. Penalties are administered if promises for job creation are not met and/or the business leaves Connecticut within 10 years.[71]

Additional financial incentive programs are available from various agencies in the State of Connecticut including:

The Eli Whitney Fund – an investment fund targeting high-technology entrepreneurs with capital finance for sectors that provide the greatest potential for economic growth. Investments typically range from $500,000 to $2 million.

Connecticut BioSeed Fund – provides seed capital for young Connecticut biotech companies to sustain them until they can secure a lead investor. Investments are up to $500,000 and eligibility is based upon ranked criteria that include track records and potentials of the company.

The Connecticut Clean Energy Fund – managed by Connecticut Innovations, this fund was created to promote the production and use of clean energy in Connecticut. Projects may be located anywhere, but must benefit ratepayers in Connecticut.

[71] Metro Hartford Alliance. 2009. < http://www.metrohartford.com/>

Next Generation Ventures LLC – a joint venture between The Phoenix Companies, Inc. and Connecticut Innovations, this program offers seed capital and professional management to entrepreneurial high-tech companies in Connecticut. The fund's total financial resources are $15 million.

Community Economic Development Fund – created to revitalize distressed neighborhoods in Connecticut, the fun provides access to capital and technical assistance for small business, as well as support for community economic development initiatives. Loan limits vary according to their category and purpose but are generally for up to $250,000.[72]

Statewide Business Incentives

Many of the existing funding opportunities that exist are for small or newer businesses in Connecticut. There are also many tax incentives that are available for both new business as well as established corporations interested in growing within the State of Connecticut.

The most common development tax incentive utilized by local economic development initiatives is State of Connecticut property tax abatements. Any project that adds more than $3 million in new real estate value can be eligible for a seven year property tax abatement in which assessed valuations are gradually increased to over the term. Projects valued at less than $3 million typically receive a three year, 50% reduction in their assessed value.

Additional State tax incentives include:[73]

- Credit of up to 60% of the Connecticut's state income tax for companies that hire at least 10 new employees for a minimum of a 12-month period.
- $1,500 per worker credit to companies that hire workers who were let go by a previous Connecticut employer as a result of corporate restructuring, within the last 12 months.
- Various credits for company research, design expenditures or grants awarded for research & design.
- 5-10% credit for investments in fixed and/or human capital.
- Tax exemptions for insurance corporations
- 100% corporate sales tax exemptions on the following:
- Machinery utilized for manufacturing of finished projects
- Computer and data processing services
- Calibration and compliance services related to personnel training offered by colleges
- Alternative fuel technology
- Safety apparel
- Aircraft
- Website maintenance

[72] Metro Hartford Alliance. 2009. <http://www.metrohartford.com/businessresourcesdetail.aspx?id=70&ekmensel=75ede4bd_16_0_70_3>
[73] Department of Economic and Community Development, State of Connecticut. 2009. <http://www.ct.gov/ecd/cwp/view.asp?A=1097&Q=253522>

Findings

The economy in the Town of Enfield must be developed to provide residents, businesses and institutions with ample opportunities for financial stability and growth. Following are findings on the economic conditions:

- Unemployment rates have increased significantly to 7.8% in 2009.
- Several major employers have closed, downsized or moved operations in Enfield since 2000, including Lego, Westvaco, Phoenix Insurance and Hallmark.
- Nearly 2 million square feet of industrial and commercial space is vacated in the town due to corporate relocations, downsizings and closures.
- The insurance industry, like the Hartford Metro and led by Massachusetts Mutual, continues to be a major industry, however it is experiencing decline.
- Poverty levels risen significantly since 2000.
- Median household income in Enfield has grown by more than 30% since 2000, outpacing the growth for the entire Hartford Metro area.
- The Town government has had to take protective actions with wage, hiring and spending freezes to ensure cost certainty during a declining economy.
- The proposed New Haven-Hartford-Springfield Commuter Rail line, including a new station in Enfield, provides an opportunity for enhancing the Town's regional tourism profile.
- The existing Thompsonville Neighborhood Revitalization Strategy (1992, updated 2001) has been mostly unimplemented.
- In 2009, efforts have begun to resurrect the Enfield Community Development Corporation to serve as a CDC for the revitalization of the Village of Thompsonville.
- Asnuntuck Community College is a major asset, providing affordable education, workforce development and support for the local business community.
- The agriculture industry in the Town of Enfield is in significant decline, however measures have been recommended to preserve farmland and promote the industry's viability.
- Tobacco is a major agricultural product in the Town of Enfield with potential for growth in agri-tourism.
- The Town of Enfield labor force is becoming increasingly well educated.
- Metro-Hartford Alliance serves as the primary regional economic development agency, partnering with local municipalities on development projects.
- Enfield has a central location within the "Knowledge Corridor," a regional economic development promotion initiative stretching from Hartford to Springfield Massachusetts, where there is a high concentration of college institutions and "knowledge-based" jobs.

Community Facilities & Services

This chapter examines public facilities and services that are provided by the Town of Enfield because they are essential to the quality of life of residents. The facilities and services discussed relate to law enforcement, fire and emergency services, hospitals and medical centers, public schools, institutions of higher education, public libraries and social services. Understanding differences between agency operations and the regulations to which each entity is subject will help citizens and community leaders make better land use, capital improvement and funding decisions. Being aware of how growth and infrastructure affect the effectiveness and efficiency of these services is also helpful, particularly in identifying opportunities for collaboration.

Public Services Policies, Plans & Studies

Regional Study

Connecticut Metropatterns

Connecticut Metropatterns is a study about urban growth in the State of Connecticut. The study focuses on the relationship between land use and taxation, and describes the impact of the state's heavy reliance on "fiscal zoning." The study explains that the cost of public services typically is greater where there is a small or shrinking population, or where the population is spread out over the land. To cover the cost of providing public services, the government taxes real property based on the value of the property. To ensure equity among taxpayers, lawmakers typically assign different tax rates based on the amount of services consumed by different land uses. The study argues that this relationship between land uses and taxes has led communities to base land use decisions on "the amount of net tax revenue that can be generated from a parcel" instead of on "the overall suitability of the land and the long-term needs of the town and region."[74] The study urges municipalities such as the Town of Enfield to resist the urge to make land use decisions based solely on increases in tax revenue, and opt instead for land use decisions that result in functional development patterns that promote efficient use of the land, good traffic circulation patterns, and environmental, social and individual health and safety.

Local Plan

1998 Town of Enfield Plan of Conservation and Development

The 1998 POCD expressed the Town's commitment to providing well-located and quality community facilities for public education, public safety, emergency services, street maintenance, storm and sanitary sewage, and waste management. The Plan did not indicate that there were any pressing issues or deficiencies in any of those public services. Citizen satisfaction with public services was high, particularly with Police, Fire and Public Library services, according to a survey conducted during the 1998 planning

[74] Office of Policy and Management, State of Connecticut. Conservation and Development Policies Plan for Connecticut 2005-2010. Pg. 11

process. However, many of the concerns raised by town residents were management issues that were unrelated to land use planning; and therefore, were out of the scope of the Plan.

Two of the Plan's objectives that continue to be relevant today were working with private utilities to ensure adequate water supplies, and improving the quality of the Public Library for business, educational and recreational use. Among the recommendations to meet the Town's public services goal were: continuing to provide those public services; monitoring demographic trends to ensure that services are meeting the needs of the population; and making capital reinvestments. The Plan also recommended amending Town regulations to accommodate future growth, but there was no specific guidance defining the level of service that should be provided to accommodate future growth.

Inventory of Community Facilities

Public Safety

Firefighting

There are 5 fire departments in the Town of Enfield. All are combination fire departments (combination of paid and volunteer staff), except for the Thompsonville Fire District, which is a career fire department (full-time paid staff). There was no information online regarding ISO ratings for any district.

- **Enfield Fire District** #1 – has two stations, one at 200 Phoenix Ave., the other at 199 Weymouth Rd. Staff: 12 officers, 3 engineers, 23 firefighters, 2 administrative personnel, 9 commissioners. Equipment: 5 engines, 1 fire truck, 1 rescue vehicle, 1 brush vehicle, 1 hover for water and ice rescue, 4 officer vehicles, 1 maintenance vehicle
- **Hazardville Fire District** #3 - 385 Hazard Ave. Staff: 3 officers (including 2 fire inspectors), 3 engineers, 21 firefighters, 2 support personnel, 3 commissioners. Equipment: 1 truck, 2 engines, 1 TAC
- **North Thompsonville Fire District** #4 - 439 Enfield St. Staff: 13 officers, 4 engineers (plus 2 vacancies), 29 firefighters (plus 3 vacancies), 5 commissioners. Equipment: 3 engines, 1 truck, 1 rescue vehicle, 2 officer vehicles. The District handled 458 incidents in 2008, including 105 service calls and 68 mutual aid calls. The number of incidents in 2008 increased by 87 since 2007.[75]
- **Thompsonville Fire District** #2 - 11 Pearl St. Staff: 4 officers, 15 firefighters (plus 1 vacancy). Equipment: 2 engines, 1 truck, 3 officer vehicles. The Thompsonville Fire District's station has a number of FEMA, NFPA, OSHA, Homeland Security and Building Code compliance issues that are forcing the District to seek a new building in another location. Current problems include insufficient space for modern equipment, traffic conflicts, moisture and flooding, and structural failures.[76]
- **Shaker Pines Fire District** #5 - 37 Bacon Rd. Staff: 6 officers, 4 engineers (including a fire inspector), 12 firefighters, 5 commissioners. Equipment: 4 engines, 1 utility vehicle, 1 service vehicle, 1 rescue boat[77]

[75] Fire Chief/Fire Marshal's Report. Annual Report of the Board of Fire Commissioners. North Thompsonville. 2008.
[76] Pacheco Ross Architects, P.C. Thompsonville Fire Station Problems - PowerPoint Presentation for Commissioners' meeting. October 28, 2008.
[77] Retrieved on June 9, 2009 from www.firedepartmentsofenfield.org

All five of Enfield's fire districts levy a property tax, which is collected by the Town of Enfield for each individual district. These taxes fund the districts' operating budgets each fiscal year. In 2008-2009, the mill rates were as follows:

Table 29 Town of Enfield Fire District Tax Levies

Fire District	Mil Rate
Enfield Fire District #1	2.35 mils
Thompsonville Fire District # 2	5.15 mils
Hazardville Fire District #3	1.75 mils
North Thompsonville Fire District #4	2.40 mils
Shaker Pines Fire District #5	1.10 mils

Source: http://www.enfield-ct.gov/filestorage/91/803/121/Tax_Collector_Town_of_Enfield.pdf

Law Enforcement

The Prison/Town Liaison Committee was established in 1990 by Resolution 9471. Its purpose is to provide a formal means of communication between town residents, town officials and prison officials regarding prison operations in Enfield. The committee can have a minimum of 9 members, including the Town Manager, the Police Chief, and 3 council liaisons, and a maximum of 13 residents. The committee meets four times a year and as necessary.

The Town of Enfield Police Department received $69,000 in federal stimulus money in early April 2009. The money will be used to put 4 police officers on evening foot patrol in Thompsonville. The department believes it can effectively prevent crime by having a greater presence in the community to discourage criminals from thinking they can get away with crime. Patrol will take place from the Lamagna Center and cover North Main Street and Windsor Court, and south from the center to Franklin Avenue. Portion of that grant will be used for narcotics suppression throughout town. The funds are expected to last up to 2 years.

Correctional Institutions

There are three correctional facilities in the Town of Enfield, all operated by the State of Connecticut and situated in the industrial area along Moody and Taylor Roads. Oldest prison, Enfield Correctional Institution, was built in the 1960s in an area that was predominantly farmland. This enabled inmates to work in the farms as part of their sentence. Today, community service is a major component of the activities coordinated at all three correctional institutions in Enfield:

- **Enfield CI**, known as the Osborn Prison Farm until 1986, is focused on substance abuse rehabilitation, vocational instruction and education, including parenting skills. The facility also manages a unique outreach program in which prisoners help at-risk youths understand the impact criminal activities have had on their lives and what prison life is really like.
- **Willard-Cybulski CI** prepares inmates for release into the community by allowing them to gain skills through community service activities. This facility also accommodates inmates with significant healthcare needs.
- **Carl Robinson CI** offers intensive substance abuse treatment, community service opportunities, and full vocational training programs through Asnuntuck Community College. This facility occupies 1,700 acres that were the site of a historic Shaker community.

Current amount of staff and inmates in each facility are listed in Table 30.

Table 30 Table State of Connecticut Correctional Department in 2009

Facility	Address	Total Inmate Population	Percent of State Prison Population (%)	Staff	Description
Enfield CI	289 Shaker Rd.	724	3.81	223	Level 3 / Medium Security
Carl Robinson CI	285 Shaker Rd.	1,547	8.15	311	Level 3 / Medium Security
Willard-Cybulski CI	391 Shaker Rd.	1,157	6.09	217	Level 2 / Low Security
State's Total Prison Population		**18,978**			

Source: Connecticut Department of Corrections. Retrieved on August 3, 2009 from: http://www.ct.gov/doc/cwp/view.asp?a=1502&Q=265422&docNav=|

In addition to these three facilities, the State of Connecticut may refer inmates approaching their release to the **Enfield Alternative Incarceration Center** on 9 Moody Road. This facility is managed by Community Renewal Team, Inc., a private company. It offers rehabilitation services, employment assistance, life skills development, and referrals to other community services.[78] Another private company, Families in Crisis, Inc., offers transportation services to the correctional facilities for family members and friends of inmates. Service area includes Hartford, New Haven and Waterbury.

Educational Resources

Public Schools

89.7% of Enfield's school aged children attended Enfield public schools in 2007. Student to pupil enrollment ratio was 22:1 in 1999. Table 1 shows the historical patterns of enrollment in the Enfield Public Schools District.

Table 31 Total enrollment in Enfield Public Schools District from 1998-2008

Year	Grade Level			Total Enrollment
	PK – 6	7 – 8	9 – 12	
1998-99	3,581	1,115	2,085	6,873
2000-01	3,467	1,028	2,182	6,771
2005-06	3,270	1,021	2,145	6,618
2008-09	3,111	923	2,075	6,296

Source: Prowda, Peter M. Enfield Public Schools Enrollment Projected to 2018. Dec. 22, 2008.

[78] State of Connecticut Department of Corrections. Programs and Services. Retrieved on August 3, 2009 from http://www.ct.gov/doc/cwp/view.asp?a=1492&q=265596

School Enrollment Projections

The elementary enrollment will continue to decline but at a slower rate than current decline rates. The elementary school enrollment is projected to stop declining by 2017 (5.8% decline from 2008 to 2017). In contrast, the middle school population is expected to peak by 2011. From that point on until 2018, middle school enrollment is expected to decline by 10.8%. High school enrollment will continue to decline, with the expectation that it will be 16.1% lower than in 2008.

Table 32 Projected enrollment in Enfield School District from 2009-2018

Year	Grade Level			Total Enrollment
	PK – 6	7 – 8	9 – 12	
2009-2010	3,130	876	1,999	6,192
2011-2012	3,034	921	1,849	5,991
2015-2016	2,931	848	1,812	5,778
2018-2019	2,932	823	1,740	5,682

Source: Prowda, Peter M. Enfield Public Schools Enrollment Projected to 2018. Dec. 22, 2008.

School District Facilities

According to [get source], renovations were made in 1990 to increase classroom capacity. The District received $5 million in [get year] for capital improvements. As of April 2009, the District has no plans to undertake any capital improvements or expansions in the near future. There is sufficient building capacity in each school to meet current enrollment needs. In fact, the District is considering closing some schools to operate more efficiently and reduce costs. There is concern about the financial limitations imposed by the country's current economic downturn. As funds become available, the District is prioritizing maintenance activities, including bringing certain buildings up to code and upgrading the heating/cooling systems.

Table 33 Enfield Public Schools Facilities

School	Address	Size (Sq. Ft.)
Head Start	1270 Enfield St.	12,869
Edgar H. Parkman Elementary School	165 Weymouth Rd.	60,327
Eli Whitney Elementary School	94 Middle Rd.	58,633
Enfield Street Elementary School	1318 Enfield St.	48,439
Harriet Beecher Stowe Elementary School	117 Post Office Rd.	49,324
Hazardville Memorial Elementary School	68 North Maple St.	54,316
Henry Barnard Elementary School	27 Shaker Rd.	70,182
Nathan Hale Elementary School	5 Taylor Rd.	46,295
Prudence Crandall Elementary School	150 Brainard Rd.	60,417
Thomas G. Alcorn School	1010 Enfield St.	53,950
John F. Kennedy Middle School	155 Raffia Rd.	168,232
Enfield High School	1264 Enfield St.	186,026
Enrico Fermi High School	124 North Maple St.	202,400

Several issues regarding school facilities were raised during a recent School District forum held on Thursday April 2, 2009. The School District was considering reorganizing the use of its public schools due to changes in the Town and School District budgets. This reorganization was considering closing and consolidating several schools, and moving other educational or community programs to the schools that would remain vacant. The possibility of transferring responsibility and maintenance of school grounds to the Town was also mentioned. Residents whose children attend the Alcorn School expressed concern with the implications of closing that school. Residents indicated that the school acts as the neighborhood's community center, and is within safe walking distance for area families. If this school were to be closed and students forced to attend school farther away, parents were concerned that they would not have a means of transportation to pick up their children in case of illness or an emergency if they did not own a car. They were also worried about the high cost of beginning a busing program.

The study indicates "areas with lower levels of income are often unable to support the local tax burden necessary to create school systems that are strong enough to overcome the socio-economic barriers students face. Statistically, there is no correlation between per-pupil spending and student performance on the mastery exams. Students' performance is more accurately predicted by factors outside the school system. Specifically, the best predictors of student performance are the educational attainment of the parents and whether the child comes from a single parent family or not." State Long Range Housing Plan

Higher Education

Asnuntuck Community College is a public two-year institution of higher education. Located at 170 Elm Street, the college serves students from East Granby, East Windsor, Ellington, Enfield, Somers, Stafford Springs, Suffield and Windsor Locks. It offers four different educational paths: professional certificates (28 programs), Associate of Arts or Science degrees (19 degrees), options to transfer to a four-year college, and continuing education courses. The college also offers high school students the opportunity to earn college credits before high school graduation.

In 2008, enrollment in credit programs was approximately 1,790, while enrollment in non-credit programs was 1,774. Most of these students are residents of the Town of Enfield. There are 25 full-time faculty and 96 part-time faculty.[79] Spring 2009 data indicate that total enrollment is currently at 1,748. Ninety-three percent of students are Connecticut residents, while seven percent of students come from the State of Massachusetts. About eighty-one percent of the students from Connecticut were residents of the surrounding towns.

College facilities include a library, computer lab, manufacturing technology workshops, child care center, gymnasiums and athletic fields. The college has recently made improvements to the campus grounds. Construction focused on traffic circulation improvements, with work on walkway and parking redesign and repaving. The college's online capabilities include access to library resources, distance learning, tutoring, academic and financial transactions, and college radio. There is also an online employment service that connects students to alumni and employers. For details on the economic impact of Asnuntuck Community College, please refer to the Economic Vitality chapter.

Funding comes from the US Department of Education, the State of Connecticut, and tuition and fees. Additional support for student scholarships and special projects is available thanks to private contributions to the Asnuntuck Community College Foundation.

Asnuntuck Community College has developed a series of system priorities and institutional goals. Those that are relevant to this planning process are:

[79] College at a Glance. Retrieved on May 5, 2009 from: http://www.acc.commnet.edu/ir/FactBook.htm

- Ensuring an attractive, safe, secure, and inclusive Campus Environment
- Ensure that students are engaged in distinctive curricular and co-curricular activities
- Meet the evolving needs of the community, region and business and industry partners

Public Libraries

The Enfield Public Library provides an extensive array of services to the community. The library offers services for teachers and students, including librarian visits, reading suggestions, facilitated discussions, lesson planning materials, and multimedia resources. There is a multi-media early literacy program for families with children ages preschool to intermediate elementary; storytime activities; and events related to national and state reading efforts such as "Connecticut Loves to Read" and "Read Across America". The library also has a series of programs for adults, including facilitated book discussions, "Meet the Author" events, lectures and movie screenings. The library offers a home delivery service to residents of Enfield who are certified by a physician or healthcare provider to be homebound, and to residents of convalescent homes and assisted living communities.

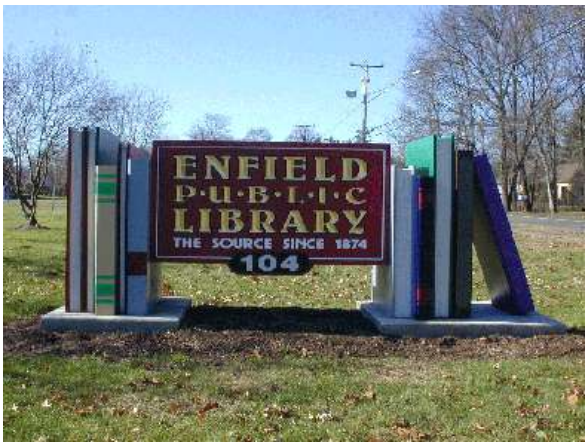


Figure 23 The Public Library's street sign

One of the unique aspects of the Enfield Public Library is its niche as a local resource center for business, automotive and healthcare communities. The library provides free access to online resources for career development; company profiles, industry reports and rankings; news, magazine and specialized journal articles. Resources from the Connecticut Digital Library are accessible through the Enfield Public Library. Library staff offers courses and tutorials to increase computer and internet literacy.

In addition, the Enfield Public Library functions as a gateway to other cultural and recreational venues throughout the region. Friends of the Enfield Public Library offers a museum pass collection that enables the public to visit museums in the Connecticut Commission on Culture and History system for free. Reduced admission fees for several other regional attractions are made available through the library too.

Library Level of Service

The library is open weekdays from 9:00 AM to 9:00 PM, and Saturdays from 9:00 AM to 5:00 PM.

Table 34 Enfield Public Library Statistics

Year	Service Area Population	Visits	Cardholders	Sq. Ft. per Capita	Operating Expenditures per Capita
2002-2003	45,379	253,847	15,176	0.44	$ 27.69
2007-2008	45,011	272,006	15,533	0.49	$ 37.30

Source: "How we stack up", A Statistical Profile of Connecticut's Public Libraries. July 2002 - June 2003, and July

2007 – June 2008; Enfield Public Library Statistics 2000-2008.

This table shows that while the population in the service area has shrunk, visits to the Enfield Public Library have increased by 7.15% over the last five years. The amount of patrons with a library card increased by 2.35% during the same period. Staff indicated that the library system has not had any major construction since 1968. To maximize library use, the facilities have been rearranged and some improvements were done in 2003 through a state award. The number of staff has also remained the same since 1968.

Funding & Issues

The library system's funding is managed by the Library Board of Trustees, which was established by Town Charter. Members (three) are appointed by Town Council, and are responsible for receiving and administering legacies and gifts on behalf of library endowment funds, and grants from the State of Connecticut. Record keeping is done by the Town of Enfield Department of Finance.

In 2005, the library received an LSTA Grant to conduct a Long Range Planning Study. This effort created a Long Range Planning Committee of 5 active community members. A consultant was hired to conduct meetings with the public and obtain feedback about facilities and services. The study revealed that Enfield residents have a high level of satisfaction with library services and facilities. The main issues were increasing limited space for meetings and community activities, additional storage space, marketing to the business community and increasing accessibility of library services to homebound patrons and cultural groups. There were also issues with the building's adaptability to requirements of wireless communications.

One of the major issues is that the Enfield Public Library is the only organization of its kind in Enfield, be it public or private. There are time, fund, staff and technological limitations to keeping track of inventory due to overdue items. This limits the amount of materials that are available. In a promotional flyer, the Enfield Public Library was described as saving taxpayer dollars by purchasing items that could be shared among everyone, which would cost more if everyone purchased the same items individually. This is especially the case for subscription databases, which are more affordable when cost shared. This is a service of particular benefit for the business community, as the library makes this service accessible to cardholders online. Total value of this service estimated at $435,000.

Health and Wellness

Planning and design can impact two factors affecting human health: environmental conditions and access to healthcare. In fact, some of the key arguments in favor of concepts such as smart growth, walkable communities, complete streets, and sustainable development are based on their positive contributions to individual and community health. The healthcare establishment is also increasingly becoming aware of the need to address "familial and social relationships; housing, neighborhood, environmental, and occupational conditions; societal expressions of discrimination and opportunity; and access to and quality of health care settings and personnel" in

Figure 24 North Central Health District Offices on North Main Street in Thompsonville.

addition to "individual constitutional and lifestyle factors."[80]

This section of the community facilities chapter identifies public health and social services facilities within the Town of Enfield, and major private health and social service facilities. This information will help to determine whether Enfield residents are well served by existing public health and social service facilities.

Healthcare Facilities

The **North Central District Health Department** has offices at 31 N. Main St. The Department enforces regulations and educates the public about environmental health, community health and nutrition, food protection and emergency readiness. It reviews epidemiological studies, conducts inspections of regulated facilities and operations, laboratory testing, child vaccinations, and plans for bio-terrorism threats. The Board of Directors consists of members from eight municipalities. Enfield has 5 representatives.

There are no major hospitals in the Town of Enfield. Park View Specialty Hospital, Baystate Medical Center and Mercy Medical Center are located in Springfield, MA approximately 10 miles from Enfield. Johnson Memorial Hospital is located in Stafford Springs, about 12 miles away in neighboring Tolland County.

Johnson Health Network- manages several healthcare facilities in Enfield. The services offered in Enfield include cancer care, cardiology and cardiac rehabilitation, diagnostic imaging, laboratory medicine and pathology, mental health, physical rehabilitation, and same day surgery. Johnson Health Network's facilities in Enfield are listed below:

- Home & Community Health Services - 101 Phoenix Ave.
- Phoenix Community Cancer Care - 142 Hazard Ave.
- Johnson Professional Associates, P.C. - 151 Hazard Ave.
    - Enfield Women's Health
    - Behavioral Health Services
    - Sleep Center
- Johnson Surgery Center of Enfield - 148 Hazard Ave.
- Johnson Memorial Wellness Center - 3 Weymouth Rd. They are the only providers of physical therapy and athletic training for the Enfield Public Schools.

Other healthcare providers in the Town of Enfield are varied and listed below:

- **Mary Lou Strom Primary Care Center**- 5 North Main St. - a non-profit provider of primary care and social services affiliated to Community Health Center, Inc. As a federally qualified health center, the center offers services for persons who are uninsured, homeless or victims of domestic violence. Dental and translation/interpreter services are also available.
- **Caring Solutions Home Health Care**- 5600 Bigelow Commons – In-home services for infants and adults. Also offers transportation services.
- **Comfort Keepers**- 585 Hazard Ave. – In-home care for elderly persons.

[80] The Connecticut Health Disparities Project, Connecticut Department of Public Health. Issue Brief - Defining Health Disparities. Summer 2007.

- **Blair Manor Skilled Nursing and Rehabilitation Services**- 612 Hazard Ave. – Short and long-term physical, occupational and speech therapy services, and hospice care.
- **Parkway Pavilion Healthcare**- 1157 Enfield St. – Short and long-term rehabilitation care. Accommodations for 140 residents.
- **Naturopathic Health Care**- 115 Elm St. – Naturopathic medical office.
- **American Home Care**- 31 Moody Rd. – Specialized services for individuals with bleeding disorders. Services include medication delivery and caregiver education.
- **Enfield Dialysis Center**- 113 Elm St. – Social and medical services for individuals with renal problems. A subsidiary of Fresenius Medical Care.
- **Joshua Center**- 72 Shaker Rd. – A subsidiary of Natchaug Hospital providing partial hospital and intensive outpatient day treatment programs for children, teens and adults with mental illness and substance abuse problems. The Hospital also conducts special education services and evaluations for the juvenile justice system.
- **Able Care Pharmacy & Medical**- 15 Palomba Dr. – Pharmaceutical and medical supplies

Health Disparities

The State of Connecticut defines health disparities as avoidable differences in health that result from cumulative social disadvantages. The Connecticut Department of Health has determined that there are "documented health disparities for the Black/African American, Hispanic, Asian/Pacific Islander, and Native American populations relative to the White population in Connecticut". The Department further explains that research has shown that "immigrants, refugees, limited English proficiency populations, and homeless persons…tend to have limited access to health care and/or adverse health outcomes relative to the majority population."[81]

One of the Connecticut Health Department's efforts to ensure everyone has adequate access to healthcare is working with the US Department of Health and Human Services to identify communities that do not have an adequate proportion of medical staff, facilities or services. Hartford County has a total of 23 communities that are designated as medically underserved areas by the federal government. The Town of Enfield is one of those communities; it is specifically designated as a Healthcare Professional Shortage Area for primary care for the low income population. The report also indicates that there are no public community health centers in Enfield.[82] Designation as a medically underserved area qualifies the Town for state and federal funding for healthcare needs.[83]

Social Services

The Town of Enfield Department of Social Services has eight divisions:

- **Dial-A-Ride** - Enfield participates in Greater Hartford's Transit District (GHTD) Dial-A-Ride Municipal Grant Collaboration program.

[81] The Connecticut Health Disparities Project, Connecticut Department of Public Health. Issue Brief - Defining Health Disparities. Summer 2007.

[82] Federal Shortage Designation Information, CT Towns. Retrieved on April 30, 2009 from: http://www.ct.gov/dph/cwp/view.asp?a=3132&q=388118

[83] Connecticut Department of Public Health. Health Care for Connecticut's Underserved Population. Jan. 2007.

- **Congregate Living Meals Program** – is located at 1 Beech Rd and provides hot lunch for seniors on weekends and holidays.
- **Adult Day Center** – is located at 1A Beech Rd. The center offers medical, exercise, entertainment and meal services. Field trips are arranged for clients and there are also caregiver support groups. The Center charges a fee for its services; fees charged are based on a "sliding scale".
- **Enfield Child Development Center** – has two locations, 132 South Rd. and at the Family Resources Center at 110 High St. The facility at 132 South Rd. is 14,000 sq. ft. The facility has programs for children 8 weeks to 12 years old, including child care, educational, arts and other activities, and help with homework. Children's multicultural background is incorporated into each of the programs. In 2008, the Center served 225 children.
- **Youth Services/Youth Center** – is located at 19 North Main St. and serves youth ages 0 to 18 years who are enrolled in school. The Youth Center provides individual and group counseling, parenting and workplace training, and support for alternative education.
- **Family Resources Center** – is located at 1010 Enfield St. within the Thomas Alcorn Public School. The Center is a school-based family support and child care program offering child care, preschool, home visits for parents with infants and toddlers, youth development activities, teenage pregnancy prevention, adult education and literacy. The Center also helps with networking and outreach to other day care providers and referrals to other public services.
- **Neighborhood Services** – is located at 786 F Enfield St. and functions as a "one-stop shop" for information about state and federal programs. Neighborhood Services also provides assistance with housing relocation, energy and utilities, and neglect, abuse or exploitation of elderly persons. Other crisis and family programs are offered, including staff visits to homes and senior housing.
- **Senior Center** – is located at 199 Elm St. Its facilities include a craft center, fitness center, billiards room, computer center, library and meeting rooms. Social, educational and recreational activities are organized by staff. The Center also serves lunch and runs a "Meals on Wheels" program for homebound seniors that have seen a physician in the past 6 months.

The Town of Enfield Department of Social Services created a Strategic Plan that outlines the agency's tasks over a period of three years. Some of tasks that are relevant to this planning process are:

- Expand adult day care services to out-of-town residents
- Strengthen programs for families and youth that are offered in neighborhood settings
- Understand the extent and root causes of homelessness in Enfield
- Improve transportation services available for seniors and persons with disabilities by following the Independent Transportation Network America model and working with other towns in North Central Connecticut
- Improve access to information about social services offered by the Town and other organizations
- Improve collaboration with other Town, state and federal government agencies, particularly to apply for and secure grant funding
- Assist North Central Health District to create an affordable health clinic in Enfield
- Create alternative fundraising strategies to supplement taxpayer dollars

Some of the issues confronted by this agency include:

- **Additional building space** – The Enfield Department of Social Services indicated that it needs a space of 14,000 -15,000 square feet for a child development center. Dept. staff explains that a new facility is needed because the existing building is aging, and because a town-owned facility would help them avoid leasing costs. Additional space is also needed for the Youth Center and Youth Services Counseling program, and the Adult Day Center. The Adult Day Center needs an additional 5,000 - 7,000 square feet. There is the possibility that the Center will have to be relocated in two to four years because the Department has only been able to secure 2 year leases from the landlord, and it is concerned that they will ask them to leave.
- **Access to affordable transportation for seniors and people earning low-incomes** - Improving access to affordable transportation for seniors and disabled individuals was one of the top goals of the plan, as identified by community members, social services program participants, community leaders and social services staff members who participated in the planning process.
- **Funding** – Enfield Social Services Department expects to lose state funding for some of its programs, and to rely increasingly on other sources of funding. As economic conditions in the community worsen, the Department finds that having fewer resources to assist Town residents with loss of jobs and housing, etc. is its most pressing challenge.

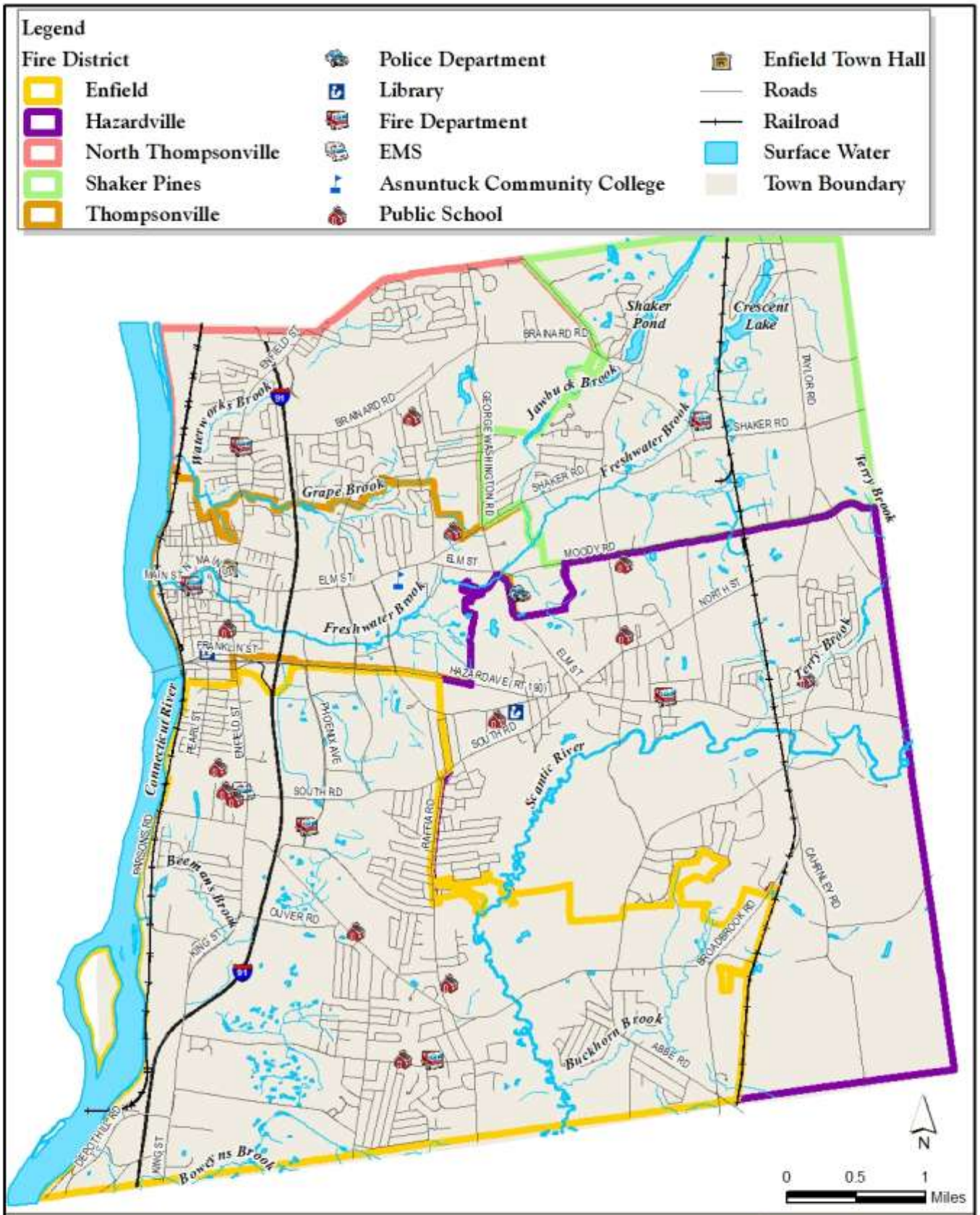
Other agencies that provide critical social services in the Town of Enfield are:

- **Greater Hartford Transit District** (GHTD) administrates grants on behalf of the Federal Transit Administration, and it offers paratransit services under contract to the Connecticut Department of Transportation.[84]
- **Allied Rehabilitation Centers, Inc**. also offers paratransit services in Enfield.
- **Enfield Emergency Food Shelf** – is a non-profit volunteer organization located at 96 Alden Ave. Affiliated to the Enfield Conference of Christian Churches, it provides food to families and individuals who apply and qualify for their services. As of last April, 1,154 individuals have been served in 2009.
- **Loaves and Fishes** – is a local soup kitchen located at 28 Prospect St.
- **Mobile Foodshare** – is located at 64 Pearl St. and provides food to anyone who brings a shopping bag.
- **Enfield Recovery House** – located at 36 Pleasant St. the Enfield Recovery House offers support and transitional housing for men.
- **Network Against Domestic Abuse of North Central Connecticut** – 139 Hazard Ave. Provides shelter and counseling for victims of domestic violence
- **North Central Counseling Services** – is located at 47 Palomba Drive. A subsidiary of Community Health Resources, it provides counseling, respite and in-home services, partial hospitalization and housing assistance.
- **New Directions of North Central Connecticut** – 113 Elm St. Services provided include: individual and group counseling, school-based intervention and community education programs regarding substance abuse and mental health problems.

[84] Retrieved on April 8, 2009 from: http://www.hartfordtransit.org/orginfo.html

Findings

- According to the community survey conducted throughout this planning process, town residents are satisfied with the quality of services of police and fire departments in Enfield, and that they feel safe within their community.
- The Enfield Public Library offers a wide array of services to the residential and business community in Enfield at a very low cost to individual users. This is an asset in a community that values public education and alternatives for youth and adult recreation, and where families are being directly affected by changes in the national economy. However, library facilities are becoming increasingly limited in terms of space and ability to incorporate modern communications infrastructure. More staff is also needed.
- Enfield Public School District has sufficient building capacity at the present to accommodate its student population. Building capacity may increase in the future if population continues to decline as expected in population projections. For this reason and due to the uncertainties of national economic conditions, the School District is carefully considering reorganization of the use of its facilities and the cost of capital improvement projects that may be needed in the future.
- Many of the Town's educational and social services facilities are located within the neighborhoods they serve. They also often share the same building space. As programs continue to expand, sharing building space is presenting certain space constraints. Many organizations are expressing a desire to move into their own building in order to increase office and program space, eliminate scheduling conflicts, leasing costs and other problems with leasing. However, being within the neighborhoods they serve and sharing building space are assets because they facilitate resident's access to public services; promote a healthy, active lifestyle; can reduce building costs and maintenance; and promote interagency collaboration.
- The strategic plan of the Enfield Social Services Department suggests that there is a need to work with neighboring towns. Working in partnership can offer cost-savings, as well as a larger customer base that can support the services. The opportunity to expand services to neighboring towns also underscores Enfield's role within the region as a center, not just of retail shopping, but also of vital support services for young working families and a growing elderly population.



Community Facilities and Services

Plan of Conservation & Development - Town of Enfield, CT

DESIGN Planning, Inc.
peter j. smith & company, inc.

Infrastructure and Utilities

The following is a summary of the status of infrastructure in the Town of Enfield for drinking water, sanitary and storm sewer, natural gas, and electricity and solid waste. Not all of the infrastructure is owned by the Town, but all Town-owned infrastructure is managed by the Department of Public Works. The Town of Enfield Department of Public Works has several divisions: Building & Grounds Maintenance, Highway Maintenance, Engineering, Solid Waste, Fleet Services, and the Water Pollution Control.

Water

Domestic water is supplied by two privately-owned public utilities: the Connecticut Water Company and the Hazardville Water Company. These private water utilities are regulated by the United States Environmental Protection Agency (EPA) and the Connecticut Department of Public Health (DPH) with regard to water quality and operations, the Department of Environmental Protection (DEP) for environmental compliance, and by the Department of Public Utility Control (DPUC) with regard to rates and service.

The Connecticut Water Company supplies water to more than 86,000 customers, or nearly 300,000 people, for residential, commercial, industrial and municipal purposes in 54 towns in Connecticut.[85] The Hazardville Water Company serves 7,200 customers living along 117 miles of main requiring 12 wells capable of pumping 4.2 million gallons per day.[86]

As required by the EPA, both companies publish an annual Water Quality Report that is available online. These reports described the results of periodic water quality tests and the sources of water, which for both utilities is a series of wells that draw groundwater. Based upon EPA primary water quality standards, water from both utilities has been deemed safe for consumption.

The private water utilities are not operated or regulated by the Town of Enfield. However, there are Advisory Committees for each utility that include a representative(s) from the Town of Enfield. The purpose of the committees is to provide the residents with advocates to air complaints about service, water quality and fees. According to the Enfield Town Engineer, in recent years, there have been few complaints from residents about the water quality, rates or supply provided by the utilities.

Private Wells

Not all areas of the town have utility water available to them – instead these properties have their own private wells that draw groundwater from the aquifer. Typically, these private wells are much shallower than the utility wells, thus are more susceptible to groundwater contamination. This makes it all the more important for the Town to preserve and monitor the aquifer protection areas and the groundwater recharge areas. During the writing of this report, a consultant was hired by the Town to study soil contamination in the Broadbrook Road area that has caused problems with local wells. A solution to this problem may be to extend water lines and take the private wells offline in this area.

[85] Connecticut Water Company website http://www.ctwater.com
[86] Hazardville Water Company website http://www.hazardvillewater.com

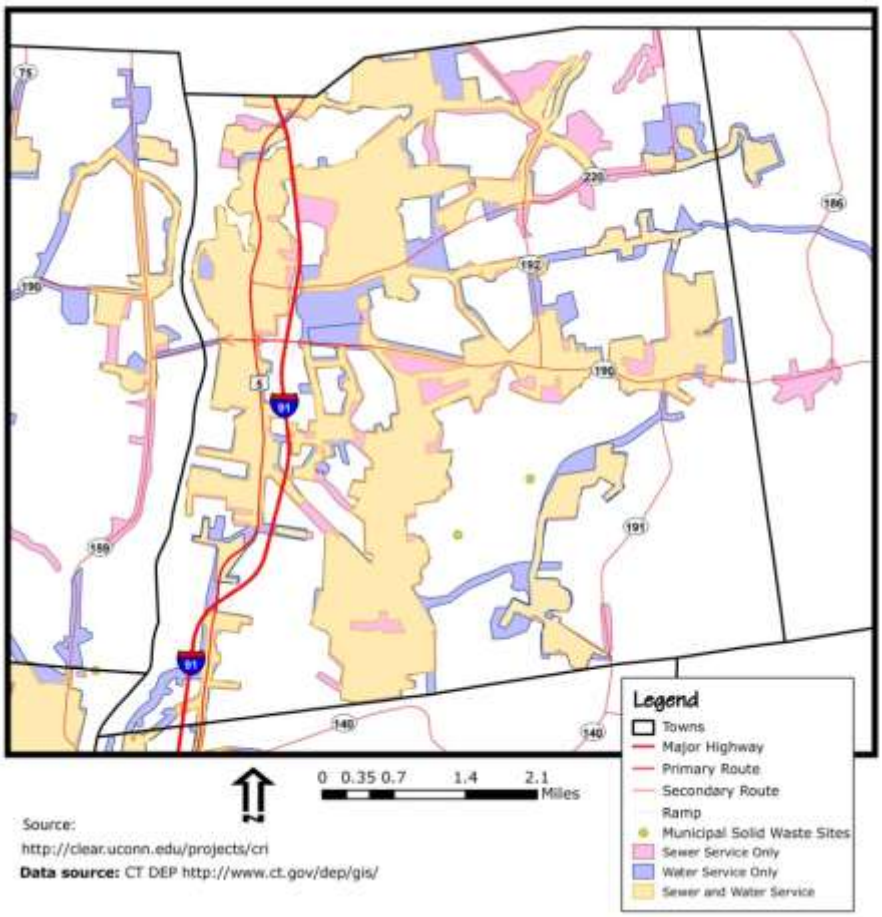


Figure 25 Areas Serviced by Water and Sewer

Sanitary Sewer System

The Enfield Department of Public Works' Water Pollution Control Division owns and operates a Wastewater Treatment Plant (WWTP) at 90 Parsons Road. Besides the plant, the Division is responsible for the operation, maintenance and repair of sixteen pumping stations, and two hundred fifty miles of sewer pipe. The twenty two year old WWTP (1987) is currently permitted to discharge ten million gallon per day (mgd), but from a practical standpoint, is capable of fully treating nine mgd. This is due to a required upgrade to include a nitrification/de-nitrification process that initially reduced the WWTP's capacity. After some fine tuning, the WWTP increased its treatment capacity back up to nine mgd. The normal flow at the WWTP is around five mgd with an occasional spike after a high intensity rainstorm of twelve to fifteen mgd. The WWTP is designed to handle a brief surge of twenty mgd and provide partial treatment before discharging the water. Based on the reported surges of wastewater after a rainstorm, one can conclude that there is stormwater entering the sanitary sewer system. Usually problems of this type come from older developments that were built before regulations were in place that restrict the tie-in of sump pumps and roof leaders to sanitary sewer systems. The Town is aware of this problem and has taken steps to address it. According to the Superintendent of the WWTP, Enfield applied for and received a Federal grant totaling $286,000 to address stormwater inflow issues in the Thompsonville area. While this won't entirely solve the problem, this will definitely help. According the Superintendent of the WWTP,

the plant can take a reasonable amount of extra volume that may arise if there were a population increase in Enfield without any upgrades and the reduction of stormwater inflow will help further.

Sludge from the WWTP currently goes to Metropolitan District Commission facility in Hartford for disposal. A proposal to create a facility in Enfield that would use the sludge to create energy that has been stalled at the writing of this report. The idea is to use methane gas from the sludge to generate electricity in a process similar to what is known as "cow power", a process being used in Vermont that converts methane from cow manure to energy. A study done for this proposal concluded that if implemented, the facility would result in substantial savings in energy costs for the Town.

Septic Systems

One study estimates that in the Town of Enfield, "95% of residential and industrial areas are sewered."[87] The remaining properties in outlying areas use onsite sewage treatment systems such as septic tanks with drain fields (septic systems). These structures are regulated by the State of Connecticut Department of Public Health that has a new (January 2009) set of regulations titled Regulations and Technical Standards-for Subsurface Sewage Disposal Systems available online at http://www.cteha.org/pdf/TechStd'09Master.pdf. Locally, these regulations are enforced by the North Central District Health Department. While these regulations update the requirements for design and installation of septic systems, which goes a long way toward insuring the proper functioning of the system, they do not require post-construction maintenance, monitoring or inspections. Instead, it is up to individual property owners to conduct inspections, pump septic tanks and take other steps to ensure that systems are operating properly and that no untreated wastewater is leaving the site. Poorly maintained septic systems can have a direct impact on the integrity of both groundwater and surface water sources. Systems can overflow and contribute pollutants to nearby streams and groundwater. Therefore, proper septic system function and maintenance or the elimination of onsite systems is of long term importance for the Town of Enfield. There should be no problem with WWTP capacity when taking septic systems offline since the high concentration septage (material pumped from septic tanks) is currently hauled to the WWTP for processing.

Implications for Housing Density

Another aspect of onsite sewage treatment systems that is regulated by the State is the distance to wells, open watercourses, groundwater drains, etc. A private well that draws less than ten gallons per minute (gpm) must not be closer than seventy five feet to any part of an onsite sewage treatment system. If the well draws more than 10 gpm, the setback increases to 100 feet. This regulation effectively sets a minimum lot size/maximum housing density in areas that do not have municipal sewer and water. Therefore, if increased density is desired, municipal water and sewer services must be provided or a developer must provide one.

Storm Water System

Enfield owns and maintains a system of stormwater pipes, catch basins and manholes. Ongoing maintenance and upgrades to old and undersized pipes are being done with Capital Improvements Program (CIP) funding. Some of this work is done with Town staff and larger projects are contracted out. There are no combined sewer overflow (CSO) connections (where overflow from the sanitary sewer is spilled into the storm sewer) in the municipal system. The entire system flows by gravity – there are no pump stations.

[87] Town of Enfield Connecticut – Plan of Conservation & Development - 1999

Much of the stormwater pollution regulations in the Town of Enfield have been applied by the Federal Environmental Protection Agency (EPA). The Connecticut Department of Environmental Protection (CTDEP) serves as the umbrella agency for administering the state's National Pollution Discharge Elimination System (NPDES) stormwater management program. Connecticut's stormwater program is closely modeled after the federal NPDES program, which requires stormwater be treated to the maximum extent practicable. Best management practices (BMP') must also be designed to remove 80% of the total suspended solids load. The CTDEP publishes the Connecticut Stormwater Quality and the Connecticut Guidelines for Soil Erosion and Sediment Control; both are available online at http://www.ct.gov/dep/.

At the state level, all construction sites disturbing more than one acre, many industrial sites, and all designated Municipal Separate Storm Sewer Systems (MS4s) are required to obtain and meet the requirements of NPDES permit coverage. Enfield is defined as a MS4 community since it has an Urbanized Areas as determined by the U.S. Census Bureau and has an MS4 permit in place with CTDEP. Specifically, MS4 regulations apply to how towns manage their system and what measures they take to reduce or eliminate the discharge of pollutants to that system. In Enfield, a developer or contractor must also get a permit directly from CTDEP for the discharge of stormwater – the Town does not issue this permit. Also, the Town does not have any stormwater regulations that supplement the CTDEP regulations.

Natural Gas and Electric

Gas and electric services in Enfield are run by private utilities – the Town does not own or operate infrastructure in this category. According the website city-data.com, 56% of the homes in Enfield are heated with fuel oil, kerosene, propone, etc., 35% use utility gas, 5% use electricity and 3% use "other".

The infrastructure for electricity is owned and maintained by Connecticut Light & Power (CL&P). Customers can choose from a wide range of electric providers since the market is de-regulated; however, CL&P will deliver that electricity to the customer. Yankee Gas provides the infrastructure for, and delivery of, natural gas service in Enfield. If the owner of a home of business in Enfield does not have gas service and would like it, they would approach the utility directly. On some occasions the Town may act on behalf of a group in approaching a utility but ultimately this is not the responsibility of the Town.

The Enfield Clean Energy Committee was originally established by the Town in October of 2007. The purpose of the committee is to promote clean power options; encourage the development of renewable energy in Enfield; and make recommendations to the Town Council. The committee has been meeting regularly since that time and has been discussing methods to promote clean energy and energy conservation.

Solid Waste

The Town of Enfield Solid Waste Division of the Department of Public Works provides curbside pickup of trash and recyclables once each week. Refuse/trash for residential customers must be placed in the new tipper barrels provided by the Town for that purpose. Bulky items must be picked up by appointment for a fee. Refuse is initially trucked to the transfer station, located on Town Farm Rd. From there, the Refuse is transported to the Connecticut Resources Recovery Authority (CRRA) facility in Ellington. The CRRA is a quasi-public agency established by the state in 1973 to modernize Connecticut's solid waste disposal. CRRA replaced a patchwork of "town dumps" with a program that emphasizes trash-to-energy; recycling; and safe, modern, engineered lined landfills. In Enfield the tons of municipal solid waste collected from curbside and transported on a weekly basis to the CRRA Facility in 2006 was 17,866 tons.

State of Connecticut law prohibits the disposal of grass clippings with household refuse. Therefore, yard waste consisting of grass clippings and brush, is collected separately and may be placed at curbside in Brown Tipper Carts or Brown Leaf bags. Yard waste can also be dropped off at the Town's transfer station. Additional services provided to residents include a monthly scheduled automotive battery and used motor oil collection/drop off. The Town also provides an annual household hazardous waste drop-off opportunity in the spring.

Recycling

The Town provides curbside collection of commingled recyclables placed in blue bins provided by the Town, on a weekly basis. Recyclables include; mixed paper, glass, metal, plastic, and aseptic containers such as juice boxes and milk cartons. After staging at the Town's transfer station, recyclables are transported to the CRRA Recycling Facility in Hartford.

Findings

- While there are numerous problems with onsite sewage treatment systems (septic systems); they do allow development of sites that are remote and not economically feasible to extend sewer service to. Wherever feasible though, the Town should extend the sewer service to take existing septic systems offline eliminating concerns about water contamination due to septic systems with poor maintenance or unsuitable soil conditions and to allow higher housing densities where desired.
- With regard to stormwater inflow into the wastewater system, the Town should continue to take measures to correct the problem. This will help delay the date when expensive upgrades to the WWTP are needed due to either extra inflow volumes due to additional population or more stringent regulations.
- Hopefully, in the future the capital necessary to build the sewage sludge-fueled energy generation facility will be found. If implemented, the Town will likely realized some savings on energy costs and will become a leader in "green energy".

Transportation

A community's transportation network determines how easily people and goods are able to move into, out of and around its boundaries. The local transportation network also helps define the character of the town. The Town of Enfield transportation system inventory covers a variety of multimodal system elements including streets, sidewalks, multi-use and bicycle trails, air transportation, rail transportation, and public transit. By reviewing all available modes of transportation in Enfield and providing consistency with state, regional and local plans, this inventory complies with the objectives of the federal Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which authorizes funding for transportation programs, such as highways, transit, freight, safety and research.

Roads and Traffic

This subsection addresses the roadway classifications, existing traffic conditions, and recent traffic improvement projects in Enfield. The street system within the Town of Enfield is maintained and improved by the Connecticut Department of Transportation (state-owned roads) and the Town of Enfield Highway Maintenance Division.

Functional Classification

The Federal Highway Administration (FHWA) classifies roadways and highways according to the function or service it provides. In the State of Connecticut, the functional classification system is prepared and maintained by the Connecticut Department of Transportation. There are three major categories of roadways and highways: arterial, collector and local. Within the Town of Enfield, each of these classifications exists:[88]

Arterials: include interstates, other freeways and expressways, and are designed for higher speed and traffic volumes. These roads serve as connections between municipalities or are part of the interstate system.

- Expressway – Interstate-91
- Principal Arterials – U.S. 5
- Minor Arterials – Route 190, Route 191, Route 192, Route 220, Abbe Road, Brainard Road, Powder Hill Road, Raffia Road, Simon Road, South Road, South Maple Street, and Taylor Road

Collectors: designed for lower speeds and shorter distances. They are typically two-lane roads that collect and distribute traffic to and from the arterial system and connect them with residential neighborhoods.

- Collectors – Abbe Road, Bacon Road, Elm Street, Freshwater Boulevard, George Washington Road, Moody Road, North Street, North Main Street, Pearl Street, Phoenix Avenue, Post Office Road, Shaker Road, South Road, Steele Road, Town Farm Road, and Weymouth Road

[88] Connecticut Department of Transportation. 2009. <http://www.ct.gov/dot/cwp/view.asp?a=3532&q=259754&PM=1&dotPNavCtr=|&pp=12&n=1>

Local roads: all roadways not included in a higher-level classification. They provide basic access between residential and commercial properties as well as connections to higher classification roads.

Traffic Conditions

This section evaluates traffic counts conducted in the Town of Enfield over a fifteen-year period from 1992 to 2007. The analysis includes the town's five major state roads (U.S. 5, Routes 190, 191, 192 and 220), as well as each of the four I-91 interchanges. Reflecting Connecticut Department of Transportation practices, Table 2 reports traffic counts for the I-91 interchanges for every third year from 1991 to 2006.

Overall, traffic has increased on these major roads by 4.7% during the 15-year period. The busiest roadways are:

- Route 190, which handles 27,800 daily vehicles in the area of the Enfield commercial retail centers;
- Route 220, which experiences 32,400 vehicles daily near the Enfield Square shopping center; and
- U.S. 5, which handles between 12,000 and 16,100 daily vehicles all the way south from the Massachusetts state line, except for a portion near the East Windsor town line that has considerably less traffic.
- The major factors that each of these highly traversed roadways has in common are their proximity to commercial centers as well as I-91 interchanges. Other locations that have seen a significant increase in traffic since 1992 include:
- Route 220, especially east of I-91, which has seen more than 4,000 additional vehicles;
- Route 191, between Bailey Road and the East Windsor town line, where there are more than 1,000 additional daily vehicles; as well as
- U.S. 5 at the northern and southern borders of the town, where there are more than 1,000 new daily vehicles in each area.

Conversely, areas that have seen notable decline in traffic since 1992 are Route 190, east of Elm Street, which has dropped by 3,000 daily vehicles, at the Somers town line, where there are 2,500 less vehicles, as well as most areas along U.S. 5 in the village of Thompsonville, where traffic has dropped by up to 12%. The following table illustrates the changes in traffic for the Town of Enfield since 1992.

Table 35 Traffic Counts of Major Roadways for Enfield (1992-2007)

Route	Location	Year						
		1992	1995	1998	2001	2004	2007	Percent Change (%)
U.S. 5	Massachusetts State Line	14,500	13,800	15,200	15,800	16,400	15,700	8.3
	N.E. of I-91 Exit 49	N/A	N/A	15,100	16,000	15,000	16,100	6.6
	North of Alden Ave	16,100	14,800	16,700	15,400	14,600	14,100	-12.4
	North of Route 220	15,700	14,900	16,300	16,100	15,100	14,600	-7.0
	North of Frew Terrace	13,800	14,800	14,200	13,300	13,300	12,300	-10.9
	South of South Road	14,800	14,400	15,600	14,500	15,200	14,600	-1.4
	North of I-91 Exit 46	15,000	13,100	14,000	17,800	14,200	14,700	-2.0
	East Windsor Town Line	5,900	5,000	5,600	8,100	6,600	6,700	13.6
Route 190	East of Phoenix Ave	28,400	26,400	27,500	27,600	27,000	27,800	-2.1
	East of Elm Street	22,800	19,500	20,400	19,900	19,700	19,800	-13.2
	West of Route 191	18,000	16,400	17,700	15,000	16,600	16,800	-6.7
	At Somers Town Line	17,000	13,800	14,300	13,300	19,400	14,500	-14.7
Route 191	South of Route 190	7,300	4,000	6,400	6,500	7,300	7,300	0.0
	South of Bailey Road	5,000	7,300	5,200	5,500	5,800	5,900	18.0
	At East Windsor Town Line	4,400	5,000	4,600	4,900	5,200	5,400	22.7
Route 192	S.E. of Brainard Road	7,100	7,400	7,300	7,400	7,200	6,500	-8.5
	South of route 220	5,700	6,600	4,600	4,700	4,200	4,200	-26.3
	North of North Street	5,700	7,000	5,900	5,900	4,900	4,600	-19.3
	North of Route 190	3,300	3,000	3,500	3,300	2,900	2,900	-12.1
Route 220	East of U.S. 5	13,900	10,500	11,700	12,600	12,800	12,700	-8.6
	East of I-91 Exit 48	28,300	30,000	31,000	29,400	32,000	32,400	14.5
	East of Harvest Road	25,200	24,800	26,800	24,000	25,600	24,400	-3.2
	N.E. of George Washington Road	9,400	11,500	11,800	11,800	11,700	12,500	33.0
	East of Route 192	7,200	8,200	9,000	9,100	9,300	10,500	45.8
	North of Shaker Road	8,100	8,200	8,700	8,700	8,800	9,500	17.3
	At Massachusetts State Line	7,800	7,600	8,200	7,800	8,100	8,900	14.1

Source: Connecticut Department of Transportation. 2009 TMSADT Data Application.

The I-91 interchanges in the Town of Enfield have also seen an increase of just over four percent in daily traffic since 1991. However, the increase can be attributed to only one of the interchanges, 48 at Route 220. Traffic at this interchange has increased by 22% and can be largely attributed to regional shopping centers that have continued to develop to the east of this intersection. The other three interchanges, 46, 47 and 49, have all decreased in daily traffic between 0.7% and 4.8%. Table 2 shows traffic levels at each of the four Enfield I-91 interchanges.

Table 36 Traffic Counts of Interstate 91 Exits for Enfield (1991-2006)								
Route	Location	Year						
		1991	1994	1997	2000	2003	2006	Percent Change (%)
Interstate 91 Exits	Interchange 46	12,300	12,000	12,200	11,900	12,200	11,900	-3.3
	Interchange 47	28,900	28,100	29,700	30,400	3,100	28,700	-0.7
	Interchange 48	23,200	22,700	22,000	22,200	24,500	28,300	22.0
	Interchange 49	20,800	19,500	18,400	18,800	19,200	19,800	-4.8
Source: Connecticut Department of Transportation. 2009 TMSADT Data Application.								

Current Problem Areas

There are no major current traffic problem areas cited by the Town of Enfield Engineering Department in 2009. Minor areas of traffic concern cited by the department include Routes 190 and 220, east of I-91, surrounding Enfield Square and other major retail developments.[89] As seen in the daily traffic counts since 1992, these are the areas that have seen the most significant increase in traffic, especially along Route 220 and the I-91 interchange 48. Congestion along Route 190 is addressed in the Route 190 Corridor Transportation Plan, which was drafted by the Capitol Region Council of Governments in 2004.[90]

Transportation Improvement Projects

The Town Engineering Department has compiled a list of priority transportation projects to take place in Enfield over the next several years. The projects include a mix of mostly road reconstruction projects along with bridge, pedestrian and bicycle access improvements. There are currently no projects for new roads or sidewalks. The present economy has impacted projects in Enfield, as the Town called for a freeze on spending for capital improvement projects, limiting additional funding that would ordinarily be targeted for transportation. Table 3 is an inventory of priority transportation projects for the Town of Enfield.

In addition to the transportation projects that are being undertaken by the Town, the Capitol Region Council of Governments has submitted a series of projects in the Town of Enfield for federal Transportation Improvement Project (TIP) funds, which often require a combination of State and local dollars. Table 4 is a list of TIP funds targeted for projects in the Town of Enfield.

Proposed Thompsonville Intermodal Rail Station

As a part of the State's proposed New Haven-Hartford-Springfield Commuter Rail Service, a new station may be constructed in Thompsonville. The station would be located on Main Street, at the railroad crossings (Bigelow Commons). The station design is proposed to include high-level platforms, grade separated pedestrian crossings, bicycle storage and racks and approximately 117 new parking spaces. Its

[89] Cabibo, John, P.E. Town of Enfield Department of Engineering. June 4, 2009. Personal Interview.
[90] Capitol Region Council of Governments. 2004. Route 190 Corridor Transportation Plan, Executive Summary. p.1

location within an urban area of Enfield will provide access to a wide variety of transportation options, including automobile, bicycle and pedestrian.[91]

Table 37 Town Transportation Projects for Enfield

Project	Description	Status
Road Reconstruction	Pearl Street	Bid Awarded
	Weymouth Road	2009 Construction
	Bess Road	2009 Construction
	Judy Drive	2009 Construction
	Roberts Road	2009 Construction
	Parky Drive	2009 Construction
	Nelson Drive	2009 Construction
	Long Hollow Road	2009 Construction
	Adams Road	Under Design
	Chief Street	Under Design
	Dale Road	Under Design
	Queen Street	Under Design
	Welch Drive	Under Design
	Alden Avenue	Under Design
	Hartford Avenue	Under Design
	Bigelow Avenue	Under Design
	White Street	Under Design
	Windsor Street	Under Design
	Union Street	Under Design
	Union Street Extension	Under Design
	Lafayette Street	Under Design
	Russel Street	Under Design
	Jim Street	Under Design
Intersection Improvements	Freshwater Blvd. & Cranbrook Blvd.	Under Design
Bridge Reconstruction	South Maple Street	Under Design
Road Reconstruction Inc. New Bikeway	Post Office Road & Town Farm Road	Under Design
Road & Sidewalk Improvements	Raffia Road	Under Design
Sidewalk Reconstruction	Heron Road	Bid Awarded
	Abbe Road	Bid Awarded
River Dam Access	Access Walkway for CT River Dam	Under Design

Source: Town of Enfield Engineering Department

[91] Connecticut Department of Transportation. 2005. New Haven-Hartford-Springfield Commuter Rail Implementation Study. Recommended Action, p.2

Table 38 2007-2010 Transportation Improvement Projects (TIP) for Enfield			
Project	**Description**	**Year**	**Cost**
Thompsonville Intermodal Center	Intermodal Transportation Station in Thompsonville	2007-2009	$2.93M
Post Office/Town Farm Roads	Reconstruction from Raffia Road to Abbe Road including designated Bikeway	2009	$11.44M
Pedestrian Access Over Rail	Engineering & Construction for Pedestrian access over Amtrak to CT River		$7.51M
South Maple Street Bridge	Engineering to Replace South Maple Street bridge and approaches	2009	$300K
U.S. 5 Bridge over I-91	Rehabilitation of Bridge 00445, U.S. 5 over I-91	2009	$14M
Route 190 Multi-Use Trail	Construction of multiuse Trail along Route 190, including sidewalks/trail on either end of Route 190 Bridge over CT River	2007 +	$3.25M
Source: Capitol Region Council of Governments TIP2007 Funding Matrix			

Route 190 Corridor Transportation Plan

In February 2004, the Capitol Region Council of Governments approved the Route 190 Corridor Transportation Plan. Route 190 is the main east-west roadway passing through north-central Connecticut. In the Town of Enfield, Route 190 is known as Hazard Avenue, and it extends east from the Town of Suffield to the Town of Somers. Route 190 Corridor Transportation Plan specifically addresses Route 190 in Enfield and Somers.

By 2024, it is anticipated that traffic on Route 190 will grow by approximately 20%. The plan addresses existing or anticipated safety and congestion issues, focusing upon solutions that preserve and enhance the character of the local communities. Within the Town of Enfield, the plan addresses four distinct areas: the Commercial Area, the Transition Area, Hazardville and Scitico.[92]

The Commercial Area along Route 190 is the section surrounding the Phoenix Avenue intersection, east of I-91 and adjacent to access points for Enfield Common, Enfield Square and Brookside Plaza shopping areas. Recommended improvements include intersection modifications at Route 190 and Phoenix Avenue, traffic signal phasing modifications and construction of two new northbound left-turn lanes. Traffic signals between I-91 and the Enfield Professional Park should be synchronized for improvement of traffic flow. A direct connection is recommended from Enfield Common and the Enfield Square mall. The plan also suggests bicycle and pedestrian improvements to improve access along Route 190, a pedestrian bridge over I-91 and a multi-use trail along Freshwater Brook and connecting to the shopping centers. The total cost for these improvements is estimated at $5.5 million.[93]

The Transition Area is defined as between Palomba Drive and the village of Hazardville. Significant commercial growth is anticipated for this area. It is recommended that Route 190 is widened between Palomba Drive and the Enfield Professional Park to allow for left-turn lanes. Sidewalks are suggested for the north side of Route 190 from Palomba to Elm Street, as well as five-foot shoulders to accommodate

[92] Capitol Region Council of Governments. 2004. Route 190 Corridor Transportation Plan, Executive Summary. p.2
[93] Capitol Region Council of Governments. 2004. Route 190 Corridor Transportation Plan, Executive Summary. p.3

bicycles. The plan also recommends the installation of a variable message sign for westbound traffic, describing conditions on I-91. The total cost for these improvements is projected to be $2.2 million.[94]

The plan focuses improvements in Hazardville around the Maple Street intersection. The goal is to improve congested conditions through intersection and streetscape improvements, while having minimal impact upon the historic character of the village. It is recommended that lane assignments be changed to create exclusive left-turn lanes in each direction. Right-turn lanes are also suggested in the eastbound direction, however the Town must decide if the improved traffic flow warrants the loss in potential new greenspace. The stop-bar on the southbound approach of Maple St. should be moved back to accommodate vehicles with large turn radii. The cost for these recommendations is $650,000.[95]

The Scitico improvement area is focused around the intersections of Route 190 with Scitico Road and Taylor Road, as well as with Broad Brook Road. The recommendations include the addition of an eastbound left-turn lane on Route 190 and a southbound left-turn lane on Taylor Road. It also recommends the partial or full closure of Scitico Road to traffic from Route 190 to relieve traffic issues in this area. At the Broadbrook Road intersection, the plan recommends a west bound left-turn lane on Route 190 as well as streetscape improvements for the entire area to improve aesthetics and provide pedestrian safety. The entire cost of improvements in this section is $1.2 million.[96]

Workforce Mobility

An analysis of the town's workforce mobility gives an indication of the sufficiency of the transportation infrastructure. Enfield's working population in 2000 was 21,479. Eighty-nine percent worked within the Hartford MSA. Of those residents who worked within the Hartford MSA, 88% did so outside of the central city. Those who worked in another MSA made up 10% of Enfield's working population and 57% of these worked in that MSA's central city. A small number of Enfield residents (0.46%) did not work in an MSA. [97]

Eight percent of Enfield's total working population had jobs outside of Connecticut.[98] At a regional level, 3 out of 4 workers worked outside their town of residence.

The most commonly used means of transportation to work in 2000 was a car, truck or van (95%). Less than one percent of workers used public transportation. Sixty percent of workers spent anywhere between 10 to 25 minutes traveling to their place of employment, while only one percent of residents worked from home. [99]

[94] Ibid p.4
[95] Ibid p.5
[96] Ibid p.6-7
[97] US Census Bureau. P28. Place of work for workers 16 years and over- MSA/PMSA level. Census 2000 Summary File 3 Sample Data.
[98] US Census Bureau. P26. Place of work for workers 16 years and over- State and County level. Census 2000 Summary File 3 Sample Data.
[99] US Census Bureau. P31. Travel time to work for workers 16 years and over. Census 2000 Summary File 3 Sample Data.

Parking

The Town of Enfield owns and operates three municipal parking lots that are publicly available to residents and visitors. All three lots are located within the Village of Thompsonville. A lot at Pearl Street and Asnuntuck Street contains 54 spaces. Another lot at Pearl Street and South Street has 31 spaces. And the final lot, located at Pleasant Street and Whitworth Street has 33 spaces. The Town does not own any publicly available lots in the Village of Hazardville.[100]

According to the Thompsonville Neighborhood Revitalization Strategy, drafted in 2001, the Village of Thompsonville does not have an overall parking deficiency. However, there are specific uses and policies that have caused some strain. The plan cites the area near the Lamagna Youth Center and the former Strand Theatre on North Main Street as requiring a greater amount of parking. However, in other sections of the Village, the plan recommends changes to the municipal parking policies and physical demarcation as a way for parking to better serve Thompsonville residents and visitors. Parking strategies need to focus upon creating turnover on primary streets and highly convenient public lots. The plan advocates for imposing a two-hour time limit on parking to ensure turnover as well as painted striping to ensure that drivers use parking spaces efficiently. Conversely, longer term parking would be better suited on side streets and the more remote portions of the existing lots. In regards to on-street parking, the plan suggests diagonal parking along Pearl Street, north of High Street, as well as on North Main Street in front of the Strand Theatre. To provide additional parking, the plan recommends that bus stops, loading areas and fire hydrant areas to be consolidated to reduce the amount of streetscape that is unavailable for parking. Finally, the strategy includes alterations to the zoning regulations, reducing the amount of parking required for each type of development, especially retail.

Bus Service

The Town of Enfield does not have its own bus system; however, there are commuter bus services available to residents, providing connections to the surrounding metro areas. Two regional agencies have operations in the Town: Springfield's Pioneer Valley Transit Authority (PVTA) and Connecticut Transit's (CTTransit) Hartford Division. The PVTA operates its Route Green 5 bus from Springfield, MA, serving the Massachusetts Mutual Campus in Enfield. The route runs Monday through Friday, with eight round trips between 6:50am and 6:15pm. Additional service is offered on Saturdays, with six trips running from 9:10am to 5:40pm. Connections are offered at the Massachusetts Mutual campus CTTransit's Route 5 on weekdays. The regular fare for the bus is $1.25, with options for daily ($3.00), weekly ($12.50) and monthly ($45.00) rider passes.[101]

CTTransit operates its Route 5 express service from Downtown Hartford to Enfield. During weekdays, the bus runs from 6:50am to 7:14pm and makes stops at the Massachusetts Mutual Campus, the Enfield park & ride at Freshwater Blvd. and in Thompsonville at Pearl & Franklin Street. Connections are available to the PVTA Green 5 bus line to Springfield on weekdays at the Massachusetts Mutual Campus. Additional weekend service is offered with one round trip to the Freshwater Blvd. Park & Ride lot. Regular fare for the bus, which traverses three zones, is $2.95. There are also 10-day ($26.50) and monthly ($100.00) passes available.[102]

[100] David Tuttle, Superintendent, Town of Enfield Building & Grounds Department. July 21, 2009. Personal Interview.
[101] Pioneer Valley Transit Authority. 2009. <http://www.pvta.com/uploads/schedules/G-05.pdf>
[102] Connecticut Transit. 2009. <http://www.cttransit.com/Fares/Express.asp>

The Peter Pan Bus Company operates a daily round trip from the Enfield Park & Ride at Freshwater Blvd. to the Foxwoods Casino Resort. One additional round trip is also offered on Friday and Saturday. The fare for a round trip is $27.00. There is no other intercity bus service directly serving the Town of Enfield. Bradley International Airport in Windsor Locks offers additional service to Peter Pan, as well as Greyhound, providing connections to their services throughout North America.[103]

Dial-A-Ride

Dial-A-Ride is a local transportation service within the Town of Enfield aimed to provide affordable means of travel for elderly and disabled residents. The service primarily offers bus service to anywhere within the Town of Enfield, however, car service provided by volunteers is also available for medical appointments outside of town. To utilize Dial-A-Ride, one must be a resident of the Town of Enfield at least 60 years of age or have a disability. The service requires an annual membership fee of $70 and operates Monday through Friday, 8:00am – 4:00pm. Dial-A-Ride identifies priorities for service, including medical appointments, grocery shopping, appointments, senior programs and visits to nursing homes, friends, libraries and restaurants.[104]

Rail Service

The Hartford Capitol Region is presently served by national Amtrak passenger rail service. The service connects the region to other major northeastern metropolitan areas and offers Enfield residents an additional transportation option. The State of Connecticut also has regional commuter rail, operated by Metro North, a subsidiary of the New York Metropolitan Transportation Authority, however, those lines do not enter the Capitol Region. The commuter rail ends in Waterbury, to the southwest of the Capitol Region.[105]

Federally-owned and operated, Amtrak is the dominant form of passenger rail travel in the United States, providing service to 46 states and over 500 destinations. The Windsor Locks Train Station is the primary Amtrak station for the Town of Enfield, providing service to Amtrak's Northeast Regional and Vermonter lines. The Northeast Regional line runs from Newport News, VA to Springfield, MA, servicing Washington D.C., Philadelphia, New York City, New Haven and Hartford, along the way. The route splits in New Haven, where passengers can also head towards Boston. The Vermonter line extends from Washington, D.C., through New York City, Springfield and Burlington, VT, to St. Albans in northern Vermont. This line is often utilized by travelers from major metropolitan areas on the eastern seaboard to access skiing facilities in Vermont. During 2008, approximately 16,000 travelers utilized the Windsor Locks station.[106]

Proposed Commuter Rail Service

The State of Connecticut has proposed a New Haven-Hartford-Springfield Commuter Rail Service to be established to serve the central spine of the State. The entire line would serve eight existing stations, three new stations, including one in Enfield, and utilize the existing Amtrak right-of-way. The service is proposed to operate 16 trains a day and projected to serve 630,000 passengers, annually. The line would connect to existing Metro North service that ends in New Haven, giving Enfield and the Hartford Capitol

[103] Connecticut Department of Transportation. 2004. New Haven Hartford Springfield Commuter Rail Implementation Study: Existing conditions Report. p. 4-17
[104] Town of Enfield. 2009. Enfield Dial-A-Ride. <http://enfield-ct.gov/content/91/115/5093/4301.aspx>
[105] Metro North Railroad. 2009. < http://www.mta.info/mnr/html/mnrmap.htm>
[106] Amtrak. November, 2008. Amtrak fact sheet. Fiscal year 2008: State of Connecticut.

Region a direct commuter rail connection to New York City. As a part of this project, an intermodal rail station would be constructed on the existing rail line in the village of Thompsonville.[107]

Air Service

The Town of Enfield is serviced well by several airports, to varying degrees. The primary commercial airport is Bradley International in the neighboring Town of Windsor Locks. Additional facilities serving Enfield and Connecticut residents are the Tweed-New Haven Airport, located in New Haven, Logan International in Boston, as well as the major New York City metropolitan airports of Kennedy, LaGuardia and Newark.[108] The town is also home to a small privately operated facility, Laurie Field Airport, as well as two heliports: Dairy Mart Farms Inc. Heliport and Della Heliport.[109]

Bradley International Airport is the largest and busiest air facility in the State of Connecticut and is the only state-owned airport with scheduled commercial and cargo air service. Located approximately ten miles southwest of Enfield and accessible via Interstate-91, the primary service area for the airport includes the State of Connecticut and western Massachusetts. The secondary service areas include eastern New York State, as well as portions of Vermont, New Hampshire and Maine. The tertiary service area for the airport includes the entire Northeastern United States, stretching from the southern borders of Pennsylvania and New Jersey to the northern tip of Maine. The airport serves 15 commercial airlines with over 270 daily flights and eight cargo carriers.[110] In 2007, the facility hosted 6.5 million passengers, following a two year decline from a record year of nearly 7.4 million passengers in 2005.[111] Cargo volume increased significantly at the airport between 2003 and 2006, increasing from 142,000 tons to 162,000 tons, served annually.[112] Since 2000, the Bradley International has undertaken several major capital improvement projects, including a new terminal, terminal-wide improvements, a new parking garage, as well as new customs and federal inspections stations.

Planned improvements for the future include the replacement of the oldest facility at the airport, Murphy Terminal, additional parking expansions, a high-speed taxiway and consolidated cargo and rental car facilities. All new projects will be funded from state and federal resources. Additionally, several transportation improvement projects have been proposed by *The Bradley Area Transportation (BAT) Study*[113] and the *Capitol Region Transportation* Study to strengthen the regions connectivity to the facility, increase safety and ultimately improve the airport's ability to spur economic development.[114]

Tweed-New Haven Airport is located sixty miles south of Enfield in the City of New Haven. The airport is owned by the City of New Haven and is served by US Air, which operates 12 daily flights to its regional hub in Philadelphia. Two additional airports exist within the State: Groton-New London Airport in

[107] Connecticut Department of Transportation. 2004. New Haven Hartford Springfield Commuter Rail Implementation Study: Existing conditions Report. p. 4-17
[108] Connecticut Department of Transportation. 2007. Moving Forward: Connecticut's Transportation Strategy. p.79-88
[109] Airport-Data. 2009. Laurie Field Airport. <www.airport-data.com/airport/CT19/>
[110] Capitol Region Council of Governments. 2007. Capitol Region Transportation Plan – p.39
[111] Connecticut Department of Transportation. 2007. Moving Forward: Connecticut's Transportation Strategy. p.79-88
[112] Capitol Region Council of Governments. 2007. Capitol Region Transportation Plan – p.39
[113] Connecticut Department of Transportation. 2007. Moving Forward: Connecticut's Transportation Strategy. p.79-88
[114] Capitol Region Council of Governments. 2007. Bradley Area Transportation Study – p.39

Groton and Sikorsky Airport in the Town of Stratford. However, neither of these airports continues to provide scheduled commercial air service. They each presently operate as general aviation facilities.[115]

Residents of Enfield and Connecticut also often utilize the larger air facilities in the Boston and New York City for long-distance travel.[116] Logan international is located 100 miles northwest of Enfield, offering domestic and international flights. Newark Liberty International, LaGuardia and JFK International Airports in the New York City metropolitan area are located approximately 130 miles to the south. LaGuardia primarily serves flights to the United States and Canadian cities, while Newark Liberty International and JFK International also offer domestic and international service.

Three small, private air facilities are also located within the Town of Enfield. Laurie Field is located on Abbe Road in Hazardville. The facility is not open to the public. The two heliports, Dairy Mart Farms Inc. Heliport and Della Heliport are located on Vision drive and Route 192 in the Town of Enfield, respectively. Each of these facilities is also not open for public use.[117]

Bicycle & Pedestrian Travel

Bicycle and pedestrian travel is becoming increasingly important in transportation planning for the Capitol Region. In 2007, the Capitol Region Transportation Plan included recommendations that promote the integration of biking and walking into transportation infrastructure, encouraging roadway designers to develop projects that are most accommodating of pedestrians and cyclists. Wherever possible, new road construction, as well as reconstruction must accommodate all forms of transportation, including pedestrians and bicycles, not just motorists. The plan calls attention to developing land uses that are friendly to bicycles and pedestrians, encouraging developers to considering all forms off access to their site. It is also recommended that all public transit be able to accommodate bicycle storage and/or racks to allow riders to transition easily between modes. The plan also suggests a series of initiatives to promote pedestrian and bicycle transportation through education, enforcement, safety promotion and the continued official support from government thought the bicycle and pedestrian committee.[118]

Following the Transportation Plan, the Capitol Region Council of Governments drafted the updated Regional Pedestrian and Bicycle Plan. The document's goal is to "create a plan that will lead to significant shifts in the number of people who choose to walk and bicycle for regular transportation. According to the 2006 American Community Survey, of workers in the Hartford Region, less than one percent bike to work and just over three percent walk. Compared to 2000 and 1990 data, bicycling has increased, marginally, and walking has also increased, following a decline in 2000. The level to which these numbers increase will be how the success of this plan is measured. Recommendations in the plan include the following:

- regional adoption of a complete streets policy, ensuring that all modes of transportation are reasonably accommodated for in-roadway projects
- creation of a survey document to enable municipalities to identify infrastructure needs
- development of regional design guidelines for pedestrian & bicycle facilities

[115] Connecticut Department of Transportation. 2007. Moving Forward: Connecticut's Transportation Strategy. p.79-88

[116] Connecticut Department of Transportation. 2007. Moving Forward: Connecticut's Transportation Strategy. p.79-88

[117] Airport-Data. 2009. Laurie Field Airport. <www.airport-data.com/airport/CT19/>

[118] Capitol Region Council of Governments. 2007. Capitol Region Transportation Plan – p.39

- complete the multi-use path systems in the region
- extension of existing trail systems
- development of effective bicycle commute routes
- continue local trail development
- creation of an on-road bicycle network
- develop additional bicycle storage and locking facilities
- public education about bicycle and pedestrian travel
- enforcement of local traffic laws that protect cyclists and pedestrians

Designated by the Regional Pedestrian and Bicycle Plan, the Town of Enfield presently has an extensive on-road bicycle network. Following is an inventory of designated bicycle ways in Enfield, including a proposed trail from Enfield Square to the village of Thompsonville as well as across the Connecticut River:[119]

[119] Capitol Region Council of Governments. 2008. Regional Pedestrian and Bicycle Plan. p.26-39.

Table 39 On Road Bicycle Network for Enfield (2008)		
State Rte. Or U.S. Hwy #	**Local Road Name**	**Section**
S.R. 220	Taylor Rd., Shaker Rd., Elm St.	State Line to U.S. 5
S.R. 192	North Maple St.	State Line to Bacon Rd.
U.S. 5	Enfield St., King St.	State Line to S.R. 510
S.R. 191	Broad Brook Rd.	S.R. 190 to East Windsor Town Line
S.R. 190	Hazard Ave.	Palomba Dr. to Somers Town Line
S.R. 510	Depot Hill Rd.	U.S. 5 to Old Depot Hill Rd.
S.R. 514	Franklin St.	S.R. 190 Bike Path to U.S. 5
	Taylor Rd., Shaker Rd., Elm St.	S.R. 220 to S.R. 190
	Bacon Rd.	S.R. 192 to S.R. 220
	Old Depot Hill Rd.	Depot Hill Rd. to River Rd.
	River Rd.	Old Depot Hill Rd. to East Windsor Town Line
	Raffia Rd.	South Rd. to Post Office Rd.
	Simon Rd.	Raffia Rd. to East Windsor Town Line
	North Main St.	U.S. 5 to Main St.
	Main St.	North Main St. to South River St.
	South River St.	Main St. to Asnuntuck St.
	Asnuntuck St.	South River St. to Prospect St.
	Prospect St.	Asnuntuck St. to Maple Ave.
	Maple Ave.	Prospect St. to Spring St.
	Spring St.	Maple Ave to S.R. 190 bike path
	Cranbrook Blvd.	Freshwater Blvd. to Palomba Dr.
	Palomba Dr.	Cranbrook Blvd. to S.R. 190
	South Rd.	U.S. 5 to SR. 190
	Post Office Rd.	U.S. 5 to Raffia Rd.
	Town Farm Rd.	Abbe Rd. to S.R. 191
	* Town Farm Rd.	Abbe Rd. to Raffia Rd.
	* Route 190 Trail	Freshwater Blvd. to U.S. 5
	* Route 190 Trail	Across Connecticut River
* Note: Proposed Bikeway		
Source: Capitol Region Council of Governments Regional Pedestrian & Bicycle Plan		

Findings

- The Town of Enfield transportation network must be developed to amply serve local residents, as well as to provide new opportunity for travel, recreation and economic opportunity. Following are findings on the present transportation conditions:
- A proposed New Haven-Hartford-Springfield Commuter Rail Line includes an intermodal station in Enfield which will provide new opportunity for Enfield tourism, economic development and inter-municipal transportation
- The Town of Enfield, as well as the Capitol Region have put a significant emphasis upon developing bicycle and pedestrian accommodations throughout the town, including a focus on a "complete streets" policy for all new transportation projects
- New multi-use trails are to be constructed along Town Farm & Post Office Roads as well as along I-190 from Freshwater Boulevard to U.S. 5 and across the Connecticut River.
- Traffic conditions in the town are generally good with no major problem areas. The locations with the highest levels of congestion include Routes 190 and 220, east of I-91, near major retail centers
- The town is well serviced by air transportation due to its close proximity to Bradley International Airport, the largest airport in Connecticut, located in nearby Windsor Locks
- Enfield residents are presently served by rail transportation in Windsor Locks, which has the nearest Amtrak station. The future New Haven-Hartford-Springfield Commuter Rail project will bring a new station to the village of Thompsonville
- Public transportation in Enfield consists of one bus route, each, to the cities of Hartford and Springfield
- Transportation services for the elderly and disabled are provided by Dial-A-Ride
- The Route 190 Corridor Transportation Plan provides a blueprint for road improvements on Route 190 to relieve current congestion issues and accommodate traffic growth while preserving the landscape and character of the neighborhoods along the roadway

Historic & Cultural Resources

Culture is "a shared, learned system of values, beliefs and attitudes that members of society use to interpret the world and relate to one another and the built and natural environments."[120] Culture typically refers to visual and performing arts, historic preservation, heritage, humanities, and film. Tourism, which occurs "when an individual takes a trip outside of his/her usual environment for a short period of time,"[121] often depends on access to a community's historic and cultural resources.

This chapter of the community inventory identifies Enfield's defining historic and cultural resources. It outlines issues that may be preventing the community from effectively protecting its historic and cultural resources and using them to create economic development. The chapter also briefly describes the framework for historic preservation at the federal, state and local levels. A reference list of available preservation tools (awards, funding sources and regulations) will be included in the implementation section of the Plan.

Historic Preservation & Culture Policies

Role of the Federal and State governments

The National Park Service, a branch of the Department of the Interior, is the agency charged with enforcing the country's historic preservation regulations; promoting the best treatment for buildings, structures, sites, objects and districts with historic value; and distributing public funds for protection and enhancement of formally recognized historic resources.

Federal regulations set the standard for historic preservation throughout the United States, but not all buildings, structures, sites, objects and districts with historic value are subject to these standards. Compliance with federal standards is mandatory if a project in which a federal agency is involved will impact historic resources, or if federal funds and tax credits are used.[122] The four standards for the treatment of historic properties are:

- **Preservation** - maintain the property as it was evolved over time, protecting certain features and materials from damage and stabilizing those that are in poor condition
- **Rehabilitation** –retain the historic character of the property while allowing different uses, certain alterations or additions
- **Restoration** – return the property to its appearance at a given point in time by removing evidence of other periods
- **Reconstruction** – re-create parts of a property that no longer exist for interpretive purposes

Detailed information about these standards is available at http://www.nps.gov/history/hps/tps/standards_guidelines.htm More publications offering technical preservation guidelines are available at

[120] Connecticut Commission on Culture & Tourism. Strategic Plan 2005-2008. Pg. 9
[121] Ibid.
[122] When Standards Are Regulatory. Retrieved on June 25, 2009 from http://www.nps.gov/history/hps/tps/standards/standards_regulatory.htm

http://www.nps.gov/history/hps/tps/publications.htm An array of technical and financial assistance programs is accessible through the NPS's Heritage Preservation Services at http://www.nps.gov/history/hps/index.htm

The most significant recognition of a historic building or site is listing in the National Register of Historic Places. A property can be listed in the Register if it meets certain age, integrity and significance criteria, such as being at least 50 years old, maintaining original appearance, and having been associated with significant events, activities, architectural or engineering achievements, landscapes or people of the past.[123]

State Historic Preservation Board, a branch of the CT Commission on Culture and Tourism, reviews applications for National Register nomination.[124] The State Historic Preservation Council works on day-to-day issues like establishment of local preservation districts, preventing unreasonable demolition of National Register properties, and visually marking places with historic significance.[125] Properties that are listed on the State Register receive special consideration under the State Building and Fire Codes, ADA, and Lead Poisoning Law. Properties that are listed in the National Register are automatically listed in the State Register.[126]

State & Local Plans

State Conservation and Development Policies Plan of 2005 - 2010

The State of Connecticut recognizes the value of historic properties in local communities. The variety of architectural styles present in a community defines neighborhoods and gives them a distinct "sense of place and permanency."[127] The state also understands that historic properties, due to their architectural value and historic significance, attract people with a wide range of interests, allowing communities with well-preserved historic areas to profit from tourism. For these reasons, the state encourages municipalities with declining urban neighborhoods to view historic properties in their full potential. The plan says that historic buildings "can become a focal point for reviving blighted areas… [and] older homes and structures that have been designated on the State and/or National Register of Historic Places can be an asset in helping to create neighborhood investment."[128] With proper recognition and management, historic properties can make greater economic contributions.

The Plan addresses historic preservation issues in its policies regarding conservation areas. It is state policy to protect historic resources by avoiding structural development on a site or building, except if the proposed development is consistent with the preservation value of the site or building. In addition, any

[123] Where to Start (How to list a property). Retrieved on June 25, 2009 from http://www.nps.gov/nr/national_register_fundamentals.htm#benefits
[124] About Us. Retrieved on June 25, 2009 from http://www.cultureandtourism.org/cct/cwp/view.asp?a=2127&q=293822&cctPNavCtr=|#49219
[125] About Us. Retrieved on June 25, 2009 from http://www.cultureandtourism.org/cct/cwp/view.asp?a=2127&q=293824&cctPNavCtr=|#44406
[126] State Register Fact Sheet. Retrieved on June 25, 2009 from http://www.cultureandtourism.org/cct/cwp/view.asp?a=2127&q=413220
[127] Office of Policy and Management, State of Connecticut. Conservation and Development Policies Plan for Connecticut 2005-2010. Pg. 27
[128] Office of Policy and Management, State of Connecticut. Conservation and Development Policies Plan for Connecticut 2005-2010. Pg. 71

properties within a state-designated Historic Area, including state and National Register Historic Districts must conform to the guidelines or standards established for that district.[129]

Connecticut Commission on Culture and Tourism Strategic Plan 2005-2008

The Connecticut Commission on Culture and Tourism (CCT) is a state agency that resulted from the consolidation and reorganization of several individual arts, culture and tourism agencies. It works in partnership with the state's five tourism regions, the Connecticut Trust for Historic Preservation, and the Connecticut Humanities Council. The Commission's Strategic Plan clearly defines the new agency's mission to:

- Market Connecticut to business and leisure travelers
- Develop and promote the arts
- Recognize, protect, preserve and promote historic resources
- Interpret and present Connecticut's history and culture, and
- Promote the state as a film location

These activities aim to improve the quality of life and economic vitality in the entire State of Connecticut. One of the key ideas expressed in the Strategic Plan is that historic and cultural resources make extensive contributions to economic development. In fact, the Plan recognizes that Connecticut has many "enviable assets…that [can] build stronger, more diverse and vibrant communities… [and] contribute to the overall economic success of the state." The challenge is to get people to realize the value of the resources in their community, and to make local historic and cultural resources much more visible as part of the entire state's heritage.

Consequently, the Plan says the state's tourism efforts will be focused on culture. One of the objectives is to evoke pride and educate residents about the wealth of cultural opportunities in Connecticut, by creating an identity campaign that is capable of generating economic gains at the local level. To do this, the state proposes to increase access to marketing expertise and resources. It plans to provide support, funding, coordination, communication, regulatory oversight, marketing, promotion, fulfillment, advocacy, and research services to local government and industry. Major campaigns that will highlight the state's historic and cultural resources will use: advertising, public relations, online marketing initiatives, direct mail, specialty publications (including Connecticut Vacation Guide, Official Tourism Map, and Special Events Calendars), and a tourism hotline and website.

Building Quality Communities: Historic Preservation in Connecticut

The State of Connecticut Commission on Culture and Tourism published its federally-mandated state historic preservation plan in 2005. The Plan creates an argument for the positive impacts of historic preservation on an individual's and a community's sense of identity, neighborhood pride, spirit, quality of life, and prospects for economic progress. It explains how historic preservation projects within urban historic districts have contributed significantly to their economic, social, physical, and aesthetic revitalization. It presents numerous examples of successful historic preservation projects completed across Connecticut, and concludes that:

- historic preservation projects create 5 to 9 more jobs than new construction for every $1 million of expenditures

[129] Office of Policy and Management, State of Connecticut. Conservation and Development Policies Plan for Connecticut 2005-2010. Pg. 6

- historic building rehabilitation allows vacant buildings to be reused and returned to the tax rolls
- historic preservation projects increase property values near the project site
- rehabilitated historic areas attract reinvestment
- heritage tourism creates economic development
- for every dollar the state invests in promoting tourism opportunities, it generates a return of $51 from the private sector

In addition to explaining the benefits of historic preservation and heritage tourism, the Plan lists the types of historic resources that are most at risk in Connecticut. These include buildings, structures and objects related to: Industrial heritage, urban landscapes, rural landscapes, transportation things (scenic roads and bridges), and cemeteries. Finally, the Plan lists the Commission on Culture's goals and strategies to develop quality communities in Connecticut by enhancing local heritage resources.

The Economic Impact of the Arts, Film, History and Tourism Industries in Connecticut

The State of Connecticut recognizes that there are opportunities to "increase economic and other benefits by promoting cultural events and preserving and interpreting settings that display Connecticut's cultural heritage". A state economic impact study describes the impact of tourism activities in the state. The following table provides information related to the impact of various kinds of tourism attractions within the River Valley Region, which includes the Town of Enfield.

Table 40 Tourism Figures within the River Valley Region

Visitors to:	River Valley Visitors
Travel and tourism attractions	3,826,589
Historical attractions, venues & institutions	1,226,333
Arts attractions, venues & institutions	1,230,575
Visitor Total	**6,283,497**

Source: Center for Economic Analysis, University of Connecticut and Connecticut Commission on Culture and Tourism. Table I-7: Connecticut Vacation Guide Reported Visitors by Tourism Region. The Economic Impact of the Arts, Film, History and Tourism Industries in Connecticut. December 2006. Pg.15

Existing challenges at the state level in CT are data management, resource protection and documentation, education, and planning and fundraising efforts. The Town of Enfield does not have any major heritage sites of the state, but it doesn't mean it doesn't have potential.

Town of Enfield 1999 Plan of Conservation and Development

The Town of Enfield has a history that dates from 1630. The diversity of people that have settled here had an impact in the amount and style of buildings that have been developed over the years. Today, the Town faces many challenges in maintaining that diversity and number of historic properties in good conditions. Along with that, it is struggling to maintain traditional neighborhoods in good shape. For this reason, the Plan includes a series of neighborhood revitalization strategies to guide residential and commercial rehabilitation and revitalization in conjunction with historic preservation. This neighborhood strategy is specific to three neighborhoods that have special historical role in the community: Thompsonville, Hazardville, and Enfield Street. A summary of each strategy follows:

Thompsonville - Neighborhood revitalization accomplishments from 1992 to 1998 in Thompsonville include: increased occupancy in Bigelow Commons, improved access and directional signage from I-91, improved landscaping and lighting throughout the neighborhood, completion of several private rehabilitation and preservation projects, installation of a walking and biking path, and construction of a boat launch on the Connecticut River.

Some of the Plan's recommendations going forward in 1998 were marketing the neighborhood to commercial activities that could play a distinctive niche, supporting reuse of landmark buildings, and implementing a main street management model. The Plan also suggested focusing on increasing occupancy and enhancing existing residential and commercial properties, and placing less emphasis on infill development.

Enfield's 1998 POCD described many of the issues faced in the Thompsonville neighborhood. The village continues to have scattered buildings in need of repair and renovation, and several in need of serious rehabilitation or even demolition. It explained that the neighborhood lacked a retail identity that could give it a competitive market position to attract more residential and commercial development. Part of the difficulty in Thompsonville's ability to attract development is that the nearby mall offers more competitive retail facilities. This makes commercial reuse in Thompsonville a hard sell. Other problems include pedestrian safety issues crossing Route 5, lack of public transportation and lack of adequate off-street parking. The neighborhoods many institutional uses were described as one of the village's strong points as it has helped maintain the area's stability.

Enfield Street - The middle section of Enfield Street is a historic district, and most of the Plan's recommendations address this section. Accomplishments from 1992 to 1998 include reduction of residential zoning densities to maintain character of the neighborhood and limit traffic; and creation of a local historic district to ensure that modifications to historic properties are consistent with preservation standards. 1998 Plan recommendations include dedicating historic buildings to municipal or non-profit functions that will not have a detrimental impact to the building after rehabilitation improvements have been made by the Town.

Hazardville - The Hazardville Center is designated as a "neighborhood conservation area" in the State POCD. The state identifies neighborhood conservation areas as places where it "proposes to support homeownership, improved energy efficiencies, historic preservation, removal of unsafe structures, improved delivery of public services, maintenance of residential continuity of the neighborhood and removal of environmental hazards."[130] However, as of 1998, the area had not yet been designated a local historic district. The Plan recommended creating a Hazardville Special District Zone similar to the one used in Thompsonville, and mentioned that there was a proposal to preserve and publicize historic areas and structures related to the Hazard Powder Works.

Enfield's Historic & Cultural Resources

The Town of Enfield is rich in history and still retains many buildings from its past. Various sources of information were used to verify this, and over 150 historic resources are currently identified as possessing some historical value. Unfortunately, the Town of Enfield does not have an official record of buildings, sites or districts that have been given local, state or federal historic designation. The only exception is the Enfield Street Historic District. The Town's Planning and Zoning Department retains the original list of properties that were identified as historic or contributing to the district's historic character. The Department has made efforts to periodically rectify this list, but maintaining an accurate record of the ownership status and condition of the properties within the district is nearly impossible because there is no

[130] Town of Enfield. 1998 Plan of Conservation and Development. Pg. 95

administrative process that requires property owners and Historic District Commission to report maintenance and construction activities in the district. The Town also lacks a comprehensive survey of all properties or sites that have potential for local, state or federal historic designation regardless of their inclusion within a district.

Historic Districts

Many communities throughout the US have at least three "layers" of historic districts: local, state and federal. The Town of Enfield has four historic districts listed in the State and National Registers of Historic Places, but only one of them is also a local historic district. A local historic preservation commission is supposed to enforce local, state and federal historic preservation regulations, but the Town does not have such a commission. The Town's only historic preservation commission is the Enfield Street Historic District Commission, which can only govern preservation issues within that district.

A local historic preservation commission is supposed to review and determine the impact of physical alterations to the exterior of a historic property or demolition of a historic property that visible from the public right-of-way. The commission also issues opinions for consideration by other commissions, such as the Planning and Zoning Commission, regarding the impact of new construction within a historic district. The purpose of this is to ensure that any alterations, construction or demolitions will be preserve or be consistent with the character of the district. Local historic districts, however, are not authorized to regulate the color or use of a historic building. Use is regulated according to local zoning.

Enfield Street Historic District

Enfield Street is the historic north-south route from New Haven to Massachusetts and Vermont (I-91 is the modern route). The District was listed in the National Register of Historic Places in 1979. The National Register-designated portion covers the area extending from 1106 to 1492 Enfield Street.

By September 2009, the Town Planning and Zoning Department will have completed preservation guidelines for the Enfield Street Historic District. The guidelines will educate residents about the kind of work on the exterior of a historic property that requires a permit application and a Certificate of Appropriateness. It will explain the difference between normal repair and maintenance and significant exterior improvements, and the standards for exterior work. The guidelines are expected to clarify residents' questions and alleviate the perception that the district is excessively regulated.

Notable resources in the area include:

- **Enfield Congregational Church** – Located at 1295 Enfield St. It was built in 1849 and is still the tallest building in Enfield. It was the site of the famous sermon "Sinners in the Hands of an Angry God."
- **Enfield Street Grade School** – Located at 1314 Enfield St. Built in 1954.
- **Enfield Town Meetinghouse / Old Town Hall** – Located at 1294 Enfield St. Built in 1775, today it is used as a museum and as the headquarters of the Enfield Historical Society. Listed in the National Register in 1974.
- **Fire House** – Located at 1296 Enfield St. Built in 1955.
- **Martha Parsons House Museum** – Located at 1387 Enfield St. Built in 1782 by John Meacham as a parsonage. Used today as a museum owned by the Enfield Historical Society.
- **Thomas Alcorn Elementary School** – Located at 1010 Enfield St. Built in 1925.

- **US Postal Service Station** – Located at 1430 Enfield St. Built in 1810 for Ephriam Potter on land owned by John Pease.

Enfield Shakers Historic District

In 1788, a Shaker community was established in Enfield after multiple acts of resistance from townspeople who objected to their religious practices. The Enfield Shakers, as they are known today, were the only Shaker community in Connecticut, but they had a notable presence due to their garden seed industry and their efforts to promote agricultural progress in Connecticut. The Shaker population, however, decreased substantially by the early 1900s, and those left moved away from Enfield in 1917.

Figure 26 Enfield Shakers Village ca. 1910. The village is now the site of the Correctional Institute. Retrieved on June 9, 2009 from http://en.wikipedia.org/wiki/File:Enfield_CT_Shakers.jpg

The Enfield Shakers Historic District was listed in the National Register of Historic Places in 1979. The District roughly encompasses the area bounded by Shaker, Taylor and Cybulski Roads.[131] District boundaries include all remaining buildings and farmland; but only fifteen of the original structures remain. Many of the remaining buildings are currently used as private residences that are not open to the public, while others are on property owned by the State of Connecticut Corrections Department. All of the remaining buildings are considered significant because they have fairly well-preserved exteriors and because they represent all the different aspects of Shaker life.[132] Even though the buildings are not open to the public, the district is included in the National Park Service's Shaker Historic Trail travel program.[133]

Figure 27 Remaining Shaker buildings on the Department of Corrections property.

The Town of Enfield Planning and Zoning Department is working with the state and private property owners to find resources and alternatives to protect the property and resources within it. One of the main threats to the sites is encroaching industrial development southeast of the district, which may compromise visual continuity within the district.

Remaining resources in this district are:

- The **South Family** buildings – Located near Moody and Cybulski Roads. Include several small shops, a house and barn.

[131] http://www.cultureandtourism.org/cct/lib/cct/CT_Properties_on_the_National_Register.pdf
[132] Town of Enfield Department of Planning and Zoning. A Brief History and Self-Guided Tour of Enfield and Its Historic Resources. Preservation Week 2003.
[133] Enfield Shakers Historic District. Retrieved on June 24, 2009 from www.nps.gov/history/Nr/travel/shaker/ect.htm

- The **Church Family** farm buildings – Located near Taylor and Shaker Roads on State Corrections Department property. Includes an old meetinghouse and several barns.
- The **North Family** buildings and sawmill site – Located along Shaker Rd. about a mile west from main cluster of buildings.

Hartford Bigelow Carpet Mills Historic District

In 1828, the first carpet mill in Enfield was established. It was known as the Thompsonville Carpet Manufacturing Company, which was reborn in 1854 as the Hartford Carpet Company, and finally closed in 1971 under the name of Bigelow-Sanford Carpet Company. The Village of Thompsonville where the factory was located was named in honor of Orrin Thompson, founder of that company.

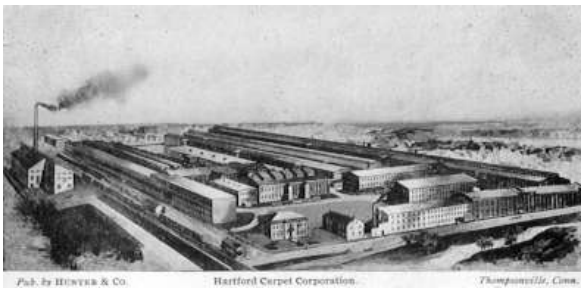


Figure 28 The carpet factory. Retrieved on June 9, 2009 from http://home.att.net/~mkm-of-enfct/EHS/EHS carpet.html

Today, the Carpet Mills have been renovated and converted into apartment buildings, which are listed in the National Register of Historic Places. Rehabilitation of the buildings was the largest historic tax credit project ever done in the State of Connecticut.

Figure 29 Thompsonville's carpet factory redeveloped as an apartment complex known as Bigelow Commons.

The Hartford Bigelow Carpet Mills Historic District was listed in the National Register of Historic Places in 1994. The District is roughly bounded by Lafayette St., Hartford Ave., Alden Ave., Pleasant St., High St., Spring St., South and Prospect Streets.[134] The Enfield Planning and Zoning Department has submitted an application to expand the boundaries of the Hartford Bigelow Historic District.

In the 1920s, the firm was known as the Bigelow-Hartford Carpet Company and it employed 13,500 people, making it the largest carpet mill complex in the country. The District includes approximately 150 former workers' dwellings, which were all company built and have a distinctive architectural type, such as Gothic Revival cottages from the 1840s, utilitarian tenements from the 1880s, and suburban-like development of the 1920s. These show changing trends in employee housing.[135]

Notable resources in or near the district include:

- **Bigelow Commons** – Located at 55 Main St. It is a former carpet mill factory complex comprised of 6 buildings, all of which are now apartments.

[134] http://www.cultureandtourism.org/cct/lib/cct/CT_Properties_on_the_National_Register.pdf
[135] Town of Enfield Department of Planning and Zoning. A Brief History and Self-Guided Tour of Enfield and Its Historic Resources. Preservation Week 2003.

- **Casket Factory** – Located River St., west of the railroad tracks.
- **Site of ferry landing** – Located at the end of Main St. Used today as a public boat launch, it used to be a way for people to move between Enfield and Suffield.
- Powerhouse ruins
- Enfield Manufacturing Company stockinet mill

Hazardville Historic District

In 1835, black powder processing operations were taking place in Powder Hollow. In 1843, Col. Augustus Hazard -the man after whom the Village of Hazardville was named- established the Hazard Powder Company, which replaced Loomis, Denslow and Company. The Hazard Powder Company supplied a significant amount of the gunpowder used during the Civil War, but after decades of declined production, it closed in 1913 after a major explosion. Today, much of the Powder Hollow area in which manufacturing activities took place has reverted to open space.

Figure 30 Hazardville Center ca. 1906. Retrieved on June 9, 2009 from http://en.wikipedia.org/wiki/File: HazardvilleCTMainStEastviewCA1906.jpg

The Hazardville Historic District was listed in the National Register of Historic Places in 1980. The District's boundaries are roughly CT 190 and CT 192, and include the Powder Hollow area.[136] The Enfield Planning and Zoning Department is currently in the process of digitizing the district's exact boundaries.[137]

Figure 31 Hazardville Center in early Spring of 2009. Hazard Avenue appears to be a busier street today than in the early 20th century.

The value of the Hazardville Historic District lies in the fact that it retains its character as a small 19th century village. While few buildings lack individual distinction, most of them still have the original building materials, workmanship and architectural style of the time. The area's setting still retains much of its integrity, although many modern elements have slightly altered its appearance. Furthermore, the Powder Hollow area has significant archaeological potential.[138]

Notable resources in or near the district include:

- **The Hazardville Institute** – Located at Hazard Ave. and Maple St. Built in 1869, it was used as a public hall, and abandoned in the 1970s. It was saved from demolition by Town of Enfield and the

[136] Retrieved on June 24, 2009 from http://www.cultureandtourism.org/cct/lib/cct/CT_Properties_on_the_National_Register.pdf
[137] Personal communication with Roger Alsbaugh. July 15, 2009.
[138] Town of Enfield Department of Planning and Zoning. A Brief History and Self-Guided Tour of Enfield and Its Historic Resources. Preservation Week 2003.

Hazardville Institute Conservancy through a 99-year lease. Currently undergoing interior rehabilitation. It is listed in National Register of Historic Places.

- **Hazardville United Methodist Church** – Located at 330 Hazard Ave.
- **Connecticut Valley Tobacconist** – Located at 337 Hazard Ave. It used to be the old Hazardville Pharmacy.
- **Hazardville Grammar School** – Located at 359 Hazard Ave. Built in 1864, today it houses a child day care center.
- **St. Mary's Episcopal Church** – Located at 383 Hazard Ave.
- **Powder Mill Barn** – Located at 32 South Maple Rd. It was a horse barn of the Hazard Gunpowder Company. It was turned into a square dancing hall in 1959 by Ralph Sweet, and it is currently used for special events and scheduled activities.
- **Scantic River Rapids Park** – Located along the Scantic River, with access on South Maple St. It was the site of the Hazard Gunpowder Company. The foundations of approximately 21 buildings from a complex originally of 200 buildings still remain.

Cemeteries

Enfield's cemeteries can also be considered historic resources. Some gravestones date from 1696 and the area had several well-known stone carvers. Groups like the Enfield Historic Society, the Enfield Cemetery Association and various individuals have documented the history of Enfield's cemeteries, gravestones, stone carvers and their clients.[139]

- Enfield Street Cemetery
- Hazardville Cemetery
- King Street Cemetery
- Thompsonville Cemetery
- Old Hazardville Cemetery
- Holy Cross Cemetery
- Muslim Cemetery
- Old St. Patrick's Cemetery
- St. Adalbert's Cemetery
- St. Bernard's Cemetery
- St. Patrick's Cemetery
- Thompsonville

Figure 32 Enfield Street Cemetery is one of the oldest cemeteries in Enfield.

[139] http://www.enfield-ct.gov/content/686/106/default.aspx

Cultural Resources

Other sections that are forthcoming: theaters, museums, art galleries, performing arts centers, farmers' market, archaeological sites, heritage trails, state cultural funding programs, major partners; Enfield Cultural Arts Commission]

Notable cultural resources include:

- Polish National Home
- Old Train Station
- Old Round Library

Current Conditions & Issues

There are archaeological resources in Powder Hollow. The Town of Enfield has been involved for over 30 years with the state in efforts to protect that part of the Scantic River.

At the moment, the US Department of the Interior has the official record of all National Register listed properties in Enfield. The State Historic Preservation Council has the original National Register nomination package, but Town Planning and Zoning Department Staff mention that they have not been able to get anyone to send a copy of that package. Documentation is also supposed to be on file with the Town Clerk. Other than this, there is no official record of historic properties in the Town of Enfield. The Planning and Zoning Department maintains the record of the Enfield Street Historic District up-to-date and has rectified the records with the assessor's parcel and lot information. However, the information about style and date built on file in the assessor's database is not based on extensive historic research about the properties.

The historic preservation process is not integrated into the building code and permit approval process so the town lacks an administrative process and formal guidelines and regulations about the proper treatment of historic properties. The planning department is involved in historic preservation in an ad-hoc manner, issuing statements and recommendations to the appropriate commissions if it becomes aware of a project that might have an impact on historic resources within a historic district.

GIS data of the historic district and its boundaries are not available. The Planning and Zoning Department has been working with the GIS Administrator in the Assessor's office to delineate the districts' boundaries. The district boundaries are generally 250 ft from the right of way, but not including the right of way. The boundaries expand from that occasionally to accommodate a particular property.[140]

Certified Local Government Status

The Town of Enfield is applying for Certified Local Government status with the National Park Service and the state office of historic preservation. The program has four requirements: establish a preservation commission, create a historic preservation ordinance, maintain an active survey of local historic resources, and participate in the National Register process. There may also be additional requirements in the state. Once the Town is certified, it will have access to technical assistance and funds for:

[140] Personal communication with Roger Alsbaugh, Assistant Planner, Planning and Zoning Department, Town of Enfield. July 15, 2009.

- staff and commission member training,
- public outreach materials,
- architectural, historical and archaeological surveys,
- design guidelines and preservation plans, and
- rehabilitation and renovation projects.[141]

Town staff indicated that this certification will help the Town institutionalize a process for protecting historic properties. Once this is accomplished, it will allow the Town to address preservation issues in an integrated manner, allowing impact to historic properties to be considered with economic, environmental impacts, smart growth and transit-oriented development issues. The application has the support of all Town commissions.

[141] National Park Service. CLG Opportunities. Retrieved on June 9, 2009 from http://www.nps.gov/history/hps/clg/CLG_opportunities.html

Findings

- A book summarizing the highlights of Enfield's history declared: "Most people pass by these buildings never knowing their stories, unaware of the town's rich and varied history."[142] This statement reflects what many Town residents have expressed throughout this planning process, and underscores the need to promote the Town's historic and cultural resources locally and regionally.
- There is a need for a townwide survey of historic properties. Only one district, the Enfield Street Historic District, has a comprehensive listing of historic properties. In addition, no historic agricultural resources inventory is available in Enfield.
- There are very few historic buildings on the state and national register of historic places. Listing on these registers would enable property owners and the Town to secure funding for restoration work.
- Several studies and plans, as well as the public input conducted throughout this planning process, indicate that historic preservation regulations are not enforced in Enfield. This leads to inappropriate changes to historic buildings, which lead to loss of architectural integrity and deterioration of neighborhood character.
- The Enfield Shakers Historic District is engulfed by industry. Although maintaining the privacy of households that currently reside in the historic buildings, the Town can take measures to ensure that the architectural integrity of the buildings and remaining landscape qualities of the area are protected for future generations.
- Natural resources in Enfield are not systematically considered part of the community's heritage, despite the historic use of various waterways and topographic features in the Town's industrial development.
- The Town has initiated an effort to attain the Certified Local Government status, which will enable it to qualify for numerous historic preservation programs at the state and federal levels.
- The Town does not have a commission that can rule on preservation issues throughout the entire town.

[142] Miller, Michael K. Images of America: Enfield. Acadia Publishing. 1998. Pg. 7

Parks, Recreation & Open Space

Enjoying time outdoors by ourselves or with others is one way many people have of getting away from daily troubles. Parks and open spaces provide a place where people can relax and interact with others outside of a work environment. Recreation centers are other important places where people can participate in activities that take their mind off their worries. Communities throughout the US recognize the importance of recreational opportunities for personal growth and community development. Public recreation centers and parks are provided at low or no cost to users to ensure equal access.

The POCD for the Town of Enfield discusses parks, recreation and open space to understand better the specific role and condition of parks, recreation and open space in the community. This chapter presents an inventory of parks, open space and recreational programs operated by the Town. The chapter discusses the jurisdictional and administrative framework that governs many of the recreational resources presented. A map is included to show the location of all parks, recreation centers, trails and open spaces and the way in which they are interconnected. The chapter concludes with a summary of findings for the Plan.

Parks

Policies, Plans and Studies

State Plan of Conservation and Development 2005-2010

The State Plan of Conservation and Development (S-POCD) uses a systematic approach to land use planning. One of the main ideas expressed in it is that a greater balance and connectivity should exist between built and natural areas. Park development should be a key element of neighborhood revitalization, and restoration of natural features in urban areas is encouraged. This should help to make nature and passive recreation accessible to persons earning low-income or who are transit-dependent or otherwise disadvantaged. The Plan also mentions that natural features in urban areas have potential for being the focus of local environmental education programs. In regards to undeveloped areas, the Plan recommends using design techniques that leave a portion of the site undeveloped or minimally developed for passive recreation as a way to mitigate a development's negative impact on the area and any sensitive resources.

Town of Enfield 1999 Plan of Conservation and Development

The Town POCD lists a series of goals, objectives and recommendations regarding the town's natural resources, agricultural lands and open space areas, as well as recreational facilities and programs.

With regards to parks and recreational facilities, the goal is to provide an adequate amount, variety and distribution of recreational facilities, but objectives are only focused on maintenance and enhancement of existing facilities. Consequently, recommendations are focused on improvements needed for town parks, school fields and community centers and improvements to the parks administration and communication system. There is apparently a need to be more efficient when working with Board of Education, the State

DOT and DEP. The recommendations, however, list new sidewalks, pedestrian and bike trails, and community centers.

Townwide Facilities Planning Phase, Recreation Facilities Improvements Project

This study identified three main users of Enfield's recreational facilities: schools, sports leagues and the general public. The study found that Enfield residents perceive that existing recreational facilities do not meet their needs. Many park facilities in town are designed and available mostly for organized sports, and there is a need for unstructured recreation space for other users. The public identified need for picnicking, sledding, kite flying areas and trails for walking, biking canoeing and kayaking. They also mentioned community gardens, dog parks, band shells, bird sanctuaries, and regulatory and informational signage.

Sports fields are overused because they are used by school and town teams for physical education classes, team practices and tournaments. The general public uses these fields as well for unstructured activities (i.e. "pick me up games") when available.[143] League sports had need for additional football and soccer facilities in order to fulfill needs in 2000. Improvements to pedestrian amenities and circulation were determined to be needed. Maintenance was noted as a concern should facilities be expanded or new ones created and population or use projections are not fulfilled. Proper field/court lighting needed for night games and permanent concession stands for town teams who do fundraising through concessions. Drainage is also an issue in many fields and for many teams. One of the key recommendations was creating a central sports facility to ease scheduling of field use and maintenance as well as making it easier for families with children in multiple teams to attend games.[144]

The study found that there are many informal trails throughout town, but no formal pedestrian/bike trails; and that there is a desire to increase public access to riverfront areas. The Plan mentioned that there has been consideration of acquiring land along the river to connect with the Scantic River Greenway. The Connecticut River Greenway does not extend all the way to Enfield, but there has been consideration of connecting the town to neighboring communities.

The study identified six priority sites for improvements: Powder Hollow Bowl, Green Manor, Brainerd Park, Asnuntuck Community Technical College, Mancuso Park and Shaker Recreation Area. Most of the improvements to these parks involved wildlife habitat and historic resource interpretive signage, play areas and parking areas.

[143] Town of Enfield. Phase I – Townwide Facilities Planning Phase. Recreation Facilities Improvements Project. November 2000.
[144] Town of Enfield. Phase I – Townwide Facilities Planning Phase. Recreation Facilities Improvements Project. November 2000.

Park Inventory

The Town of Enfield has 28 publicly owned recreation facilities. These facilities occupy 465 acres. In addition, there are 5 privately owned facilities available for public use. The Department of Public Works and the Recreation Department co-share in parks and recreation programs and facilities.

Table 41 Enfield's Recreation Facilities

Code	Name	Description	Quantity	Total Acres
MP	Mini Park	Small, specialized facilities that serve a concentrated or limited population or a specific group, such as a tot lot for young children	0	0
PG	Playground	Areas to fulfill the play needs of children between six and fourteen years of age, often located at or near elementary school sites	2	8.61
PF	Playfield	Areas to fulfill the recreational needs of older children and adults, often located at or near junior or senior high schools	11	300.8
NP	Neighborhood Park	Areas for active and/or passive recreation, generally large enough to provide for a variety of activities, located within neighborhoods for easy access	8	84
CP	Community Park	Similar to neighborhood parks but larger in scale, often with unique natural features or special features that serve the entire municipal population	3	65.23
SA	Special Area	Areas devoted to special uses (golf courses, beaches, and other unique facilities) or natural areas preserved as open space	4	7
TOTAL			**28**	**465.64**

Source: Town of Enfield, Connecticut. Plan of Conservation & Development. May 20, 1999. Pg. 66

Needs Analysis

Table 42 Park Types and Acreage Needed Based on NRPA Standards

Park Type	Park Size	Ideal Acres Per 1,000 Persons	Ideal Acres[1]	Current Acres[2]	Acres Needed
Mini	≤ 1	0.25 - 0.50	11.30 – 22.60	1	10.30 – 21.60
Neighborhood	1.1 - 15	1 – 2	45.21 – 90.42	85.91	0 – 4.51
Community	15.1 - 25	5 - 8	226.06 – 361.69	97.15	128.91 – 264.54
Regional	25.1 - 200	10+	452.12 +	281.58	170.54 +

[1] These values are based on acres per person times the total population of the Town (45,212).

Source: 1999 Town of Enfield Plan of Conservation and Development, US Census 2000, NRPA and peter j smith & company, inc.

The previous table creates a classification of parks that is based on the size of the park. The table then shows a standard for the amount of space needed to accommodate 1,000 persons in each type of park. This can be used to estimate how much space per person is appropriate given the town's total population.

The total amount of parkland in town can then be compared to the ideal amount of space that should be used for each type of park. This gives the Town an idea of how much additional parkland is needed to provide the ideal amount of park space. While other factors need to be considered in order to make a more accurate determination of the community's recreational needs, this analysis provides a rough, first idea of how well current needs are met. In this case, the table shows that there is adequate supply of neighborhood parks. The supply of mini parks, community parks and regional parks is deficient and should be examined more closely.

Recreation Facilities & Programs

Recreation facilities in the Town of Enfield are managed by the Department of Buildings and Grounds, which also coordinates scheduling the use of Town sports fields. Recreation programs are organized by the Recreation Department, which is located in the Angelo Lamagna Center at 19 North Main Street.

Enfield's recreation programs are available to Town residents and non-residents; however, non-residents can participate based on space availability and must wait to enroll 1 week after the registration period for residents. Year-round activities include swimming, martial arts, art and performing art lessons; and cooking and science activities, preschool playgroups. The Department also offers babysitter and lifeguard training programs. Most programs are geared to children and teenagers, but there are adult programs as well. Programs for adults and whole families include town-sponsored bus trips to several cities and events in the region. There are frequently trips to New York City, Boston and Springfield to see Yankees and Red Sox games, do sightseeing, and Broadway shows.

The Recreation Department's busy season is in the summer, when there are activities in the Lamagna Center and at various outdoor locations. During the summer, the Department offers all of its year-round activities, plus outdoor movie nights. Summer-only activities include half and full day camps with different activities or sports activities. Sport camps are offered in Enfield Public Schools facilities. The Department also rents "picnic packs" to families.

The Recreation Department also organizes the Town's Fourth of July celebration, one of the few activities to attract the community to the Thompsonville area. This celebration showcases local restaurants, artists and businesses with events like Taste of Enfield and Enfield Expo. There are also sport events, a parade, a carnival, a fishing derby, concerts and activities for children. Unique activities organized during other seasons include a torchlight parade, carol singing, house lighting contest, and a parents' holiday night out.

Partnerships

The Recreation Department publicizes its programs by sending brochures to every home with students attending public schools in grades K-8. The Department would like to reach more town residents and is exploring other ways distribute these brochures including: direct mail, newspaper insert, bulk pick-up locations. The Recreation Department has also been working with the Scantic River Watershed Association, a local non-profit, to expand their hiking and conservation activities along the Scantic River.

Issues

Recreation Department and the Planning and Zoning Department Staff indicated that there is a strong bias towards sports in Enfield. As a result, of all the necessary projects identified in the Town's Recreation Facilities Improvements Project – Phase I Townwide Planning Phase of 2000, only school athletic field upgrades have been completed. Development of other facilities, particularly for passive outdoor recreation, has not been addressed yet.

There is also the problem that adults want swimming opportunities too, but most times the pool is scheduled for children's lessons. The pools at schools are limited in size. There also appears to be a need for more classes for seniors and meeting space for community groups.

The Recreation Department currently shares the Lamagna Center with other community service agencies and the Police Department. The size of the building is not enough to comfortably accommodate all agencies. Parking is not sufficient either to accommodate employees and visitors. For this reason, the Recreation Department staff has indicated that it would be ideal to have their own building. According to the Planning and Zoning Department, the Recreation Department has a property on Prospect St. that is used as a storage facility and has room for expansion. The facility was an old horse stable, which is deemed to be one of the most intact and stable historic structures in the area. Relocating the Recreation Department here would give them more space and help to preserve a unique historic building.

Recreation Department Staff observe that participation in their programs has increased as families look for more affordable recreation alternatives. They expect participation to keep growing in the next couple of years as families weather the national economic downturn and realize how inexpensive public recreation programs are. However, this will put more strains on staff. The Department's workload is more than what the current number of employees can handle. The Recreation Department currently has 3 full-time staff and over 70 volunteers for the basketball program. Seasonal or part-time staff is hired as needed, but budget constraints make volunteers' help vital to the Department's operations.

In terms of funding, their money comes from the town budget. They charge for all the programs, but starting on July 1st the Department will be able to keep extra cash they make in a special revenue fund.

Trails

Policies, Plans & Studies

State Plan of Conservation & Development 2005-2010

The State POCD has a number of policies to address trail development in Connecticut. The Plan conceives of trails as a necessary link between built and natural areas, and specifically recommends that trails link revitalization areas and main streets to river corridors and greenways, and affordable and mixed-income housing areas. The Plan encourages communities to create links between them and neighboring greenways, regional trails and open spaces, and other available corridors whenever possible. The Scantic River Park is listed in the State POCD as one of the state's official state greenways.

Connecticut Statewide Pedestrian and Bicycle Transportation Plan

The Connecticut Statewide Pedestrian and Bicycle Plan is a statewide master plan used to further develop infrastructure for pedestrians and cyclists. The Plan explains the benefits of supporting the development of a non-polluting, non-motorized means of transportation, citing positive impacts to individual and environmental health. Safety is an important objective, so the Plan recommends separating bike lanes from the main roadway when feasible, and allowing enough space and visibility on sidewalks and on paths between buildings to minimize unexpected conflicts between cyclists, pedestrians and motor vehicles.

The Plan includes maps of existing and proposed locations for pedestrian and cyclist routes. There is a trail system along the Connecticut River, but it completely bypasses the Town of Enfield. As shown on Figure 1, the trail system does not cross over the river in Enfield.

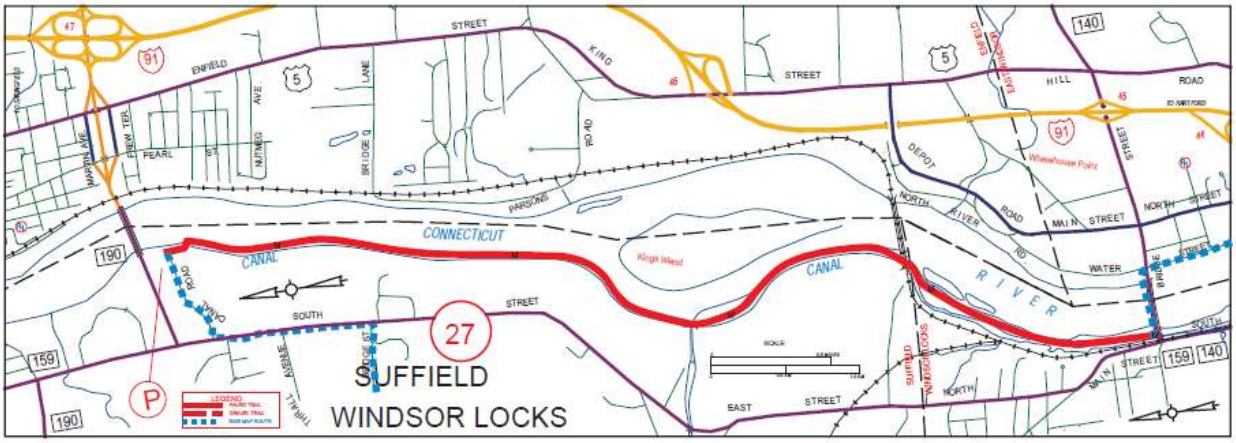


Figure 33 Trail along the Connecticut River in the Towns of Suffield and East Windsor. On this map, the solid red lines represent paved trails; red dashed lines, gravel trails; and blue dotted lines, bike trails. Source State Pedestrian and Bicycle Transportation Plan.

Capitol Region Transportation Plan: A guide for transportation investments through 2035

This plan has policies recognizing that the public right-of-way must serve all users, not just motor vehicles. It also says that one of the goals is to build upon the interregional greenway system.

As shown on Figure 34, there is an off-road bicycle route on the eastern portion of the Town of Enfield, which connects the town to Massachusetts and East Windsor. There are also two on-road bike routes: one east-west route connecting Enfield to Suffield and Somers, and one north south route connecting the town to Suffield, Windsor Locks and East Windsor. The east-west on-road intersects with the off-road route, almost forming a loop from river to countryside.

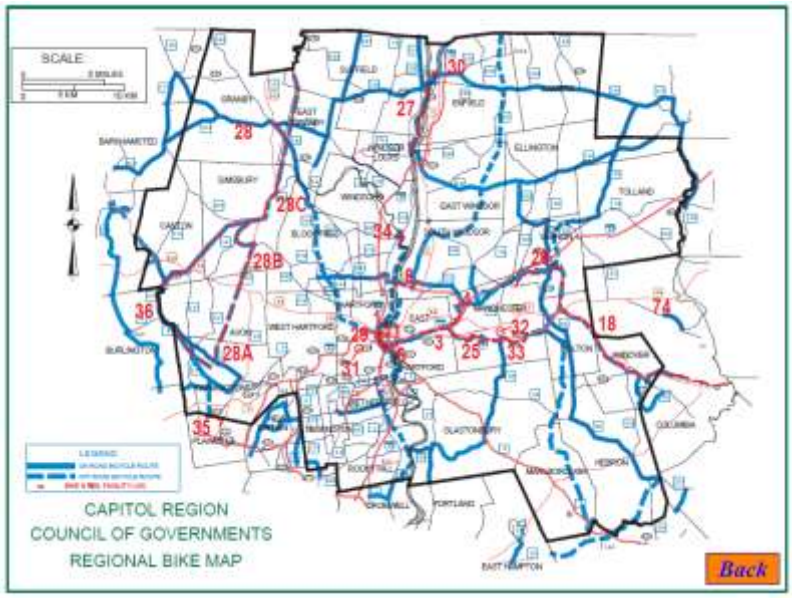


Figure 34 Regional bike route network. Solid blue lines show on road bicycle routes; dashed blue lines show off road bicycle routes; and red numbers show bike and pedestrian facilities.

Draft 2005 Connecticut Recreational Trails Plan

The Draft 2005 Recreational Trails Plan is a status report on the state's progress creating a system of recreational trails. The Plan describes the main community and user group issues related to trail development and use, and it presents a series of goals and objectives for trail management and funding trail projects that address issues raised by the public.

As of September 2005, there are over 1,000 miles of trails in the state. The trails go through public, private, federal, state and municipal lands.

One of the Plan's goals is to make a continuous, statewide trail system. This goal stems from the knowledge of the tendency of long-distance trails (regional, statewide and interstate) to attract a greater number of users and visitors. To achieve this, the state has prioritized acquiring trail segments that can complete existing trails, especially if the property is within the Blue Blazed Trail System. Another reason acquiring land is to reduce the threat of losing private trails to changes in ownership or to development.

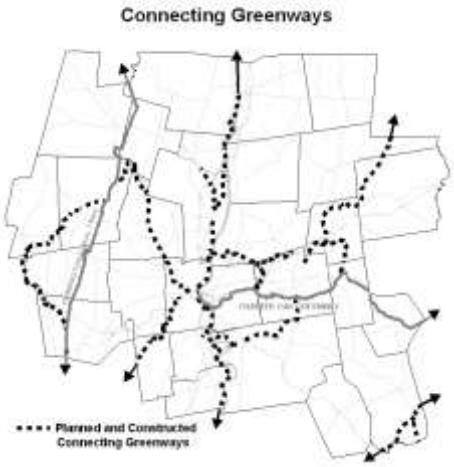


Figure 35 This image shows a network of existing and planned greenways throughout Connecticut, but no linkages to the Town of Enfield. Source: 2007 Capitol Region Transportation Plan.

Another goal is developing multi-purpose trails that can accommodate a greater variety of users (including ATV, mountain bikers, horseback riders), not just hikers. This goal is significant for two reasons: several user groups are critically underserved (which often leads to illegal use of trails).[145] In addition to multi-purpose trails, providing parking and access to people with disabilities and creating blueways along streams and rivers are considered part of the strategy.

One of the greenways listed is the Scantic River Park, which "encompasses land along the Scantic River, providing a critical link in a corridor connecting Somers, Enfield, East Windsor, and South Windsor. The Scantic River corridor has been identified by the DEP as a resource protection area."

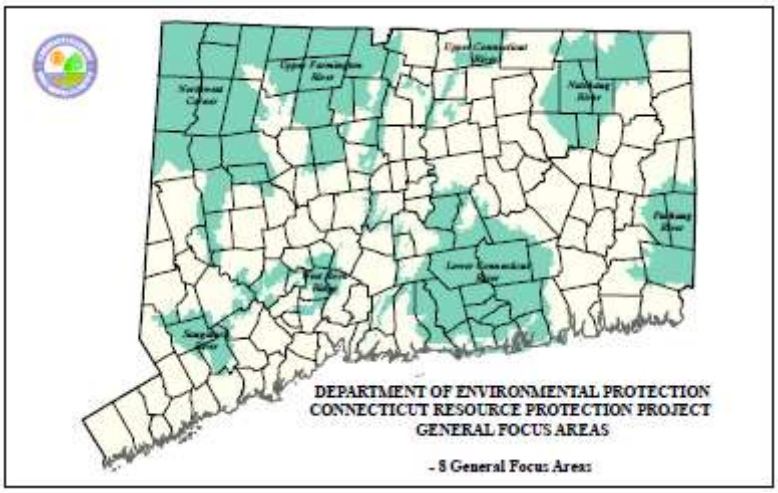


Figure 36 Resource Protection Areas in Connecticut – This map from the SCORP shows the southeastern part of Enfield and the Connecticut River waterfront to be part of the State's focus areas for environmental protection.

Figure 5 shows that the Scantic River Greenway is the only state-designated greenway in Enfield, which clearly stands isolated from other greenways.[146]

Powder Hollow is the 2nd section of the Scantic Spring Splash Canoe Race, held annually in March and attracting paddlers from all over the east coast. The section is not suitable for novice paddlers and certain areas can be portaged or scouted after the dam at Springborn Labs (approximately a 2 mile stretch). Other parts of the Scantic River in Enfield are not navigable. The first section of the canoe trail begins in Somersville.

Other organizations

Approximately 700 miles are part of the Blue Blazed Trail System managed by the Connecticut Forest and Park Association. The Connecticut Forest and Park Association is an important state partner because it organizes many volunteers who help in trail maintenance and many landowners who preserve open space and grant public access through their properties. Only hiking is allowed in Blue Blazed trails that are

Figure 37 Greenways in Connecticut

[145] State Parks Division, Connecticut Department of Environmental Protection. Draft Connecticut Recreational Trails Plan. September 2005.
[146] Connecticut Department of Environmental Protection. State Comprehensive Outdoor Recreation Plan 2005-2010.

maintained by the Connecticut Forest and Park Association.[147]

Funding

The Connecticut Recreational Trails Program (RTP), which administers funds from the Federal Highway Administration (FHWA), awards grants to state and local agencies and organizations based on the priorities listed in the Plan.[148]

Open Spaces

"In 1992, the Connecticut Greenway Committee was established by the Governor. This committee, made up of citizens from every part of Connecticut was directed to develop a detailed proposal for a permanent Greenway program, which would provide assistance to municipalities and private organizations. The Greenway Committee defines greenways as follows:

"*Greenway: A corridor of open space that may protect natural resources, preserve scenic landscapes and historical resources, offer recreational opportunities, and provide a place for people to walk, bicycle and move from place to place. Greenways can be located along a waterway or other defining natural feature, such as a ridgeline, or along a man-made corridor such as an unused right-of-way, abandoned town road, woods road, or historic barge canal. A greenway can be a greenspace along a highway or around a village. Greenways can provide the "missing links" to connect existing protected areas, and to give people convenient accesses to the outdoors. A greenway can be as wide as a river valley or as narrow as an abandoned rail bed.*

Greenways can serve many purposes. Rural greenways can preserve natural habitats and wildlife migration routes, encourage restoration of environmentally valuable landscapes, and support both recreational and educational programs. In our cities and suburbs, greenways can encompass both natural and man-made features, and they are a way for communities to create convenient access to local attractions, fresh air and green lands."[149]

Agencies & Organizations

The Town has representatives in the **Connecticut River Assembly**, which reviews and comments on applications pertaining to land use within the Connecticut River conservation zone. This assembly is a group of 14 towns and meets monthly.

The **Conservation Commission** is the Town of Enfield's advisory body on open space and farmland conservation matters. While it does not have regulatory powers, it issues opinions for consideration by other commissions and proposals for approval by the Town Council. The Conservation Commission's other responsibilities include maintaining an inventory of protected open space and farmland, and identifying lands for potential public acquisition (through fee simple purchase or conservation easements), and promoting the community's resources. The Commission has been involved in efforts to protect land along the Scantic River, obtaining official Connecticut Greenways Council greenway designations, and organizing educational forums with the Northern Connecticut Land Trust. The Commission has stated its support of Town plans to provide public access and protected open space along the Connecticut River adjacent to rail line.

[147] State Parks Division, Connecticut Department of Environmental Protection. Draft Connecticut Recreational Trails Plan. September 2005.
[148] State Parks Division, Connecticut Department of Environmental Protection. Draft Connecticut Recreational Trails Plan. September 2005.
[149] Connecticut Statewide Pedestrian & Bicycle Transportation Plan. Chapter 6.

Policies, Plans & Studies

State Conservation and Development Policies Plan 2005-2010

The State Conservation and Development Policies Plan acknowledged the multiple values of undeveloped lands, whether they are public or privately owned. According to the Plan, protected open space is valuable as an outdoor recreation resource, and it can attract regional tourism, enhance communities' quality of life amenities, and have positive effects on health.

Due to the rapid pace of land consumption, acquisition of open space is a state priority. By acquiring open space, the state guarantees that (1) the land will remain undeveloped and (2) building will be minimal, occurring only as necessary to provide public access, and keeping with the character of the place. The Plan set a goal and a timeline for acquiring open space: Acquire 21% of the total land area of the state by 2023. The goal is then split into two directives: 10% is to be acquired by the state government, and 11% will be acquired by municipalities, private non-profits and water utilities with state assistance.

In spite of this, the state is aware of its limited "ability to compete with development in setting aside land [which] leaves an undesirable margin for environmental degradation."[150] The Plan reminds other agencies and the public "acquisition will not be the only tool required to protect natural resources in the future. Coordinated efforts combining acquisitions with easements, public education, regulation, and technical assistance to landowners will be increasingly vital…"[151] The Plan also defined the use of those properties, indicating that the state's policy is that protected open space should be multi-purpose and allow it to be used for the long term, and be available to the public.

State Comprehensive Outdoor Recreation Plan (SCORP) 2005-2010

The State Comprehensive Outdoor Recreation Plan (SCORP) is a study of supply and demand of recreational facilities and activities in Connecticut. The study considers not just state-owned property, but also municipal, federal, educational, land trust, wildlife viewing and commercial recreation facilities or sites.

One of the most significant elements of the SCORP is its insight to state residents' recreational preferences. As part of the planning process, a user demand survey was conducted with members of the general public, expert/avid recreationists, and local officials. According to the survey, 93.8% percent of all survey participants engaged in land-based activities, 85.3% water-based activities, and 54.2% in winter activities. The most popular activities were:

- Walking, running, hiking (UFI 95.3)
- Beach activities (UFI 62)
- Visiting historic sites and museums (UFI 36.7)
- Swimming (UFI 62-54, depending on swimming facility)
- Biking (UFI 40.9)
- Bird and wildlife watching (No UFI given)
- Sledding (UFI 26.8)

[150] Office of Policy and Management, State of Connecticut. Conservation and Development Policies Plan for Connecticut 2005-2010. Pg. 56
[151] Office of Policy and Management, State of Connecticut. Conservation and Development Policies Plan for Connecticut 2005-2010. Pg. 58

- Camping (UFI 20)
- Canoeing, kayaking, tubing (UFI 20.8)

These activities are listed in decreasing order by the number of people that participate in them. In parenthesis, the use frequency index (UFI) is given to indicate how often survey participants are engaged in these activities. The activities with both a higher number of participants and a higher UFI are the activities with the highest demand throughout the entire State of Connecticut. On the other hand, many people who participated in the study indicated that they do not partake in recreational activities for some of the following reasons:

- Not knowing what is being offered (36.3%)
- Not knowing the location of facilities (27.3%)
- Facilities too far from their residences (23.1%)
- Fees are too high (17.6%)
- Facilities are not well maintained (15.4%)
- Individuals lack a personal interest in recreation (11.8%)

The inventory of recreational facilities is incomplete due to differences in the availability data locally; but the study does mention that, the state average level of service for open space is 6 persons per acre of open space or 166 acres of open space for every thousand persons.

According to the public, maintenance and improvement of existing facilities is needed, but additional facilities that can support the activities listed previously is also important. Local officials add that most existing recreational facilities adequately meet the needs of adults between the ages of 19 to 54, but neglect the needs of younger children, teenagers and older adults.

The study identified the participant's top three priorities were: maintenance and improvement of existing facilities (59%); acquisition of more open space (47%); and development of new outdoor recreation facilities (45%). In addition, it mentioned that the state DEP will also prioritize multi-use trail development, particularly if it closes the gap between individual trails within the state's trail network.

The significance of these findings for the Town of Enfield is the opportunity to align its priorities and projects to those of the State. The study explains that DEP will select project requesting grant funding from the Land and Water Conservation Fund (LWCF) based on an "open project selection process" that evaluates each project using a rating and ranking criteria based on the recommendations, strategies and priorities of the 2005-2010 SCORP.

The Green Plan: Guiding Land Acquisition and Protection in Connecticut 2007-2012

The Green Plan is a document that provides further detail about the approach used to meet the state's 21% open space acquisition goal. This plan lists the state open space goals, threats and challenges, priorities for acquisition and protection, programs and funding available, and outlines the process. "With a total of 3,205,760 acres in Connecticut, 673,210 acres must be preserved to meet the goal." The Plan's priorities for acquiring open space are: properties that provide water access, natural areas, scenic and historically significant properties, greenways, forests, special opportunity purchases. The acquisition program was set with a timeline and end date of 2023. As of January 1, 2007, the state has acquired 78%

of the land acreage goal. The exact acreage protected by state government partners has not been compiled, but it is estimated to be 229,798 acres.[152]

Some of the challenges involved in acquiring open space are: landowner's financial flexibility, location, character and size of parcel, current property values at the time of sale/donation. These factors affect per acre cost. Another challenge is providing long term stewardship or management of protected lands. Non-profits cannot use grant funds for management of the area after it has been purchased.

Scantic River State Park Master Plan of 1989

A feasibility and suitability study for the Scantic River State Park was completed in 1968. This plan recommended preserving the floodplain as open space and creating a central recreation complex in Enfield. The recreation plan was never implemented due to fiscal constraints, except for a total of 326 acres that were acquired by the State. The master planning study resumed efforts to create the park, and public input meetings were held in all municipalities intersected by the Scantic River. These meetings revealed that Enfield residents wanted group camping, fishing, swimming, hiking, biking and historic interpretation facilities at the park. The study found that swimming was unsuitable due to the characteristics of the river and conflicts with state policy on natural resource-based recreation. Feasible activities and facilities included interpretive facilities at Powder Hollow, floodplain acquisition, fishing, hiking and biking trails. The total cost of land acquisition was estimated at $2 to 3 million; facilities development at $8 million; staffing at $75,000 and equipment at $90,000.

Town of Enfield 1999 Plan of Conservation and Development

The Town POCD lists a series of goals, objectives and recommendations regarding the town's natural resources, agricultural lands and open space areas, as well as recreational facilities and programs.

Due to the Town's physical characteristics, topography and aquatic resources are the main focus of many of the Plan's goals. A key objective is to protect water quality and prevent flooding hazards by using land use regulations such as overlay zoning, use and area restrictions and acquisition of vacant riverfront land as preferred tools. The plan also recognizes the value of agricultural lands as open space and has the objective to prevent the loss of large tracts of farmland. It recommends protecting farmland through existing state programs like purchase of development rights, or town acquisition of specific development rights.

Creating an open space network in which corridors (greenways, walking and biking trails) link destination sites, neighborhoods, parks and schools is a large component of the Plan. Most recommendations involve acquiring land through a public entity such as the Town or State of Connecticut. The recommendations list several strategies to consider, including establishing a municipal source of funds for open space acquisition, leasing or exchange programs. Another recommendation was creating local laws that enable state property tax incentive laws.

A Program of Action: Open Space and Farmland Preservation in Enfield

This report was completed as a joint effort between the Town of Enfield Conservation Commission, the Town of Enfield Planning and Community Development Department, and the Capitol Region Council of Governments. It was prepared with funding from the Connecticut Department of Environmental Protection and conducted simultaneously with the Town of Suffield's open space and farmland preservation planning process.

[152] The Green Plan: Guiding Land Acquisition and Protection in Connecticut 2007-2012. Connecticut Department of Environmental Protection. September 2007. Pg. 3

The key arguments for open space and farmland protection in Enfield are centered on the following ideas:

- Humans derive satisfaction from the natural world, therefore natural areas improve quality of life,
- The town has unique natural resources,
- Open space and farmland require less public expenditures than other land uses, and
- Protected open space and farmland can actually generate revenue

The report suggested that:

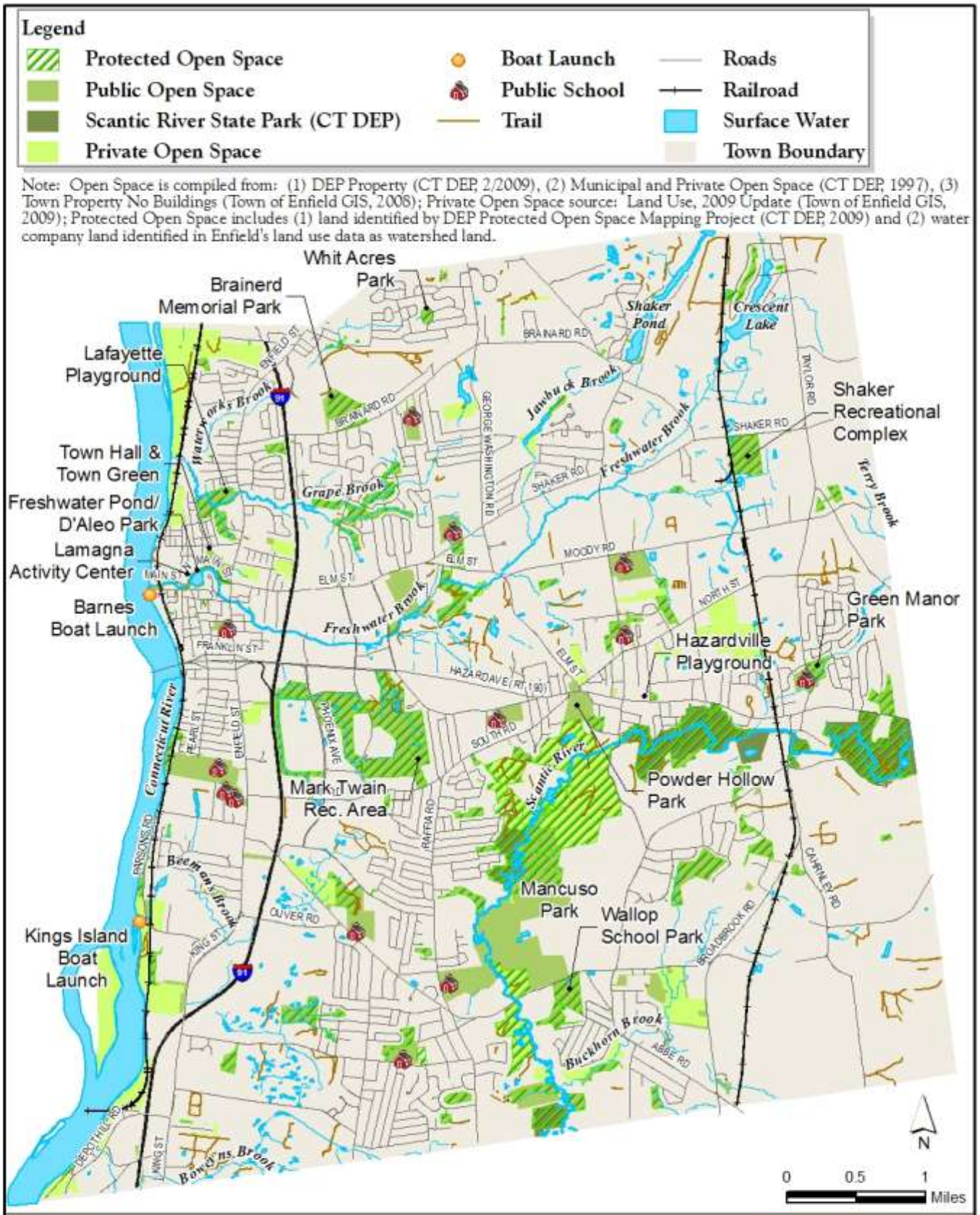
- Open space preservation is not a priority;
- The community is concerned about the effectiveness of existing land preservation programs;
- Elected and appointed leaders and staff lack of knowledge of the regulations they are tasked with enforcing; and
- The town lacks a decision-making process that integrates many disciplines and is representative of a broad range of community interests.

The report explored different strategies and planning tools that could be used for open space and farmland preservation in Enfield; and provided an initial list of projects and target properties. The report identified 50 properties that should be targeted for preservation within the Connecticut River, Scantic River, Beaman's Brook, Route 190 corridor, South Maple Rd., Abbe Rd., Powder Hill Rd., King's Island, Enfield Dam area, the former Town landfill and certain utility landholdings. The plan recommended creating a greenway system that is linked to educational facilities; has good access points to trails and fishing spots; and acts as a buffer between different land uses.

The report also suggested that open space preservation would be more effective if the Town collaborated with other public entities and private organizations. Collaboration would help obtain and maximize funding, acquire real estate property or property rights, ensure adequate protection of wildlife and habitat, and develop recreation and tourism amenities. Unfortunately, the Town Council never adopted this Plan, preventing the Planning and Zoning Department from institutionalizing the Plan's policies, and the Conservation Commission from moving forward with the Plan's priority projects.

Findings

- Time and time again, Enfield residents express that existing recreational facilities do not meet their needs. On one hand, there is a need for more unstructured or passive recreation opportunities. On the other, the sport fields need to be shared better between users and maintained in good conditions.
- A recurring issue is poor working relationship with other government agencies such as the Board of Education, the State DOT and DEP. Effective liaisons are needed in order to secure funding and push through open space projects that have long been talked about, but not completed.
- Recreational trails are scattered throughout the Town of Enfield. They are not interconnected and have limited accessibility. Furthermore, many town residents are unaware of their existence. Public outreach and education about the town's available open spaces and trails is long overdue, despite a growing demand for them.
- There is limited access to the town's main waterways, the Connecticut River and the Scantic River. Boat launches, waterfront trails are needed as well as a comprehensive system of signs to guide residents and visitors to those recreational areas.
- According to a need analysis based on NRPA standards, the Town of Enfield needs small pocket parks throughout the town, as well as large open spaces in order to meet the recreational needs of the population.
- The SCORP results suggest that Enfield's problems with lack of information about recreational facilities and the activities offered are not just local, but part of a trend throughout the entire state. This presents an opportunity for Enfield to develop projects that would give more visibility to its parks and open spaces and seek funds available through the state that would help the state simultaneously achieve its own goals as stated in the SCORP.
- The State of Connecticut has plans to develop long-distance trails along the Scantic River. The Town can take advantage of this initiative and apply for funds that may be available for hiking and blueway trail development.
- State plans indicate that land acquisition is the most common strategy of open space conservation. It is also costly, but not the only alternative. Municipalities such as Enfield have many opportunities to develop alternative open space conservation programs through partnerships with private landowners, state purchase of development rights, among others. The Town needs to explore this further and ensure that its land use policies and regulations promote open space conservation. While there is no guideline as to the open space protection goals at the local level, all open space conservation efforts in Enfield would be contributing to the state's conservation goals.



Parks, Recreation and Open Space

Plan of Conservation & Development - Town of Enfield, CT

DESIGN PLANNING, INC.
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Natural Resources & Climate Change

The natural environment is the foundation upon which communities are built. The purpose of this chapter is to identify the kinds of natural resources that exist in Enfield and determine how they can contribute to the community's vision for the future. The chapter will also examine the condition of those resources and try to shed light on how people's actions and land use decisions can affect their environment. A review of the regulations that govern the use of the town's resources will help to make sure that the goals, objectives, policies and actions of this Plan will be consistent with other local, regional, statewide and national regulations and policies. Most importantly, the information in this chapter will help the Town identify areas that are suitable for development, those that can support limited development, and those that should be protected from development.

Geographic Location

Enfield is a town of approximately 34 square miles in north-central Connecticut, along the border with Massachusetts. The Connecticut River separates Enfield from Suffield to the west. Enfield shares its southern border with East Windsor and Ellington and its eastern border with Somers.

Topography

The topography ranges from 14' - 42' above sea level along the Connecticut River and rises as one progresses eastward. Elevations greater than 240' are found along the eastern edge of the town, generally east of Taylor Road and Cahrnley Road. The town's highest elevations of 348' – 444' are found in the southeast corner of the town.

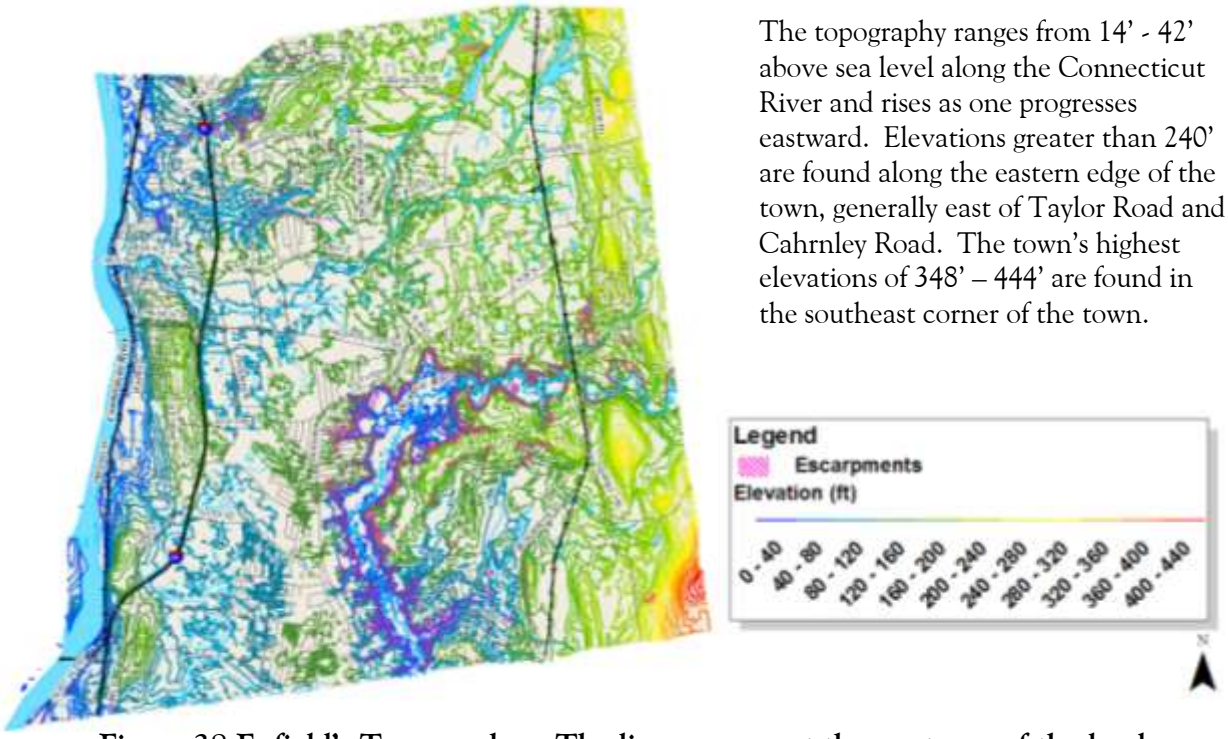

Figure 38 Enfield's Topography – The lines represent the contours of the land. Blue contour lines represent lower elevations; reds, higher elevations.

Soils

The Natural Resources Conservation Service (NRCS) of the United States Department of Agriculture (USDA) classifies soils within the US, and compiles the information in "soil surveys". The Soil Survey for Hartford County, Connecticut includes detailed descriptions of the kind of soils present in Enfield, their suitability for different uses, and development constraints. The Soil Survey is particularly useful for land use planning because it describes the soils' suitability for on-site sewage treatment (septic systems) and agricultural use, their susceptibility to erosion, and the presence of wetlands.

Highly Erodible Soils

Several types of soils within the town are highly erodible. These are referred to as "terrace escarpment soils" or "escarpments." Significant erosion problems are associated with these soil types, particularly along the banks of the Scantic River. Escarpment soils are regulated by the "Inland Wetlands and Watercourses Regulations of the Town of Enfield," as are other soils on slopes that exceed 15% and are within 100' of a wetland or watercourse. (See Figure 35 for the location of terrace escarpment soils)

Important Soils for Agriculture

Soil surveys identify the location of prime and important farmland, which is useful to ensure that agricultural activities are on fertile land. It is also useful as a farmland preservation tool to ensure that prime and important farmlands are not lost to industrial and urban uses. Without appropriate planning, agriculture may become relegated to marginal lands, which may be more erodible, droughty, harder to cultivate and less productive.

Of the 82 soil types within the town, 26 soil types (approximately 7,160 acres or 33% of the town) are considered prime farmland, as defined by the USDA. Additionally, 23 soil types (approximately 5,753 acres or 26% of the town) are considered farmland of statewide importance. Approximately 90% of the agricultural land use in the town occurs on land considered prime farmland or farmland of statewide importance.

Water Resources

Watersheds

It is important to consider water resources and management from a wider perspective such as the watershed level because water is not constrained to political boundaries. The Connecticut Department of Environmental Protection (CT DEP) addresses water resource and water quality issues at the watershed level under the umbrella of the Watershed Management Program. The CT DEP has divided the state into five major watershed basins following natural watershed boundaries. A major watershed is further divided into regional, sub regional and local watersheds. Enfield is included within the "Connecticut Area" major watershed, which encompasses central Connecticut; but it is split between two regional watersheds: the Connecticut Main Stem and the Scantic regional watersheds. These watersheds drain respectively to the Connecticut River and Scantic River. See Figure 36 for an illustration of the regional, sub regional and local watersheds within the Town of Enfield.

Connecticut River Watershed

The Connecticut Area watershed is portion of the greater Connecticut River watershed that is within the state of Connecticut. The greater Connecticut River watershed covers approximately 11,000 square miles within four states, extending from the northern tip of New Hampshire to the Long Island Sound. The Connecticut River flows for approximately 400 miles and provides 70% of all the fresh water entering the Long Island Sound.

From Paleolithic times to today, humans have depended on the Connecticut River watershed. Over 2.3 million people do at present. Interactions with the Connecticut River and its tributaries have ranged from the sustainably benign, to the extremely detrimental. In the 17th century, European settlements and their attendant massive timbering and new farms led to great upheaval in watershed habitats. In less than two centuries a landscape that was 80% forested was transformed into a patchwork-terrain of small woodlots, fields and fences in which trees covered just 20% of the watershed.[153] Modern challenges to the health of the watershed include urban and suburban development, and increasing amounts of impervious surfaces, non-point source pollution, sewage treatment effluent, erosion and siltation, and dams.

The watershed is home to migratory fish and birds, and several threatened and endangered species. It also hosts extensive globally significant tidelands. In 1991, the entire Connecticut River watershed was designated as the Silvio O. Conte National Fish and Wildlife Refuge, the first watershed-wide refuge of its kind in the country. In 1998, the Connecticut River was designated as an American Heritage River, due to its historic and cultural significance to the nation.

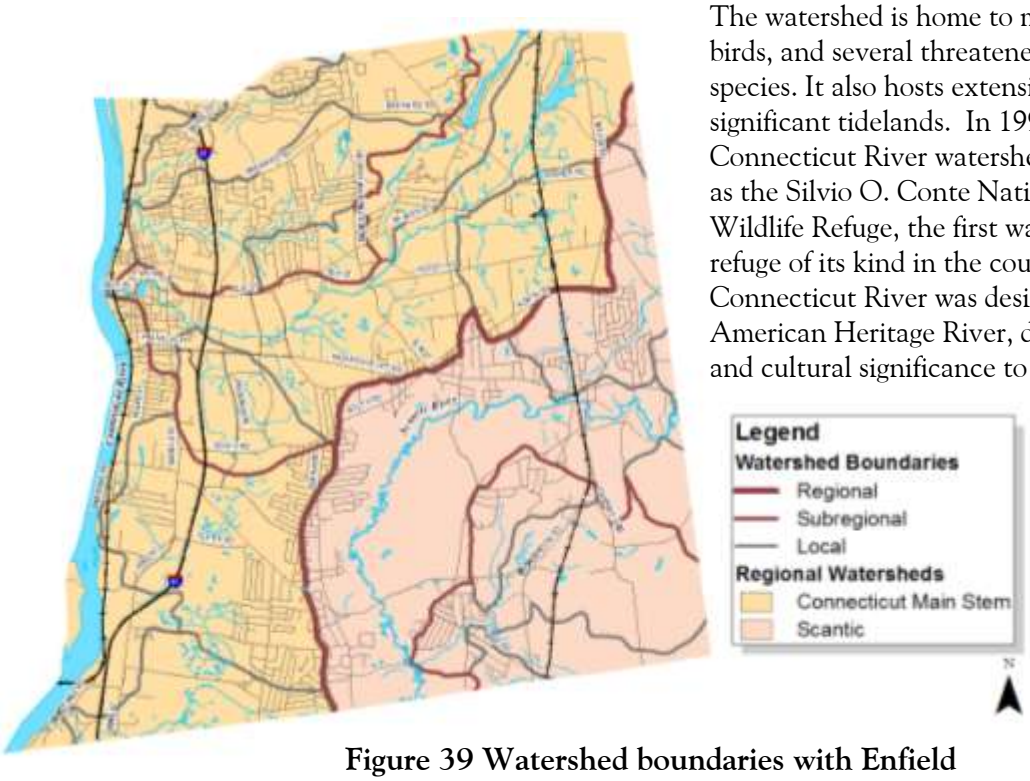

Figure 39 Watershed boundaries with Enfield

Several organizations are active in the stewardship of the Connecticut River watershed. Groups and agencies that are active within the entire 11,000 square mile Connecticut River Watershed include the U.S. Fish and Wildlife Service Connecticut River Coordinator's Office (fishery management and habitat restoration), U.S. Geological Survey's National Water-Quality Assessment (NAWQA) Program's Connecticut, Housatonic and Thames River Basins (CONN) Study Unit (status and trends in the quality of surface and groundwater resources), and conservation organizations such as the Connecticut River Watershed Council and the Trust for Public Land.

[153] "The Connecticut and Its Tributaries". Connecticut River Watershed Council. 28 May 2009. <http://www.ctriver.org/our_region_and_rivers/about_our_rivers/index.html>

Scantic River Watershed

The Scantic River Watershed covers an area of approximately 90,000 acres between Connecticut and Massachusetts. The Scantic River itself begins in Hampden, Massachusetts, and flows 38 miles to its confluence with the Connecticut River in South Windsor, Connecticut. The river twists and turns through some of the best agricultural lands in the nation.[154] Like the Connecticut River, the Scantic River was a source of food, waterpower and irrigation for early settlers of the area.

A number of groups and government agencies are actively involved in planning for the entire watershed, but some focus on the portions of the watersheds within the Connecticut. The Rivers Alliance of Connecticut is a statewide non-profit organization dedicated to protecting and enhancing Connecticut's rivers, streams, and watersheds. In Enfield and Somers, the Scantic River Watershed Association is active in the stewardship of the Scantic River and its watershed. This group assists the CT DEP in getting volunteers for the agency's annual biostream surveys. Another active organization is the Northern Connecticut Land Trust.

Surface Water

Surface water refers to rivers, streams, ponds and wetlands. The Connecticut River is the largest waterbody in Enfield and it flows along the town's western boundary. The Scantic River meanders through the southeast quadrant of the town. Other named streams include Beemans Brook, Boweyns Brook, Buckhorn Brook, Freshwater Brook, Grape Brook, Jawbuck Brook, Pierce Brook, Raspberry Brook, Rustic Brook, Terry Brook, Waterworks Brook and Woods Stream. Crescent Lake and Shaker Pond, in the northeast section of Enfield, are the town's largest ponds. Other named ponds include Charnley Road Pond, Cranberry Pond, Freshwater Pond, Haas Pond, Melrose Pond, Powder Mill Ponds, Richardson Pond, Stowes Pond, Taylor Pond, Tobacco Pond No. 1 and 2, and Washington Road Pond. Wetlands in Enfield are a result of the area's glacial past and resultant soils and topography. They are scattered throughout the town, many along the Connecticut and Scantic Rivers.

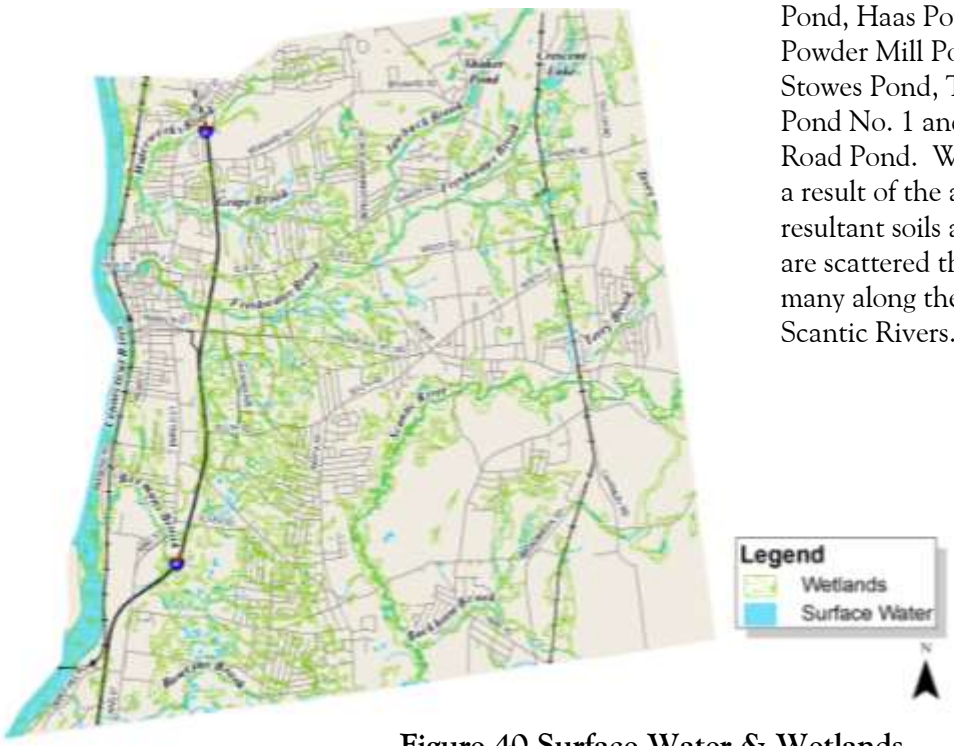

Figure 40 Surface Water & Wetlands

[154] Scantic River Watershed Association. Date. Your Guide to the Scantic River. xx p.

Surface Water Quality

The Federal Clean Water Act (CWA) requires each state to monitor, assess and report on the quality of its waters relative to designated uses established in accordance with the state's water quality standards. The CWA is the primary federal law that protects our nation's surface waters, including lakes, rivers, wetlands, estuaries and ocean waters. In authorizing the Act, Congress declared, as a national goal, the attainment, wherever possible, of "water quality, which provides for the protection and propagation of fish, shellfish and wildlife and provides for recreation in and on the water". This goal is popularly referred to as the "fishable / swimmable" requirement of the CWA.[155]

The CWA requires all states to list the waters that do not meet state water quality standards. A waterbody that does not meet water quality standards is considered to be impaired. When a water body is listed on the Impaired Waters list, the CT DEP describes the cause or probable causes of the impairment. The DEP then determines the degree of priority (high, medium or low) for developing a Total Maximum Daily Load (TMDL) or other pollution control program to address each impairment. A report about the impaired waterbodies is submitted to the EPA every two years. The latest report is the "2008 State of Connecticut Integrated Water Quality Report".

There are no surface waters within Enfield that have TMDLs associated with them. However, a state-wide TMDL concerning the concentration of mercury in fish does apply to Enfield. This TMDL has led to a Statewide Advisory recommending limiting the consumption of freshwater fish due to elevated levels of mercury in some species.

In Enfield, the surface water segments assessed by the CT DEP for the 2008 report were: the Connecticut River, Scantic River, Freshwater Brook and Buckhorn Brook. None of these segments was assessed for aquatic life use, but some were assessed for recreational use. Table 42 lists the findings from that assessment. The Connecticut River does not support recreational use or fish consumption. Buckhorn Brook, Freshwater Brook, and the Enfield segment of the Scantic River fully support fish consumption. However, the CT DEP recommends people to refer CT DEP Angler's Guide or the CT DEP website for more information about fish consumption advisories. Neither Freshwater Brook nor the Enfield segment of the Scantic River was assessed for recreational use.

Table 43 Enfield's Impaired Waters

Waterbody	Impaired Designated Use	Cause	Potential source	TMDL Priority Level
Connecticut River	Recreation	Enterococcus Escherichia coli	Combined Sewer Overflows, Municipal Point Source Discharges, Sources Outside State Jurisdiction or Borders, Source Unknown	High
	Fish Consumption	Polychlorinated biphenyls	Municipal Point Source Discharges, Source Unknown, Sources Outside State Jurisdiction or Borders	Low
Buckhorn Brook	Recreation	Escherichia coli	unknown	High

Source: Connecticut Department of Environmental Protection. 2008 State of Connecticut Integrated Water

[155] Connecticut Department of Environmental Protection. August 2008. 2008 State of Connecticut Integrated Water Quality Report. 7 p.

Quality Report.

The Connecticut River and Buckhorn Brook's recreational impairments have been given a high priority for developing TMDL plans. This means that the water body is currently under study, and that a TMDL plan may be needed to eliminate the water quality impairment. Pending study results, these waters may be reassigned to another EPA category that does not require a TMDL, or a TMDL plan may be developed within 3 years.

The fish consumption impairment to the Connecticut River has been given a low priority. This means that insufficient information exists to address the impairment in the near future or that other programs may be more effective to remedy the water quality impairment. These waters may be reassigned to another EPA category (one not requiring a TMDL), or a TMDL plan may be developed in 7-11 years.[156]

Groundwater

The Town of Enfield receives its drinking water from groundwater sources. Enfield, as well as the rest of Connecticut, is underlain by two major types of groundwater aquifers:

- **Bedrock aquifers** - Bedrock aquifers underlie the entire state and are an important source of water for self-supplied/non-community domestic, commercial, and industrial users. Bedrock aquifers primarily store and transmit water through intersecting fractures in consolidated rock.[157]
- **Unconsolidated glacial sand and gravel (stratified-drift) aquifers** - Stratified-drift aquifers line the larger river valleys. They are generally the most productive sources of ground water, but they are not evenly distributed. They store and transmit water through interconnected pores between individual grains of sediment. Factors that significantly influence the availability of groundwater include differences in the thickness, extent, and permeability of the stratified-drift aquifers; and the size of surface waterbodies and their proximity to the recharge area. These aquifers are the primary source of groundwater for water utilities that serve populations of greater than 1,000 people.[158]

Connecticut's aquifer systems are shallow, typically less than 300 feet deep, and the water table is within 50 feet of the land surface. Most wells tap the upper part of the saturated zone, producing water that has been in the aquifer for only a few months to a few decades. These shallow aquifers are susceptible to contamination from land use activities on the surface.[159]

Groundwater Quality

CT Source Water Assessment Program (SWAP)

The Department of Public Health (DPH) and the CT DEP manage the state's Source Water Assessment Program (SWAP). This program is mandated under the Safe Drinking Water Act Amendments of 1996,

[156] Connecticut Department of Environmental Protection. August 2008. 2008 State of Connecticut Integrated Water Quality Report. 132 p.
[157] "CONN Study Unit Description". USGS CT Water Science Center. 3 June 2009. <http://ct.water.usgs.gov/nawqa/description.htm>
[158] "Connecticut Groundwater Conditions". Groundwater Protection Council. 3 June 2009. < http://www.gwpc.org/e-library/documents/state_fact_sheets/connecticut.pdf>
[159] "Connecticut Groundwater Conditions". Groundwater Protection Council. 3 June 2009. < http://www.gwpc.org/e-library/documents/state_fact_sheets/connecticut.pdf>

and its purpose is to complete an assessment of wellfields that are sources of public drinking water to evaluate their susceptibility to potential sources of contamination. Sources of potential contamination that are of concern to public drinking water supplies in Connecticut are generally associated with historic waste disposal sites, or commercial, industrial, agricultural and residential properties that store or use hazardous materials like petroleum products, solvents or agricultural chemicals.[160]

A SWAP is used to evaluate the degree to which a wellfield may be at risk from potential sources of contamination. This helps public water supply system managers, public health officials, regional planners, and state and local government set targets and implement measures to enhance source water protection efforts such as routine inspections, protective land use regulations, acquisition of critical land, proper septic system maintenance, and public education. SWAPs analyze the environmental sensitivity of the aquifer recharge or watershed area; potential contaminant sources present in the aquifer recharge or watershed area; and various "Source Protection Factors", which include the presence of local regulations or zoning initiatives to protect public drinking water supplies and how much of the aquifer recharge or watershed area is controlled by the water utility.

The CT DEP completed the evaluation of Enfield's wellfields in 2003. These wellfields are maintained and operated by the Connecticut Water Company and Hazardville Water Company. In general, the sources of contamination that can potentially impact Enfield's wellfields include:

- underground fuel storage tanks,
- improperly maintained on-site septic systems,
- improper waste disposal, or
- commercial/industrial sites that store or use chemicals, or generate hazardous wastes.

For undeveloped areas, a potential risk factor is inappropriate development. In 2003, more than 30% of the land near source water areas was undeveloped, and less than 10% of them were preserved as open space. Specifically, the SWAP revealed that the wellfield in Enfield with the highest susceptibility to contamination is the O'Bready Wellfield, located north of Hazardville. Some of the factors contributing to a high susceptibility rating include:

- several contaminant levels that exceed maximum federal and state contaminant/guidance levels;
- a contaminant release point within the source water area;
- ten percent or more commercial or industrial development in the source water area; and
- very little or no public or private preserved open space lands in the source water area.

Some of the recommendations and source protection opportunities identified by the CT DEP in the SWAP reports include:

- Encourage homeowners to adopt residential best management practices that minimize the use hazardous materials or generation of hazardous waste.
- Proactively work with local officials and developers to insure that only low-risk development occurs within the source water area.
- Encourage residential property owners to conduct scheduled inspections and maintenance of underground fuel storage tanks and on-site septic systems.

[160] State of Connecticut Department of Public Health, Drinking Water Division. May 2003. Source Water Assessment Report: An Evaluation of the Susceptibility of Public Drinking Water Sources to Potential Contamination. 1 p.

- Support and encourage the acquisition of open space land within the source water area.

Aquifer Protection Strategies

Efforts to protect and improve groundwater quality focus on protection of the source water supply, which includes land use regulation and land preservation. This requires coordinated responsibilities shared by the state, municipality, water companies and individuals. Decisions about land use over the next several decades will be particularly significant. Approximately, 70% of the land within an aquifer protection area is developed with commercial, industrial, institutional, residential or agricultural land uses. However, nearly 87% of the land within Enfield's aquifer protection areas is currently unprotected, and 19% of this is either vacant or undeveloped land susceptible to development. Water utility land holdings are not permanently protected either, unless a conservation easement has been placed on them. See Figure x for an illustration of the existing land uses within the aquifer protection areas.

Land conservation is a critical tool to protect drinking water sources. It is uniquely effective in preventing the degradation of water quality and can also offer long-term cost savings. According to an EPA study, prevention measures cost communities an average of five times less – and up to 200 times less – than removing contaminants from drinking water. Preliminary findings from a study by the South Central Connecticut Regional Water Authority also indicate that investments in open space protection help contain water treatment costs in Connecticut.[161]

State and federal grant programs are available to assist with open space acquisition for source water protection. The publication "A Toolkit for Communities: Protecting Land to Safeguard Connecticut's Drinking Water" by the Trust for Public Land (TPL) contains more information about grants, local financing options, tax incentives, conservation easements, purchase of development rights, etc. for open space preservation. Groups such as TPL, The Nature Conservancy, American Farmland Trust, and others can provide assistance with technical issues and, in some cases, planning and real estate transfers.

Wetlands

In Connecticut, inland wetlands are defined by soil type, which differs from the federal definition of wetlands. Defining wetlands by soil type allows identification of wetlands even in times of drought, when characteristic wetland indicator plants may not be obvious. Areas disturbed by human activities and no longer in their natural state, may also be classified as wetlands due to their soil characteristics. To be considered a wetland, the soil must have one or some of the following characteristics: poorly drained, very poorly drained, and alluvial and floodplain. However, all floodplain soils are considered wetlands regardless of drainage class.

Wetlands are important because they perform valuable ecological functions. They:

- remove nutrients, pollutants and sediments from surface water runoff;
- recharge water supplies;
- reduce shoreline erosion and flood risks; and
- provide fish and wildlife habitat.

In addition, wetlands provide recreational opportunities, aesthetic benefits, sites for research and education, and commercial fishery benefits. Historically, wetlands have been undervalued because their benefits and environmental functions were not well understood. Many wetlands have been destroyed or

[161] The Trust for Public Land. 2003. A Toolkit for Communities: Protecting Land to Safeguard Connecticut's Drinking Water. 7 p.

are threatened by illegal dumping, filling, dredging, diversion or obstruction of water flow, erection of structures and other uses.

Watercourses are defined broadly to mean rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private.[162]

In Enfield, approximately 5,160 acres (or 23% of the town) are classified as inland wetlands or watercourses. Additionally, approximately 6,260 acres (or an additional 28% of the town) falls within the upland review area, which is associated with the wetlands and watercourses permitting process. Approximately 722 acres, or 14% of the inland wetlands and watercourses in Enfield, fall within protected open spaces. Protected open spaces include private land, state- and municipal-owned land, and one land trust holding. See Figure x Inland Wetlands and Watercourses map to see the location of protected open space, as defined by the CT DEP Protected Open Space Mapping Project, with respect to wetlands.

Wetland Regulations

Legislation to protect and regulate the use of wetlands exists at the federal, state and local levels of government. In Connecticut, the CT DEP regulates freshwater wetlands and watercourses through the Inland Wetlands and Watercourses Act. The Act is implemented through regulations adopted by municipal inland wetlands agencies that mirror state regulations. In Enfield, these regulations are the "Inland Wetlands and Watercourses Regulations of the Town of Enfield".

The Inland Wetlands and Watercourses regulations require a permit for all "regulated activities" occurring or proposed within wetlands, watercourses, and the associated upland review area. A **regulated activity** is defined as:

a. any operation within or use of a wetland or watercourse involving removal or deposition of material; or

b. any obstruction, construction, alteration or pollution of such wetlands or watercourses, with the exception of certain specified activities.

Upland review areas are defined as:

a. All areas within 100 feet of the boundary of such wetlands and watercourses;

b. All areas within 200 feet of the Connecticut, and Scantic Rivers, Beamans Brook and Freshwater Brook, up stream of Elm Street crossing (excluding tributaries);

c. All areas within 150 feet of the boundary of such wetlands or watercourses from any proposed subsurface waste disposal or drainage system;

d. All slopes with a grade in excess of 25% within 100 feet of the boundary of a wetland or watercourse. The area measured from the toe of the slope to the top of ridge or escarpment shall be considered regulated;

e. All escarpment slopes as identified in the "Soil Survey , Hartford County, Connecticut" (as it may be amended) as "Tc", "Te", "Tg", with grades in excess of 15% within 100 feet of the boundary of a wetland or watercourse. The area measured from the toe of the slope to the top of ridge or escarpment shall be considered regulated

Within the upland review areas, any clearing, grubbing, filling, grading, paving, excavating, constructing, depositing, or removal of material and discharging of storm water on the land requires a permit. Non-

[162] "Inland and Tidal Wetlands". Connecticut Department of Environmental Protection. 10 June 2009. <http://www.ct.gov/dep/cwp/view.asp?a=2720&q=325674&depNav_GID=1654>

regulated activities include certain agricultural, residential, water company, maintenance, conservation, and recreational uses of wetlands.

In general, the applicant must demonstrate that his/her application is consistent with the purposes and policies of the regulations and that a feasible and prudent alternative does not exist. A permit application may need to include a plan depicting the proposed activity as well as engineering and/or environmental information describing its impacts. The Inland Wetlands agency may approve the application as filed or grant it upon other conditions, including using impact mitigation measures that can:

a. prevent or minimize pollution or other environmental damage,

b. maintain or enhance existing environmental quality, or

c. restore, enhance and create productive wetland or watercourse resources (in that order of priority)[163]

Other Wetland Protection Strategies

In addition to regulations, some of the best protection for wetlands has been provided through acquisition and conservation easements by private and public land protection programs. However, wetlands functions are not necessarily protected if the wetland is located within protected open space. Open space can be protected for many purposes other than aquifer protection, such as natural resource/feature or habitat conservation, non-facility based outdoor recreation.[164] Wetlands will still be affected by land use activities allowed within the open space, as well as by land uses in adjacent areas.

Water Quality

Preserving and improving water quality is vital to Enfield's natural resources. High quality drinking water supplies are critical to public health, and habitat areas are essential to biological diversity. Both drinking water supply and habitat quality depend on the maintenance of water quality at the highest possible level. Additionally, good water quality is necessary for recreation, since contact with polluted water can pose health risks.

Pollution Sources

Many of our most common water quality problems today are related to the activities and living requirements of people. Water quality is affected by both point and non-point pollution sources. Point source pollution originates from a specific place or location, such as a discharge pipe from a factory. Non-point source pollution originates over a widespread area of the landscape and may include:

- malfunctioning septic systems,
- soil erosion,
- leaking underground fuel storage tanks,
- stormwater runoff,
- fertilizers,

[163] The Town of Enfield. July 1974, amended February 2005. "Inland Wetlands and Watercourses Regulations of the Town of Enfield". 29 p.
[164] Connecticut Department of Environmental Protection. 2009. Protected Open Space (shapefile metadata: protected_open_space.htm). 1 p.

- pesticides, and
- road salt.

In Connecticut stormwater runoff from urban areas and construction activities are two of the most significant categories of non-point source pollution.[165] Unlike point source discharges, which are stringently regulated at the state level, comprehensive management of non-point source discharges is more difficult.

Non-Point Sources of Pollution

The CT DEP describes non-point source management as a "challenge" for the CT DEP and for the numerous other agencies, organizations, and individuals working to restore and protect the quality of the state's water resources. The complicating factor is that non-point source pollution is largely the result of dispersed activities that are regulated at the local level. While the federal and state governments are charged with meeting the goals of the federal Clean Water Act and Coastal Zone Management Act and its companion state laws, they do not have the ability to regulate land use or the primary remaining sources of the pollutants that prevent attainment of these goals. One of the biggest challenges to the state NPS Program is building awareness of the connection between land use and water quality, and then providing local land use decision-makers with the tools necessary to guide development in such a way as to minimize impacts to local water resources.

The national program to control non-point source pollution, prescribed by D319 of the Clean Water Act, relies primarily on the voluntary use of best management practices (BMPs) to reduce the impacts of land use on water quality. CZARA D6217 requires the state to have enforceable policies to ensure the implementation of management measures to protect coastal water quality from non-point source pollution.[166] The CT DEP administers the Nonpoint Source Pollution (NSP) Program and the Watershed Management Program, which are designed to identify and reduce sources of nonpoint pollution.

In addition, the state encourages municipalities to consider the goals and policies of the "Conservation and Development Policies Plan for Connecticut" as well as the "The Plan of Conservation and Development for the Capital Region", both of which contain goals and policy recommendations regarding the reduction of non-point source pollution and the protection of water supply areas.

Domestic and Industrial Waste Water

Domestic waste water contains high levels of carbon, nitrogen, phosphorus, some synthetic organic chemicals and heavy metals, all of which can affect aquatic habitat and ground water quality. Nutrients such as nitrogen and phosphorus may stimulate growth of algae in ponds and rivers, leading eventually to declining levels of oxygen and adverse impacts on habitat. Some synthetic organic chemicals and heavy metals are toxic to humans and other organisms. Domestic waste water also contains bacteria and viruses, which may threaten human health if viable microorganisms enter drinking water.

Industrial waste water can have the same contaminants as domestic sewage; however, concentrations of synthetic organic chemicals and heavy metals may be much higher in industrial waste.

The Infrastructure and Utilities chapter of this plan describes Enfield's municipal sewage collection and treatment system, which serves an estimated 95% of Enfield's residential and industrial areas. The rest of

[165] "Nonpoint Source Pollution (NSP) Management." Connecticut Department of Environmental Protection. 3 June 2009. < http://www.ct.gov/CT DEP/cwp/view.asp?a=2719&q=325588&CT DEPNav_GID=1654>
[166] Connecticut Department of Environmental Protection Bureau of Water Management. November 1999. Connecticut Nonpoint Source Management Program. 21 p.

the town is served by septic systems. The Connecticut Department of Public Health regulates the design and installation of septic systems, but these regulations do not require post-construction maintenance, monitoring or inspections. Overflows from municipal wastewater treatment plants during storm events as well as poorly maintained or malfunctioning septic systems can contribute to water quality problems.

Aquifer Protection

The primary challenge facing the quality of a community's water supply is protecting the integrity of the well areas and groundwater aquifers. An aquifer protection area is defined as an area that includes the well field, recharge area and areas of contribution. The area immediately surrounding a well is particularly important. It is from here that groundwater is unnaturally induced to flow towards a well, creating a cone of depression in the water table. The land area that contributes water to the cone of depression is called the well recharge area and it varies in size and shape depending on the type of aquifer tapped and the yield of the well. A typical recharge area of a low-yield residential well can encompass several acres; that of a large-yield community well can be hundreds of acres.[167]

Land use activities within a well recharge area can have significant effects on groundwater quality. Table 43 lists the principal groundwater concerns related to land uses, as identified by the CT DEP. Enfield's zoning code permits commercial, industrial, agricultural and residential land uses within the town's designated aquifer protection areas; this presents a substantial risk of contamination from septic systems, hazardous waste spills, leaking underground storage tanks and road salt runoff. Two municipal solid waste sites are also located within Enfield's aquifer protection areas. See Aquifer Protection map on page x.

Table 44 Principal Groundwater Concerns in Connecticut

Land Use	Specific Facilities/Activities	Contaminants
Residential single and multifamily units	Septic systems, fuel storage tanks, workshops, lawns and gardens.	Household chemicals, home and auto fuels, lubricants, paints, cleaners and degreasers, pesticides, fertilizers, and septic system additives.
Agriculture	Manure storage sites, feeding lots, silage pits, equipment maintenance sites, fuel storage tanks, pesticide and fertilizer use.	Primarily releases and run- off of pesticides, fertilizers, animal and plant wastes, fuels lubricants used for equipment maintenance.
Commercial trades and services	Automobile service and repair shops, dry cleaners, machine shops, photo-finishing labs, printers, medical and veterinarian offices, furniture strippers. Floor drains, parking lots, loading docks, underground storage tanks.	Releases of fuels, lubricants, cleaners, degreasers, fertilizers, pesticides, medical wastes, acids, antifreeze solutions, deicing salts, and miscellaneous chemicals.
Industrial manufacturing and processing	Facilities dedicated to the production and fabrication of minerals, metal, wood, textiles, chemical liquids. Energy production, waste disposal, highway maintenance, road salt storage, and chemical storage.	Similar to those found at commercial land uses but in greater quantities and concentrations. The production, use, storage and disposal of many chemicals and wastes.
Waste disposal	Landfills, municipal and industrial waste treatment, storage and disposal facilities, waste processing.	Many solid, liquid, gaseous and radiological wastes, including pathogenic bacteria and viruses.

Source: "Contamination". Connecticut Department of Environmental Protection.

[167] "Wells". Connecticut Department of Environmental Protection. 9 June 2009. <http://www.ct.gov/dep/cwp/view.asp?a=2685&q=322276&depNav_GID=1654>

<http://www.ct.gov/dep/cwp/view.asp?a=2685&q=322266&depNav_GID=1654>

Protection of groundwater sources requires coordinated responsibilities shared by the state, municipality and water companies. It involves identification/modeling of the aquifer protection area (also referred to as a wellhead protection area), as well as the development of protective measures.

The CT DEP has established Aquifer Protection Area Program statutes and regulations to protect critical public water supply wells through delineation of the recharge area and establishment of land use controls to minimize potential contamination. Also included are strategic monitoring requirements for aquifer protection areas and a proposed (but not yet implemented) requirement to inventory and regulate agricultural activities in aquifer protection areas.

The aquifer protection land use regulations restrict development of new land use activities that use, store, handle or dispose of hazardous materials and require existing uses of this type to register with either the CT DEP or the local Aquifer Protection Agency. Regulated activities must comply with the best management practices outlined in the regulations. A materials management plan and a stormwater management plan may also be required for certain regulated activities.

Aquifer Protection Regulations in Enfield

The Enfield Planning and Zoning Commission was established as the Town's Aquifer Protection Agency. The Town's "Aquifer Protection Area Regulations" have been adopted as the Town's aquifer protection area land use regulations, consistent with state regulations. These regulations establish provisions for regulating land use activity within the aquifer protection area including: prohibiting certain new activities, registering existing regulated activities, issuing permits for new regulated activities at registered facilities, and administration and enforcement. Although the CT DEP lists agricultural and residential land uses as principal groundwater concerns, these activities are not regulated by the state or local Aquifer Protection Area regulations.

Plans and guidelines to protect aquifers from agricultural activities

Aquifer Protection Regulations have a requirement that any person engaged in agriculture on land located within an aquifer protection area, and whose annual gross sales from agricultural products during the preceding calendar year were $2,500 or greater, is required to submit a farm resources management plan to the CT DEP. A farm resources management plan outlines the implementation of best management practices (BMPs) to address manure management, pesticide management including storage and handling, nutrient management, storage of fuel and oil, and equipment maintenance. However, this aspect of the state's Aquifer Protection Area Program has not been implemented by the CT DEP and is not likely to be implemented in the next several years. Therefore, agricultural operations are exempt from the local aquifer protection land use regulations.

The CT DEP and the US Natural Resource Conservation Service (formerly the US Soil Conservation Service) have developed the "Manual of Best Management Practices for Agriculture: Guidelines for Protecting Connecticut's Water Resources", which describes a wide range of management practices designed to reduce the impact of agriculture on surface water and ground water quality. The manual was developed to provide guidance in the development of farm resources management plans. The recommended BMPs in the manual are voluntary, except where they become part of an approved farm resources management plan. The CT Department of Agriculture's Environmental Assistance Program (EAP) allows for the reimbursement of part of the costs to maintain compliance with an approved agricultural waste management plan.

Guidelines for protecting aquifers from residential and commercial uses

Activities conducted at a residence "without compensation" are not regulated by the state or local Aquifer Protection Area regulations. The CT DEP website lists some non-regulatory ways that municipalities and the public can reduce the risk of groundwater contamination at home or at work:

- Consider important aquifers when acquiring open space.
- Ensure that town facilities practice good pollution prevention.
- Mount a public education campaign on groundwater risks:
    - how to properly handle and dispose of chemicals;
    - the importance of how to acquire, by purchase or bequest, a critical well recharge area;
    - the proper use and maintenance of septic systems, including the need to be routinely pump and inspect septic systems (every five years).
- Conduct regular household hazardous materials collection days.
- Ensure that both commercial and residential oil storage tanks are maintained.
- Test underground fuel oil tanks for leaks; if possible, replace them above ground.
- Encourage the sensible use, storage and disposal of commercial and residential pesticides and fertilizers, chemicals and fuels:[168]
- Reduce the use of chemicals and substitute with safer choices; always use according to directions.
- Properly dispose of all waste; don't dump chemicals down drains or on the ground.

Stormwater, Erosion and Sedimentation

During a rain event, rainwater soaks into the ground or runs across it; the latter is termed stormwater runoff. As areas become more developed, a larger amount of stormwater runs off of paved surfaces, roofs, compacted soils and lawns, rather than soaking into the ground. The loss of wetland and vegetated floodplain areas to development also reduces stormwater's natural ability to soak into the ground. Wetlands and vegetated floodplain areas slow the speed of flowing water and provide infiltration and storage, while larger stormwater flows from developed areas are directed into stormwater drains and local waterways, resulting in greater flow volumes and higher velocities than in the past. Large, fast stormwater flows within streams and creeks cause erosion and degradation of riparian habitat and stream banks. Stormwater carries with it sediment, as well as other pollutants including fertilizers, pesticides, road salt, oil, heavy metals, and pathogenic bacteria and viruses.

Stormwater Problems in Enfield

Enfield has experienced on-going erosion problems, particularly of the terrace escarpment soils. In order to address current erosion and drainage problems in Enfield, the town assembled a work group in November 2007. The work group inventoried, prioritized, prepared general cost estimates and established a funding strategy for erosion, flooding and drainage problem areas. As a result, several problem areas have been successfully mitigated or repaired, and many are in the planning stages. However, as the group pointed out in their project, erosion is on-going and these projects are repairing the effects, not addressing the causes.

[168] "Understanding Groundwater: Protecting a Natural Resource". Connecticut Department of Environmental Protection. 9 June 2009. <http://www.ct.gov/dep/cwp/view.asp?a=2685&q=322272&depNav_GID=1654>

Increased development has resulted in higher stormwater flows and, prior to the 1970s, site drainage design did not require stormwater detention for controlling post-development peak flows; these issues are at the root of many of the erosion and drainage problems. Furthermore, a majority of the stormwater detention facilities throughout the state have been designed to control peak flows, without regard for water quality mitigation. Therefore, drainage, flooding, and erosion problems are common in many older developed areas of the state and many existing stormwater detention basins provide only minimal water quality benefit.[169]

Federal & State Stormwater Regulations

Stormwater management can help reduce some of the problems associated with stormwater runoff. The National Pollution Discharge Elimination System (NPDES) Phases I and II, implemented by the US Environmental Protection Agency (EPA), requires states to regulate the control of polluted discharges from large construction sites, certain industrial activities and operators of municipal separate storm sewer systems (MS4s). The requirements include the establishment of a stormwater management program that is intended to improve water bodies by reducing the quality of pollutants that can enter storm sewer systems during storm events. It also requires the use of best management practices (BMPs) intended to reduce the negative impacts of stormwater. The CT DEP implements the NPDES requirements through its stormwater permitting processes, which applies to the following activities:

1. The Stormwater Associated with Industrial Activities General Permit requires industrial facilities to cover or remove materials whose exposure to precipitation could produce polluted stormwater.
2. The Stormwater Associated with Construction Activities General Permit, requires developers and builders to implement stormwater management plans that will prevent the movement of soil and sediments off construction sites and into nearby streams and water bodies.
3. The Stormwater Associated with Commercial Activities General Permit, found only in Connecticut, requires operators of large paved commercial sites such as malls, movie theaters, and supermarkets to undertake actions such as parking lot sweeping and catch basin cleaning to keep stormwater clean before it reaches water bodies.
4. The Stormwater from Small Municipal Separate Storm Sewer Systems General Permit, only recently implemented in Connecticut, requires each municipality to take steps to keep the stormwater entering its storm sewer systems clean before entering water bodies. One important element of this permit is the requirement that towns implement public education programs to make residents aware that stormwater pollutants emanate from many of their everyday living activities, and to inform them of steps they can take to reduce pollutants in stormwater runoff.[170]

As a designated MS4 community, Enfield holds a Stormwater from Small Municipal Separate Storm Sewer Systems General Permit. (Is a Phase II Storm Water Management Plan required/existing?) One important element of this permit is the requirement that towns implement public education programs to make residents aware that stormwater pollutants emanate from many of their everyday living activities, and to inform them of steps they can take to reduce pollutants in stormwater runoff.

[169] Connecticut Department of Environmental Protection. 2004. 2004 Stormwater Quality Manual. 10-2 p.
[170] "Stormwater Management: How Is Stormwater Regulated?" Connecticut Department of Environmental Protection. 4 June 2009. <http://www.ct.gov/dep/cwp/view.asp?a=2721&q=325702&depNav_GID=1654>

NPDES requirements are also addressed by the state through the Connecticut Guidelines for Soil Erosion and Sediment Control, which provides guidance on the measures necessary to protect the state's waters from the adverse impacts of stormwater runoff during construction activities and post-construction, respectively.

An integral element of NPDES requirements is an erosion and sedimentation control (E&S) plan, which must include methods and techniques for minimizing erosion and sedimentation from stormwater runoff during construction, based on the best currently available technology. Minimum requirements for E&S plans are mandated under the Connecticut Soil Erosion and Sediment Control Act. This law specifically requires local planning and zoning commissions to consider erosion and sediment controls and provide for certification that an adequate E&S plan has been submitted. Many municipal planning and zoning commissions, including Enfield's, have cited the Connecticut Guidelines for Soil Erosion and Sediment Control in their regulations and frequently require them as the standard to follow.

State Guidelines for Stormwater Management

More sustainable methods of stormwater management, such as on-site bioretention, constructed wetlands and permeable paving, as well as the preservation/restoration of wetlands and floodplain areas can help address the causes of these erosion and flooding problems. The CT DEP's "Stormwater Quality Manual" provides guidance on measures to protect waters from the adverse impacts of post-construction stormwater runoff. The manual focuses on site planning, source control and stormwater treatment practices, and is intended for use as a planning tool and as a design guidance document. For those planning new development, the manual provides guidance on source control and treatment measures as well as the preparation of a site stormwater management plan.

For existing development, Chapter 10 of the manual addresses stormwater retrofits, which are designed to reduce peak stormwater flows and improve water quality mitigation functions of, older, poorly designed or poorly maintained stormwater management systems. The chapter presents methods for reducing runoff and improving the treatment of stormwater from existing detention basins, parking lots and highway right-of-ways. It also provides sources for more information on stream restoration practices, including stream bank stabilization of eroded areas and placement of habitat improvement structures.

Local Stormwater Regulations

Section 7.20 of the Enfield Zoning Ordinance requires the preparation of a soil erosion and sediment control plan for development where the cumulative disturbed area is greater than ½ acre, with the exception of a single family dwelling outside of a subdivision. In Enfield, a developer or contractor must get a permit for the discharge of stormwater directly from CT DEP. The Town does not have any stormwater regulations in addition to the CT DEP regulations.

Flooding

Floodplains are located in lowland areas adjacent to watercourses and are subject to flooding both seasonally (as in the case of a spring freshet) and sporadically (as in the case of a major flood). Left undeveloped, floodplains safely store and convey downstream flood waters and receive sediments eroded from elevated areas of the watershed. Floodplains provide fertile soils and have been used for growing crops since colonial times. When no longer farmed, floodplains revert to floodplain forests.[171] FEMA

[171] "Inland Wetlands Management". Connecticut Department of Environmental Protection. 10 June 2009. <http://www.ct.gov/dep/cwp/view.asp?a=2720&q=325684&depNav_GID=1907>

Flood Insurance Rate Maps are a good indication of where flood zones are located within a particular community.

Since there is no distinct flood season in Connecticut, major riverine flooding can and has occurred in every month of the year. However, the spring snowmelt, and late summer/early autumn hurricanes and tropical storms are periods when riverine flooding is more likely.[172] According to the CT DEP's Natural Hazards Mitigation Plan, major flooding of Connecticut's small rivers and loss of several lives can be expected once every five to ten years during the 21st century. Major flooding of the larger rivers (Housatonic, Connecticut, Farmington) with some loss of life and several hundred million dollars in damage can be expected once every 30 years on average. Since the passage of flood regulations in 1968, and the creation of The Federal Emergency Management Agency (FEMA) in 1978, flood vulnerability in Connecticut has continued to increase but at a slower rate than it would have in the absence of regulation.

Flood Protection Programs

National Flood Insurance Program

FEMA manages the National Flood Insurance Program (NFIP). Enfield, along with nearly 20,000 other communities across the United States and its territories participate in the NFIP by adopting and enforcing floodplain management ordinances to reduce future flood damage. In exchange, the NFIP makes federally backed flood insurance available to homeowners, renters, and business owners in these communities. In addition to providing flood insurance and reducing flood damages through floodplain management regulations, the NFIP identifies and maps the Nation's floodplains and floodways. Mandatory flood insurance purchases apply for developments within zones designated as 100-year floodplain. Additionally, communities are required to adopt local land use regulations consistent with federal requirements for construction in these zones. The figure below shows the extent of the 100-year flood zones in Enfield.

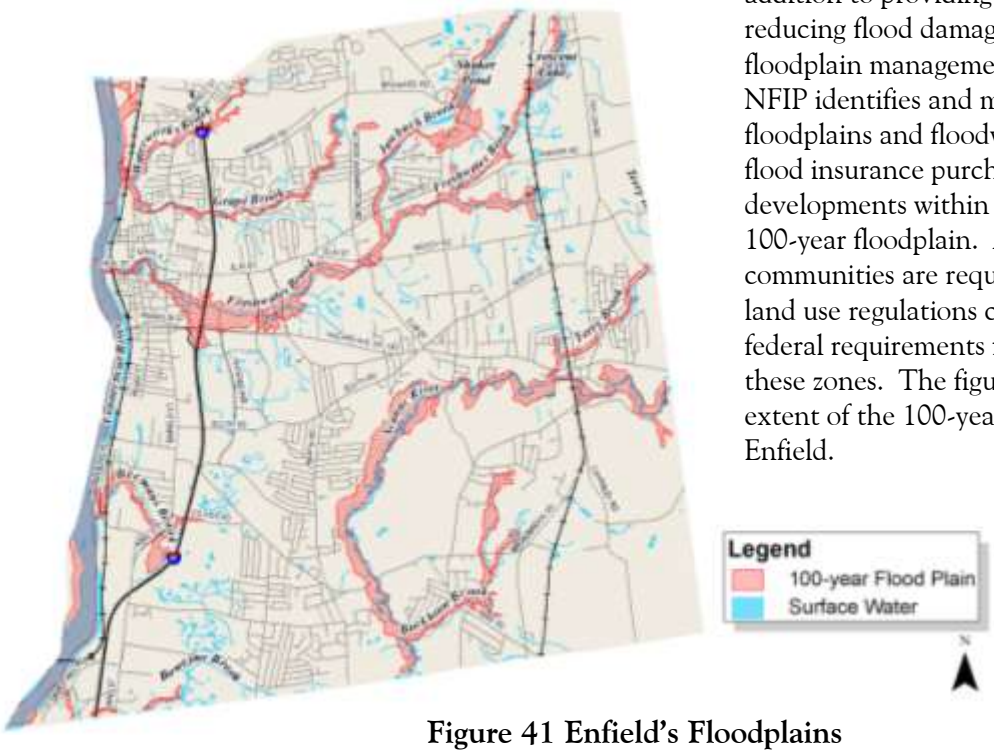

Figure 41 Enfield's Floodplains

[172] Connecticut Department of Environmental Protection. 2007. Natural Hazards Mitigation Plan for 2007-2010. 2-17 p.

Local Floodplain Regulations

Floodplains are important for the storage and conveyance of floodwater. Therefore, it is necessary to manage the types of development that may occur within these areas. The "Inland Wetlands and Watercourses Regulations of the Town of Enfield" requires a permit for regulated activities within floodplains. Additionally, the Town of Enfield Zoning Regulations include conservation overlay zone. Regulations for this zone provide standards for the preservation and usage of lands within the Connecticut River conservation zone, which includes the river floodplain. Per the regulations, flood plain use is regulated so as to preserve the necessary flood storage capacity; to promote public health, safety and general welfare through minimizing flood losses in flood plain areas; and to promote flood plain uses that are compatible with beneficial flood plain functions. The regulations describe uses that are compatible or incompatible with flood plain values. Agricultural or farming uses, excluding farm buildings and farm structures are permitted within the floodplain. "The Conservation and Development Policies Plan for Connecticut 2005-2010" identifies 100-year river and coastal floodplains as Conservation Areas. The state's plan explains, "Given the public's continued attraction to rivers and the coastline, many of the state's flood hazard areas experience intensive commercial and industrial development. The Plan does not prohibit the continuation or the modification of these land uses. The Conservation Area designation is a red flag denoting that future actions must be consistent with the flood management objectives for such an area."[173]

Plants & Wildlife

Conservation Strategies

State Comprehensive Wildlife Conservation Strategy

The CT DEP published Connecticut's Comprehensive Wildlife Conservation Strategy. The purpose of the document is to reverse the decline of wildlife populations and the loss of key habitats. Its goal is to keep common species common and minimize the need to list additional species as endangered or threatened.

The Strategy identifies species of greatest conservation need (GCN) and their key habitats. Altogether, there are 475 species of greatest conservation need, including 27 mammals, 148 birds, 30 reptiles and amphibians, 74 fish and 196 invertebrates. GCN species are associated with 12 key habitats and 43 sub-habitats located throughout Connecticut. Each of these habitats, which are considered habitats of greatest conservation need, are linked to standardized state, regional and national vegetation classification systems. GCN habitats and sub-habitats include several types of forests, wetlands, and other unique communities such as sparsely vegetated areas, caves, and coastal beaches. (See Figure x for a map of biodiversity areas in Enfield)

Finally, the Wildlife Conservation Strategy summarizes the threats to key habitats and GCN species, and lists the priorities for conducting the research, survey and monitoring, and conservation actions needed to reduce the threats. The most significant threats to Connecticut's land and waterscapes include habitat

[173] Connecticut Office of Policy and Management Intergovernmental Policy Division. The Conservation and Development Policies Plan for Connecticut 2005-2010. 7p.

loss, degradation, and fragmentation caused by development; changes in land use; and competition from non-native, invasive species.[174]

Endangered Species Regulations

The Connecticut Endangered Species Act recognizes the importance the state's plant and animal populations and the need to protect them from threats that could lead to their extinction. The overall goal of the legislation is to conserve, protect, restore and enhance any endangered or threatened species and their essential habitat. Species are listed according to their level of risk, and their status is reviewed every five years.

"Endangered Species" means any native species documented by biological research and inventory to be in danger of extirpation throughout all or a significant portion of its range within the state and to have no more than five occurrences in the state, and any species determined to be an "endangered species" pursuant to the federal Endangered Species Act.

"Threatened Species" means any native species documented by biological research and inventory to be likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range within the state, and to have no more than nine occurrences in the state. It includes any species determined to be a "threatened species" pursuant to the federal Endangered Species Act, except for such species determined to be endangered by the Commissioner in accordance with section 4 of this act.

"Species of Special Concern" means any native plant species or any native non-harvested wildlife species documented by scientific research and inventory to have a naturally restricted range or habitat in the state. It could also be a species that is at a low population level, or is in such high demand by man that its unregulated taking would be detrimental to the conservation of its population or has been extirpated from the state.[175]

The number of endangered, threatened and special concern species in Enfield is significant. The CT DEP's website provides a list of endangered, threatened and special concern species by county, (http://www.ct.gov/dep/cwp/view.asp?a=2702&q=323474&depNav_GID=1628), but does not provide listings by town because, as a CT DEP representative explained, the inventory is not static and may not be complete either. The CT DEP recommends reviewing the CT DEP's Natural Diversity Database (NDDB) maps, which are available online and updated every six months, to identify if a proposed project may impact.

The NDDB maps represent approximate locations of endangered, threatened and special concern species and significant natural communities in Connecticut. The maps are intended to be a pre-screening tool to identify potential impacts to state-listed species and can be used to identify areas of potential conservation concern. Per the CT DEP, a project may have a conflict with a species or natural community if any part of the project: is within an identified NDDB area; overlaps a lake, pond, or wetland that intersects a NDDB area; or is upstream or downstream (by less than 1/2 mile) from a NDDB area. If any of these conditions exists, the CT DEP should be contacted for more information.[176] The figure entitled, Natural Diversity – Areas of Concern shows the location of the NDDB areas within Enfield and the relation of

[174] Connecticut Department of Environmental Protection Bureau of Natural Resources. October 1, 2005. Connecticut's Comprehensive Wildlife Conservation Strategy. xii-xiii p.
[175] "Endangered, Threatened and Special Concern Species in Connecticut". Connecticut Department of Environmental Protection. 29 July 2009. <http://www.ct.gov/dep/cwp/view.asp?a=2702&q=323486&depNav_GID=1628&depNav=|>
[176] "GIS Data Guide, Natural Diversity Database". Connecticut Department of Environmental Protection. 29 July 2009. <http://www.ct.gov/dep/cwp/view.asp?a=2698&q=323102>

these sensitive areas to protected open space; only a very small portion of NDDB areas fall within existing protected open space.

Farmland

"Farmland is also an integral part of Connecticut's living landscape. Well-managed farms provide habitat for wildlife, filter drinking water, help reduce flooding events, and offset carbon emissions into the atmosphere."[177] Agricultural land in the region is valued for its contribution to the rural atmosphere and open space.

The USDA National Agricultural Statistics Service conducts the Census of Agriculture every five years. The most recent censuses were conducted in 2002 and 2007. The USDA released the 2007 data in February 2009. However, the 2007 data is only broken down as far as the county level. The 2002 data provides information down to the zip code level. Within the Enfield 06082 zip code, the 2002 Census of Agriculture identified 38 farms, 25 of which were identified as having harvested cropland.

There are approximately 3,961 acres of land in agricultural use in the town. For information about the rate of loss of agricultural land, see Table 9 in the Economic Vitality chapter.

Soils Suitable for Farming

As mentioned in the Soils section of this chapter, the USDA Soil Survey identifies soil types that are considered prime farmland or farmland of statewide importance. Identification of prime and important farmland is useful to land use planning; when prime and important farmlands are lost to industrial and urban uses, agriculture becomes relegated to marginal lands which may be more erodible, droughty, less productive, or less easily cultivated.

Of the 82 soil types within the town, 26 types (approximately 7,160 acres or 33% of the town) are considered prime farmland, as defined by the USDA. Additionally, 23 types (approximately 5,753 acres or 26% of the town) are considered farmland of statewide importance. Approximately 90% of the agricultural land use in the town occurs on land considered prime farmland or farmland of statewide importance.

Farmland Preservation Programs

The CT Department of Agriculture (DOAG) maintains a Farmland Preservation Program, which preserves farmland by acquiring (through donation or purchase) development rights to agricultural properties. Through the voluntary program, the farms remain in private ownership and continue to pay local property taxes and a permanent restriction on nonagricultural uses is placed on these properties. The main objective of the Farmland Preservation Program is to secure a food and fiber producing land resource base, consisting primarily of prime and important farmland soils, for the future of agriculture in Connecticut.

The DOAG has a statewide goal of preserving 130,000 acres, with 85,000 acres of cropland; as of December 2008, the program has preserved 34,500 acres on the 254 farms constituting approximately

[177] State of Connecticut Food Policy Council and the Working Lands Alliance. A Call To Farms! A Mid-decade Look at Connecticut's Agricultural Lands. 2005.

26% of the 130,000 acre goal. This land base will enable Connecticut to produce at least 50% of its fluid milk needs and 70% of its in-season fresh fruits and vegetables.[178]

Within Enfield, there are 843 acres of land in the Farmland Preservation Program (21% of the agricultural land use). The Farmland map shows the relationship between agricultural land use, prime and important farmland soils and preserved farmland.

Agricultural production is concentrated in several priority watersheds around the state, including the upper Housatonic River basin, the upper Thames River basin, including the Shetucket, Quinebaug, and Yantic river watersheds, and the upper Connecticut River, including the Scantic and Farmington river watersheds.

These areas have been targeted for Environmental Quality Incentives Program (EQIP) and Wildlife Habitat Improvement Program (WHIP) funding.[179] EQIP, a USDA program, provides cost sharing for agricultural improvements that will help meet water quality and other environmental objectives. WHIP is a voluntary program of the USDA NRCS, which provides technical and cost-share assistance to establish and improve fish and wildlife habitat on primarily private land; focus areas are grasslands, riparian areas, old fields, streams, rivers, wetlands, and invasive species management.

Protected Open Space

Definition of Open Space

By definition, Connecticut's Protected open space does not include land for which the Department of Agriculture has acquired development rights. The preserved farmland remains in private ownership and these lands are not generally available to the public for use without further agreement from the individual farm owner. Without a specific public access/recreation or wildlife habitat component, these lands cannot be counted towards the 21 percent open space goal.[180]

Land Protection at the State Level

To gain a better understanding of how much land is actually protected, the CT DEP began the Protected Open Space Mapping (POSM) Project to inventory all open space parcels in the state. The POSM for Enfield was just completed in 2009. The Protected Open Space shown on various maps in this Town of Enfield POCD is derived from data from the POSM. Based on this data, there are 1,574 acres of protected open space in Enfield (7% of the town). The CT DEP owns 21% of this protected open space and the remaining 79% is protected through partners (Town of Enfield, Northern Connecticut Land Trust, water companies, etc.). To achieve 21% protected open space within Enfield by 2023, approximately 3,150 additional acres would need protection (although the 21% is a statewide goal and may not be dispersed equally throughout the state's municipalities).

The land protection process can occur through donation or purchase in several ways, most commonly through fee simple, easements for access, use and/or conservation, or acquisition of development rights.

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[178] "Farmland Preservation Program". Connecticut Department of Agriculture. 28 July 2009. <http://www.ct.gov/doag/cwp/view.asp?a=3260&q=399016>

[179] Connecticut Department of Environmental Protection Bureau of Water Management. November 1999. Connecticut Nonpoint Source Management Program. 11 p.

[180] Connecticut Department of Environmental Protection. September 2007. The Green Plan: Guiding Land Acquisition and Protection in Connecticut. 13 p.

The CT DEP has two programs available to assist in realizing the open space acquisition and preservation vision and goal:

- The **Recreation and Natural Heritage Trust Program** – used to acquire lands to add to the State's system of parks, forests, and wildlife, fishery and natural resource management areas for the beneficial use and enjoyment of the public.
- The **Open Space and Watershed Land Acquisition Grant Program** - provides financial assistance to municipalities and nonprofit land conservation organizations to acquire land for open space and to water companies to acquire land to be classified as Class I or Class II water supply property. The grant program stipulates that the acquired land must be protected by a permanent conservation easement requiring that the property remain forever predominately in its natural and open condition. Qualified municipalities can use grant monies for restoration or protection of natural features or habitats on open space already owned by the municipality.

The Green Plan

The CT DEP envisions a diverse landscape of protected open space that offers outdoor recreation to Connecticut's citizens, protects water supplies, preserves natural communities and habitats for plants and animals, offers green spaces accessible to all residents, whether residing in urban, suburban or rural communities, and provides a working natural landscape for the harvest of farm and forest products. [181]

State goals for the acquisition and protection of open space are outlined in The Green Plan: Guiding Land Acquisition and Protection in Connecticut. A statutory goal of protecting 21% of the state's land areas (673,210 acres) by 2023 has been established. Of this 21%, 10% is targeted to be acquired and held by the state and 11% is targeted to be acquired and held by land protection partners. Partners are identified as municipalities, nonprofit land conservation organizations, water companies, and interested private property owners.

Consistency with Other Plans

This goal of protecting open space complements other state and local plans, such as the Conservation and Development Policies Plan of Connecticut 2005-2010, several CT DEP plans (including the Climate Change Action Plan for Connecticut; Connecticut Comprehensive Wildlife Conservation Strategies; Natural Hazards Mitigation Plan; Connecticut Recreation Trails Plan; and the Statewide Comprehensive Outdoor Recreation Plan, each discussed in this Town of Enfield POCD), A Plan of Conservation and Development for the Capital Region, and this Town of Enfield Plan of Conservation and Development.

Green Plan's Priorities for Acquisition

Besides setting acquisition/protection targets, The Green Plan also identifies priorities for acquisition and protection: three categories of land qualities that should be evaluated with each potential land protection project. These are the *ecological values* of the property, the *uses that the property can provide or protect*, and the *location of the site*.

For *ecological value*, properties containing sensitive ecological communities, outstanding or representational examples of ecological communities or certain water resources, as listed in The Green Plan, will receive higher scores during evaluation; for example in Enfield, these may include streams/rivers

[181] Connecticut Department of Environmental Protection. September 2007. The Green Plan: Guiding Land Acquisition and Protection in Connecticut. 1 p.

and associated riparian communities, upland buffers around high quality wetlands, riverine islands, steep slopes, erodible soils, etc.

In addition to protecting ecological value, the DEP will work to protect properties that can provide certain *uses* that benefit the public, such as habitat that supports one or more species of greatest conservation need, floodplain protection, riparian buffers, properties that provide recreational or cultural heritage opportunities, etc.

Thirdly, the relative *location* of a property is considered; there are certain site-specific conditions that can enhance the value of a potential acquisition or protection opportunity, such as proximity/linkages to existing open space or greenways, threat of development, parcels that may further environmental justice/environmental equity goals, etc.

Conservation and Development Plans

The state's Conservation and Development Policies Plan of Connecticut 2005-2010 (State C&D Plan) and A Plan of Conservation and Development for the Capital Region both support open space preservation.

The State C&D Plan identifies and maps Preservation Areas, which can help the state attain its goal of 21% protected open space. In Enfield, these Preservation Areas include rivers, lakes, ponds, wetlands, locations of state Threatened, Endangered or Special Concern species, etc.

The Capital Region plan identifies Conservation Corridors, which are areas that link sensitive and preserved land in order to protect significant natural features across municipalities; according to the Capital Region plan, permanent preservation of land in these corridors is of "high regional importance". In Enfield, the Capital Region plan identifies Conservation Corridors along the Connecticut and Scantic Rivers.

Climate Change

The pattern of weather in a particular place is its climate. Climates vary slowly over time, forcing life to adapt to new conditions, but recently the rate of climate change has sped up. Global average temperatures started rising around 1900. They have risen and fallen many times since then, but the trend has crept upward – slowly at first, but more rapidly since the 1970s. The rise in temperature roughly matches the rise of modern industry, the growth of huge cities, and the increasing quantities of fuel such as coal and oil that we burn to provide energy for heating, electrical power, and transportation.[182] The United Nations Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment, released in 2007, concludes that it is "unequivocal" that the climate is warming and that there is "very high confidence" (i.e., at least 90% certainty) that human activities have caused "most of the observed increase in globally averaged temperatures since the mid-twentieth century."[183]

Causes of Climate Change

Scientists have learned that climate change is caused by a combination of factors, some natural and some caused by human activity. The most significant of factors is the increase in greenhouse gases in the atmosphere, especially carbon dioxide.

[182] Woodward, John. Eyewitness Climate Change. New York: DK Publishing, 2008. 6-7 p.
[183] "An Introduction to Climate Change". Connecticut Climate Change. 11 June 2009. <http://ctclimatechange.com/climate_change.html>

The greenhouse effect is the rise in temperature that the Earth experiences because certain gases in the atmosphere (water vapor, carbon dioxide, nitrous oxide, and methane, for example) trap energy from the sun. Without these gases, heat would escape back into space and Earth's average temperature would be about 60°F colder. Because of how they warm our world, these gases are referred to as greenhouse gases.[184]

The increase in carbon dioxide has added significantly to the greenhouse effect that keeps the planet warm; this is one of the main reasons why global temperatures are rising. Most of the extra carbon dioxide is released by the burning of carbon-rich fuels. Trees, plants and organisms sequester, or store, carbon when they absorb carbon dioxide during their growth process. When wood is burned for fuel or trees are cut and burned to clear land for farming, ranching, road building and homes, the carbon that the trees have stored over their lifetimes is released as carbon dioxide. Fossil fuels, such as oil, gas and coal, have formed slowly over millions of years; these fuels contain carbon from living things that died and were buried and compressed before they had a chance to decay. The burning of fossil fuels releases the carbon, in the form of carbon dioxide that was stored by the plants and organisms as they grew long ago. The burning of fuels releases carbon dioxide into the atmosphere at a much faster rate than it can be soaked up by the processes that formed the fuel in the first place, so the concentration of carbon dioxide in the air increases.[185]

Climate change is a global problem and requires global action. Gradually, international agreements are being forged to combat climate change. But in order to effectively achieve results, changes in policy and behavior are required at the national, state, local and individual levels.

Effects of Climate Change

Steadily rising global temperatures can have serious consequences, such as heat waves, droughts, wildfires, more intense storms, floods, melting glaciers, and rising sea levels. Fragile natural environments will suffer. Plants and animals that cannot cope with the changes in climate and habitat may eventually become extinct, while other organisms may flourish as they adapt. The result is a new mix of species that suits an altered world. This process enabled mammals to take over when dinosaurs became extinct 65 million years ago. Recent wildlife losses may be signaling that we are at the beginning of a similar process now.

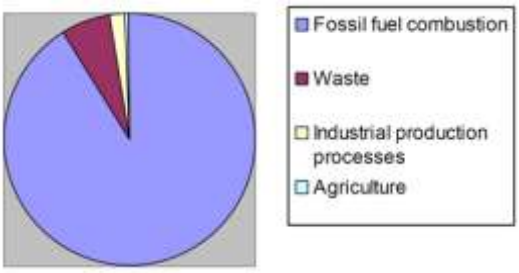
Climate change can also have a big impact on society. In some areas of the world, climate change could affect famines, mass migrations and conflicts over land and resources. Developed countries, such as our own are vulnerable to loss of services such as power, communications and transportation, as a result of destructive events (similar to what happened with Hurricane Katrina in New Orleans in 2005). Scientists fear that if we do not make every effort to combat climate change, global temperatures could rise high enough to trigger catastrophic events like mass melting of the Arctic permafrost and huge wildfires, which would release more greenhouse gasses and further accelerate global warming.[186]

Dealing with Climate Change at the State Level

[184] "Greenhouse Effect…" United States Environmental Protection Agency. 4 August 2009. < http://www.epa.gov/climatechange/kids/greenhouse.html>
[185] Woodward, John. Eyewitness Climate Change. New York: DK Publishing, 2008. 21 p.
[186] Woodward, John. Eyewitness Climate Change. New York: DK Publishing, 2008. 40-42 p.

Climate Change Action Plan for Connecticut

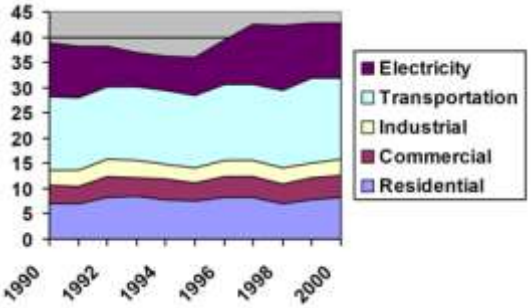
The Connecticut Climate Change Action Plan of 2005 was developed by Governor's Steering Committee, which is made up of leaders from key state agencies, including the CT DEP, the Public Utility Commission, the Department of Transportation, Administrative Services, the Office of Policy and Management, and the Connecticut Clean Energy Fund.



CT GHG Emissions by Sector, 2000

The Climate Change Action Plan quantifies the emissions contributing to global climate change that are generated in Connecticut. According to the inventory of greenhouse gas (GHG) emissions for 1990 through 2000:

- about 90% of the total emissions in 2000 came from the combustion of fossil fuels—oil, gas, and coal—to power the state's cars and factories, heat and cool its homes and buildings, and generate electricity
- Municipal solid waste management was responsible for about 6% of total emissions
- Industrial processes and agriculture contributed less than 2% and 1%, respectively. (See figure entitled, CT GHG Emissions by Sector)



CT CO2 Emissions from Fossil Fuel Combustion, 1990–2000 (MMT)

Carbon dioxide (CO_2) emissions from fossil fuel combustion result from stationary sources (i.e., power plants, industrial facilities, and home heating systems) and from mobile sources, such as motor vehicles. The figure entitled, CT CO_2 Emissions from Fossil Fuel Combustion, shows that transportation accounts for approximately 40% of CO_2 emissions annually. Primary energy consumption in the residential and commercial/industrial sectors is approximately 20% and 10%, respectively. The electric utility sector contributes between 18 and 30% of the CO_2 emissions from fossil fuel combustion.[187]

The State's goal is to help reduce greenhouse gas emissions in Connecticut to 1990 levels by 2010, and 10% below that by 2020.[188] Reducing GHG emissions in Connecticut to 1990 levels and lower will require aggressive action by all sectors of society, including its businesses and institutions, colleges and universities, nongovernmental organizations, and local governments. All sectors will play a vital role in focusing attention on climate change in Connecticut and implementing the GHG mitigation actions proposed in this plan.[189] The Plan contains 55 recommended actions that focus on five main topic areas: Transportation and Land Use; Residential, Commercial and Industrial; Agriculture, Forestry and Waste;

[187] Governor's Steering Committee on Climate Change. January 2005. Connecticut Climate Change Action Plan 2005. 38-41 p.
[188] "Climate Change". Connecticut Department of Environmental Protection. 11 June 2009. <http://www.ct.gov/dep/cwp/view.asp?a=2684&q=322070&depNav_GID=1619>

Electricity Generation; Education and Outreach. The Plan is available on-line at: http://www.ctclimatechange.com/.

Local Alternatives to Combat Climate Change

Of the 55 recommended actions in the Connecticut Climate Change Action Plan 2005, many actions can be implemented at the municipal level. These include:

- Transportation and Land Use:
  - Fleet Vehicle Incentives and Initiatives (acquisition of low-GHG vehicles in public, private and state fleets)
  - Transit, Smart Growth and Vehicles Miles Travelled (VMT) Reduction Package
  - Increase availability of low-GHG transportation choices, such as transit (bus and rail), vanpools, walking and biking. Provide complimentary land use policies and incentives to improve the attractiveness of low GHG travel choices.
  - Redirect at least 25% of new development (forecast population and employment) to growth-appropriate locations, as indicated by the State POCD.
- Residential, Commercial, Industrial:
  - High-Performance Schools and State-Funded Buildings (design new construction and major renovations to meet Leadership in Energy and Environmental Design (LEED) standards)
  - Training of Building Operators (train building operators to maximize efficiency of their buildings and reduce energy use)
  - Energy Benchmarking and Tracking Program for Municipal Buildings (measure and track energy consumption, strategic planning, and benchmarking in comparison to other buildings)
  - Procurement of Environmentally Preferable Services and Products
- Agriculture, Forestry, Waste:
  - Reduce Use of Non-Farm Fertilizer (support education programs to reduce nonfarm (i.e., commercial and residential) fertilizer use by 7.5% by 2010 and 15% by 2020)
  - Buy Locally Grown Food (local produce reduces emissions associated with the transport of agricultural products; purchase an additional 10% of CT's farm products from local sources instead of conventional markets)
  - Urban Tree Planting Program
  - Plant trees in urban areas to reduce the consumption of energy for heating and cooling buildings, thereby helping avoid fossil fuel emissions and increasing the carbon stock of non-forest land.
  - Establish an urban forestry program (CT DEP provides funding and other support for urban forestry programs and tree planting).

[189] Governor's Steering Committee on Climate Change. January 2005. Connecticut Climate Change Action Plan 2005. 42 p.

  - Forest and Agricultural Land Preservation (support the protection of forestland and agricultural land preserves for their carbon absorption/sequestration capacity)
  - Increase Recycling and Source Reduction
- Electricity Generation:
  - Government Clean Energy Purchase (see below)
- Education and Outreach:
  - Support state efforts to foster a broad awareness of climate change issues (including co-benefits) and impacts and engage citizens in actions to reduce GHG emissions
  - Lead by example (e.g. make municipal events "green" with environmentally preferable products, recycling containers, locally grown food, etc.; reduce municipal fertilizer use)

Dealing with Climate Change Locally

State & Voluntary Programs

The Connecticut Governor's Steering Committee on Climate Change also recommends that cities and towns develop local climate change action plans. Eighteen municipalities have pledged to reduce greenhouse gas emissions: Bridgeport, Fairfield, Hamden, Hartford, New Britain, New Haven, Plainville, Stamford, Weston, Windham, and Windsor. Bristol, New Britain, Berlin, Burlington, Plainville, Plymouth, and Southington have also made the pledge through the Central Connecticut Regional Planning Agency. All of these communities also joined Cities for Climate Protection, a program run by the International Council for Local Environmental Initiatives. Information about this program is available at: http://www.iclei.org/index.php?id=1854 for more information

Enfield Clean Energy Committee

Enfield participates in the Connecticut Clean Energy Fund (CCEF), which was created in 2000 by the Connecticut Legislature to support clean energy. In October 2007, the Town Council approved a Resolution Proposing Clean Energy Commitment and Creating a Clean Energy Committee. According to the resolution: with a commitment to the health of its citizens, the Town of Enfield commits to the CCEF "20% by 2010" campaign, where, by the year 2010, the Town's municipal facilities will purchase 20% of energy needs from clean energy sources and will allocate 100% of any electricity savings to additional town purchases of clean energy.

A Clean Energy Committee was also created by the resolution for the purpose of promoting clean power options, encouraging the development of renewable energy in Enfield; and making recommendations to the Town Council for purposes of achieving the Town's goals stated in the resolution.

Enfield's Clean Energy Committee was established in 2007. The committee researches opportunities for clean energy purchase, renewable energy, and funding and provides recommendations to the Town Council. The committee also networks with other municipalities and organizations to learn what has worked in other communities. The committee is working with the town to establish the town's baseline energy use and recommends that the town participate in the EPA Community Energy Challenge.

Economic Incentives for Energy Conservation

As part of the CCEF, if Enfield further commits to the EPA Community Energy Challenge, the town can qualify for (1) free solar power systems by making significant commitments to clean energy and (2) $5,000

Community Innovations Grants to fund programs designed to raise awareness of the benefits and availability of clean energy on the local level.

Energy efficiency not only reduces GHG emissions, but also saves money. The EPA Community Energy Challenge is an opportunity for municipalities across New England to identify simple and cost-effective measures that increase energy efficiency and renewable energy use while reducing air pollution and saving money.[190] Communities must set a target for reductions (at least 10% lower than the community's baseline) in energy use intensity (energy use per square foot) and then track energy use, costs and greenhouse gas emissions. The timeframe for reductions is up to participants. The EPA and its program partners provide resources to identify opportunities for energy efficiency and renewable energy sources. Thirty-three cities and town in Connecticut have already joined the challenge.

[190] "Community Energy Challenge: Promoting Energy Efficiency and Renewables in New England Cities and Towns". US Environmental Protection Agency. 4 August 2009. <http://www.epa.gov/Region1/eco/energy/energy-challenge.html>

Findings

- The town's "Aquifer Protection Area Regulations" have been adopted as the town's aquifer protection area land use regulations, consistent with state regulations. However, even though the CT DEP lists agricultural and residential land uses as principal groundwater concerns, these activities are not regulated by the state or local Aquifer Protection Area regulations.
- Enfield has experienced on-going erosion problems, particularly of the terrace escarpment soils. More sustainable methods of stormwater management, such as on-site bioretention, constructed wetlands and permeable paving, as well as the preservation/restoration of wetlands and floodplain areas can help address the causes of erosion and flooding problems. The CT DEP's "Stormwater Quality Manual" provides guidance on measures to protect waters from the adverse impacts of post-construction stormwater runoff, including to retrofit of older stormwater systems.
- One important element of this permit is the requirement that towns implement public education programs to make residents aware that stormwater pollutants emanate from many of their everyday living activities, and to inform them of steps they can take to reduce pollutants in stormwater runoff.
- The CT DEP has assessed several surface water segments in Enfield for water quality and listed these water bodies on the Impaired Waters list, including the Connecticut River, Scantic River, Freshwater Brook and Buckhorn Brook. The Connecticut River and Buckhorn Brook are classified as not supporting recreational use, and TMDL studies have been given a high priority. Per the CWA, all water bodies identified on the Impaired Waters list must attain water quality standards within a reasonable period, either through a Total Maximum Daily Load (TMDL) study (Water Cleanup Plan) or other pollution control mechanisms. The impairments to the Connecticut River and Buckhorn Brook are being studied for possible development of TMDL.
- General sources of contamination with the potential to impact to Enfield's drinking water wellfields include properties with underground fuel storage tanks, improperly maintained on-site septic systems, improper waste disposal, or commercial/industrial sites that store or use chemicals or generate hazardous wastes.
- The wellfield with the highest susceptibility is the O'Bready Wellfield, located north of Hazardville. Some of the conditions that contribute to its high overall susceptibility rating include: levels of several contaminants that exceed federal and state maximum contaminant/guidance levels; a contaminant release point within the source water area; commercial or industrial development of ten percent or more of the source water area; and very little or no public/private preserved open space lands within the source water area.
- According to Enfield's Source Water Assessment, a potential risk factor common to most of the source water areas is that more than 30% of the land (in 2003) is undeveloped, which could present a risk if developed inappropriately. Additionally, less than 10% of the land in the source water areas exists as preserved open space.
- Efforts to protect and improve groundwater quality focus on protection of the source water supply, which includes land use regulation and land conservation. Land conservation can also offer long-term cost savings over mitigating water quality problems.

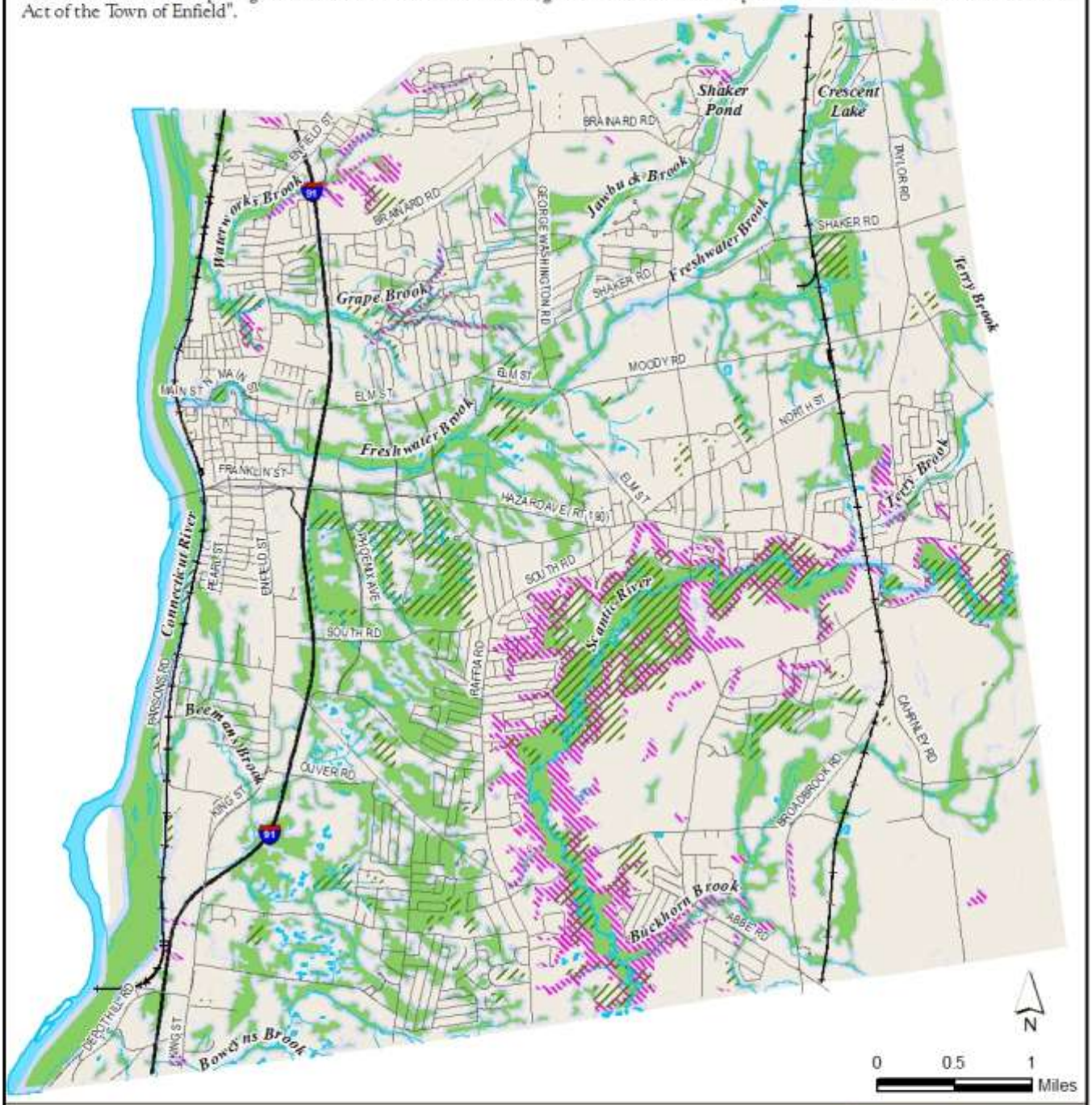
- Decisions about land use over the next several decades will be particularly significant since nearly 87% of the land within Enfield's aquifer protection areas is currently unprotected and 19% of this is vacant or unprotected open space susceptible to development. Seventy percent is already developed with commercial, industrial, institutional, residential or agricultural land uses.
- Historically, wetlands have been undervalued because their benefits and environmental functions were not well understood. Wetlands perform valuable ecological functions: they remove nutrients, pollutants and sediments from surface water runoff; recharge water supplies; reduce shoreline erosion and flood risks; and provide fish and wildlife habitat. In addition, wetlands provide recreational opportunities, aesthetic benefits, sites for research and education, and commercial fishery benefits.
- In Enfield, freshwater wetlands are regulated through the "Inland Wetlands and Watercourses Regulations of the Town of Enfield", consistent with state requirements. The regulations require a permit for all "regulated activity" within the wetlands and watercourses and an associated upland review area. In general, the applicant must demonstrate that his application is consistent with the purposes and policies of the regulations and that a feasible and prudent alternative does not exist.
- In Enfield, approximately 5,160 acres (or 23% of the town) are classified as inland wetlands or watercourses. Additionally, approximately 6,260 acres (or an additional 28% of the town) falls within the upland review area.
- In addition to government regulation, some of the best protection for wetlands has been provided through acquisition and conservation easements by private and public land protection programs. Approximately 722 acres, or 14% of the inland wetlands and watercourses in Enfield, fall within protected open spaces; however, they can still be affected by land use activities within the open spaces as well as by adjacent land uses.
- Approximately 90% of the agricultural land use in the town occurs on land considered prime farmland or farmland of statewide importance.
- 823 Ac or 21% of the agricultural land use in Enfield occurs on land designated as preserved farmland.
- CT DEP's Natural Diversity Database (NDDB) maps represent approximate locations of endangered, threatened and special concern species and significant natural communities. CT DEP may have to be contacted for guidance if a project meets one or more criteria.
- Connecticut has established a goal of protecting 21% of the state's land areas (673,210 acres) by 2023. Of this 21%, 10% is targeted to be acquired and held by the state and 11% is targeted to be acquired and held by land protection partners.
- There are 1,574 acres of protected open space in Enfield (7% of the town). The CT DEP owns 21% of this protected open space and the remaining 79% is protected through partners (Town of Enfield, Northern Connecticut Land Trust, water companies, etc.). To achieve 21% protected open space within Enfield by 2023, approximately 3,150 additional acres would need protection (although the 21% is a statewide goal and may not be dispersed equally throughout the state's municipalities).
- Connecticut has pledged to reduce the state's greenhouse gas emissions to 1990 levels by 2010 and 10% below that by 2020, which will require aggressive action by all sectors of society, including local governments.

- The Connecticut Climate Change Action Plan 2005 details 55 recommended actions, many of which can be implemented at the municipal level, to help the state reach its GHG reduction targets. These are summarized on the previous pages.
- The Clean Energy Committee can help the town research and implement GHG reduction actions, educate the public and promote Enfield's role in mitigating climate change.
- The Enfield Clean Energy Committee supports the town's participation in the EPA Community Energy Challenge, which can save the town money through energy savings and help the state meet its GHG reduction goals.
- Protection/Improvement Efforts: Efforts to protect and improve surface water quality focus on the reduction of non-point source pollutants, municipal wastewater discharges and coordinated watershed efforts.
- As non-point source pollution is inextricably tied to local land use, many related water quality problems can, and should, be addressed locally through land use planning, education and, where appropriate, regulation.

Legend

- Protected Open Space
- Escarpments
- Inland Wetlands & Watercourses
- Upland Review Area
- Roads
- Railroad
- Surface Water
- Town Boundary

Notes: Protected Open Space includes (1) land identified by the DEP Protected Open Space Mapping Project (CT DEP, 2009) and (2) water company land identified in Enfield land use data as watershed land; Inland Wetlands and Watercourses and the Upland Review Areas shown on this map are general locations shown for reference/guidance and are defined per the "Inland Wetlands and Watercourses Act of the Town of Enfield".



Inland Wetlands and Watercourses

Plan of Conservation & Development - Town of Enfield, CT

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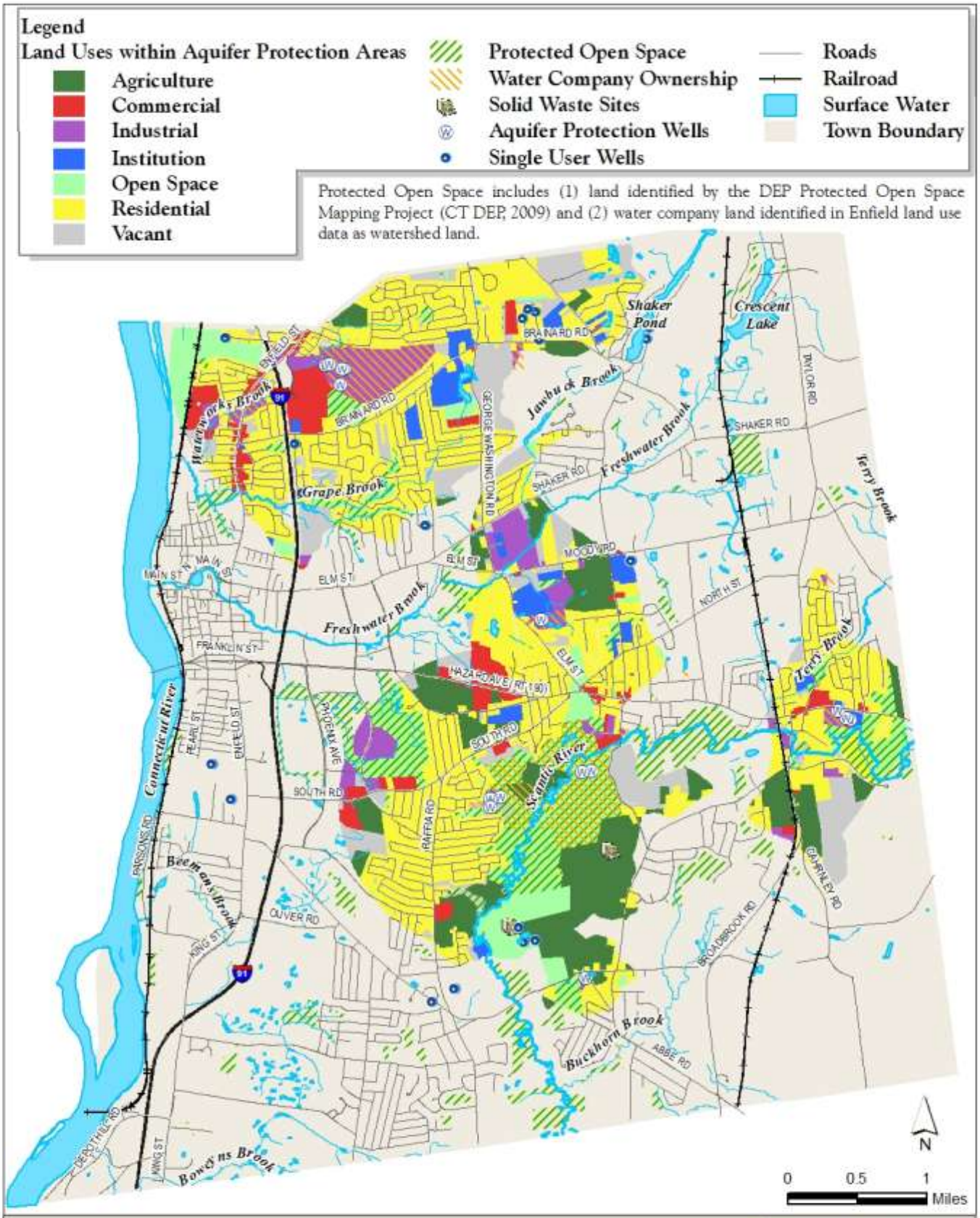
peter j. smith & company, inc.



Aquifer Protection

Plan of Conservation & Development - Town of Enfield, CT

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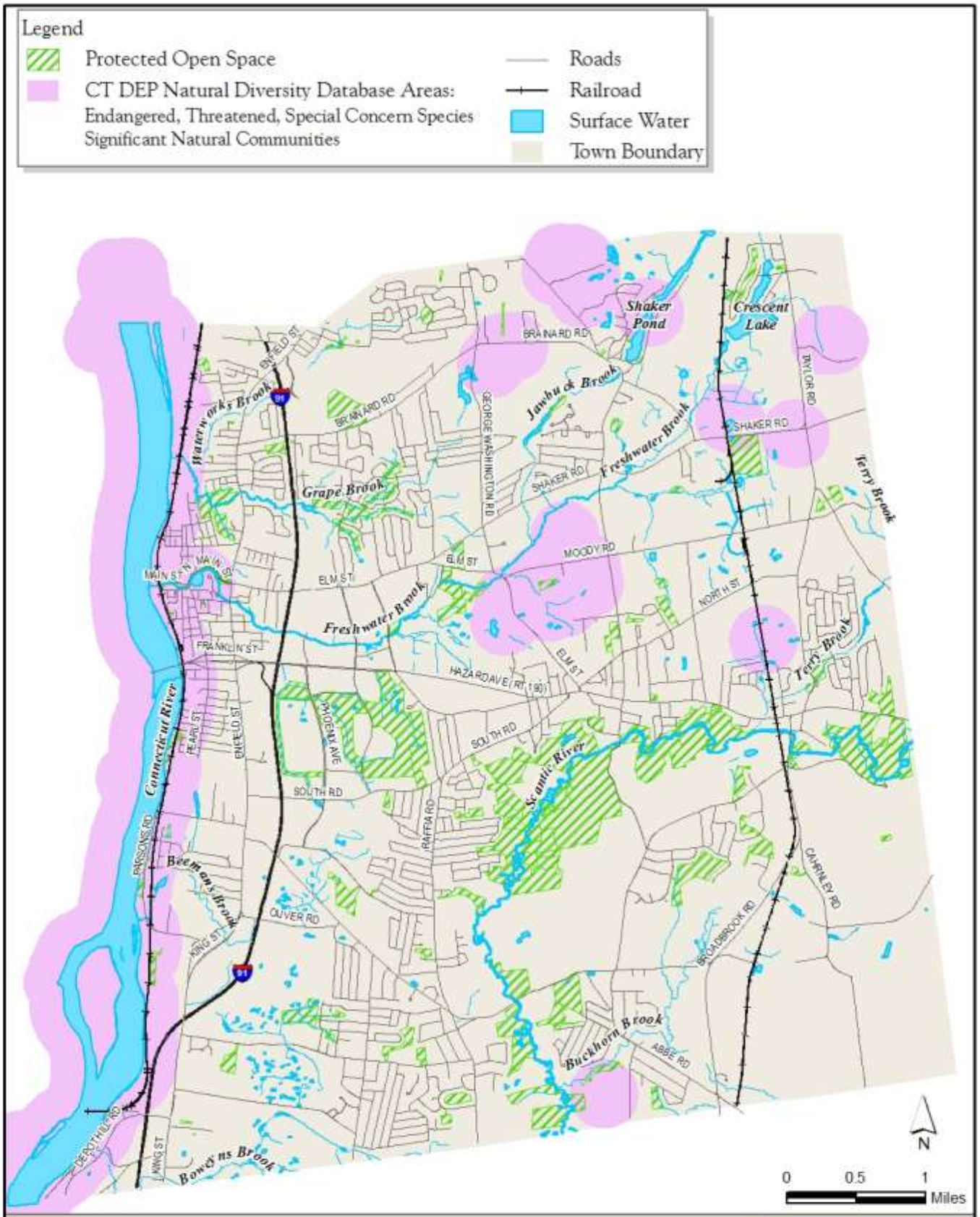


Natural Diversity - Areas of Concern

Plan of Conservation & Development - Town of Enfield, CT

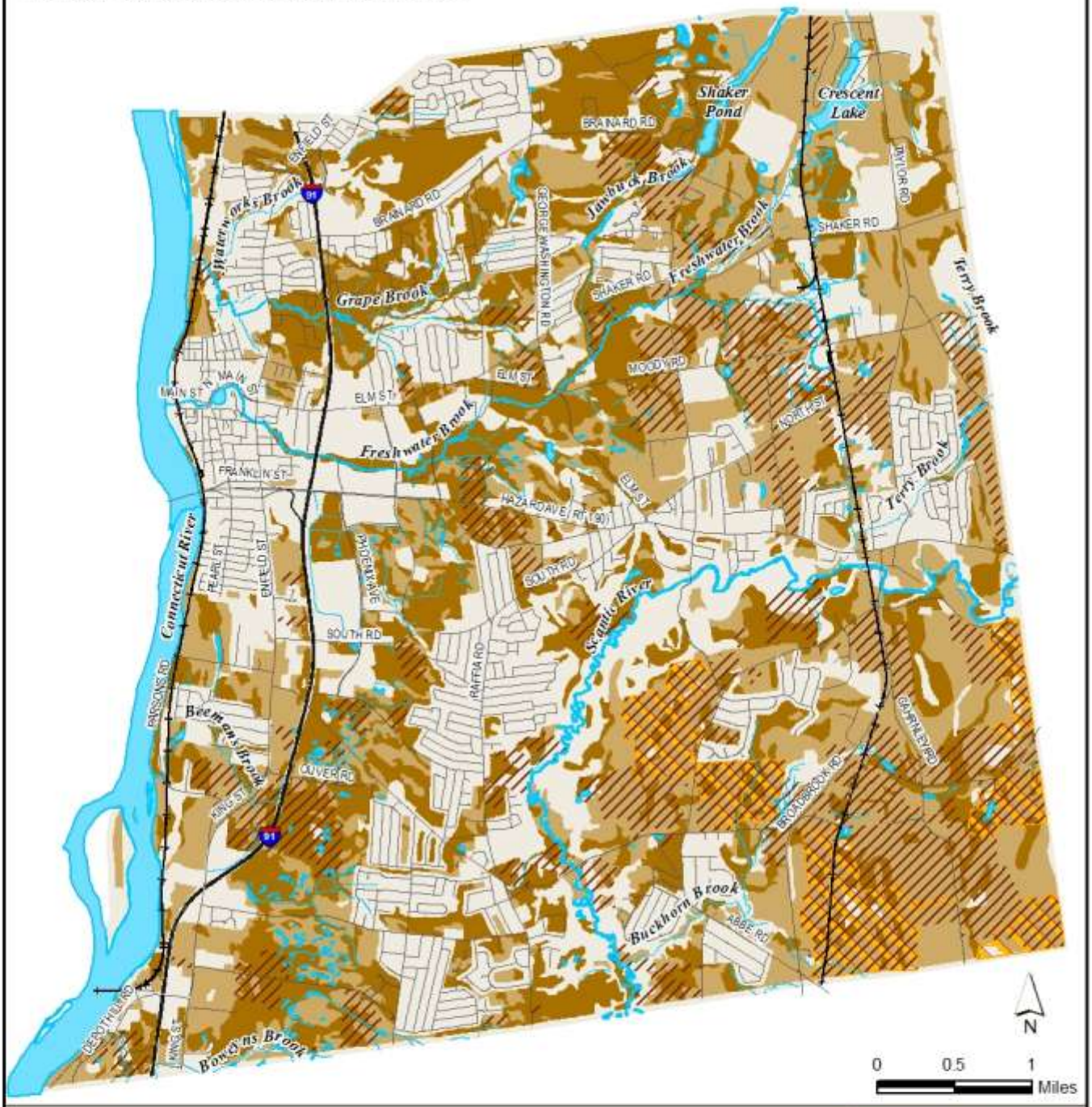
DESIGN Planning, Inc.
peter j. smith & company, inc.

Legend

Soils

- Farmland of Statewide Importance
- Prime Farmland
- Agricultural Land Use
- Preserved Farmland
- Roads
- Railroad
- Surface Water
- Town Boundary

Note: Farmland Preservation Property includes parcels of land that are designated as preserved farmland under the Connecticut Farmland Preservation Act (CT DEP and DOAG, 2009).



Farmland

Plan of Conservation & Development - Town of Enfield, CT

DESIGN PLANNING, INC.
Peter L. Smith & Company, Inc.

Current Land Use & Zoning

Identifying the use of each parcel in the Town of Enfield is important because it reveals the pattern of past growth. This is the first step to determine areas that should be preserved and the potential for future development. The analysis of existing land use is the basis of the Town's Future Land Use Plan. Existing land use helps us understand how activities are spatially organized within the Town of Enfield. It can be used to ensure that conflicts between different land uses are minimized to preserve human and environmental health. Evaluating current land use patterns also helps figure out how they should change in the future, if they should. Existing land use patterns are combined with the identified needs and projections for people and facilities to get a rough idea of how much space will be needed to accommodate the uses that are important to the communities' goals. As a result, it will be the basis of goals and objectives for this plan.

Existing Land Use

A by parcel inventory of land use was conducted with data from the Town of Enfield Planning Department. The database revealed that the Town utilizes 24 land use categories. These categories were consolidated into the following general land use categories:

Agriculture- Agricultural Land accounts for 18% of the Towns area. The majority of agricultural land is located in the southeast section of the Town. There are also large areas of agricultural uses around Moody Road. Other agricultural uses still exist in several other areas of the Town, even in areas surrounded by development. The State of Connecticut has a Purchase of Development Rights (PDR) Program to preserve agricultural land. Active farms with more than 30 acres of cropland and a high percentage of prime agricultural soil are eligible to receive compensation in exchange for a deed restriction not to develop the property in the future. Several farms in Enfield have sold their right to develop their property and keep their land in agricultural use.

Residential - There are 6,509 acres of residentially developed property, accounting for nearly 30% of the Town of Enfield. The majority of this land is low density residential development (1-2 family). Residential uses are located along two belts. In the Central part of the Town, residential uses are located on the north and west side of the Scantic River. Residential development is also concentrated along the extreme north and west borders of the Town. Higher density residential uses are concentrated primarily around Thompsonville. A couple of residential neighborhoods are found in the southeast portion of the Town, surrounded by agricultural uses.

Commercial - Commercial land uses include office uses as well as retail sales and services. The 1,143 acres of commercial property is an increase of 151 acres since the 1998 land use inventory and represents 5.2% of the Town's area. A large regional commercial center around Hazard Avenue, east of I-91 contains most of the commercial land. A smaller concentration of commercial uses is located around the King Street exit of the I-91. Commercial corridors exist along Enfield Street, north of Elm Street and along Hazard Avenue on the eastern side of the Town

Industrial - Industrial uses make up 5.6% of the Town. The 1,243 acres includes warehousing operations and utility uses. A large parcel operated by the Connecticut Water Authority is included in the industrial area; however, most of the land is vacant. The largest concentration of industrial uses is located in the

northeast corner of the Town and includes the Hallmark facility north of Shaker Road and an industrial park on the south side of Shaker Road. Other industrial uses are concentrated around Moody Road at George Washington Road, Phoenix Avenue at South Road, and along Depot Hill Road.

Institutional - Institutional land included government facilities, hospitals, schools, churches, and other community oriented facilities. These uses make up 6.5% of the Town's area. A large portion of the 1,434 acres dedicated to institutional uses is due to the prison complex, located in the north east corner of the Town, which includes five prisons extending into the Town of Somers. Other than these facilities, institutional uses are scattered throughout the town with some concentration in and around village areas

Open Space - Open space land is land dedicated to parks or preserved for natural resources. Most of the 2,398 acres of open space is located around the Scantic River. This area has been designated as the Scantic River Greenway. There are several open space areas along the Connecticut River as well. There is a large amount of preserved land in the industrial park area south of Hazard Avenue. Other open space areas include parks throughout the Town and common open space areas contained in subdivisions.

Vacant Land - Vacant Land is land that is currently not being used for anything but can be developed in the future. Preserved land is not included in vacant land. The Town has 2,566 acres of vacant land that could be developed. There are many large vacant parcels distributed throughout the Town with the majority of them on the south side of the Town.

Other - In order to account for the whole area of the Town, areas covered by water and road right-of-ways were factored into the area. The water area includes areas covered by ponds and rivers. Water that was located on a parcel devoted to another use was still counted as water and the area was subtracted from the other use. Just over 4% of the Town is covered by water. The remaining 8.4% of the Town is dedicated to road right-of-ways.

Table 45 Land Use in Enfield in 2009

Land Use Category	Land Use Subcategory	Acres	Percent (%)
Agriculture	**Total**	**3,961**	**18.0**
Residential	1,2,3 Family	5,767	26.2
	4-19 Family	34	0.2
	20+ Family	157	0.7
	Condominium	371	1.7
	Planned Residential Development	180	0.8
	Total	**6,509**	**29.6**
Commercial	Retail / Sales Service	498	2.3
	Office	193	0.9
	Professional / Financial Services	129	0.6
	Mixed Commercial / Residential	27	0.1
	Auto Sales / Service	115	0.5
	Other Commercial	181	0.8
	Total	**1,143**	**5.2**
Industrial	Manufacturing	707	3.2
	Wholesale / Distribution / Heavy Commercial	258	1.2
	Utility	277	1.3
	Total	**1,243**	**5.6**
Institutional	Municipal Facility	412	1.9
	State / Federal Facility	763	3.5
	Private Institution	260	1.2

Table 45 Land Use in Enfield in 2009			
Land Use Category	**Land Use Subcategory**	**Acres**	**Percent (%)**
	Total	**1,434**	**6.5**
Open Space	Town Park / Recreation / Open Space	1,039	4.7
	Private Open Space / Recreation	579	2.6
	Other Public Recreation / Open Space	371	1.7
	Watershed	280	1.3
	Cemetery	129	0.6
	Total	**2,398**	**10.9**
Vacant Land	**Total**	**2,566**	**11.7**
Water	**Total**	**921**	**4.2**
Road ROW	**Total**	**1,842**	**8.4**

Current Zoning

The Town of Enfield originally adopted a zoning ordinance in 1925. Major updates to the ordinance have taken place in 1966, 1975, and the latest in 2002. Zoning Ordinance establishes permitted uses, minimum lot sizes, minimum front, side and rear setbacks for principal and accessory buildings, maximum building heights, maximum building and lot coverage, and minimum floor areas. The Zoning Ordinance is a critical tool for controlling the type, density, and appearance of development within the Town. The Zoning Ordinance for Enfield establishes 14 districts. One of the districts is currently not being used. In addition to the base districts, there are three overlay districts, which were created to protect the Connecticut River and control design along major corridors.

The following table presents a breakdown of the zoning districts by area:

Table 46 Zoning Categories in Enfield in 2009			
Zoning Category	**Description**	**Acres**	**Percent (%)**
HR-33	One Family Residence	293	1.3
R-33	One Family Residence	6,864	31.0
R-44	One Family Residence	4,384	19.8
R-88	One Family Residence	4,951	22.4
BL	Local Business	271	1.2
BG	General Business	99	0.4
BP	Professional Business	162	0.7
BR	Regional Shopping	438	2.0
TVC	Thompsonville Village Center	71	0.3
I-1	Industrial	3,024	13.7
I-2	Industrial	138	0.6
IP	Industrial Park	445	2.0
SDD	Special Development	43	0.2
No Zone		966	4.4

Residential Districts

All of the residential districts in the Town of Enfield are for the development of single family dwellings. The minimum lot size is based on the number associated with the individual district multiplied by 1,000 square feet. There are exceptions made for a variety of senior housing developments. Agricultural uses are subject to a special permit. Together, the residential districts make up almost ¾ of the Town. The lowest

density R-88 District is located in the southeast portion of the Town and on the land occupied by the prison complex. The H-44 District is located in several areas of the Town including an area within the R-88 zoned area. The R-33 District is generally located along two belts in the northern and western halves of the Town. The two belts are separated by industrial and commercial districts. The Historic Residential District (HR-33) is located between Enfield Street and I-91 from Hazard Avenue to Oliver Road. The District differs from the R-33 District in that it does not permit some senior housing complexes or duplexes by special permit.

Commercial Districts

Commercial district are divided into 5 different types with varying lot sizes, lot coverages, setbacks, heights, and permitted uses. All of the commercial districts together take up less than 5% of the Town with the Regional Shopping District being the largest. With the exception of the Thompsonville Village Center (TVC) District, in general, residential uses are not permitted in commercial districts unless in conjunction with a professional practice.

The BR District is designed for large regional shopping centers with areas greater than 80,000 square feet. The district is located on the east side of I-91 around the Hazard Avenue and Elm Street exits and around the Enfield Street exit.

The TVC District is designed to encourage revitalization of Thompsonville Village Center. The District permits a variety of compatible uses, while maintaining the pedestrian friendly historic village character. Individual establishments should be less than 5,000 square feet. Design Standards preserve the historic features of the Village.

The Local Business (BL) District and the General Business (BG) District differ slightly in intensity. Both districts are distributed as small areas along Enfield Street/King Street, Hazard Avenue, and to a lesser extent on Raffia Road.

The Business Professional District is designed for office park style developments with large amounts of open landscaped areas. Maximum lot coverage is 60%. The District is located on Hazard Avenue between Hazardville and the regional shopping center. The Limited Office (LO) district is designed for smaller office establishments. The District is currently not in use.

Industrial Districts

There are three industrial districts that occupy 16.3% of the area in the Town of Enfield. The I-1 and I-2 Districts differ only in the types of uses allowed. The I-2 district allows more auto related uses such as auto sales and service stations. The I-P district is designed for larger industrial developments with larger amounts of open area. The I-1 District occupies a large area both north and south of Shaker road and two other large areas on the east side of I-91. There are also some isolated I-1 area located near Hazard Avenue and Enfield Street. The I-2 District is located on Shaker Road, south of the Hallmark Factory and around Depot Hill Road. The I-P District is located between Hazard Avenue and South Road.

Special Districts

The Special Development District was created for the adaptive reuse of vacant, deteriorating or underutilized buildings. Any land use is permitted with the approval of the Commission with a plan submitted for the restoration of a building. There are two SDD districts located at the King Street exit and on the west side of Thompsonville.

The Enfield/King Street Design Overlay District is designed to promote the character and scale of a historic New England town along that corridor. Design standards control development in relation to the

existing historic character. The Hazardville Overlay District is also meant to enhance the historic character of that area of the Town. The purpose of the Conservation Overlay District is to protect the quality and character of the Connecticut River, while permitting some water dependant uses and to protect new development from flooding hazards.

Zoning Ordinance Assessment

Overall the Zoning Ordinance for the Town of Enfield is a well organized, easy to understand document. The Ordinance contains design and performance standards to protect the character of the Town. Agricultural uses, while permitted, are not protected from development. Mixed uses are permitted in certain areas of the Town. There are no provisions for multiple family developments except for senior developments, within the TVC, and with the option of the Special Development District.

Build-Out Capacity Analysis

A capacity analysis was performed to estimate the potential amount of new development that could occur in the future. The analysis was based on the current zoning and a set of assumptions. Assumptions include complete build-out of all vacant and agricultural land. It is impossible to determine the amount of development that would occur as a result of infill and redevelopment.

Another assumption was that certain areas cannot be developed. These were considered constraints. A constraints layer was created to identify all the spatial factors that preclude or limit development. These factors include flood plains, steep slopes, areas protected by the Inland Wetlands and Watercourses Regulations, farms that have sold their development rights, and areas designated as the Scantic River Greenway. These areas are considered undevelopable, and were consequently removed from the analysis.

Methodology

The capacity analysis was performed using geographical information system (GIS) software. GIS is a computerized database and mapping technology that can be used for spatial analysis such as this.

The Town's zoning and land use maps (or "layers" as they are known in GIS) were combined to create a map that had attributes of both existing land use and zoning districts. This map was then combined with the constraints layer, and all parcels that had a constraint were removed. The result was a land use and zoning layer of all developable land. In the process of doing this, the software calculated the area of each developable parcel, which was then imported to an Excel spreadsheet.

The spreadsheet was then used to calculate the total amount developable land. The total amount of developable land was the sum of vacant and agricultural land uses. The next step was to determine the number of residential units, commercial space, and industrial space that could potentially be developed in each zoning district. Table 46 shows the formulas used to calculate the potential build-out capacity.

Table 47 Formulas Used to Calculate Build-Out Capacity					
Zoning District	**Formula for Residential Units**	**Zoning District**	**Formula for Commercial Space**	**Zoning District**	**Formula for Industrial Space**
R-33	acres x 1.25 = r.u.	BL	area x 20% = ft^2	I-1	area x 50% = ft^2
HR-33	acres x 1.25 = r.u.	BG	area x 25% = ft^2	I-2	area x 50% = ft^2
R-44	acres = r.u.	BP	area x 15% = ft^2	I-P	area x 33% = ft^2
R-88	acres x 0.5 = r.u.	BR	area x 25% = ft^2		
		TVC	area x 85% = ft^2		

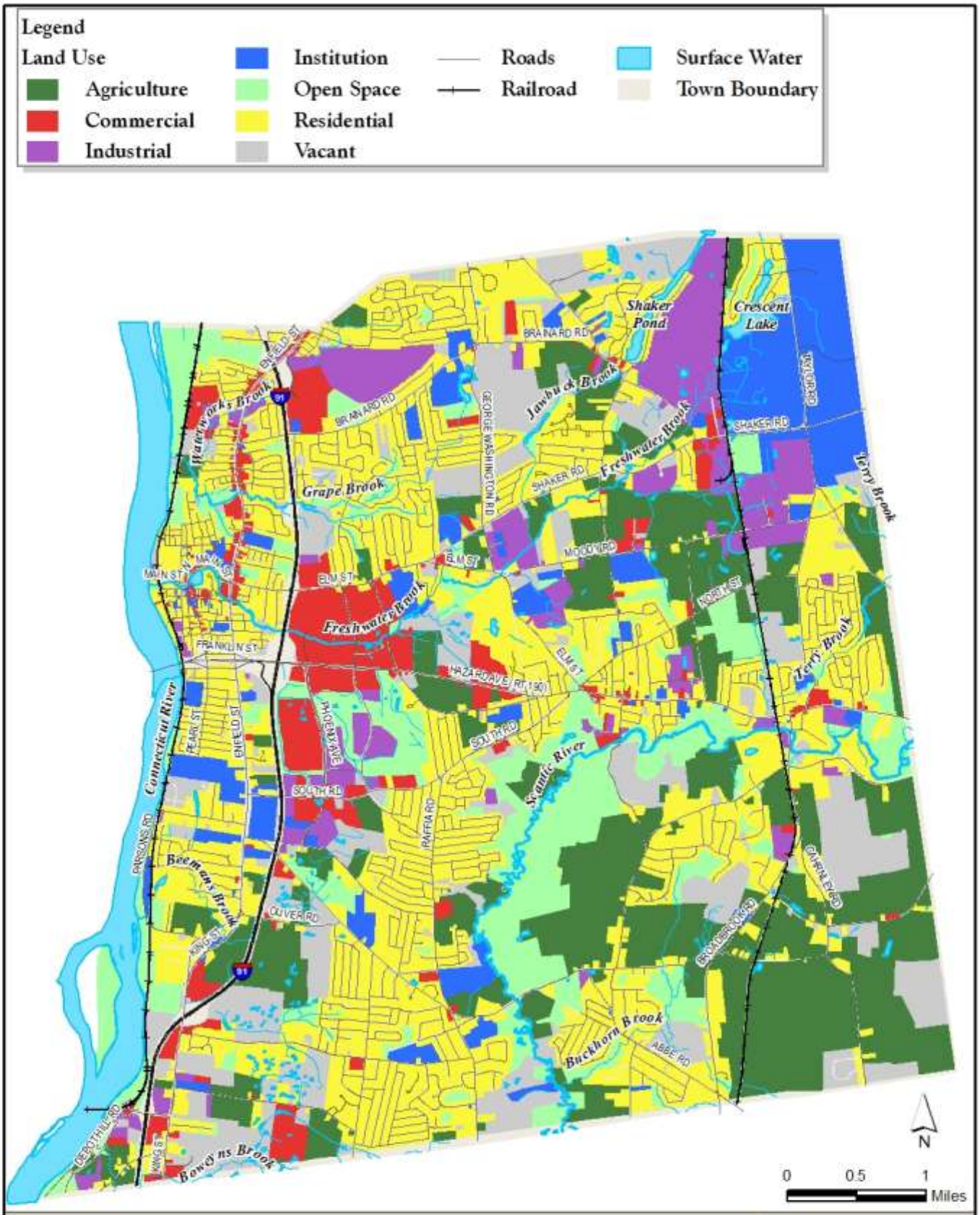
The density of residential development shown on Table 46 is based on the maximum density permitted in each of the current residential zoning districts. Commercial and industrial space is based on the maximum building coverage permitted in each of the current commercial and industrial zones. The calculation assumes that in both commercial and industrial spaces only one floor will be developed. Table 47 shows the results of these calculations: the amount of new development that would be possible if all vacant and agricultural land were built out to the maximum capacity according to existing zoning regulations.

Table 48 Build Out Capacity (Vacant and Agricultural Land)				
Zoning District		Undeveloped Area		Maximum Development Potential
		Area (ft^2)	Acres	
Residential	R-33	14,647,510	336	420 units
	R-44	34,998,016	803	803 units
	R-88	52,344,758	1,202	601 units
	Total			**1,825 Residential Units**
Commercial	Local Business	392,554	9	78,511 ft^2
	General Business	46,377	1	11,594 ft^2
	Professional Business	668,127	15	100,219 ft^2
	Regional Shopping	270	0	68 ft^2
	Thompsonville Village Center	63,911	1	54,324
	Total			**244,716 ft^2**
Industrial	I-1	32,073,220	736	16,036,610 ft^2
	I-2	587,949	13	293,974 ft^2
	I-P	23,914	1	7,892 ft^2
	Total			**16,338,476 ft^2**

Under existing zoning regulations, the Town of Enfield could accommodate approximately 1,825 housing units; over 200,000 square feet of commercial space; and a little over 16,000 million square feet of industrial space. While this analysis does not account for the possibility of commercial uses developing in industrial zones, it does demonstrate that there is an oversupply of land zoned for industrial use.

For comparison purposes, this process was repeated excluding all agricultural land. In this way, it is possible to get an idea of how much land could be developed for residential, commercial and industrial uses if all agricultural land in Enfield was protected.

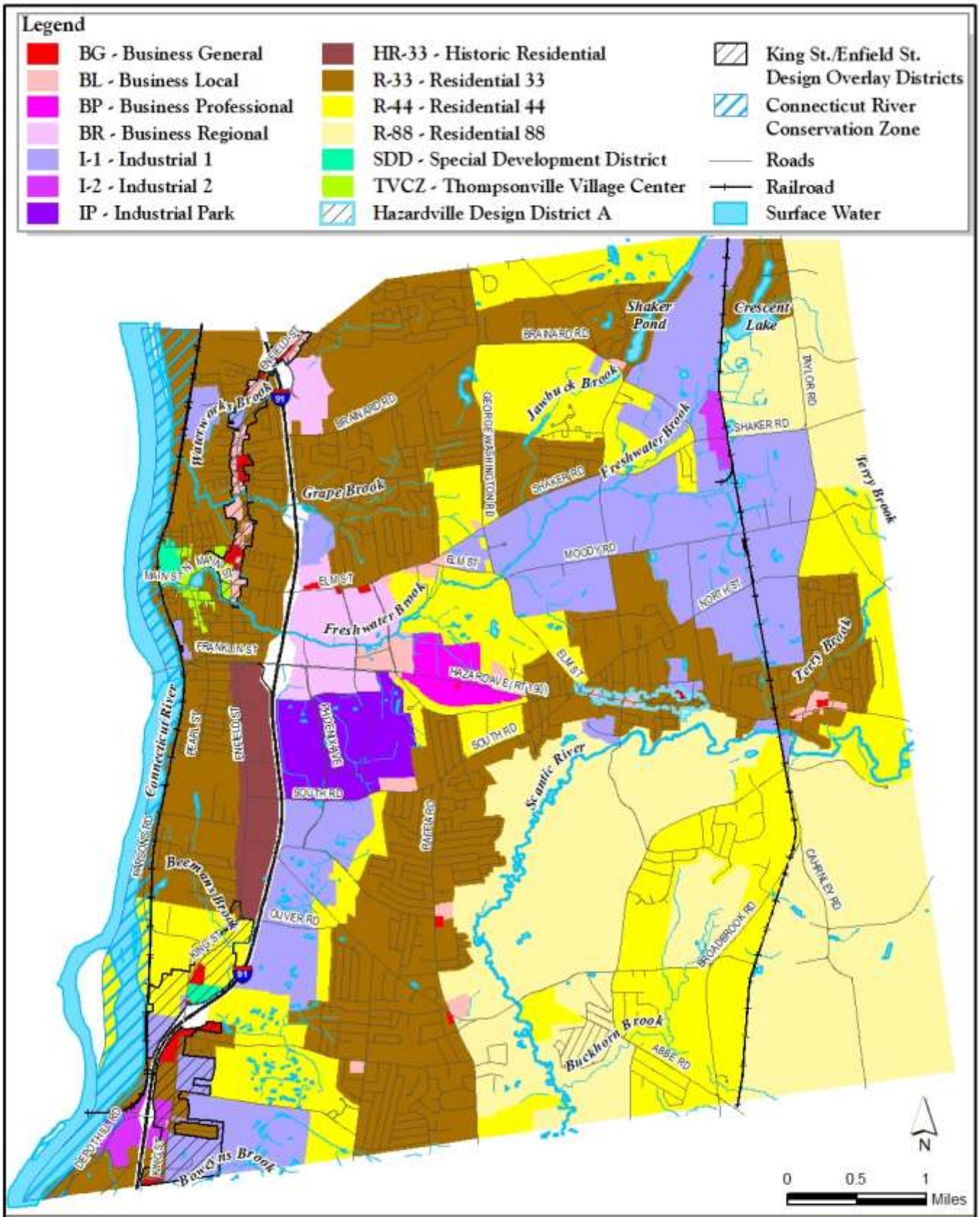
Table 49 Build out Capacity (Vacant Land Only)				
Zoning District		**Undeveloped Area**		**Maximum Development Potential**
		Area (ft^2)	**Acres**	
Residential	R-33	8,953,906	206	257 units
	R-44	15,986,211	367	367 units
	R-88	18,144,535	417	208 units
	Total			**832 Residential Units**
Commercial	Local Business	74,214	2	14,843 ft^2
	General Business	46,044	1	11,511 ft^2
	Professional Business	557,232	13	83,585 ft^2
	Regional Shopping	270	0	68 ft^2
	Thompsonville Village	63,911	1	54,324 ft^2
	Total			**164,330 ft^2**
Industrial	I-1	11,508,348	264	5,754,174 ft^2
	I-2	189,497	4	94,748 ft^2
	I-P	23,914	1	7,892 ft^2
	Total			**5,856,814 ft^2**



Existing Land Use

Plan of Conservation & Development - Town of Enfield, CT

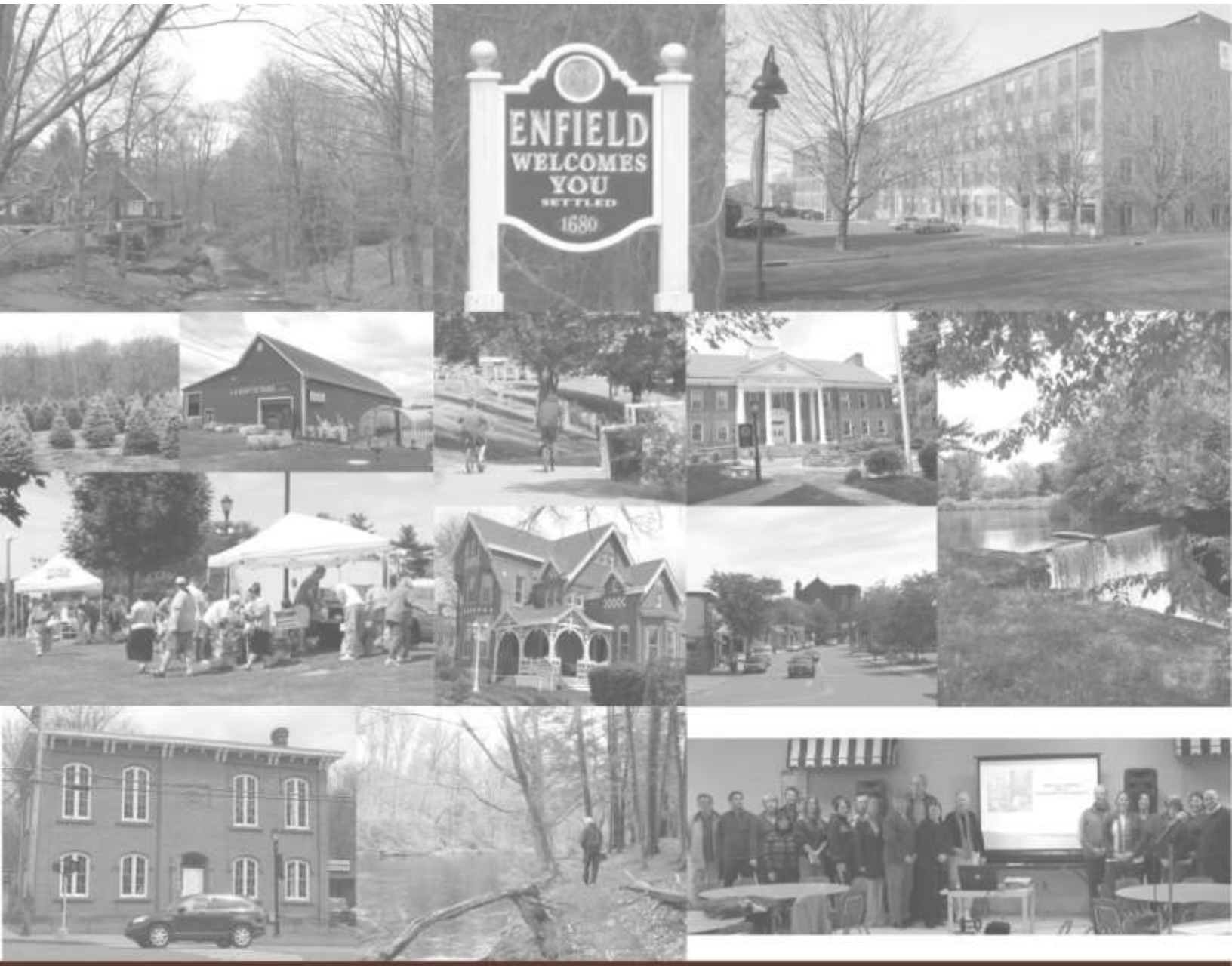
DESIGN PLANNING, INC.
Peter J. Smith & Company, Inc.



Zoning

Plan of Conservation & Development - Town of Enfield, CT

DESIGN Joint Planning, Inc.
peter j. smith & company, inc.



Appendix