



Mansfield Tomorrow:

PLAN OF CONSERVATION AND DEVELOPMENT

TOWN OF MANSFIELD, CONNECTICUT | OCTOBER 8, 2015



ACKNOWLEDGEMENTS

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Thank you to all of the advisory committee members and Town staff that took the time to provide input during the planning process and review draft chapters of the plan. Your expertise, thoughts and ideas have made this plan better and provide a foundation for your future efforts as we move into implementation.

AND TO EVERYONE IN MANSFIELD WHO PARTICIPATED—THANK YOU! THIS IS YOUR PLAN!

Everyone who responded to the public opinion survey, gave time for an interview, or participated in community workshops helped make this plan—and can help put the plan into action to make Mansfield's vision for tomorrow a reality. This is your plan and your future!

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ABOUT THE PLAN



Photo credit: James D. Gilligan



Photo credit: UConn

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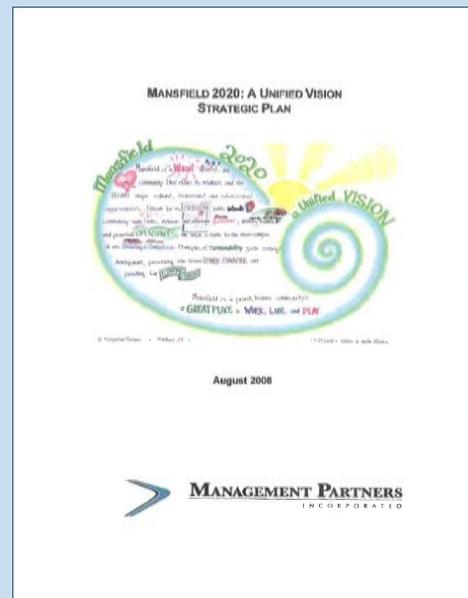
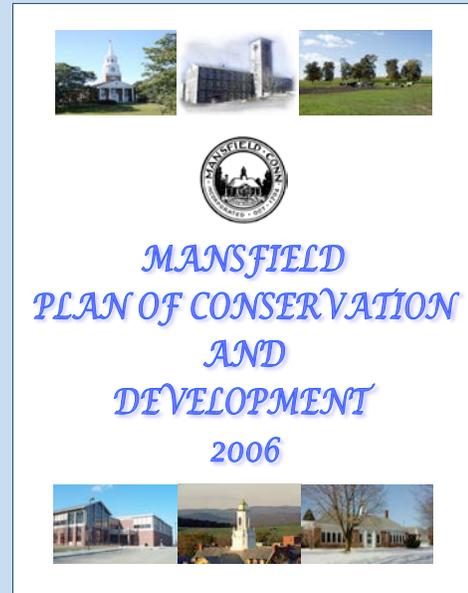
This section provides an overview of the Plan and how to use it, including foundational principles, consistency with state and regional plans, and a summary of each Plan chapter.

A New Plan of Conservation and Development

This document serves as the Town's fifth Plan of Conservation and Development (POCD). POCDs are developed in accordance with Section 8-23 of Connecticut General Statutes (C.G.S.), which requires municipalities to adopt a Plan of Conservation and Development every ten years. Prior Mansfield Plans of Conservation and Development were completed in 1971, 1982, 1993, and 2006.

These earlier POCDs focused on land use issues and regulatory actions. Sensing the need for a broader plan to help guide decision making for the town, in 2008 the Town Council developed *Mansfield 2020: A Unified Vision* to serve as the town's Strategic Vision (henceforth referred to as the "2008 Strategic Vision"). **The 2015 POCD consolidates and expands on the work done as part of the 2006 POCD and the 2008 Strategic Vision to create a single, unified framework of values, goals, strategies and actions that will guide both the Planning and Zoning Commission and Town Council as they make decisions about the town's physical, social and economic development over the next two decades.**

As this Plan incorporates many goals and strategies that are the province of other elected officials such as the Town Council and Board of Education, it is important to note that the inclusion of action plans in the POCD supported by these bodies does not necessarily imply approval by the Commission of specific projects or plans which may someday be formally presented to the PZC in an application. Specific projects will be reviewed at the time of submission for consistency with the overall vision and goals identified in this Plan, particularly those related to conservation, development and land use.



Mansfield's 2006 Plan of Conservation and Development (POCD) and the 2008 Strategic Vision provide an important foundation for the Mansfield Tomorrow Plan.

CONSISTENCY WITH FEDERAL, STATE AND REGIONAL PLANS

The development of this Plan has been guided by past plans and the 2008 Strategic Vision, as well as plans and principles adopted at the federal, state and regional levels. The 2015 plan is designed to give Mansfield the tools to accommodate and benefit from future change while preserving the rural character of the town. Having a clear, multi-faceted plan that is consistent with planning principles at all levels of government will assist the community in achieving its goals and forging effective partnerships with businesses, nonprofits, and the University of Connecticut.

Federal Livability Principles

Funding for the Mansfield Tomorrow initiative was provided through a Sustainable Communities Grant from the U.S. Department of Housing and Urban Development (HUD) Office of Sustainable Housing and Communities, now the Office of Economic Resilience. The mission of this program is “to create strong, sustainable communities by connecting housing to jobs, fostering local innovation, and helping to build a clean energy economy.” The grant program is part of a larger initiative, launched by HUD, the U.S. Department of Transportation, and the Environmental Protection Agency, known as the Partnership for Sustainable Communities. This interagency partnership was created to coordinate federal investments in the areas of housing, transportation, water, and other infrastructure with the goals of making neighborhoods more prosperous, allowing people to live closer to jobs, saving households time and money, and reducing pollution. The Partnership’s six Livability Principles served as the foundation of the Mansfield Tomorrow planning process, as appropriate to a small community, and they are broadly consistent with Mansfield’s 2006 POCD and 2008 Strategic Vision.

Federal Livability Principles	<p>Provide more transportation choices.</p> <p><i>Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation’s dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.</i></p>
	<p>Promote equitable, affordable housing.</p> <p><i>Expand location- and energy-efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.</i></p>
	<p>Enhance economic competitiveness.</p> <p><i>Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services, and other basic needs by workers, as well as expanded business access to markets.</i></p>

Federal Livability Principles

Support existing communities.

Target federal funding toward existing communities—through strategies like transit-oriented, mixed-use development and land recycling—to increase community revitalization and the efficiency of public works investments and safeguard rural landscapes.

Coordinate and leverage federal policies and investment.

Align federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.

Value communities and neighborhoods.

Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.

Connecticut’s Conservation and Development Policies Plan

The State of Connecticut adopted its first state plan in 1979 and has updated it five times since then, mostly recently in June 2013 with the adoption of the 2013-2018 Conservation and Development Policies Plan.¹ Municipal POCDs are not required to be consistent with the State Plan. However, these plans must note any inconsistencies. The State POCD is based on six growth management principles that reflect a “smart growth” policy to avoid sprawling development and that are consistent with the federal livability principles.

Connecticut Growth Management Principles

Redevelop and revitalize regional centers and areas with existing or Currently Planned Physical Infrastructure.

Expand housing opportunities and design choices to accommodate a variety of household types and needs.

Concentrate development around transportation nodes and along major transportation corridors to support the viability of transportation options.

Conserve and restore the natural environment, cultural and historical resources, and traditional rural lands.

Protect and ensure the integrity of environmental assets critical to public health and safety.

Promote integrated planning across all levels of government to address issues on a statewide, regional and local basis.

¹ http://www.ct.gov/opm/lib/opm/igp/org/cdupdate/2013-2018_cd_plan.pdf

The goals, policies and strategies identified in this Plan are consistent with the six growth management principles identified in the 2013-2018 Conservation and Development Policies Plan and will help to implement those principles in Mansfield.

Regional Land Use Plan

Connecticut has a strong tradition of regional planning that helps to implement state goals and policies. Regional planning organizations are required to prepare land use plans every ten years to help guide development in a coordinated manner. These plans are advisory in nature, and serve as another piece of the foundation for development of municipal land use plans. The goals, policies and actions identified in this Plan will help to implement regional land use, transportation and economic development plans.

As part of a state-mandated consolidation process, the number of regional governments and planning organizations was reduced from fifteen to nine in 2014. As a result of this process, Mansfield became a member of the Capitol Region Council of Governments (CRCOG) on July 1, 2014. While CRCOG plans will need to be updated to include the new member towns, Mansfield Tomorrow is consistent with the goals and policies outlined in the 2014-2024 Regional Plan of Conservation and Development for the Capitol Region; a plan which was also funded by a HUD sustainability grant. These goals and policies are based on the following major themes:

<i>Regional Land Use Plan</i>	Focus new regional development in areas in which existing and planned infrastructure can support that development.
	Support efforts to strengthen and revitalize Hartford, the Capitol Region’s central city, and also support the revitalization of older, urbanized areas throughout the region.
	Develop in a manner that respects and preserves community character and key natural resources.
	Implement open space and natural resource protection plans that acknowledge and support the multi-town nature of our natural systems.
	Support the creation of new employment and housing opportunities, and transportation choices, to meet the diverse needs of our region’s citizens.
	Encourage regional cooperation in the protection of natural resources, the revitalization of urban areas, and economic development.

Until the CRCOG plan is updated to include Mansfield, the 2010 Windham Region Land Use Plan remains in effect. The Mansfield Tomorrow Plan is also consistent with the goals established in the 2010 Windham Region Plan.

THE PLAN



Shelter Falls

This Plan was developed through an extensive community visioning process known as *Mansfield Tomorrow*. This initiative also included the development of specific strategy reports for agriculture, economic development and housing as each of these topic areas has the potential to dramatically influence the long-term health and sustainability of Mansfield. Focus groups comprised of diverse stakeholders for each topic area worked with staff and the consultant team to develop detailed strategy reports that provided the foundation for the related goals and actions contained in this Plan.

All of the feedback received through the visioning process, from the Mansfield Tomorrow Advisory and Focus Groups, and from various Town advisory committees has been used to prepare a series of goals, policies, strategies and actions to guide the physical, social and economic development of Mansfield over the next twenty years. The Plan itself is organized to best reflect the themes identified through the visioning process.

The chapters within this Plan are as follows:

- **Mansfield's Vision for Tomorrow (Chapter 1).** This chapter identifies the key themes and concerns identified through the visioning process and establishes a vision for Mansfield's future.

The first topical chapters focus on the physical features and community amenities that influence how and why people choose to live in Mansfield. These features and resources establish the framework for where new development can be located and the form it should take.

- **Natural Systems (Chapter 2).** This chapter focuses on conservation and enhancement of Mansfield’s natural resources while adapting to a changing climate through the following goals:
 - > Mansfield residents and officials actively participate in conserving and protecting the Town’s natural resources.
 - > Mansfield has healthy watersheds with high-quality ground and surface water resources and aquatic habitats.
 - > Mansfield’s soil, plant and wildlife habitats are healthy and diverse.
 - > The Town is taking steps to moderate or adapt to the impacts of climate change.
 - > Mansfield has increased community resilience and mitigated the impacts of natural hazards.
 - > Mansfield’s land use regulations promote the protection and enhancement of natural systems.

- **Open Space, Parks, and Agricultural Lands (Chapter 3).** This chapter addresses how we interact with the natural resources and features identified in Chapter 2 through passive open space, active recreation, and farming. Goals include:
 - > Natural resources within Mansfield’s public and private open spaces are protected and well-managed.
 - > Mansfield has more land being used for agriculture.



Spin class at the Mansfield Community Center

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- > Mansfield’s park and preserve system, including natural and active recreation areas, provides access to residents and meets the needs of the population.
- > Mansfield’s land use policies and regulations for public and private open spaces protect natural resources, preserve scenic views, and expand opportunities for agriculture and active recreation.
- **Community Heritage and Sense of Place (Chapter 4).** This chapter identifies the features and resources that contribute to Mansfield’s sense of place and community character, including historic buildings and villages. Goals include:
 - > Mansfield honors and preserves its historic resources by protecting them for future generations.
 - > Mansfield’s land use regulations maintain rural character in the majority of town, protect historic resources and accommodate future growth in smart growth, compact patterns in designated Mixed Use Centers and Compact Residential areas.
- **Community Life (Chapter 5).** This chapter discusses the variety of community services and amenities provided by the town and the facilities needed to support those services. Goals include:
 - > Mansfield provides high-quality services that connect residents to each other and the community.
 - > Mansfield is a lifelong learning community and continues to provide high-quality public education for children and youth.
 - > Mansfield public safety services—police, fire and EMS—protect life and property through a robust program of education, enforcement, and preparedness.



Warrenville Road



Stone Mill Bridge

- > Mansfield is a healthy, active community.
- > Mansfield maintains high-quality public facilities that support town goals.
- > Mansfield's policies, programs, and land use regulations support community service and health/wellness goals.

The next chapters identify goals and strategies to guide the economic and physical development of the community:

- **Diversifying the Economy (Chapter 6).** This chapter identifies opportunities and challenges related to Mansfield's economic development. Goals include:
 - > Mansfield has balanced economic development efforts with sensitivity to preserving the town's unique blend of rural character and college town amenities to create an attractive location for businesses, workers, and residents.
 - > Mansfield has an entrepreneurial environment that supports business formation, expansion, and retention.
 - > Mansfield has a growing and diversified economy that helps to maintain the high-quality services desired by residents.
 - > Agriculture is valued by the community and expanding with increased acreage, higher production and growing market opportunities.
 - > Mansfield's land use regulations are farm-friendly and support business retention and expansion efforts while protecting community character.
- **Housing (Chapter 7).** This chapter focuses on strategies to strengthen Mansfield's neighborhoods and expand the diversity and affordability of housing stock through the following goals:
 - > Mansfield's housing options include housing affordable to low and moderate income individuals and families.
 - > Mansfield's senior citizens have housing options that allow them to continue to age in their community.

- > Mansfield maintains high-quality living conditions throughout the town.
- > Mansfield's land use regulations support development of a wide range of housing options to meet the needs of residents at all ages of the life cycle, including singles, families, seniors, and students.
- **Future Land Use and Community Design (Chapter 8).** This chapter establishes the future land use plan for the town (Map 8.3: Future Land Use), identifying specific areas for conservation and development and descriptions of the desired character of future development. Goals include:
 - > Mansfield has maintained the low density, rural character of the majority of town while accommodating growth in walkable Mixed Use Centers, Compact Residential and Institutional areas.
 - > Mansfield's land use regulations and development review procedures help to achieve the vision and goals identified in this Plan and promote high-quality design appropriate to the area context.
- **Infrastructure (Chapter 9).** This chapter identifies strategies for improving Mansfield's infrastructure in support of the overall vision. Goals include:
 - > Mansfield has a balanced, integrated transportation system that provides residents with viable options in getting from one place to another.
 - > Water and wastewater infrastructure improvements conserve natural resources and support smart growth patterns to help preserve rural character.
 - > Mansfield is working toward carbon neutrality and reducing reliance on the grid by conserving energy and increasing use of renewable energy resources.
 - > Mansfield promotes waste reduction and resource conservation.
 - > Mansfield's land use policies and regulations ensure that infrastructure systems support smart growth, protect rural character and promote resource conservation.

The final chapter identifies goals and strategies to ensure effective implementation of the plan:

- **Stewardship and Implementation (Chapter 10).** This chapter addresses the fiscal climate in which this Plan was created and identifies strategies to ensure that this Plan is a living document. Goals include:
 - > The Mansfield Plan of Conservation and Development is periodically reviewed and updated to address changing conditions and trends.
 - > The Mansfield Plan of Conservation and Development is integrated into decision making at multiple levels.
 - > Mansfield's long-term financial stability underlies implementation of this Plan.
 - > Mansfield advances Town sustainability objectives through Plan implementation, public education, and partnerships.
 - > Mansfield is a model of inclusive, transparent government.
 - > Mansfield collaborates with area communities and UConn to achieve common goals and develop regional service sharing models for mutual benefit.

HOW TO USE THIS PLAN

This Plan, built on Mansfield’s strong planning legacy and an ambitious new vision crafted by Mansfield residents, is a framework for decision making; it documents the kind of place Mansfield is today, what we value, and where we’d like to focus our efforts, resources, and policies in the years ahead

Now in its 4th century, Mansfield is creating a 21st century community guided by sustainability principles, preserving the best of the past and creating new ways of living. The Plan is neither a prediction nor a projection of the future. It is a plan—and no plan is self-implementing. We will have to implement it—in a collaboration of residents, government, businesses, the university, nonprofits, and regional partners.

While Mansfield is required by State law to have a plan, there is no directive as to how a town should use its plan. Town decision makers, especially the Planning and Zoning Commission and the Town Council, can use this Plan to set policy and be proactive to achieve the vision and goals for the future, rather than simply reacting to circumstances as they emerge. This Plan will serve as the foundation of new zoning and subdivision regulations created as part of the Mansfield Tomorrow project. Chapter 8, Future Land Use and Community Design, shows the future preservation and development patterns that balance and integrate a variety of goals ranging from open space preservation to economic development. The strategies and actions recommended in the Plan provide potential approaches and activities that can advance the goals and the vision. The stewardship recommendations in the final chapter focus on how the Town can use the Plan in its regular business—departmental work plans, capital improvement

plans, and enhancing transparency. At the same time, the Plan is essential to decision making in unexpected circumstances; the values, vision and goals expressed in the Plan will serve as a guide so that the Town can navigate new challenges and take advantage of unforeseen opportunities.

Action Plans

Each chapter within this Plan includes an action plan: a set of suggestions for how to put the Plan to work and begin transforming ideas into action. Each action plan identifies some of the **entities that are expected to have a key role in** achieving specific action items (town departments, committees/ commissions, outside organizations, etc.); a target timeframe to complete each action; and the types of resources that we anticipate may be needed for implementation (staff time, volunteer time, operating budget, capital improvement program, grants, etc.).

Action plans include:

- **Goals** that describe the outcomes our community hopes to achieve;
- **Strategies** for advancing each goal; and
- **Actions**—specific steps our community can take over the short-, medium-, and long-term in support of each strategy.

Action plans are tools for focusing efforts and resources on the issues our community cares about most. The action plans will:

- Guide town officials as they continue to shape policies and allocate resources in the years to come;

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- Refocus the efforts of town staff and committees as they work to advance community goals;
- Provide a foundation for developing annual budgets and workplans; and
- Evolve over time in response to new opportunities and circumstances.

Action plans set the agenda for our community's many officials, volunteers, committee members and staff for the years ahead, and align their work with the community's vision **but do not provide a guarantee that resources will be available to advance each action.** While these action plans are comprehensive in nature, they are not intended to preclude the Town from pursuing other actions as opportunities arise. **As additional actions and initiatives are contemplated, they should be evaluated with regard to how the action will help to advance the vision and goals** contained in the overall Plan.

GLOSSARY

Best practice

A procedure that has been shown by research and experience to produce optimal results and that is established or proposed as a standard suitable for widespread adoption.

Compact development

Compact development refers to single-family homes, townhouses, apartments, condominiums, and retail and employment uses at medium or high densities that are appropriate to the local context. Compact development aims to maximize the use of available land and provide a mix of uses to make it easier for residents to access the goods and services they need without driving long distances.

Complete streets

Streets designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. By adopting a Complete Streets policy, communities direct their transportation planners and engineers to routinely design and operate the entire right of way to enable safe access for all users, regardless of age, ability, or mode of transportation. This means that every transportation project will make the street network better and safer for drivers, transit users, pedestrians, and bicyclists.

Density

Density is the amount of development within a given area. As part of a long-range planning process, stakeholders often discuss the most desirable densities for different areas of their communities.

Development

Any building, construction, renovation, mining, extraction, dredging, filling, excavation, or drilling activity or operation; any material change in the use or appearance of any structure or in the land itself; the division of land into parcels; any change in the intensity or use of land, such as an increase in the number of dwelling units in a structure or a change to a commercial or industrial use from a less intensive use; any activity that alters a shore, beach, seacoast, river, stream, lake, pond, canal, marsh, dune area, woodlands, wetland, endangered species habitat, aquifer or other resource area, including coastal construction or other activity.

Economic development

Economic development is about maintaining and expanding businesses that export their products to consumers outside the community, thereby importing income and increasing local employment and wealth.

Greenfield

Undeveloped land in a city or rural area either used for agriculture, landscape design, or left to evolve naturally. These areas of land are usually agricultural or amenity properties being considered for urban development.

Mixed Use

Characterized by a variety and combination of uses and activities – typically including housing – within a single neighborhood or building. A mix of uses can be an important factor in a neighborhood's success, helping to energize public spaces throughout the day and week, and placing a variety of activities within easy walking distance.

Multimodal

Multimodal transportation systems provide users with a variety of modal options (e.g. walking, biking, automobile, public transit – trains, streetcar, buses, etc.)

Resiliency

The ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organization, and the capacity to adapt to stress and change.

Rural character

Rural character in the Mansfield context includes a mix of forested and agricultural landscapes interspersed by small villages. The mix of landscapes is a critical aspect to the concept of rural character; particularly the views afforded by large expanses of farm land and meadow.

Smart growth

“Smart growth” covers a range of development and conservation strategies that help protect our natural environment and make our communities more attractive, economically stronger, and more socially diverse. Smart growth means strengthening communities as places that offer housing and transportation choices near jobs, shops and schools.

Sustainable development

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development is typically characterized by sensitivity to the natural environment, efficient use of energy and other resources, and the health and safety of future users.

Village style

Compact, pedestrian-oriented residential area, often with a mixed-use village center.

Walkable environment

A walkable environment is one where it is easy and safe to walk to goods and services (i.e., grocery stores, post offices, health clinics, etc.). Walkable communities encourage pedestrian activity, expand transportation options, and have safe and inviting streets that serve people of all mobility levels.

Zoning

The division of a city or county by regulations into areas, or zones, which specify allowable uses (e.g., industrial, commercial, residential) for real property along with size, massing, and other building characteristics.

Sources:

American Planning Association

City of Burlington, VT

ICLEI: Local Governments for Sustainability

Greenbelt Alliance

Mansfield Tomorrow: Plan of Conservation and Development

Merriam-Webster

Smart Growth America

U.S. Department of Housing and Urban Development

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Wikipedia

World Commission on Environment and Development: Brundtland Report

1 MANSFIELD'S VISION FOR TOMORROW



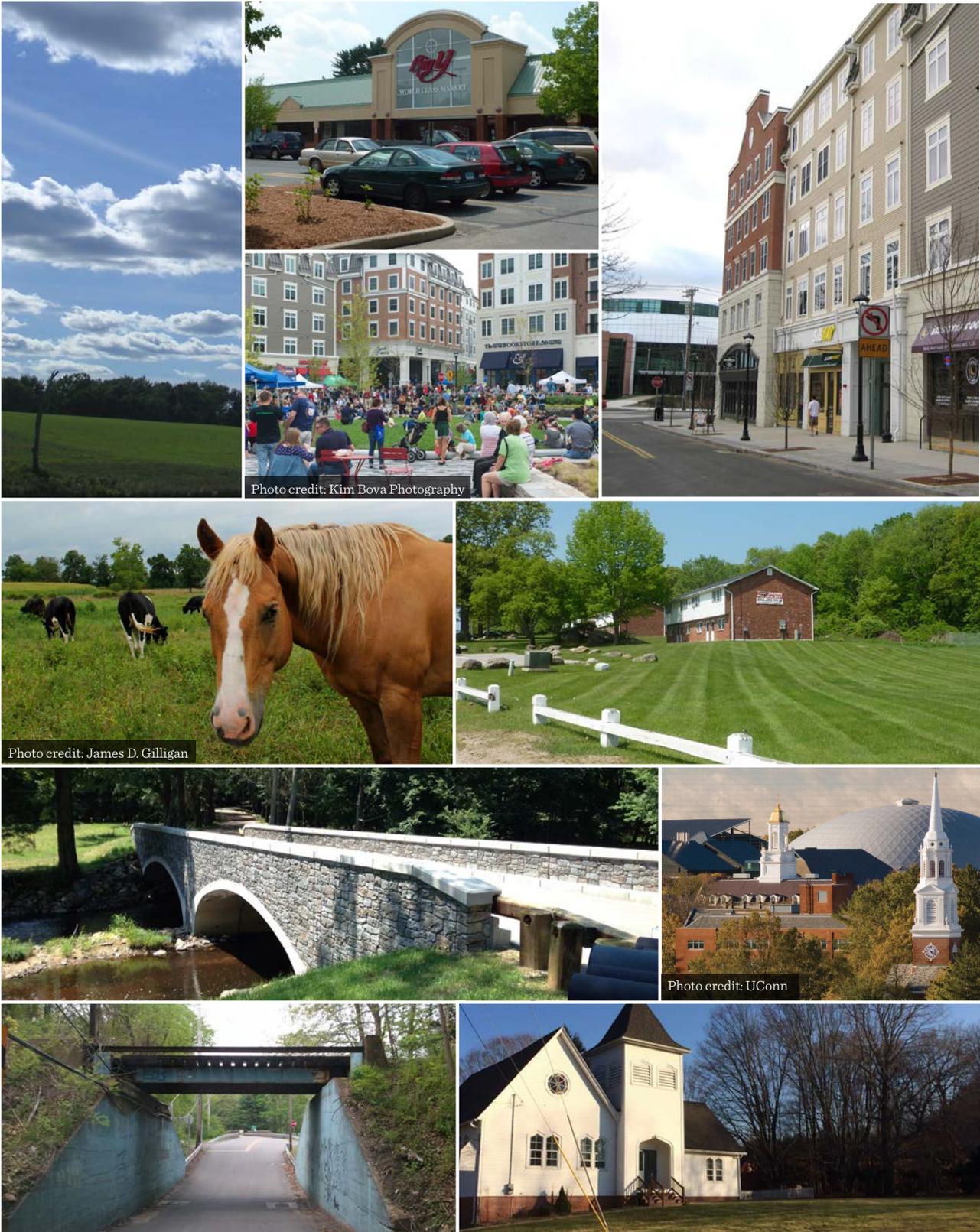
Sunset over Mansfield
Photo credit: James D. Gilligan

TOPICS IN THIS CHAPTER INCLUDE

Mansfield's Vision for Tomorrow

Moving Forward: Guiding Principles

This chapter identifies the key themes, aspirations and concerns identified through the community outreach process and establishes a vision for Mansfield's future. Chapter 1 also outlines the sustainability principles developed to guide preparation of this Plan.



Mansfield is continually changing and evolving. Over the last ten years:

- New open space resources have been acquired;
- The Storrs Center development has become a reality, creating a downtown with higher density homes, shops, and restaurants at the edge of the UConn campus;
- UConn has commenced development of its Technology Park and announced the *Next Generation Connecticut (NextGenCT)* initiative that will include a significant investment in the Storrs campus, including additional faculty and potential enrollment growth of up to 5,000 undergraduate students over the next ten years primarily in STEM (Science, Technology, Engineering and Math) disciplines;
- The Connecticut Water Company has been selected to provide additional water to UConn and areas of town adjacent to the university;
- Technology has changed how people work, shop and interact with one another;
- Interest in farming and local foods has grown, even as the supply of affordable farmland has decreased;
- The potential impacts of a changing climate on Connecticut's natural resources and infrastructure have been identified;
- Our population has continued to age as younger generations leave for places that offer greater economic opportunity;
- School enrollment has declined in Mansfield and across the state;
- The cost of living has continued to increase while economic stability has declined due to the economic recession; and
- State revenues have declined, placing more emphasis on local property taxes as the primary revenue source for Town government.

All of these changes influence the physical and social development of our community. How we adapt and evolve in response to new challenges and opportunities will determine the type of community Mansfield is in the future. **This Plan was created as a blueprint to help Mansfield preserve the places and things that are the essence of our community**—healthy and diverse natural environments, agricultural land, rural character and the sense of community that is unique to small town living. **It is also a roadmap for shaping and accommodating the economic growth that is essential to our ability to maintain the quality of life and services** that residents expect and desire.

OUR VISION FOR TOMORROW

Identifying a Vision

In 2013, the Town embarked on an extensive process to engage residents and other community stakeholders in planning for the future of Mansfield. As part of the Mansfield Tomorrow initiative, hundreds of residents contributed their thoughts and ideas on their vision for the future through workshops, surveys, personal vision statements, interviews and on-line interactive tools (see Appendix B for details). The following themes emerged through this process:

- **Preserve Community Character.** One of the most common values voiced by residents was a strong desire to preserve Mansfield's rural character, historic assets, and natural resources.
- **Strengthen Agriculture.** There is significant support for encouraging the growth of agricultural businesses, including agri-tourism and pick-your-own operations.
- **Address Impacts of University Expansion.** Residents expressed concerns about the impacts of the new Technology Park and the Next Generation Connecticut initiative on the community.
- **Support Neighborhoods.** The continued conversion of single-family homes into rental units, particularly in neighborhoods near University of Connecticut (UConn) and Eastern Connecticut State University (ECSU) where there are large student populations, is a significant concern for the long-term health of these neighborhoods.



What is “rural character?”

When asked to define rural character in the context of Mansfield, residents describe the rhythm of forests, farms, meadows, hills and waterways that provide scenic vistas and support the town's robust network of natural resources. They speak of Mansfield's living legacy of forests, farms and small villages. Throughout the planning process, community members emphasized the value they place on the town's rural character and the importance of preserving it over time.



- **Expand Housing Options.** As Mansfield’s population ages and housing preferences for young professionals and families reflect a desire for smaller living spaces in walkable neighborhoods close to services, residents expressed a desire for a wider variety of housing options that include both affordable and accessible units.
- **Strengthen and diversify the economy.** Residents are interested in growing the town’s economy in a manner that respects the community’s values and offsets the impact of declining state revenues.
- **Maintain High-Quality Community Services.** There is a strong desire for high-quality community facilities, including schools, outdoor recreation environments such as parks and trails, and community hubs like the Library and the Community Center, in spite of growing fiscal challenges within the Town.
- **Expand Transportation Options.** Residents are interested in a more robust network of safe walking and biking routes along major roads and near town destinations.
- **Focus on Sustainability.** Residents are interested in a comprehensive approach to town policies and decision-making that balances environmental and economic perspectives and increases the town’s resilience to the impacts of changing climate and economic conditions.
- **Make fiscal responsibility a priority.** In an era of declining state revenues, residents are concerned with the expansion of Town government, increasing expenditures and the resulting impacts on property taxes.

These broad themes were combined with more specific feedback to create a vision statement that articulates the community’s values, sense of identity, and aspirations. It serves as the “constitution” of the planning process and the Plan itself, telling the story of Mansfield’s ideal future.



Mansfield's Vision for Tomorrow

In 2035, the Town of Mansfield will be a community of historic rural villages, flourishing farms, and protected open spaces, and the home of the University of Connecticut's flagship campus. Through a smart growth approach, Mansfield will accommodate growth in designated areas of compact development, avoiding sprawl and preserving rural character. The compact development areas include a vibrant town center and neighborhoods with diverse housing adjacent to campus, attractive mixed-use centers at Four Corners and in southern Mansfield, as well as room for new businesses at Perkins Corner and the Depot Campus area. These areas will provide compact and walkable locations for growth. Outside of these designated areas, Mansfield will promote rural character, agriculture, and natural open space, through preservation and stewardship.

We are committed to supporting diversity, sustainability, arts and culture, economic viability, an excellent public school system, and a high quality of life and sense of community for all residents. These commitments are reflected in our community institutions such as our library, public education system, recreational programs, and town events. We value our natural resources and our cultural and historic heritage. Our goal is to pass them on to future generations. As the University's host com-

munity, our town has a mutually beneficial and respectful relationship with the University as an institution, a campus and an academic community rooted in Mansfield. As we look to the future, we are guided by community values and aspirations:

- Principles of **sustainability**, including green building, energy- and resource-efficiency, and smart growth guide development and Town policies, making Mansfield a leader in Connecticut.
- We are a **resilient community**, safeguarding our values while adapting to the future challenges of climate change.
- We are good stewards of our **natural and cultural heritage**, working to preserve a clean, green and healthy community with open space lands that support wildlife, recreation, clean air and water resources in connected networks. We value the homes and other buildings built by previous generations and adapted to contemporary uses in order to preserve our historic heritage.
- Our **economic viability** is based on technology- and research-based businesses, local retail and services, a growing agricultural and recreational business sector, and university-affiliated activities. We

*Mt. Hope Road*

welcome businesses that are aligned with Mansfield's smart growth development patterns and rural character, while helping to support Town services.

- We celebrate art and our diversity, taking pride in our **cultural offerings and amenities**.
- Our public education system, recreational opportunities, and community events offer unparalleled **quality of life** to residents.
- We promote **transportation alternatives** to connect people to destinations within Mansfield, surrounding communities and regional employment centers through increased access to public transportation, networks of walking and bicycle routes and innovative car sharing opportunities.
- We support **diversity** through a variety of attractive and affordable housing choices for people throughout the life cycle, from single young adults and couples to families, empty-nesters and retirees.
- Town residents who need **supportive services** to meet social, economic, and emotional needs find that Mansfield is a resource.
- Our **sense of community** on the neighborhood and town level is enriched by a variety of village, school, and joint town-university activities.
- We pursue **high standards of quality in design** and development.
- We work with our **neighboring communities and regional partners** to foster communication and collaboration.
- We value and promote **communication, transparency, and community participation** in town decision-making.
- We invest and take pride in our **municipal services and facilities**, providing our residents and taxpayers with excellent service and a strong return on their investment.
- We are **financially responsible**, ensuring that decisions made today do not burden future generations.

Combining enjoyment of rural character and the benefits of a university community, Mansfield in 2035 will be a place of environmental stewardship, active farming, advanced learning, cultural enrichment, innovative businesses, walkable villages, rural settlements, natural beauty, and the best schools in the region.

Mansfield Residents' Personal Visions

At the March 2013 Community Visioning Workshop, every participant was asked to write down his or her personal vision statement for 2030. These personal visions were thoughtful and often passionate, demonstrating a desire to preserve what's best about Mansfield by carefully managing change:

"A thriving community, featuring a great quality of life.... rural character...

Protect and encourage agriculture...

a vision of harmony with nature...

an excellent school system....

a town that I can live and work in....

community support for the young, middle aged, and elder persons.... parks... lakes /ponds...

a very friendly and welcoming town... increased bikeability/walkability... trails and open space....

strong community focus: activities, services, facilities...

a town that will support family life...

new rental housing, for the elderly and handicapped....

Community-based economic development driven by community stakeholders...

places to shop so my money supports local business.... recreational opportunities close to home....

areas revitalized in a way that supports Mansfield residents but retains its rural, quiet nature."

- * DESIGN THAT IS WELL THOUGHT OUT & IMPLEMENTED- STOR
- * ARTISTS RENDERING LOOKED NICE - THE REALITY IS AN EYESORE
- * PRESERVATION OF OUR GOOD WATER SUPPLY
- * RESTAURANTS WITH ORGANIC, WHOLE FOODS
- * PRESERVE THE RUA

with ...
d appreciate having a place to walk
it is I have the opportunity to

level or higher education, featuring a great
quality of life. The community embraces and practices
values of sustainability, diversity and tolerance, and
provides the creation of quality employment, housing and

(playgrounds)
healthy living
and
historic buildings,
walking/biking,
preserved land,
er w. more
cultural achievement,

BLENDING OF REGULATIONS ON A LOCAL
LEVEL, STATE LEVEL & NATIONAL LEVEL (ARMY
ORP REGS.). CURRENTLY, STATE REGULATIONS
(DEP) REQUIRE SUBSTANTIAL TIME & DOLLARS
TO GET PROJECTS APPROVED ~~WHICH~~ BEING
RESIDENTIAL OR COMMERCIAL. REVISION
OF REGULATIONS SHOULD PROVIDE INCENTIVES
FOR ENERGY CONSERVATION & ALTERNATIVES
ENERGY DEVELOPMENT.

employment, housing and
its residents. Mansfield's
its residents and tax payers
innovative workforce
ages the community's
; cultural ^{recreational} opportunities;
eg NY, Hartford, Boston
sal, business; green + open
recreational opportunities.

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I envision a Mansfield...
- ... that has less "town vs. gown" or "UConn vs. resident" or "student vs.
adult" divisions in discourse, community, and activity
- ... that no longer has the reputation (in the state, among newcomers, with students, etc.)
of having "nothing to do there"
- ... ~~that~~ that is a place where it is easier to plug in to community for
newcomers without children
- ... where you don't have to go out-of-town for amenities that modern
20-and-30-somethings take for granted (stores, restaurants, entertainment, etc.)
- ... where there aren't such stereo-typical New England "walks" between us and
neighboring towns/communities in terms of community, resources, planning, etc.

to develop bike + walk; small
for other parts; differentia
is not swallowed up +/or dom
work with, not under.
allowing
and villages to remain
ages. (e.g. condos/apts near
tech park incubator bldg.)
o trails and open space
private open space)

Or rural comm
maintain strong focus on ea
system) ③ Strong community focus - activ
facilities.
community-center in stores w/ town offices, commercial
development there. ② maintenance + ^{increased} development
trail system in forested areas.
would like to see increased cov
pe residential development

gressive tax rates, perhaps excluding
e 1st \$50K of property assessment,
in a high level of services
I have found the people who like living here like
the quiet, underdeveloped town. They value the rural
aspect, the local businesses which we are now losing.

PRESERVE: University farmland and forest land at least
east of Route 195; private farmland such as Stearns for
K-12 top rated education - better than it now is.
CHANGE: The ugly Downtown; contain the expansion
of the University's solar panels on top of
"Town Garage"; The attitude of town management;
cost of town government.

in come housing
students, preserving agric
Astray ways that have
way it has.

of the University's solar panels on top of
"Town Garage"; The attitude of town management;
cost of town government.

of the University's solar panels on top of
"Town Garage"; The attitude of town management;
cost of town government.

MOVING FORWARD: GUIDING PRINCIPLES

All of the elements of the community’s vision speak to a desire for Mansfield to become a more sustainable community, something that has been an increasing focus of Town government as well over the last several years. This focus can be seen in both the 2006 Plan of Conservation and Development (POCD) with its emphasis on directing growth to a few compact areas and the 2008 Strategic Vision plan, which expanded the concept of sustainability beyond issues such as energy efficiency and the environment to encompass economic development, transportation, infrastructure and public participation.

WHAT IS “SUSTAINABILITY?”

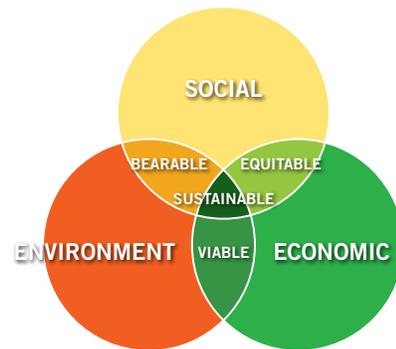
The word “sustainability” has become so widespread and used for so many different purposes that further definition is necessary.

The classic definition of sustainability comes from “Our Common Future” (also known as the Brundtland Report), prepared for the 1987 World Commission on Environment and Development:

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

This definition focuses particularly on our responsibility to the future. Sustainability is the protection, creation and maintenance of renewable systems so that they continue to be assets for future generations.

Examples of sustainable approaches include taking care of the natural environment, using resources and energy efficiently, and adapting to environmental change. While sustainability is often pigeonholed as an environmental idea, the broad umbrella of sustainability is increasingly being used to include social and economic development and equity through the idea of the “triple bottom line” representing “Planet, People, and Prosperity.”¹



¹ Sustainable Development: From Brundtland to Rio 2012, (September 2010), page 2, www.un.org/wcm/webdav/site/climatechange/shared/gsp/docs/GSP1-6_Background%20on%20Sustainable%20Dev.pdf

This Plan presents another opportunity to strengthen the community’s commitment in moving toward a Mansfield that embodies all facets of sustainability: environmental, economic and social equity. While many of the goals and actions identified in this Plan are targeted toward these broader objectives, the primary focus of a Plan of Conservation and Development is to shape the physical development of the community. Mans-

field residents have placed a high priority on maintaining the town's rural character and natural resources, with an emphasis on limiting new growth to a few compact, walkable locations where commercial development already exists.

To help achieve the community's vision, the following seven **sustainability principles** were used to guide the preparation of this Plan. These principles should also be used to guide future decisions regarding the physical development of the community.

Sustainability Principles

1

Preserve natural systems and resources.

From the perspective of sustainability, the focus is on maintaining natural systems, including wildlife habitat, forests, and water resources such as wetlands, stratified drift aquifers, rivers and streams. These resources and systems provide Mansfield residents and adjacent areas with "ecosystem services", such as clean air and clean water. Mansfield's abundant natural resources support residents' desire to maintain the town's "rural character," mostly conceived as the rhythm of forests, farms, hills and waterways that provide scenic vistas and a living legacy of forests and farms.

2

Respect and value community context.

Through the visioning process conducted for Mansfield Tomorrow, one of the strongest messages conveyed by residents was the need to maintain the town's rural character. However, it was also clear that different people emphasize different aspects of rural character. To some it is about forest and farms, for others it is about our heritage of small villages and cross-road settlements. For others, it is about more than just the physical experience, it encompasses how one experiences the community. Privacy, peace, personal freedom and the limited access to services inherent to living in a rural community are valued by some just as highly as scenic views and access to nature. It is important that as we identify strategies to ensure sustainable growth of the community, these strategies respect and promote the existing community character and context.

3

Promote resource efficiency.

Resource efficiency includes limiting the production of greenhouse gases (GHG) through energy efficiency and use of renewable energy, water conservation and stormwater management, and waste reduction and recycling. In areas where conservation of rural character is desired, strategies should encourage development patterns that conserve natural resource and open space areas to the maximum extent possible. Forested areas serve as GHG "sinks," removing GHG from the air.

4

Adapt to changing climate conditions.

Sustainable design practices help communities to be resilient and adapt to climate change, which is expected to bring higher temperatures and more extreme weather events by the end of the 21st century. For example, development restrictions in natural hazard areas (wetlands, flood zones, steep slopes, etc.), reduction of impervious surfaces, preservation of tree cover, and use of green infrastructure techniques to increase stormwater infiltration can conserve water and reduce flooding.

5

Promote connectivity.

Policies and programs should promote connectivity for both ecosystems and human interaction. Connectivity includes attention to preservation of natural corridors and connections that characterize natural systems, to physical connectivity in compact developed areas that promotes efficient circulation and transitions between the private and public realms, and to social connectivity linking people to people, community and place. Community facilities are drivers for development as well as linchpins of the community's social network. The location of future community facilities can help to direct growth to appropriate areas and should be considered for their potential to provide linkages.

6

Direct development to appropriate areas in compact and efficient patterns.

New development should be compact and resource efficient and it should be directed to areas that do not need preservation, including opportunities for redevelopment of existing developed areas. Priority areas include those already developed with higher densities and suitable for infill or redevelopment such as Storrs Center and the East Brook Mall area in southern Mansfield and those with access to existing or future infrastructure (water, sewer, transit, etc.) such as Four Corners. The compact, efficient development patterns promoted for these areas in the 2006 POCD (and updated in the Future Land Use Plan established within this document) have a limited environmental footprint and support a mixture of uses and more transportation choice.

7

Encourage sustainable design practices at all scales of development.

Sustainable design practices can be applied throughout the development process, from the time of site selection to building design and construction. These strategies focus on ensuring that impacts of new development are minimized, particularly on greenfield sites.



Photo credit: James D. Gilligan



Photo credit: UConn



Photo credit: Don Couture

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2 NATURAL SYSTEMS



TOPICS IN THIS CHAPTER INCLUDE

Topography

Soils

Water Resources

Terrestrial Environments
(Forests, Grasslands, and
Shrublands)

Wildlife and Aquatic Species

Rare Species and Unique
Habitats

Invasive Species

Soil and Water Contamination

Climate Adaptation and
Natural Hazard Mitigation

This chapter addresses Mansfield's physical features, including land, water and wildlife. These resources shape how people experience Mansfield and where activities, such as growing crops, building a house, or enjoying outdoor recreation, might best occur. These systems are also where we will begin to see the impacts of a changing climate. Understanding the value and function of these resources is essential to guide both development and conservation.

The 2003 Land of Unique Value Study and 2006 Plan of Conservation and Development include extensive information on the town's geologic history and natural resources. Much of the information in this chapter has been summarized from those documents; readers should refer directly to those reports for more detail.

what the **community** said

NATURAL SYSTEMS

Natural areas are highly valued by Mansfield residents; something that was emphasized by participants in the Mansfield Tomorrow process. In particular, residents voiced a desire to preserve the rural and natural character of the town through continued preservation of open space, better management of existing natural areas and concentration of growth in and around existing developed areas.

Themes in the community's comments on natural resources included:

- Importance of natural resources and areas to overall quality of life enjoyed by residents
- Consideration of impacts on natural resources as part of decision-making process
- Impact of continued development on water quality and availability
- Concern with impact of UConn's growth on both the town's rural character and natural systems
- Support for use of clustered development patterns to help preserve open spaces and natural resources
- Need for better management of natural resources on Town-owned property
- Preference for redevelopment of existing sites over development of greenfield sites (previously undeveloped properties)

"[Mansfield] must conserve its natural resources and natural areas or the quality of life will plummet. We need to plan this preservation carefully."

"Preserve the rivers. Keep them clean."

"The town should [establish] a vision of harmony with nature and include this in all aspects of decision making."

FROM MANSFIELD RESIDENTS

NATURAL SYSTEMS TODAY



Mansfield Hollow Lake

Mansfield is fortunate to have relatively healthy natural systems, including water features, diverse vegetation, wildlife, and healthy soils. These resources provide residents with “ecosystem services” that supply clean air and water, control erosion and floods, create fertile farmland soils, and support a diversity of life. Maintaining and enhancing these natural systems will help Mansfield to mitigate the impacts of a changing climate.

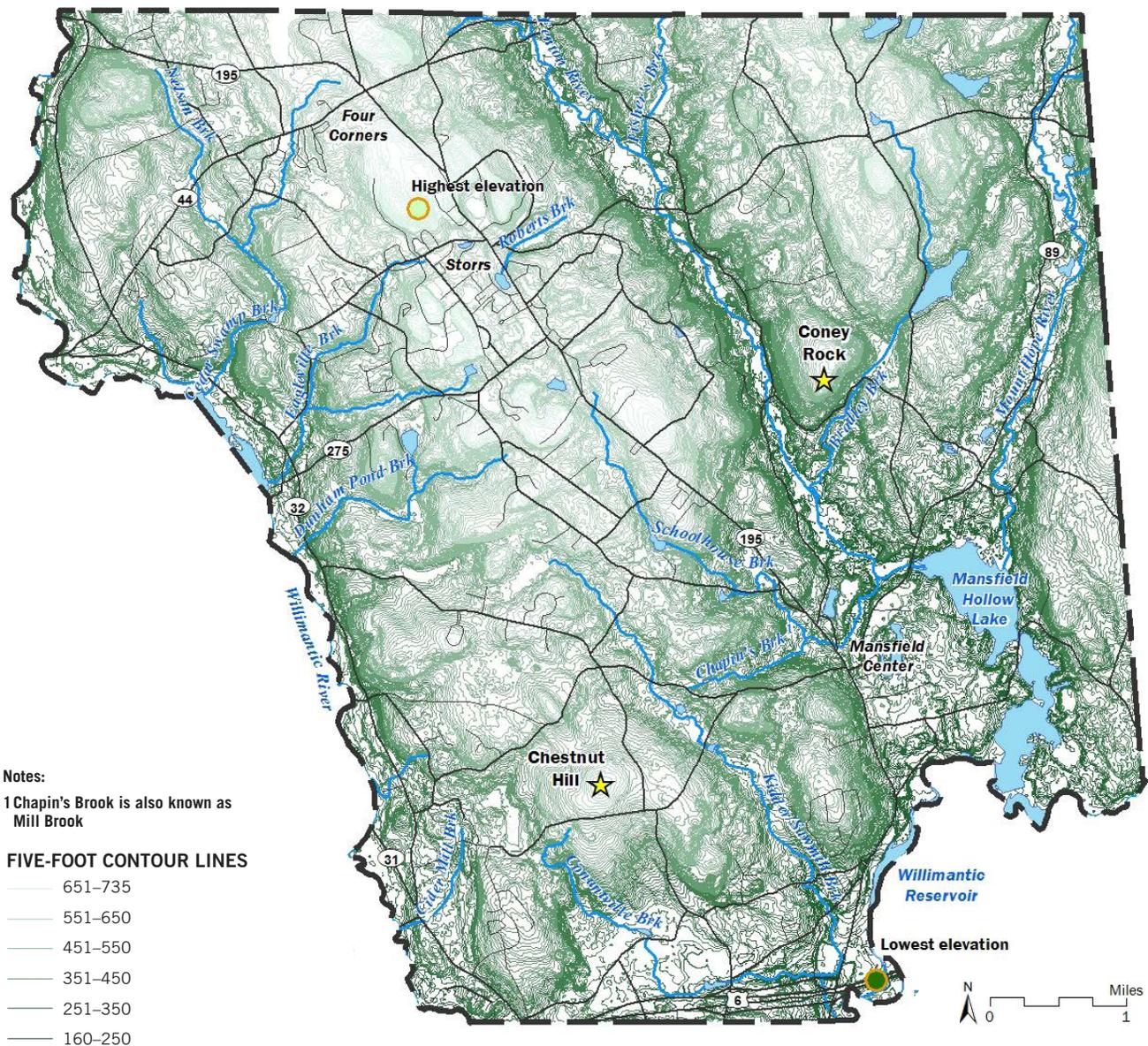
1. Topography

Mansfield is characterized by rolling hills and upland areas separated by river valleys that were created 15,000 to 18,000 years ago during the Wisconsin Glacial Episode, the last major advance of the continental ice sheet that covered North America (see Map 2.1: Topography). The ice sheet ground up bedrock and smoothed the uplands into rounded hills, depositing a veneer of rocky till across the landscape. Melt waters flowing from the receding ice sheet deposited sands and gravel in the river valleys along the Fenton, Mount Hope and Willimantic rivers. These areas now feature nearly level agricultural fields and deep sand/gravel deposits (aquifers) that store groundwater. The ice sheet was almost a mile thick, and as it slid southward, it smoothed high points, creating drumlins such as Horsebarn Hill, and it plucked at bedrock, creating high ledges,

Mansfield is approximately 45 square miles (29,180 acres).

as at 50-Foot Cliff Preserve. When the glacier melted, it left temporary blocks of ice that are now deep depressions in the earth (kettleholes) such as Echo Lake and other small ponds in the Bradley-Buchanan Preserve that are not connected to any streams or rivers. The glacier also left behind rocky soil and glacial monuments, including large boulders (erratics) as at Wolf Rock, and narrow ridges (eskers), as at the Torrey Preserve and Mt Hope Park. Much of Mansfield's landscape was blanketed with a thin, loamy, windblown mantle after the glacier receded, providing ideal conditions for plant life to take hold and thrive, which in turn formed the rich and fertile soils of today.

MAP 2.1: TOPOGRAPHY



Source: CT DEEP, 2011

The town's largest upland area extends south from Four Corners through the University campus to Chestnut Hill in Southern Mansfield. A smaller upland lies between the Fenton and Mount Hope Rivers and extends from the town's northeast corner south to Coney Rock (see Map 2.1: Topography). The southern ends of these uplands drop steeply into the Willimantic Basin, with dramatic ledges that offer views of Mansfield Hollow where the Fenton and Mount Hope Rivers flow into the Natchaug River and form Mansfield Hollow Lake. The Willimantic Basin is a large valley shared by several towns, and is distinguished by different geologic origin and terrain than the eastern uplands bedrock that underlies a larger part of Mansfield. The town's western boundary with Coventry is defined by the Willimantic River valley.

2. Soils

Mansfield has a wide range of soil types, from well-drained soils in glacial deposits of sand and gravel to poorly-drained soils in wetlands. Soil type and quality are a significant factor in determining the potential use of land, such as agriculture or development. The State of Connecticut uses soil types designated by the Natural Resources Conservation Service (NRCS) as poorly or very poorly drained, alluvial or floodplain to define inland wetland areas that may not be suitable for development. In Mansfield, these 'wetland soils' comprise approximately 25% of all soil types and are scattered throughout town. Wetland soils along with other features such as steep slopes and surface water bodies provide natural limits to development in many areas of town. Mansfield is also fortunate to have significant areas with soils that support agricultural use (see Chapter 3 for more detail).

In addition to influencing type and location of development, healthy soils are integral to the function of other natural systems. They filter rainwater and septic system leachate, creating cleaner groundwater, and cycle carbon and nutrients to support the growth of native and agricultural plants. Maintaining these functions requires deliberate action to minimize soil compaction and erosion.



Photo credit: James D. Gilligan

Preservation and stewardship of farmland soils is critical to the future success of agricultural enterprises in Mansfield (cows at Mountain Dairy shown above).

3. Water Resources

Mansfield is fortunate to have an extensive interconnected system of groundwater and surface water resources. The health and function of these resources has tremendous impacts on water quality, including new recognition of the connectivity of small streams, vernal pools and wetlands to the quality of downstream waters. The connections range from simple to complex. These connections include the transport of physical materials, chemicals, organisms or their seeds and eggs. Interactions occurring in surface and groundwater flows, including alluvial aquifers are important to the overall health and function of our water resources.¹

A) GROUNDWATER AND AQUIFERS

Rain or snow either seeps into the soil to replenish groundwater supplies, or it runs downhill as stormwater to the surface water of a river or pond. As groundwater moves through soil or bedrock cracks, some will eventually emerge on the surface in a spring, river or pond, helping to maintain water levels in these surface water features. The majority of groundwater flows into underground storage areas in the form of bedrock cracks or glacial deposits of stratified drift. These aquifers are capable of yielding usable quantities of groundwater for wells, which are the primary source of drinking water for most residents. The smaller wells associated with individual homes and multi-family developments are usually fed by bedrock aquifers.

Stratified drift aquifers are typically found in river valleys and are characterized by deep layers of sand, gravel, silt and clay laid down thousands of years ago by glacial meltwaters. Water yields of millions of gallons per day are possible wherever deep saturated deposits of porous sand and gravel are found.² In Mansfield, stratified drift deposits are concentrated in the Willimantic, Fenton, Mount Hope and Natchaug River Valleys, and in the Pleasant Valley Road area. In addition to individual wells, the University of Connecticut's Willimantic and Fenton River well fields draw from stratified drift deposits to supply potable water to the university and adjacent areas.

As groundwater is the source of drinking water for most residents, protection of these resources from contamination is a high priority. The strongest protections are provided to active public water supply wells that serve more than 1,000 people. In accordance with state requirements, two Aquifer Protection Areas have been delineated to protect the UConn's Willimantic and Fenton River well fields. The Mansfield Planning and Zoning Commission (PZC) acts as the town's Aquifer Protection Agency and is responsible for ensuring that activities within the two Aquifer Protection Areas conform to adopted aquifer protection regulations.

1 U.S. EPA. Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence (External Review Draft). U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-11/098B, 2013.

2 http://www.ct.gov/deep/cwp/view.asp?a=2685&q=322264&deepNav_GID=1654

B) SURFACE WATER: WATERCOURSES AND WATER BODIES

Approximately 3% of the town's land area is comprised of watercourses (rivers and their tributary streams) and water bodies (lakes and ponds). These form a complex network of connected features that drain into either the Willimantic River or the Natchaug River watersheds, which are both part of the larger Thames River watershed (see Map 2.2: Hydrology). There are also surface water features such as Echo Lake that are not associated with any watercourse. A little more than one-half of the town (mostly east of Route 195) is situated within the watershed boundaries of the Willimantic Reservoir, which is the source of potable water for approximately 25,000 people in Windham and southern Mansfield (also shown in Map 2.2: Hydrology). The reservoir has a large watershed that could support future system expansions. As such, protection of surface and ground water quality within the reservoir's watershed is a high priority for the town, region and state. More information on the public water supply system served by the Willimantic Reservoir can be found in Chapter 9.

Mansfield's surface water resources convey rainwater downstream and help prevent flood damage by providing flood storage capacity. They also support habitat for plants, animals, fish and other species, trap sediment, retain nutrients and help protect ground-water quality. Additionally, these areas provide educational, scientific and recreational benefits and add to Mansfield's visual and aesthetic character. Many significant archaeological sites, including dams, mills and Native American campsites are located along watercourses and water bodies.

Surface Water: Watersheds, Rivers, Streams, Lakes and Ponds

Willimantic River Watershed. This watershed is located generally west of Route 195 and includes the Willimantic River and its tributaries: Weaver Brook, Cedar Swamp Brook, Nelson Brook, Eagleville Brook, Dunham Pond Brook, and Cider Mill Brook, including Coutu Pond impoundment.

Natchaug River Watershed. This larger watershed in the eastern part of Mansfield includes:

- The Fenton River and its tributaries: Fisher's Brook, Roberts Brook, Bradley Brook, Schoolhouse Brook and Mill Brook. Associated impoundments are Hanks Reservoir, Hanks Silk Mill Pond, Hansen's Pond, Bicentennial Pond and Chapin's Pond.
- The Mount Hope River and its unnamed tributaries. Associated impoundments are Knowlton Pond, Leander Pond, and McLaughlin Pond.
- The Natchaug River and its tributaries: Sawmill (Kidder) Brook and Conantville Brook. Associated impoundments are Eatons Pond, Mansfield Hollow Reservoir (Naubesatuck Lake) and the Willimantic Reservoir.



Mansfield's lakes, rivers, ponds and streams are important ecological resources (Sawmill Brook Preserve shown above).

This region usually has sufficient precipitation to maintain stream flow in watercourses and water storage in aquifers. However, droughts occur and may become more common with rising temperatures over the next century. During a drought in 2005, pumping of UConn's Fenton River wells caused the Fenton River to dry up resulting in the University developing stream flow standards for both the Wilimantic and Fenton Rivers. When the stream flow drops below the designated levels in these rivers, UConn limits well withdrawals and implements conservation measures. The Connecticut Department of Energy and Environmental Protection (CT DEEP) is currently developing stream flow standards for Connecticut's watercourses having dam diversions. Future development of stream flow standards for well fields is also anticipated.

C) SURFACE WATER: WETLANDS

Wetlands are characterized by soil types, typical vegetation, and the length of time that surface water is present. Wetland plant communities may be broadly categorized as swamps, which have trees and shrubs; marshes with non-woody plants; and ponds with aquatic vegetation. Often a wetland will include a mix of these plant communities. Vernal pools are temporary ponds that dry up at some point during most years. These pools serve as incubators for salamanders and other small amphibians due to the lack of predatory fish species that would normally feed on tadpoles and other immature amphibians. Wetland plants (in swamps and marshes) and aquatic plants (in flowing and quiet waters) provide food and shelter for a wide range of wildlife and aquatic species. Wetlands also act as flood storage areas. Invasive species have impacted all of these various plant communities and their wild inhabitants within wetlands.

Connecticut's wetland regulations are based on wetland soils (see soils section on preceding pages for more detail). In accordance with the provisions of Connecticut General Statutes, the Mansfield Inland Wetlands Agency (IWA) is the local agency responsible for protecting wetlands from impacts of development. To this end, the IWA regulates land use activities within 150 feet of a wetland, watercourse or water body. Advisory to the IWA is the Mansfield Conservation Commission, an unelected body that may openly discuss and make recommendations on land uses and impacts on wetlands and other surface waters.

D) WATER QUALITY

The quality of surface waters in Mansfield is generally good. Although it does have impaired segments, the Willimantic River's water quality has significantly improved since 1970 due to reduction of industrial pollution and to improvements in sewage treatment plants. Pursuant to the federal Clean Water Act, the State of Connecticut monitors water quality for recreational use and for aquatic life habitat, and CT DEEP submits a report on impaired waters every two years to the US Environmental Protection Agency (EPA). For those impaired water bodies, the State performs Total Maximum Daily Load (TMDL) analyses, which specify the maximum amount of a pollutant that a water body can receive and still meet water quality standards.

Most Connecticut rivers and streams are currently classified as impaired for *E. coli* bacteria. CT DEEP is initiating a program to assess the causes of these high bacteria counts and to determine actions to reduce the bacteria load.

In Mansfield, there are several watercourses on the 2012 list of impaired waters for recreational use: the Lower Natchaug River, Bicentennial Pond and two stream segments.³ The stream segments include the upper Cedar Swamp Brook (0.61 miles) in Mansfield from the confluence with Nelson Brook upstream to Route 44 crossing; and upper Eagleville Brook (1.67 miles) in Mansfield from confluence with Kings Brook to Stadium Road. Eagleville Brook has an approved TMDL and a watershed-based plan being implemented as described in more detail in the text box on the following page. In 2012 it was delisted as impaired for aquatic habitat, but other concerns remain. In 2011, the eight municipalities in the Natchaug River watershed adopted the Natchaug Basin Conservation Action Plan to balance conservation and growth (<http://www.greenvalleyinstitute.org/NCAP.htm>). In 2014, the Eastern CT Conservation District (ECCD) developed the *Lower Natchaug River Abbreviated Watershed-Based Plan* to address high levels of *E. coli*. Mansfield is working with ECCD, DEEP and other municipalities to implement the actions identified in this plan.

Other watercourses with identified impairments include upstream segments of the Willimantic and Mount Hope Rivers (recreation), and the Fenton River, which is listed under non-pollutant impairments due to groundwater withdrawals from the UConn well fields.

Impact of Stormwater Runoff on Water Quality. The greatest threat to surface water quality is nonpoint source pollution from a wide array of residential, agricultural, commercial, and transportation sources. Where land is undeveloped, most precipitation is absorbed into the ground or is returned to the atmosphere by trees and other plants. Development can disrupt natural hydrological systems through clearing of vegetation; grading; soil compaction; the addition of impervious surfaces in the form of buildings, roads,

³ http://www.ct.gov/deep/lib/deep/water/water_quality_management/305b/2012_iwqr_final.pdf

and parking lots; and the use of drainage infrastructure such as gutters, storm sewers, and hard-lined water channels. Water flows away from these surfaces carrying oil and grease, sediment, bacteria, and other pollutants either directly to natural waterways or into engineered drainage ways that eventually convey the water to natural streams or lakes. This is referred to as “nonpoint source pollution” since it doesn’t have a single source such as a factory pipe. Landscape practices by private homeowners and by agricultural and forestry enterprises—fertilizers, herbicides, pesticides, animal waste—can also be the source of nonpoint pollution. The resulting excess nutrients in surface waters can cause algal blooms that lead to low dissolved oxygen, making streams and ponds less suitable for fish and other organisms. These alterations of the land can also increase the volume and velocity of stormwater runoff, erosion, and flooding in downstream water bodies that receive the runoff.

Stormwater management is designed to reduce both the volume and pollution impacts of stormwater. Best management practices increasingly focus on retaining or re-introducing natural drainage systems to treat pollutants, and on low-impact designs and materials for development. Commonly referred to as “green infrastructure” or “low impact development (LID),” these practices incorporate features such as rain gardens, permeable pavement, bio-retention ponds and green, vegetated roofs to absorb, slow and treat stormwater runoff. Maintaining and enhancing vegetation along watercourses and stream banks also offers protection from erosion and nonpoint pollution. Known as riparian buffers, these areas also aid in flood control, provide habitat for wildlife, and shade waters for fish.

EAGLEVILLE BROOK INNOVATIVE WATERSHED MANAGEMENT PLAN

The Eagleville Brook Total Maximum Daily Load study prepared by CT DEEP in collaboration with UConn and the Town is considered a national model for its innovative approach in identifying the impacts of impervious cover on water quality. The study determined that Eagleville Brook’s aquatic habitat was being degraded by the impacts of runoff from impervious surfaces. Through this and other studies of small watersheds, it was concluded that as little as 11% impervious surface in a watershed can affect the speed, timing and quality of runoff into a stream—and part of the Eagleville Brook watershed exceeded 25% impervious surface (buildings, roadways, sidewalks, plazas, parking lots, etc.), mostly on UConn land.

The goal of the study was to reduce “the amount and impact of effective (connected) impervious cover, replacing it where possible (i.e., porous parking lots, green roofs), disconnecting it from the manmade Eagleville drainage network (i.e., rain gardens, bioretention, green streets practices), and treating it where necessary (i.e., gravel, wetlands and other water quality practices).”¹ The implementation of this plan resulted in Eagleville Brook’s removal from the State’s list of impaired aquatic habitats (the 303d list).

¹ <http://clear.UConn.edu/projects/tmdl/library/papers/EaglevilleBrookWMP-06-01-11.pdf>

This project resulted in a watershed management plan that identified 110 retrofit opportunities at 52 sites, almost all on campus, and also recommended changes to land use regulations for the lower portion of the watershed in Mansfield (see below). While these regulations were recommended specifically in the Eagleville Brook watershed to address existing stream impairments, they can be adapted for town-wide use.

UConn has implemented a wide variety of green infrastructure projects as a result of this plan, from pervious surfaces and bioswales to green roofs. Since 2003, over 450,000 square feet at the University have been retrofitted, resulting in over 38 million gallons of stormwater being treated through green infrastructure/low impact development practices. This volume of water would fill over 57 olympic-sized swimming pools.

EAGLEVILLE BROOK WATERSHED MANAGEMENT PLAN—SUGGESTED TOWN CHECKLIST

Town of Mansfield Low Impact Development (LID) Site Planning and Design Checklist

Items listed below need to be considered by developers when submitting plans for subdivisions. Due to individual site differences, not all items will apply to each individual property. Check items that have been applied, or explain why the items have not been used. For more information on LID practices and how to implement them please refer to the 2004 Connecticut Stormwater Quality Manual.

1. Assessment of Natural Resources

- Natural resources and constraints have been indicated and are identified on the plans (wetlands, rivers, streams, flood hazard zones, meadows, agricultural land, tree lines, slopes [identified with 2 foot contours], soil types, exposed ledge & stone walls). Is the property

shown on the latest copy of CT DEEP State and Federal Listed Species and Significant Natural Communities Map as listed in the Natural Diversity Data Base (NDDDB)? If so, provide a copy of the CT DEEP NDDDB request form and CT DEEP reply letter.

- Development is designed to avoid critical watercourses, wetlands, and steep slopes.
- Soils suitable for septic & stormwater infiltration have been identified on plans.
- Soil infiltration rate/permeability has been measured and listed on plan.
- Onsite soils have been assessed to determine suitability for stormwater infiltration.
- Natural existing drainage patterns have been delineated on the plan and are proposed to be preserved or impacts minimized.

For items not checked, please use the space below to explain why that item was not appropriate or possible for your project, or any other pertinent information.

2. Preservation of Open Space

- Percent of natural open space calculation has been performed.
- An open space or cluster subdivision design has been used.
- Open space/common areas are delineated.
- Open space is retained in a natural condition.
- Reduced setbacks, frontages, and right-of-way widths have been used where practicable.

For items not checked, please use the space below to explain why that item was not appropriate or possible for your project, or any other pertinent information.

3. Minimization of Land Disturbance

- The proposed building(s) is/are located where development can occur with the least environmental impact. Disturbance areas have been

delineated to avoid unnecessary clearing or grading.

- Native vegetation outside the immediate construction areas remains undisturbed or will be restored.
- Plan includes detail on construction methods and sequencing to minimize compaction of natural and future stormwater areas.

For items not checked, please use the space below to explain why that item was not appropriate or possible for your project, or any other pertinent information.

4. Reduce and Disconnect Impervious Cover

- Impervious surfaces have been kept to the minimum extent practicable, using the following methods (check which methods were used):
 - > Minimized road widths
 - > Minimized driveway area
 - > Minimized sidewalk area
 - > Minimized cul-de-sacs
 - > Minimized building footprint
 - > Minimized parking lot area
- Impervious surfaces have been disconnected from the stormwater system, and directed to appropriate pervious areas, where practicable. Pervious areas may be LID practices, or uncompacted turf areas.

For items not checked, please use the space below to explain why that item was not appropriate or possible for your project, or any other pertinent information.

5. LID Practices Installed

- Sheet flow is used to the maximum extent possible to avoid concentrating runoff.
- Vegetated swales have been installed adjacent to driveways and/or roads in lieu of a curb and gutter stormwater collection system.
- Rooftop drainage is discharged to bioretention/rain gardens.
- Rooftop drainage is discharged to drywell or infiltration trench.
- Rain water harvesting methods such as rain barrels or cisterns have been installed to manage roof drainage.
- Driveway, roadway, and/or parking lot drainage is directed to bioretention/rain gardens.
- Cul-de-sacs include a landscaped bioretention island.
- Vegetated roof systems have been installed, if appropriate.
- Pervious pavements have been installed, if appropriate.

For items not checked, please use the space below to explain why that item was not appropriate or possible for your project, or any other pertinent information.

Stormwater Management Plan Requirements. In 2004, the Connecticut Department of Energy and Environmental Protection (CT DEEP) issued its first General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4s). The purpose of the general permit is to protect waters of the state from urban stormwater runoff from municipal separate stormwater systems. Mansfield may soon need to come into compliance with these requirements, which include, but are not limited to, preparation of a stormwater management plan, changes to regulations to address stormwater quality, erosion and sedimentation controls and removal of barriers to use of low impact development (LID) stormwater management practices.

4. Terrestrial Environments

Mansfield's land cover has changed dramatically over the last 300 years. Native Americans managed forest environments with fire to maximize their value for hunting and foraging, but European settlers focused on clearing land for agriculture. By the mid 1800s, 70% of the land was open. As new opportunities in the Midwest attracted New England farmers to better agricultural lands, the forests began to reclaim the fields. Today Mansfield is 64% forested and 12% farmland.

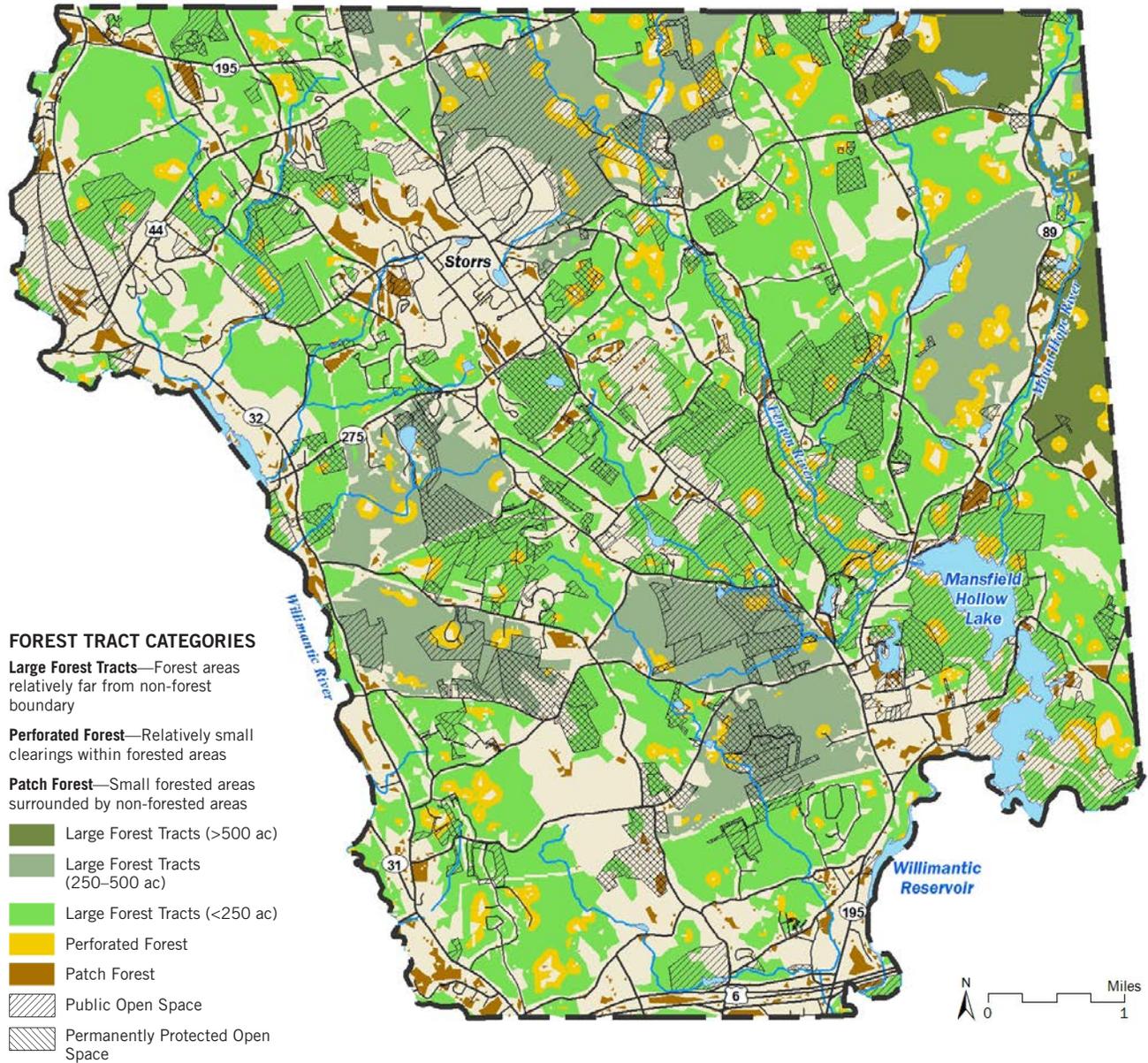
A) FORESTS

Mansfield's extensive forests are integral to the overall health and function of the town's natural systems. They maintain soil fertility, reduce soil erosion and flooding from surface runoff, improve air quality, and provide wildlife habitat, forest products, and recreation and tourism opportunities. One of the most important benefits provided by forests is to the quality and quantity of our water resources. They act as natural groundwater reservoirs, treatment plants, and stormwater management systems. By filtering



More than half of Mansfield's land area is forested but few tracts are permanently protected from development (forested land on Coventry Road shown at right).

MAP 2.3: FOREST LAND



Sources: UConn CLEAR, 2006; Town of Mansfield, 2013

rainwater and releasing it slowly, forest soils retain pollutants and provide a steady flow of clean groundwater to our rivers, reservoirs, and wells. Forests can produce clean water at a fraction of the cost of water treatment systems.⁴ From an economic standpoint, private forest tracts usually provide more tax revenue than they cost in Town services.⁵

All of Mansfield's forests are considered second growth as they developed over the last 100 years after farms were abandoned. Dry upland areas are typically forested with a mixture of oak and hickory, while maple and ash predominate in moister soils, and red maple in swamps. There are also special forest habitats in Mansfield, including Atlantic White Cedar swamps and mature pine stands. However, forest lands continue to change. Deer are eating most tree seedlings, except red maple and black birch, which will favor these tree species in the next generation of forests. In addition, non-native plants are crowding out native tree seedlings. Many forest areas now feature trees between 60 and 100 years old with the ground under them dominated by invasive plants.

Several large forest tracts (200 or more contiguous acres of unbroken forest) were identified in 2006 by the UConn Center for Land Use Education and Research (CLEAR) (see Map 2.3: Forest Land). These "interior forest" tracts occur at enough distance from the forest edge to preserve habitat for wildlife species that require more than 200 acres to sustain populations over time. In areas of fragmented forests or on forest edges, adverse conditions, such as increased predation by raccoons, can reduce survival of these interior forest species.

Of the 18,675⁶ acres of forest land in Mansfield, approximately 5,000 acres are owned by public agencies, including the Town, the State, University of Connecticut, and US Army Corps of Engineers. Few public or private forest lands are permanently protected (see Map 3.4: Public and Protected Open Space). Approximately 5,200 acres of privately owned forest land are temporarily preserved by owners who have adopted an optional tax reduction through Public Act 490.

B) GRASSLANDS AND SHRUBLANDS

The Town's diverse landscape also includes other plant communities that contribute to protection of water resources and provide nature-based recreation and tourism opportunities. Grasslands, such as abandoned agricultural fields, have declined with the resurgence of forest in last 100 years, as have areas of early-successional shrub habitat (composed of shrubs and/or very young trees). As a result, wildlife species that these

4 Foster, David et al. A Vision for the New England Landscape. Harvard Forest, Harvard University. 2010. (<http://www.wildlandsandwoodlands.org/sites/default/files/Wildlands%20and%20Woodlands%20New%20England.pdf>).

5 American Farmland Trust Farmland Information Center. Fact Sheet: Cost of Community Service Studies. 2010.

6 <http://clear.uconn.edu/projects/landscape/your/town.asp?townname=78&Go=Go>

habitats support have also declined. According to a 2006 CT DEEP publication,⁷ twelve of sixteen shrubland birds and seven of ten grassland birds have declining population trends in the region. Many are listed as threatened or endangered in several northeastern states. These habitat types require human intervention to be maintained. In the absence of active management, wildlife dependent on these early succession areas have likewise declined.

5. Wildlife and Aquatic Species

Mansfield's terrestrial and aquatic life is typical of southern New England. A rich diversity of mammals, birds, reptiles, amphibians and fish are present year-round in addition to migratory bird species that briefly stopover. CT DEEP's website contains vast information about the variety of wildlife species in Connecticut (http://www.ct.gov/deep/cwp/view.asp?a=2723&q=325718&deepNav_GID=1655#ESFact). Although not always obvious, wildlife offers many benefits such as pollinating crops, reducing insect pests, and offering enjoyment of nature. The success or decline of these species fluctuates with changes in their habitat and their predators. For example, grassland species, such as bobolinks, have declined as forests have reclaimed farmland. On the other hand, forest dwellers, such as fishers (a type of weasel), have benefited from the forest regeneration. Residential development has increased wildlife species that are commonly found in suburban areas such as raccoons. These often prey on other mammals and on birds, reptiles and amphibians, contributing to their decline.

Aquatic species (such as fish) and amphibian species that breed in aquatic habitats (such as frogs) have suffered declines everywhere. Protection of watercourses and water bodies from pollution is one avenue for supporting these species. CT DEEP stocks fish in the rivers and lakes to ensure survival of fish species and a good catch for anglers.

The return of forest cover (without the return of native predators or large numbers of hunters) has promoted an overpopulation of white-tailed deer. By consuming much of the low-growing vegetation, deer are affecting the future availability of food and shelter for themselves and for other wildlife. The growth of deer herds has contributed to the increased number and widespread distribution of Lyme disease-causing ticks, damage to agricultural crops (residential plantings), and increasing hazard to our roads. Mansfield would benefit from a CT DEEP deer management program, which is available to some Connecticut towns.

6. Rare Species and Unique Habitats

Unique plant communities include white cedar swamps, a leatherleaf swamp, a perched oligotrophic pitch pine-blueberry bog, and old white pine groves. Mansfield has several

⁷ CT DEEP 2006 Managing Grasslands, Shrublands, and Young Forest Habitats for Wildlife http://www.ct.gov/deep/lib/deep/wildlife/pdf_files/habitat/grassland_shrubland_management/Preface.pdf

species listed on CT DEEP's data base of rare, endangered, and threatened species. This list is regularly updated and available on the CT DEEP website (<http://www.ct.gov/deep/cwp/view.asp?a=2723&q=326210>). The CT DEEP also maintains and periodically updates Natural Diversity Data Base (NDDB) Maps (<http://www.ct.gov/deep/cwp/view.asp?A=2702&Q=323464>), which identify general areas in which rare, threatened and endangered species have been spotted. Applicants for developments within an NDDB designated area are encouraged, and in some cases required, to request a CT DEEP review to determine the impact of their project on species of concern. If the project would impact known species, CT DEEP will provide recommendations to avoid or minimize impacts. Because the NDDB map is continually changing, we have not included a map in this document to eliminate potential for use of outdated information.

7. Invasive Species

Non-native invasive species pose an increasing threat to plants and wildlife due to their ability to reproduce rapidly under a variety of site conditions, and the lack of natural controls on growth and reproduction characteristic of native species. Their presence alters the way plants, animals, soil and water interact within native ecosystems, often causing harm to other species and reducing ecosystem diversity. The Connecticut Invasive Plants Council, in accordance with Connecticut General Statutes (C.G.S. Sec. 22a-381a through 22a-381d), maintains a list of invasive and potentially invasive plants.⁸

Mansfield has a great number of invasive and potentially invasive plants, such as Japanese knotweed, multiflora rose, Asiatic bittersweet, Japanese barberry, purple loosestrife, the aquatic fanwort, and water chestnut, all of which crowd out native plants. Non-native pests are also a concern for their potential to destroy native species. Two invasive insects, the Asian Longhorned Beetle and the Emerald Ash Borer, are of major concern, but are not currently found in Mansfield.

In 2004, the Town adopted a non-native species policy that requires development and implementation of an invasives control plan for Town properties, training of staff and volunteers in control methods, education of residents and collaboration with other groups concerned with invasives control.

⁸ http://cipwg.uconn.edu/invasive_plant_list/

8. Soil and Water Contamination

Pollution issues that threaten natural systems in Mansfield include potential threats from hazardous waste and toxics, as well as from nonpoint source pollution, which was addressed in the Water Resources section.

A) HAZARDOUS MATERIALS

The potential threat from hazardous waste spills is often focused on UConn's hazardous waste facility and its location within the Willimantic Reservoir watershed. However, hazardous waste spills and disposal on private property can result in contamination of private groundwater wells.

Landfill Monitoring. The Toxics Action Center (www.toxicsaction.org) in a 2007 report mapped the Town's former landfill and an additional two closed landfills in Mansfield, one in the northeast corner and another in the south, near Willimantic, but did not give addresses or other information.⁹ Closed landfills need to be monitored for leaching of toxic materials into groundwater.

- *Former Town Landfill.* The Town transfer station is located on the Town's former landfill, a 26.7 acre site near Mansfield Center. It was closed in 2002 and four groundwater wells are monitored for potential contamination from the landfill, along with up and downstream surface water sampling from the Fenton River. No issues have been identified to date. As of 2013, only brush was disposed on site.
- *Former University Landfill.* UConn's Hillside Environmental Education Park (HEEP) was created at the site of a landfill, former chemical pits, and an ash disposal site. In 1998 the State issued a consent order requiring the University to thoroughly evaluate the nature and extent of soil, surface water, and groundwater pollution emanating from these sites, and propose and implement remedial actions. UConn capped and closed the landfill and chemical pits in 2005, implemented a long-term monitoring program for ground and surface water as well as for maintenance of the cap and remediation systems, removed contaminated soil and sediment, restored and created wetlands, and created a vernal pool. Remediation activities and construction of HEEP were completed in 2008, resulting in a park with 33 acres of wetlands and 31 acres of upland.¹⁰

University Hazardous Waste Storage and Disposal. The hazardous wastes produced in UConn's teaching and research labs—chemical, biological/medical, and low level radioactive waste—have been taken to a central storage facility, the Main Accumulation

9 "Toxics in Connecticut," 2007, <http://www.toxicsaction.org/sites/default/files/tac/information/TAC-toxics-in-connecticut.pdf>

10 <http://www.ecohusky.uconn.edu/development/heep.html>

Area (MAA), since 1989.¹¹ Waste is collected from locations around campus and stored temporarily until it is sent to off-campus disposal areas outside of Mansfield. The MAA, which has several buildings and paved areas on a site of 0.4 acres, is located off Horsebarn Hill Road, a site that is within the Fenton River and Willimantic Reservoir watersheds and close to the aquifer that supplies the Fenton River Wellfield (some 400 feet from the state-mapped Level A recharge area).

Although there have been no release incidents or other problems at the MAA, its location within the Willimantic Reservoir watershed has been recognized as a public concern by the Connecticut Council on Environmental Quality (CEQ) and the Office of Policy and Management (OPM), which have recommended the relocation of the MAA facility outside of the public drinking water supply watershed. Moreover, while the MAA meets current university needs, additional capacity in an upgraded facility is expected to be needed as the Technology Park is developed and university research grows as part of the NextGenCT initiative. A new state-of-the-art facility will be located on the west side of North Hillside Road adjacent to the tennis courts.

Remediation Sites. CT DEEP's Remediation Division administers several different programs related to cleanup of soil and water contamination. In March 2014, Mansfield had 44 sites participating in various remediation programs, as compared to 10,460 state-wide.¹²

Potentially Contaminated Sites. The CT DEEP maintains a list of known contaminated or potentially contaminated properties for every community. As of July 2013, 93 properties were identified in Mansfield. The source of contamination for 85 of these properties was a leaking underground storage tank. Twenty-two of the properties are owned by the University, including the former landfill site discussed above. Also on the list were three properties within the Storrs Center development that have undergone voluntary remediation as a part of the redevelopment: the former sites of Storrs Automotive, and UConn print and publishing buildings.¹³

Household Hazardous Waste. The Mansfield Public Works Department provides a web page with basic information for residents on avoiding toxic products and disposing of these products on their property. The following products can be recycled at the Mansfield Transfer Station in addition to the e-waste noted below: paint, fluorescent bulbs, refrigerant-bearing appliances, nickel-cadmium batteries, lead-acid batteries, plastic bags, styrofoam peanuts and PCB-containing ballasts and capacitors. For other haz-

11 Information on the MAA and the analysis of sites is based on Fuss & O'Neill, "Main Accumulation Area Facility Comparative Site Study University of Connecticut Storrs, Connecticut," March 26, 2013.

12 March 3, 2014 CT DEEP Presentation to PZC: "Sites with Contaminated Soil and Groundwater in Mansfield"; Bill Warzecha and Mark Lewis.

13 July 12, 2013 List of Contaminated or Potentially Contaminated Sites, Connecticut Department of Energy and Environmental Protection.

ardous waste, residents and businesses are directed to the Mid-Northeast Recycling Operating Committee (Mid-NEROC) Chemical Waste Drop-off Center in Willington. According to the Public Works Department, about 4% of the Mansfield population uses this facility annually to dispose of oil-based paints, chemical fertilizers, pesticides, household cleaners, pool chemicals, and solvents.

E-waste. Mansfield recycles electronic waste (e-waste), which contains toxic elements such as lead, mercury, and cadmium, at the transfer station and collects around 20 tons of e-waste a year.

9. Climate Adaptation and Natural Hazard Mitigation

At this time, there is a general scientific consensus that the earth is experiencing a period of long term climate change expected to raise average annual temperatures and produce more extreme climate events over the course of the 21st century. There is also a general consensus that human activities that produce “greenhouse gases” have been an important driver of this climate change, particularly in the years since the Industrial Revolution.

The primary sources of greenhouse gas emissions in the United States, in order of largest to smallest share in 2011 are electricity production (33%); transportation (28%); industry (20%); commercial and residential buildings (11%); and agriculture (8%). Land areas either act as a source of greenhouse emission or as a sink (absorbing CO₂ from the atmosphere).¹⁴

Climate Adaptation Efforts. While this Plan reflects the Town’s first attempt at planning for climate change, the University of Connecticut has been actively working on climate issues for several years. In addition to numerous campus sustainability initiatives related to design and construction, UConn efforts to address climate change include:

- Signing the *New England Governors’/Eastern Canada Premiers’ and New England Board of Higher Education’s Climate Change Action Plan and Pledge*
- Participating in the *American College and University Presidents Climate Commitment (ACUPCC)* to be carbon neutral by 2050.
- Completing a Climate Action Plan in 2009 that focuses on reducing greenhouse gas emissions and conserving natural resources that can serve as carbon sinks. Key activities include increasing the efficiency of campus operations including energy supply/distribution and transportation systems; using green technology practices where possible, increasing the proportion of campus energy from renewable sources and planning responsibly for the future when making campus development and land use management decisions to ensure the conservation of natural resources and a vibrant, thriving and biologically diverse campus community. The plan is to be reviewed and revised every five to seven years.

¹⁴ Climate change information from the US Environmental Protection Agency: <http://www.epa.gov/climatechange/>

POTENTIAL CLIMATE CHANGE IMPACTS IN MANSFIELD

The potential climate change impacts in Mansfield in the 21st century include the following:¹

- **Higher temperatures.** Average temperatures across the northeast have risen more than 1.5 degrees Fahrenheit since 1970. The most rapid warming is in winters: a gain of 4 degrees in the 1970-2000 period.
- **Increase in winter precipitation but a shorter snow season.** Winter precipitation is likely to increase by 20-30%, but snow will become wetter and the average number of snow-cover days will decrease. By the end of the 2100s, the snow season may be shorter by 50% or more.
- **Increase in heavy, damaging rain events.** These kinds of events can create more runoff (and potential nonpoint source pollution), erosion and sedimentation. Rainfall data collected by the Northeast Regional Climate Center indicates that rainfall for significant storms has increased 15-25% in Connecticut since 1961. Since stormwater requirements are currently based on 1961 rainfall data, changes to sizing of stormwater facilities will be needed to accommodate larger storms.
- **Possible increase in frequency of short-term droughts (1-3 months).** This type of event can have significant impacts on Mansfield's agricultural enterprises.
- **Cold water streams become warmer, with impacts on wildlife habitat.** This may be one of the biggest potential impacts in Mansfield, where

there are so many streams. The Connecticut Adaptation Strategies Plan highlights this issue: "Coldwater streams were identified as one of the most imperiled habitats to the negative impacts of climate change. Conserving riparian areas, or land that surrounds and protects these streams, will be an important climate change adaptation strategy in order to ensure the quality and quantity of water in Connecticut and protect the plants and wildlife that depend on this habitat. Critical riparian areas should be identified and prioritized for protection." Small to medium headwater streams are "home to a variety of coldwater fish and invertebrate species that are highly vulnerable to some impacts of climate change including increases in water temperature, runoff, sedimentation and fluctuations in water quality and quantity."²

- **Increase in vector-borne diseases,** such as West Nile Virus and Lyme disease.
- **Migration north of the northern hardwood forest (maple/beech/birch) with temperature rise.** According to the aforementioned adaptation strategies plan: "The soil and biomass in upland forests are carbon sinks, a climate change mitigation benefit. Connecticut upland forest habitat is predicted to be moderately vulnerable to climate change, due to projected increases in temperature."³
- **Reduced production by dairy cows in warmer temperatures.** Cows need to be cool and comfortable for maximum production.

¹ Union of Concerned Scientists, "Connecticut: Confronting Climate Change in the U.S. Northeast" fact sheet. www.climatechoices.org. Based on "Confronting Climate change in the U.S. Northeast: Science, Impacts, and Solutions," and "Connecticut Climate Change Preparedness Plan: Adaptation Strategies for Agriculture, Infrastructure, Natural Resources and Public Health Climate Change Vulnerabilities." A Report by the Governor's Steering Committee on Climate Change (GSC) Adaptation Subcommittee, 2011.

² Governor's Steering Committee Adaptation Subcommittee, pp. 61, 63

³ *Ibid.*, p. 59

Natural Hazard Mitigation. When evaluating risk from natural hazards, the Federal Emergency Management Agency requires communities to assess vulnerability to the following: droughts (with the associated potential of small wildfires); earthquakes (generally low impact in Connecticut); dam failures; flooding; hurricanes; severe winter weather; thunderstorms; tornados/wind damage and ice jams. Mansfield’s most frequent vulnerability is related to large storms at any time of the year. The major storm impacts today tend to be stream bank erosion, damage to trees and associated power outages. Mansfield is also concerned with the potential impacts of climate change on hazard vulnerability based on predicted changes. Our capacity to both adapt and respond to these changing conditions, continue operation of basic infrastructure and facilities, and spring back from a disaster or high impact event is what will make us a resilient community. Strategies to reduce the impacts of development on natural systems are therefore an essential component of effective hazard mitigation.

Flooding. Although Mansfield has many streams and wetlands, it does not have broad floodplains because of the town’s topography, so flooding impacts from more frequent and intense precipitation events are expected to be limited with the exception of flooding due to infrastructure failures. However, spring floods are common and are caused by rainfall in combination with snowmelt. Floods in late summer and fall are usually the result of hurricanes or other storms moving northeastward along the Atlantic coast. Winter floods result from occasional thaws, particularly in years of heavy snowfall. Low-lying areas in Mansfield that have issues during high water events include a home on Laurel Lane that becomes isolated, five homes on Thornbush Road that become isolated or inundated, and a section of Bassetts Bridge Road that repeatedly washes out. Flooding could also impact the railroad running along the Willimantic River—a concern both because of the rail’s economic importance as a regional freight line and because of the potential for hazardous material impacts due to cargo transported along the line.

When assessing the overall risk for flooding, we must take into consideration both probability and consequences. For example, a “100-year flood” has a one percent probability of occurring in any year (not a probability of occurring once in 100 years). This means that there is approximately a 63.4% chance of one or more 100-year floods occurring in any 100-year period. A 100-year flood has a 25% chance of occurring at least once in a 30-year



Photo credit: Steve Baker

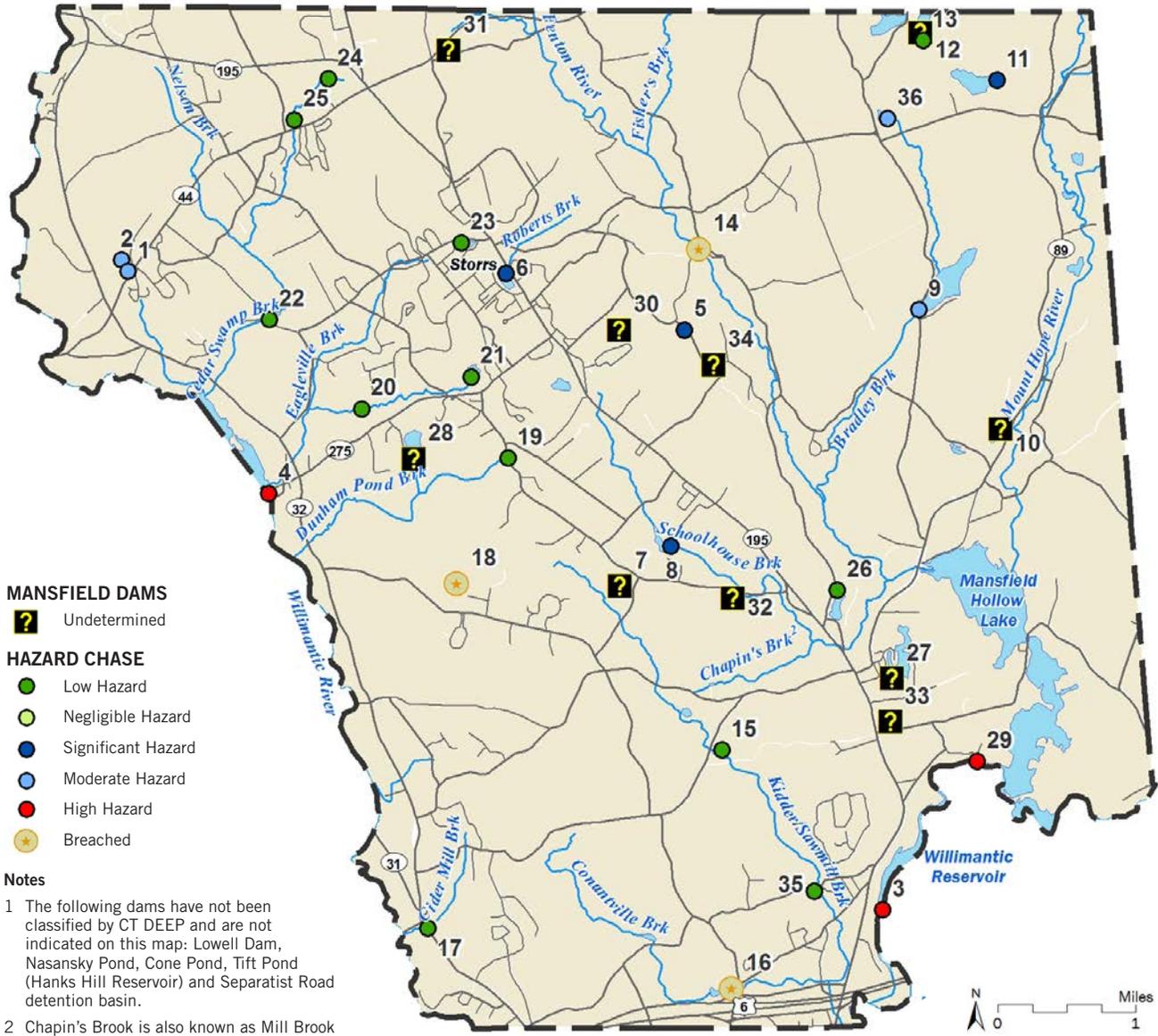
Route 275 on a 'normal' day



Photo credit: Steve Baker

Flood day, October 15, 2005

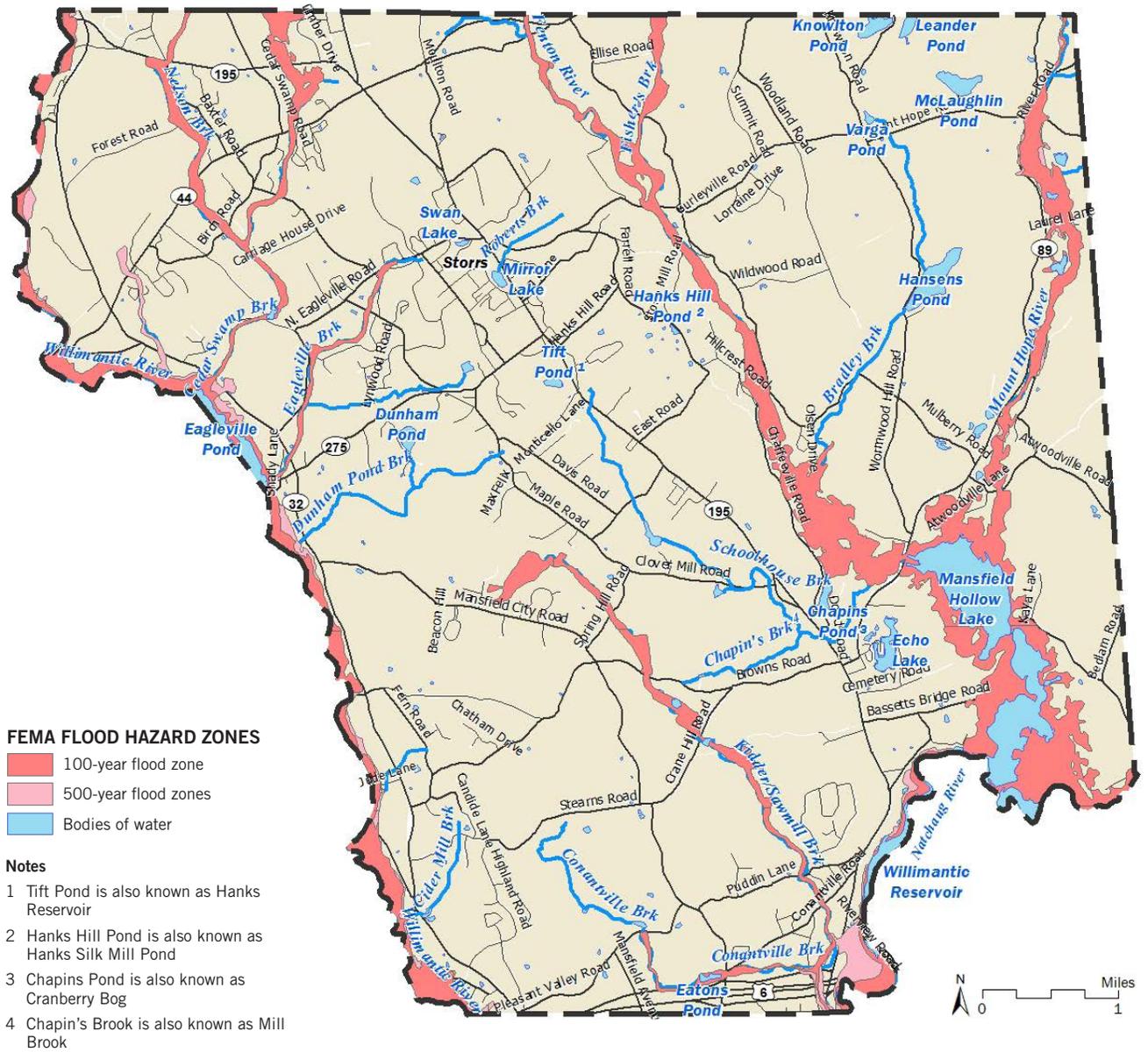
MAP 2.4: DAMS



1: TRAINING DAM #1 (Training School)	9: HANSENS POND DAM	19: GARDINER ROAD POND DAM	29: MANSFIELD HOLLOW DAM
2: TRAINING DAM #2 (Training School)	10: NOVA POND DAM	20: HIDDEN POND DAM	30: BUNDY'S BROOK DAM
3: WILLIMANTIC RESERVOIR DAM	11: MCLAUGHLIN POND DAM	21: STAR POND DAM	31: (UNNAMED)
4: EAGLEVILLE DAM	12: LEANDER POND DAM	22: BONE MILL DAM	32: CLOVER MILL POND DAM (Barrows Pond)
5: HANKS HILL POND DAM (Hanks Silk Mill Pond)	13: ODD POND DAM	23: SWAN LAKE DAM	33: WILD GOOSE POND DAM
6: MIRROR LAKE DAM	14: FENTON RIVER DAM	24: FENTON RIVER DAM	34: ROCQUE POND DAM
7: SPRING POND ROAD DAM	15: CRANE HILL POND DAM	25: SWAMP BROOK POND DAM	35: SAWMILL BROOK POND DAM
8: MANSFIELD RECREATION POND DAM (Bicentennial Pond)	16: EATONS POND DAM	26: CHAPINS POND DAM	36: VARGA POND DAM
	17: COUTU'S POND DAM	27: ECHO LAKE DAM	
	18: JOHNSON POND DAM	28: DUNHAM POND DAM	

Sources: CT DEEP, 2014

MAP 2.5: FLOOD RISK ZONES



Sources: CT DEEP, 2010; Plan of Conservation and Development, 2006

period (a typical mortgage duration) and a 50% probability of happening at least once in a 70-year period (a typical human lifetime). Locations can have a low-frequency but high risk profile—meaning that floods are likely to be rare but very damaging when they happen.

In Mansfield, the most significant flooding concerns are related to impacts from failure of man-made structures including bridges and dams. The Town has several bridges crossing the Fenton and Willimantic River, including six “scour” bridges, which are structures that may be undermined by soil erosion during certain rainfall or stream flow events, thus affecting bridge stability and safety. Two of the scour bridges, on Stone Mill Road and Laurel Lane, were replaced in 2012-2013. Dam failure is another significant concern. There are 36 dams in Mansfield, including 3 high hazard dams (Mansfield Hollow, Willimantic Reservoir and Eagleville Lake) and 4 significant hazard dams (See Map 2.4: Dams). All of the high hazard and two of the significant hazard dams are publicly owned and managed; however, the other two significant hazard dams are privately owned. Private owners are generally reluctant to make repairs, which tend to be costly. Repairs may not be made in a timely manner, increasing the potential for dam failure. The cost of dam repair also serves as a disincentive for the Town to acquire properties with existing dams due to the associated liability.

To minimize damages from flood hazards, the Town has designated all flood hazard zones on Mansfield’s Zoning Map. These zones restrict new development and provide for minimum construction standards to reduce potential flood damages in accordance with recommendations from the Federal Emergency Management Agency (FEMA). The flood zones depicted on Map 2.5: Flood Risk Zones are based on the Tolland County floodplain maps last updated by FEMA in 1980; as such, some flood areas may be different than shown based on subsequent development.

Trees. One of the other major concerns with regard to natural hazard mitigation in Mansfield is related to falling trees. Trees downed during storm events can become entangled in power lines, block roadways and damage private property. Dead and diseased trees within the Town rights-of-way present a public safety hazard that must be addressed through preventative maintenance. In accordance with Connecticut General Statutes, the Town’s Tree Warden is responsible for the care and control of all trees and shrubs on Town property and rights-of-way. With the exception of trees and shrubs that are deemed by the Tree Warden to be an immediate public hazard, no trees or shrubs may be removed or pruned unless notice of the proposed action has been posted at least ten days in advance to allow interested persons the opportunity to request a public hearing.

The regional hazard mitigation plan includes a variety of strategies specific to Mansfield to reduce the loss of life and property and economic consequences as a result of natural disasters. Strategies focus on preventative maintenance of infrastructure, protection of natural resources, preparedness and community education.

ACTION PLAN

Each chapter within this Plan includes an action plan: a set of suggestions for how to put the Plan to work and begin transforming ideas into action. Each action plan identifies some of the **entities that are expected to have a key role in** achieving specific action items (town departments, committees/ commissions, outside organizations, etc.); a target timeframe to complete each action; and the types of resources that we anticipate may be needed for implementation (staff time, volunteer time, operating budget, capital improvement program, grants, etc.).

Action plans include:

- **Goals** that describe the outcomes our community hopes to achieve;
- **Strategies** for advancing each goal; and
- **Actions**—specific steps our community can take over the short term (before end of 2019), medium term (between 2020 and 2024) and long term (between 2025 and 2035) in support of each strategy.

Action plans are tools for focusing efforts and resources on the issues our community cares about most. The action plans will:

- Guide town officials as they continue to shape policies and allocate resources in the years to come;
- Refocus the efforts of town staff and committees as they work to advance community goals;
- Provide a foundation for developing annual budgets and workplans; and
- Evolve over time in response to new opportunities and circumstances.

Action plans set the agenda for our community’s many officials, volunteers, committee members and staff for the years ahead, and align their work with the community’s vision **but do not provide a guarantee that resources will be available to advance each action.** While these action plans are comprehensive in nature, they are not intended to preclude the Town from pursuing other actions as opportunities arise. **As additional actions and initiatives are contemplated, they should be evaluated with regard to how the action will help to advance the vision and goals** contained in the overall Plan.

Key of Abbreviations	
TOWN DEPARTMENTS & SERVICES	
Building & Housing Inspection	Town of Mansfield Department of Building & Housing Inspection
DPW	Town of Mansfield Department of Public Works
Facilities	Town of Mansfield Facilities Management Department
Finance	Town of Mansfield Finance Department
Fire	Division of Fire & Emergency Services / Office of the Fire Marshal
Fire Marshal	Office of the Fire Marshal
Human Services	Town of Mansfield Department of Human Services
Information Technology	Town of Mansfield Information Technology Department
Library	Town of Mansfield Public Library
Parks & Rec	Town of Mansfield Parks & Recreation Department
Planning	Town of Mansfield Planning & Zoning Office
Police	Mansfield Resident State Trooper’s Office
OTHER ABBREVIATIONS	
CT DEEP	State of Connecticut Department of Energy and Environmental Protection
CT DPH	State of Connecticut Department of Public Health
EHHD	Eastern Highlands Health District
Emergency Management	Emergency Management Advisory Council
IWA	Inland Wetland Agency
PZC	Planning & Zoning Commission
Town/Gown	Town/University Relations Committee

CHAPTER 2: Natural Systems

Goal 2.1

Mansfield residents and officials actively participate in conserving and protecting the Town’s natural resources.

Measures of Effectiveness:

- Number of participants in educational programs
- Number of conservation volunteers
- Number of interpretive signs
- Increase membership on conservation related committees and commissions
- Number of conservation and land management demonstration projects

Strategy A | Continue to provide access to educational resources that connect people with nature and emphasize the impacts of healthy natural systems on Mansfield’s quality of life, health and economy.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Use the town website, monthly newsletter, and Parks and Recreation seasonal brochure to advertise educational programs related to resource conservation and activities that allow people of all ages to connect with nature. Examples include guided walks and canoe/kayak tours offered by the Town and regional organizations.</p>	Parks & Rec Parks Advisory Committee Conservation Commission	Ongoing	Staff Time Volunteer Time Operating Budget
<p>2. Improve signage on Town lands interpreting functions of plants, wildlife, waterways and wetlands, and their benefits.</p>	Parks & Rec	Ongoing	Operating Budget Grants
<p>3. Recognize efforts of local residents and businesses that implement environmentally friendly building and landscaping practices.</p> <p>Potential actions include creation of an annual award and recognition in Town publications such as the newsletter and website.</p>	Town Council Sustainability Committee Conservation Commission	Short Term	Staff Time Volunteer Time Operating Budget
<p>4. Sponsor demonstration projects on Town properties that showcase good conservation and land management practices.</p> <p><i>See Goal 2.3, Strategy A, Action 4.</i></p>	Conservation Commission Parks & Rec Parks Advisory Committee Open Space Preservation Committee Agriculture Committee Sustainability Committee	Medium Term	Staff Time Volunteer Time Operating Budget

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>5. Explore the development of an Environmental Education Center.</p> <p>A 4-acre building area envelope has been set aside at the Moss Sanctuary for such a use. Schoolhouse Brook Park, adjacent to the Middle School and the site of Camp Mansfield, would also be an appropriate location. Demand and need for a nature center should be studied as part of an overall Parks and Recreation Master Plan (see Goal 3.3, Strategy A, Action 2).</p>	<p>Parks & Rec Parks Advisory Committee Private Foundations Non-Profits</p>	<p>Long Term</p>	<p>CIP Grants Private Funding</p>

Strategy B | Target educational materials and programs to address specific natural resource protection challenges.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Provide information on how proper maintenance and disposal practices can reduce risks to surface and groundwater resources.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • <i>Well maintenance and periodic water quality testing</i> • <i>Septic system maintenance</i> • <i>Maintenance of commercial and residential oil storage tanks</i> • <i>Disposal of chemicals, medicines and household hazardous waste</i> • <i>Organic land care</i> • <i>Use of pesticides, fertilizers and de-icers</i> • <i>Management of stormwater runoff</i> • <i>Erosion controls</i> <p>Outreach efforts should be focused on property owners that abut wetlands and watercourses as well as those within 500 feet of a stratified drift aquifer. Use existing materials from non-profits, and from state and federal agencies.</p>	<p>Planning DPW EHHD Conservation Commission</p>	<p>Ongoing</p>	<p>Staff Time Volunteer Time</p>

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>2. Provide information on land management practices that support a healthy, diverse habitat for plants and wildlife, provide a balance between forest preservation and agricultural production goals and identify harmful impacts of various practices.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • <i>Use of native plants</i> • <i>Invasive species –prevention and eradication</i> • <i>Forest management</i> • <i>Establishment and protection of riparian buffers</i> • <i>Creation of backyard habitats</i> • <i>Environmentally-sensitive farming practices</i> • <i>Tree-trimming and maintenance</i> • <i>Impact of poor management practices such as clear cutting</i> <p>Outreach efforts should be focused on builders/developers, landscape contractors, permit applicants, and private landowners. Use existing materials from non-profits, and from state and federal agencies.</p>	<p>Planning Conservation Commission Open Space Preservation Committee Sustainability Committee Agriculture Committee</p>	<p>Ongoing</p>	<p>Staff Time Volunteer Time</p>

Strategy C | Encourage Town staff and committee members to partake in training opportunities related to resource conservation and protection.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Provide access to and funding for training related to land management, resource protection, and innovative practices to protect natural systems.</p>	<p>Parks & Rec DPW</p>	<p>Ongoing</p>	<p>Operating Budget</p>

Strategy D | Increase volunteer participation in resource conservation activities. *See related actions under Goal 5.1, Strategy C and Goal 10.5, Strategy B.*



CHAPTER 2: Natural Systems

Goal 2.2

Mansfield has healthy watersheds with high-quality ground and surface water resources and aquatic habitats.

Measures of Effectiveness:

- Reduction in number of water bodies on the Connecticut Impaired Waters List (303d list)

Strategy A | Protect and conserve groundwater resources.

ACTIONS	WHO	WHEN	RESOURCES
1. Advocate for relocation of the UConn Main Accumulation Area for hazardous waste, which is currently in a drinking water supply watershed. The design of the new facility is complete and construction is scheduled for FY16.	PZC Town Council Conservation Commission	Short Term	Staff Time
2. Promote water conservation.	<i>See related actions under Goal 9.2, Strategy B.</i>		
3. Encourage UConn to establish a preservation area for the wellfield along the Willimantic River as they have done for the Fenton River wellfield.	PZC Town Council Conservation Commission	Short Term	Staff Time Volunteer Time
4. Consider adoption of a septic system management ordinance requiring mandatory inspections and maintenance protocols for high-impact land uses such as multi-family housing developments and restaurants.	PZC Town Council EHHD	Medium Term	Staff Time Volunteer Time

Strategy B | Maintain and improve health of watercourses, water bodies and wetlands.

ACTIONS	WHO	WHEN	RESOURCES
1. Pursue preservation and stewardship of state greenways along the Willimantic, Fenton, Mount Hope and Natchaug Rivers and their tributary stream belts.	Parks & Rec Conservation Commission Local Non-Profit Organizations	Ongoing	Staff Time Grants Open Space Preservation Bonds
2. Evaluate impacts of deicing techniques (sand, salt, magnesium chloride, etc.) and move toward most sustainable alternative.	DPW	Ongoing	Staff Time Operating Budget

SHORT TERM = 2015-2019

MEDIUM TERM = 2020-2024

LONG TERM = 2025-2035

ACTIONS	WHO	WHEN	RESOURCES
<p>3. Review the biannual State of Connecticut Integrated Water Quality Report to identify impaired waterways within the town (303d list) and determine how the Town can assist in remediation efforts.</p> <p>While some efforts to improve water quality may involve strengthening regulations, others may require physical interventions. Implementation of specific improvements will need to be phased in over the long term as funding allows.</p>	<p>Planning DPW</p>	Ongoing	<p>Staff Time Grants CIP Operating Budget</p>
<p>4. Pursue grant funds to improve the health of watersheds in Mansfield and surrounding areas.</p> <p>Local funds or in-kind contributions may be required. Partnerships with UConn, local conservation organizations and adjoining communities should be explored.</p>	<p>Planning DPW</p>	Ongoing	<p>Staff Time Grants CIP Operating Budget</p>
<p>5. Prepare, adopt, and implement a Stormwater Management Plan in accordance with CT DEEP requirements.</p> <p>Preparation of this plan should be coordinated with UConn as the University prepares its own plan.</p>	<p>DPW Planning PZC Town Council UConn</p>	Short Term	<p>Staff Time Operating Budget CIP</p>
<p>6. Update the Town's Engineering Standards and Specifications to include green infrastructure practices such as reduced pavement widths, swales, cul-de-sacs with center green spaces and stormwater tree planters.</p> <p>Different options should be provided based on area context (rural vs. compact development). Roadway and stormwater facility designs that provide for more natural stormwater infiltration have different maintenance protocols and may require investment in new equipment and changes to maintenance practices. <i>See Goal 2.4, Strategy B and Goal 2.6, Strategy B for additional actions related to stormwater management.</i></p>	<p>DPW Planning</p>	Short Term	<p>Staff Time Operating Budget CIP</p>
<p>7. Develop a guide for creation and management of landscapes and hardscapes.</p> <p>Use existing manuals such as the Connecticut Stormwater Quality Manual (www.ct.gov/deep) or create one suitable for Mansfield to help developers and contractors understand how to attain desired standards.</p>	<p>Planning DPW PZC/IWA</p>	Medium Term	<p>Staff Time Volunteer Time Grants CIP</p>

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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CHAPTER 2: Natural Systems

Goal 2.3

Mansfield’s soil, plant and wildlife habitats are healthy and diverse.

Measures of Effectiveness:

- Acres of Town-owned land following a forest management plan
- Acres of contiguous interior forest tract and grasslands/shrub lands
- Reduction in number of Lyme Disease cases reported in Mansfield

Strategy A | Improve stewardship and management of land-based resources and urban forests.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Develop, update and implement forest management plans for all Town-owned forests.</p>	Parks & Rec Parks Advisory Committee Open Space Preservation Committee Agriculture Committee Conservation Commission	Ongoing	Staff Time Volunteer Time Operating Budget
<p>2. Work with forestry organizations to encourage forest owners to develop and implement management plans. Plans that provide for managed harvesting can increase the diversity of trees in a forest—in size, age and species—and facilitate regeneration of the forest floor as well as helping to mitigate wildfires. Stewardship plans could be coordinated between abutting owners of large tracts.</p>	Parks & Rec Conservation Commission Open Space Preservation Committee Agriculture Committee	Ongoing	Staff Time Volunteer Time Grants
<p>3. Encourage a balanced approach to land management that promotes natural landscapes while allowing for lawn and more highly maintained landscapes as tool to help control the deer tick population.</p>	Conservation Commission Sustainability Committee	Ongoing	Staff Time Volunteer Time
<p>4. Sponsor demonstration sites on both public and private properties to highlight good management practices.</p>	Parks & Rec Parks Advisory Committee Open Space Preservation Committee Agriculture Committee	Medium Term	Staff Time Volunteer Time Operating Budget

SHORT TERM = 2015–2019

MEDIUM TERM = 2020–2024

LONG TERM = 2025–2035

Strategy B | Encourage conservation of diverse plant and wildlife habitats.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Manage early successional grasslands and shrub land habitats on Town-owned property.</p> <p>Management techniques such as prescribed mowing, controlled burns, timber harvesting, invasive species removal and planting of native species are examples of appropriate management practices that should be addressed in management plans for each property.</p>	Parks and Rec DPW Parks Advisory Committee	Ongoing	Staff Time Operating Budget
<p>2. Train staff and land management volunteers on invasive species identification and management, including proper cleaning of equipment to avoid spreading seeds.</p> <p>Early detection and rapid response is essential for cost-effective management of invasive species.</p>	DPW Parks & Rec	Ongoing	Staff Time Volunteer Time
<p>3. Manage invasive species on Town-owned properties and roadways.</p> <p>Grant funds may be available; however, the Town will likely need to provide a cash or in-kind match.</p>	Parks & Rec DPW	Ongoing	Staff Time Volunteer Time Operating Budget Grants
<p>4. Encourage participation by private landowners in programs on natural resource conservation and invasive management such as the USDA Natural Resources Conservation Services Environmental Quality Incentive Program (EQIP).</p>	Parks & Rec Conservation Commission Open Space Preservation Committee Agriculture Committee	Ongoing	Staff Time Volunteer Time
<p>5. Work with CT DEEP to develop a deer management program for Town-owned land and identify effective strategies for private property owners.</p>	Parks & Rec	Short Term	Staff Time

Strategy C | Protect and conserve soil resources.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Partner with regional, state and federal agencies to promote practices that improve soil health and prevent soil erosion and contamination.</p>	Parks & Rec Agriculture Committee Open Space Preservation Committee Conservation Commission	Ongoing	Staff Time Volunteer Time

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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CHAPTER 2: Natural Systems

Goal 2.4

The Town is taking steps to moderate or adapt to the impacts of climate change.

Measures of Effectiveness:

- Reduction in greenhouse gas emissions from municipal activities
- Acres of forest

Strategy A | Prepare a Climate Action Plan.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Identify and prioritize climate action items within the Mansfield Tomorrow Plan of Conservation and Development.</p> <p>Appoint a task force to identify and prioritize actions within the Plan that support reduction in greenhouse gas emissions and resilience of town infrastructure, natural systems and community service/support systems. The task force should be charged with identifying the multiple benefits of climate actions (e.g. operational efficiencies, cost savings, etc.)</p>	Sustainability Committee PZC	Short Term	Staff Time Volunteer Time
<p>2. Inventory and report greenhouse gas emissions using the U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions (http://icleiusa.org/publications/us-community-protocol/) developed by Local Governments for Sustainability (ICLEI).</p> <p>Consider recruiting UConn faculty and students to assist with the inventory.</p>	Sustainability Committee DPW Facilities	Medium Term	Staff Time Volunteer Time Grants CIP
<p>3. Develop a plan to reduce town government greenhouse gas emissions and move closer to carbon neutrality.</p> <p>The plan should include a definitive, realistic target for reduction of greenhouse gas emissions within a specific timeframe. While the focus should be on municipal activities, the plan should also identify opportunities for collaboration with UConn and suggestions for how private property owners, businesses, and residents can make a difference.</p>	Sustainability Committee PZC	Medium Term	Staff Time Volunteer Time Grants CIP

SHORT TERM = 2015–2019

MEDIUM TERM = 2020–2024

LONG TERM = 2025–2035

Strategy B | Consider potential climate change impacts of proposed capital projects, programs and policies.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Seek funding for climate adaptation and mitigation projects, including the conservation of forested lands.</p>	Town Manager Town Council	Ongoing	Staff Time Grants CIP
<p>2. Encourage property owners to retain and manage existing forest and minimize fragmentation.</p>	Conservation Commission Sustainability Committee	Ongoing	Staff Time Volunteer Time
<p>3. Assign the task of exploring efforts to adapt to and mitigate the impacts of climate change. Potential activities include educating Town staff, officials and committees on threats of climate change and working with officials and committees to identify adaptation and mitigation projects.</p>	Town Council	Ongoing	Staff Time Volunteer Time
<p>4. Develop a list of climate change indicators and criteria for use in evaluating Town capital projects and programs.</p>	Sustainability Committee	Short Term	Staff Time Volunteer Time
<p>5. Update the Town’s Engineering Standards and Specifications to require use of updated rainfall data for design of stormwater management systems.</p>	DPW	Short Term	Staff Time Operating Budget CIP



CHAPTER 2: Natural Systems

Goal 2.5

Mansfield has increased community resilience and mitigated the impacts of natural hazards.

Measures of Effectiveness:

- Increase in number of dead, dying, dangerous or diseased trees removed from town rights-of-way
- Acres of land in flood hazard areas permanently protected from development
- Reduction in the number of properties suffering repetitive losses from flooding

Strategy A | Continue to participate in the preparation and implementation of regional hazard mitigation plans.

ACTIONS	WHO	WHEN	RESOURCES
1. Implement recommendations and participate in updates to the regional Natural Hazards Mitigation Plan.	Planning DPW Emergency Management Town Council	Ongoing	Staff Time Volunteer Time Operating Budget CIP Grants
2. Collaborate with UConn as part of the hazard mitigation strategy.	Emergency Management	Ongoing	Staff Time

Strategy B | Focus on maintenance and prevention to reduce power disruptions.

ACTIONS	WHO	WHEN	RESOURCES
1. Prioritize improvements and maintenance practices that promote resilience and mitigate natural hazards such as preventative tree maintenance, including trimming and removal of dead, dying and dangerous trees from town rights-of-way.	DPW	Ongoing	Staff Time Operating Budget
2. Encourage property owners to work with utility companies to explore possibilities for undergrounding service lines as part of new and redevelopment.	Planning	Ongoing	Staff Time

SHORT TERM = 2015–2019

MEDIUM TERM = 2020–2024

LONG TERM = 2025–2035

ACTIONS	WHO	WHEN	RESOURCES
<p>3. Work with an arborist to develop guidelines for tree trimming, removal and planting that are sensitive to tree health, community character and hazard mitigation needs.</p> <p>As trees contribute heavily to the overall character of Mansfield, trimming and removal activities need to be balanced with impacts on character.</p>	<p>Planning DPW</p>	Short Term	<p>Staff Time Operating Budget</p>
<p>4. Identify appropriate street tree species to be used in areas with overhead power lines.</p>	<p>Planning DPW</p>	Short Term	<p>Staff Time Volunteer Time</p>

Strategy C | Minimize impacts from future floods.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Encourage owners of properties prone to flooding to make improvements that reduce flood losses, such as elevation of structures.</p>	Emergency Management	Ongoing	<p>Staff Time Grants</p>
<p>2. Evaluate properties in flood hazard areas for potential acquisition as they become available.</p>	<p>Open Space Preservation Committee Town Council</p>	Ongoing	Open Space Bonds
<p>3. Repair/improve dams as recommended by periodic inspections and prepare Emergency Operations Plans (EOPs) for all Town owned and maintained dams.</p>	DPW	Ongoing	<p>Staff Time Operating Budget CIP</p>
<p>4. Encourage owners of private dams to repair/improve dams as recommended by CT DEEP periodic inspections and share EOPs with the Town.</p>	DPW	Ongoing	Staff Time
<p>5. Continue to advocate for state and federal cost-share for repairs to Town-owned dams.</p>	Town Manager	Ongoing	Staff Time
<p>6. Develop a comprehensive floodplain management program and participate in the National Flood Insurance Program Community Rating System (CRS).</p> <p>Benefits of participation in the CRS can include flood insurance premium reductions for property owners if the Town’s floodplain management activities qualify for enough credits.</p>	<p>Planning Emergency Management</p>	Medium Term	Staff Time

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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CHAPTER 2: Natural Systems

Goal 2.6

Mansfield’s land use regulations promote the protection and enhancement of natural systems.

Measures of Effectiveness:

- Acres of land preserved in natural state or in agricultural use as part of development approval process
- Increase in amount of impervious cover connected to green infrastructure/low impact development stormwater practices
- Increase in number of developers having pre-application meetings with the Conservation Commission and Open Space Preservation Committee

Strategy A | Identify potential issues related to natural resource protection prior to application submission.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Encourage developers to identify natural resource protection goals specific to the subject property as part of the pre-application process.</p> <p>Site evaluations should prioritize key features such as groundwater and surface water resources, large areas of interior forest, forest edges, and productive soils with a goal of maintaining connectivity between natural systems. Town data and resources such as the Open Space Acquisition Criteria should be used as part of this process. <i>See related actions under Goal 3.4, Strategy B and Goal 8.2, Strategy B.</i></p>	<p>Planning PZC Open Space Preservation Committee Conservation Commission Agriculture Committee Parks Advisory Committee</p>	<p>Ongoing</p>	<p>Staff Time Volunteer Time</p>
<p>2. Update regulations to require documentation related to existing or potential contamination of water and soils both on and in the vicinity of the proposed development site.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • Inclusion of the subject property or properties in the immediate vicinity on the most recent CT DEEP Contaminated or Potentially Contaminated Sites listing • Documentation of water quality in addition to quantity • Research on past uses that could have resulted in contamination, including agriculture • Requiring soil/water testing for contaminants based on past use (pesticides, fertilizers, Volatile Organic Compounds [VOCs], etc.) 	<p>PZC</p>	<p>Short Term</p>	<p>Staff Time Community Challenge Grant</p>

SHORT TERM = 2015–2019

MEDIUM TERM = 2020–2024

LONG TERM = 2025–2035

ACTIONS	WHO	WHEN	RESOURCES
<p>3. Update regulations to require evaluation of potential impacts of proposed development on nearby resources.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • Wells • Farmland • Forests • Aquatic and wildlife habitats 	PZC	Short Term	Staff Time Community Challenge Grant

Strategy B | Strengthen land use regulations that promote protection of natural systems and habitats. Where appropriate, regulations should include flexibility in requirements to allow for the unique characteristics of the land and proposed use.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Adopt innovative regulations that provide for protection of natural resources by avoiding fragmentation of large forest tracts.</p> <p><i>See Goal 3.4, Strategy A, Action 2 and Goal 4.2, Strategy B, Actions 1 and 2.</i></p>	PZC	Short Term	Staff Time Volunteer Time Grants
<p>2. Strengthen regulations protecting critical natural resource areas including water recharge areas, wetlands, water bodies, interior forest tracts, soils and steep slopes.</p> <p>Updates to Zoning and Subdivision Regulations should identify incentives and requirements for development practices that promote protection of critical natural resource areas such as wetlands and water bodies through strong buffer requirements; discourage designs that directly impact resources such as steep slopes, wetlands and water bodies; encourage the use of native vegetation and minimize impacts of erosion. Regulations should meet the minimum requirements established by CT DEEP.</p>	PZC IWA	Short Term	Staff Time Community Challenge Grant
<p>3. Update Flood Hazard Area regulations based on practices recommended by the National Flood Insurance Program.</p> <p>Regulations that exceed minimum requirements are eligible for credits through the Community Rating System program. <i>See related action under Goal 2.5, Strategy C.</i></p>	PZC	Short Term	Staff Time Community Challenge Grant

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>4. Identify and evaluate options for expanding protection of stratified drift aquifers and other drinking water resources such as community wells from contamination.</p> <p>Examples include expansion of current Aquifer Protection Agency regulations to additional areas and establishment of a regulated area surrounding stratified drift aquifers similar to the regulated area surrounding wetlands.</p>	<p>Planning Conservation Commission PZC</p>	<p>Short Term</p>	<p>Staff Time Volunteer Time</p>
<p>5. Establish green infrastructure standards that maximize infiltration of stormwater and natural drainage.</p> <p>Regulations should be tailored to the area context; approaches in compact development areas would differ from those in more rural areas. Standards should be consistent with CT DEEP requirements for municipal stormwater management plans. Examples include:</p> <ul style="list-style-type: none"> • <i>Adopting site development and stormwater management regulations based on the Eagleville Brook Watershed Management Plan recommendations</i> • <i>Requiring new developments to manage stormwater through a district stormwater system</i> • <i>Treating the first inch of stormwater on-site</i> • <i>Reducing need for additional pavement by right-sizing parking (both number and size of spaces)</i> • <i>Encouraging the use of permeable pavement for parking lots, driveways and patios</i> • <i>Limiting the amount of impervious cover as a percentage of lot area</i> • <i>Requiring retrofits of existing sites to reduce effective impervious cover based on extent of redevelopment and location—sites in water supply or impaired water body watersheds could have more stringent requirements</i> • <i>Requiring or incentivizing the use of infiltration methods such as bioswales, permeable pavement, rain gardens, disconnected roof drains, green roofs, etc. to meet water runoff volume and quality requirements</i> • <i>Prohibiting stormwater facilities that are single-use, walled/fenced, or excessively deep</i> • <i>Incorporating stormwater facilities into the design of civic and open spaces</i> 	<p>PZC</p>	<p>Short Term</p>	<p>Staff Time Community Challenge Grant</p>

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>6. Strengthen regulations related to prevention of light pollution and preservation of dark skies.</p> <p>The International Dark Sky Association (IDA) has developed model regulations that can be used as a resource. The IDA also maintains a list of dark-sky compliant fixtures.</p>	PZC Conservation Commission	Short Term	Staff Time Community Challenge Grant
<p>7. Update Zoning and Subdivision regulations to reflect changes due to climate change, such as setbacks in relation to flood zones, etc. <i>Additional research will be needed to identify specific changes.</i></p>	PZC	Short Term	Staff Time Volunteer Time

Strategy C | Mitigate the effects of heat islands created by hardscape surfaces.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Adopt standards to minimize impacts of heat islands in areas with more intense development and large expanses of surface parking.</p> <p>Potential strategies include use of green roofs and identifying appropriate solar reflective index ratings for hardscape materials.</p>	PZC	Short Term	Staff Time Community Challenge Grant
<p>2. Establish shade requirements for large parking and hardscape areas.</p>	PZC	Short Term	Staff Time Community Challenge Grant



3 OPEN SPACE, PARKS AND AGRICULTURAL LANDS



overview

View of Mountain Dairy from Browns Road

TOPICS IN THIS CHAPTER INCLUDE

- Natural Systems
- Agricultural Land
- Preserves, Greenways, and Trails
- Scenic Views and Vistas
- Recreational Open Space: Parks, Playgrounds and Playing Fields
- Preservation and Protection of Open Space
- Stewardship and Maintenance of Open Space
- Natural Resource Agencies and Organizations

While Chapter 2 concentrated on the variety of high-quality natural resources existing in Mansfield, this chapter focuses on how people interact with those resources in both public and private open space areas. Open space areas offer scenic views, places to recreate, environmental benefits and local agricultural products. Preservation and stewardship of open space land is critical to maintain these benefits and to keep a balance between developed and undeveloped areas.

what the **community** said

OPEN SPACE, PARKS, AND AGRICULTURAL LANDS

Participants in the Mansfield Tomorrow events and on-line forums consistently identified Mansfield's open spaces and agricultural lands as a defining characteristic of what makes Mansfield a special place to live. These open spaces also contribute significantly to the rural character that is important to residents. In particular, most of the areas identified as places to preserve by users of the on-line mapping tool were either publicly or privately owned open space.

Themes in the community's comments on open space, parks and agricultural lands included:

- Appreciation for Mansfield's open space in combination with cultural resources
- Desire for interconnected open space rather than fragmented parcels of open land
- Importance of balancing open space preservation with growth of the town's economy
- Importance of encouraging more land in agricultural production
- Concern that privately owned open space is going to be subject to increasing development pressure as UConn expands
- Need for the Town to better manage the open space it owns

"I love that Mansfield offers open spaces, etc, in combination with cultural resources. This is critical to our decision to live here."

"I moved to this town and neighborhood because it was a great place for my kids to grow up. Lots of forests and fields and places for kids to play."

"Preserve farm and fields, forests, long views, night sky..."

FROM MANSFIELD RESIDENTS

OPEN SPACE, PARKS AND AGRICULTURAL LANDS TODAY



Photo credit: James D. Gilligan

View from Stearns Rd.

Open space in Mansfield is one of the town’s defining characteristics, offering scenic views, historical settings, farm fields, and natural recreation areas. Open space also includes plazas and green spaces in developed areas and active recreation spaces, such as ball fields and playgrounds. The vast majority of open space is privately owned. Public ownership of land does not necessarily mean that it is permanently preserved as open space, as is generally assumed.

The benefits of open space are numerous. Maintaining the following benefits will require both public and private efforts to preserve and manage open space areas.

- *Healthy natural systems*—Open space supports and protects the town’s natural resources (see Chapter 2, Natural Systems).
- *Public safety*—Natural areas offer protection from problems such as erosion, flooding and pollution.
- *Community character*—Scenic views contribute to Mansfield’s rural identity and influence how people experience the town. Open space also includes some historic sites, such as the Commonfields in Mansfield Center.

Open Space is public or private property that is undeveloped or lightly developed with few or no structures.

Conservation land is open space under private or public ownership that is currently afforded some preservation status. (For more information, see section 6 of this chapter.)

- *Human Health*—Open space contributes to our health by providing opportunities for physical activity, relaxation, improved air and water quality, and land to produce healthy food.
- *Economy*—Open space makes Mansfield an inviting place, which can attract new businesses and residents to town. Most open space land is privately owned farms and forests, providing food, forest products and employment opportunities. Owners of farm and forest land usually pay more in taxes than they require in services, thus helping to offset the higher service requirements of residential uses.

The following sections provide more information on the various purposes of open space and tools for long-term preservation and stewardship. The goal is to ensure that future generations continue to reap the benefits that a robust open space network provides, and continue to strengthen this network.

1. Natural Systems

Mansfield’s open space has a diversity of natural features, including forests, diverse plant communities, water features, and wildlife and aquatic species. Preservation and stewardship of open space areas is essential to maintaining these natural features and the environmental benefits they provide. Information and goals related to preservation of natural resources are included in Chapter 2: Natural Systems.

2. Agricultural Land

Mansfield’s residents value the scenic views and local agricultural products provided by farms and forests. Mansfield’s agricultural lands are typical of a New England hill town. Over 3,500 acres of farmland (cropland and pastures) extend across rolling hills, along level river valleys and in the Willimantic Basin, representing approximately 12% of Mansfield’s acreage. Approximately 1,300 acres support operations for three dairy



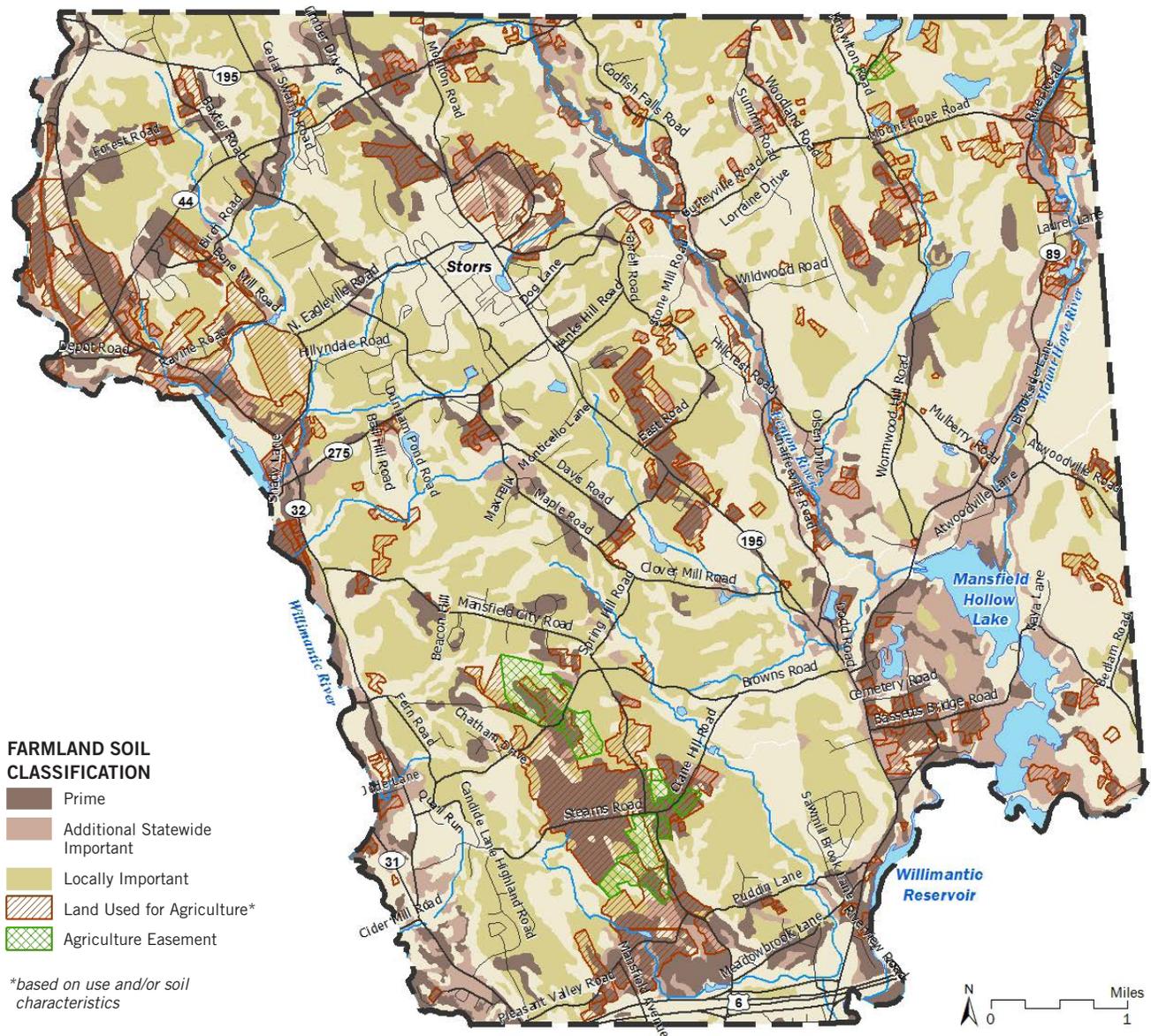
Photo credit: James D. Gilligan

Horse at Mountain Dairy

farms. The remaining acreage is divided among small farms (50 acres or less) and publicly owned farmland, including 70 acres owned by the Town and leased to local farmers; 700 acres owned by UConn; and 26 acres at Mansfield Hollow State Park that are also licensed to farmers. Smaller farms produce a variety of products, including livestock and vegetables. Agricultural lands also include actively managed trees and forest areas, such as sugar maple groves, Christmas tree farms, orchards and woodlots. For discussion on agricultural businesses, see Chapter 6: Diversifying the Economy.

The most suitable land for agriculture is identified through the presence of “Farmland Soils” as defined by the United States Department of Agriculture’s (USDA’s) Natural Resources Conservation Service. Soil types are ranked by suitability and include Prime Soils, considered to be the most suitable for crops; Statewide Important, which can produce high crop yields when managed properly; and Locally Important, which have more limitations but can still support agricultural activities. Using this classification system, approximately 58% of Mansfield contains soils that could support some type of crop production (see Map 3.1: Active Farmland and Farmland Soils), including 4,202 acres of

MAP 3.1: ACTIVE FARMLAND AND FARMLAND SOILS



Map based on best available data as of November 2014

Source: Soils from NRCS Survey provided by Town of Mansfield, 2013; other data from Town of Mansfield, 2013



Photo credit: James D. Gilligan

Mountain Dairy



Sheep at Windhover farm

Prime soils, 2,896 acres of Statewide Important soils and 9,911 acres of Locally Important soils. Some of this acreage is farmed, some is forested, and some is developed. The largest area of Prime soils is located in southwest Mansfield.¹ When combined with forested areas that do not contain any farmland soils, approximately 74% of the town's land area could be used for agriculture. Since forestry areas do provide agricultural products such as timber, firewood, maple syrup, shade and windbreaks for livestock, partial shade to aid growth of cool season grasses, nuts for pigs, medicinal plants, and other crops, they are a valued type of agriculture. Agroforestry is a land use that utilizes a mixture of trees and partially open areas on the same field. The 74% of the town's land classified with farmland soils or other forested land with non-farmland soils both provide significant ecosystem services.

The continued existence of agriculture in Mansfield depends on the availability of land as well as the economic viability of farm operations. The high cost of land in Mansfield often is a barrier to acquiring land for agricultural uses, especially for new farmers. Loss of farmland to development is a significant issue. The Mansfield Tomorrow Agriculture Strategy Report identifies access to agricultural land as one of the most pressing challenges facing Mansfield's agricultural sector. If the loss of farmland continues at the historic rate, availability of land will pose a significant challenge to the viability of both existing and potential future farmers. A potential remedy is restoration of farmland that is currently abandoned or under turf.

Defining and protecting existing farmland and prime agricultural soils will help the town to effectively balance development with a viable agricultural sector and the quality of life concerns associated with open space. Encouraging clusters of agricultural activity and improving signage will increase the visibility of agriculture, and may also contribute to viability by increasing opportunities for sharing infrastructure and knowledge among producers. Also important is preservation of existing farmland viewsheds, particularly along Horsebarn Hill, Route 32, Route 195, Route 6, Pleasant Valley Road,

¹ <http://www.cteco.uconn.edu/index.htm>

Stearns Road, Mansfield City Road, Crane Hill Road and Browns Road. Heightened visibility of agriculture can increase public support for agriculture-friendly policies.

3. Preserves, Greenways, and Trails

Mansfield has a wide variety of nature-based recreational open space, including preserves, greenways and trails. These preserves provide natural environments with access to boating, fishing, and wildlife observation, and are often connected through local and regional trail networks.

A) PRESERVES AND NATURAL PARKS

Mansfield residents have access to over 5,000 acres of natural parks and preserves, including Town, State and Federally owned properties as well as land owned by Joshua’s Trust, a local land conservation organization. A full list of preserves and description of features is identified in Table 3.1. The largest of these preserves is Mansfield Hollow, which includes over 1,900 acres of land and a 500-acre lake.

Table 3.1: Preserves and Parks with Public Access in Mansfield (see Map 3.2)

SITE	LOCATION	ACRES	PERMANENTLY PRESERVED?	FACILITIES
TOWN*				
Commonfields	Bassetts Bridge Rd	16	No	<ul style="list-style-type: none"> hiking trails along the edge of a working agricultural field leased to local farmer wildlife viewing area at pond and shrub swamp historic features part of the Commonfields used by early settlers 300 years ago and also part of Col. Experience Storrs’ 18th-century farm
Coney Rock Preserve <i>Jointly managed with Joshua’s Trust</i>	Chaffeeville Rd/ Mulberry Rd	59 acres of 243 acres	Town portion preserved by a CT DEEP Conservation Easement	<ul style="list-style-type: none"> hiking trails panoramic vistas adjacent to Joshua’s Trust portion (176 acres)
Dorwart Preserve/ Lions Memorial Park	Mulberry Rd	125 (combined)	Dorwart preserved via CT DEEP Conservation Easement; Lions Park preserved via deed restriction	<ul style="list-style-type: none"> hiking trails link between Mansfield Hollow State Park and Coney Rock Preserve
Dunhamtown Forest	Dunham Pond/ Mansfield City/White Oak Rds./Max Felix Dr.	226	Portion preserved by deed restriction	<ul style="list-style-type: none"> hiking trails historic features adjacent to Joshua’s Trust Dunham Woods
Eagleville Preserve	Stafford Rd/ S Eagleville Rd	11	No	<ul style="list-style-type: none"> fishing and canoe/kayak access to Willimantic River hiking trails field leased to farmer adjacent to 9 acres of CT DEEP land

* Mansfield also owns a number of open space parcels with neighborhood trails that are not included in this list.

Table 3.1: Preserves and Parks with Public Access in Mansfield (see Map 3.2)

SITE	LOCATION	ACRES	PERMANENTLY PRESERVED?	FACILITIES
Fifty-foot Cliff Preserve	Storrs Rd/East Rd	102	Yes; Preserved via CT DEEP Conservation Restriction	<ul style="list-style-type: none"> hiking trails panoramic views wetland boardwalk adjacent to UConn Spring Forest Tract
Merrow Meadow	Merrow Rd	33	No	<ul style="list-style-type: none"> fishing, canoeing access to Willimantic River hiking trails (partially wheel chair accessible) part of the Willimantic River Greenway, connecting north to the Coventry Riverview Trail across the river and south to the Spring Manor Trail and Mansfield Depot
Moss Sanctuary	Route 195 behind Mansfield Apartments, also Birchwood Heights Rd	135	Yes; Preserved via CT Forest and Park Association conservation easement	<ul style="list-style-type: none"> hiking trails Hanks Reservoir (Tift Pond)
Mount Hope Park	Warrenville Rd	35	Yes; Preserved via CT DEEP conservation easement	<ul style="list-style-type: none"> fishing access to Mt. Hope River/pond hiking trails cross-country skiing wetland boardwalk field leased to local farmer
River Park	Plains Rd	10	No	<ul style="list-style-type: none"> Willimantic River access with handicap accessible canoe/kayak launch hiking trails connecting to Willimantic Greenway Midriver Trail multi-use recreational field cross-country skiing includes trail license with private land owner for access to Lynch Landing and E.O. Smith Depot Campus
Sawmill Brook Preserve	Access from the Nipmuck Trail entrance off Puddin Lane or from Joshua's Trust's Wolf Rock Preserve off Crane Hill Rd	117 acres of 224 acres	A portion preserved via CT DEEP conservation easement	<ul style="list-style-type: none"> hiking trails wildlife viewing platform segment of Nipmuck Trail adjacent to Joshua Trust's 164-acre Wolf Rock Preserve
School House Brook Park	Clover Mill Rd	455	A portion is preserved because it was purchased by a federal grant that limits how the property can be used.	<ul style="list-style-type: none"> wheelchair accessible beach area with bath house fishing access picnic pavilion children's playscape hiking trails mountain biking
Shelter Falls Park	Birch/Hunting Lodge Rds	75	A portion preserved by a CT DEEP conservation easement	<ul style="list-style-type: none"> hiking trails connects to the bike path along Hunting Lodge Rd adjacent to 44 acres of CT DEEP land leased to the Town to the north, UConn North Eagleville Tract to the south, and HEEP to the east

Table 3.1: Preserves and Parks with Public Access in Mansfield (see Map 3.2)

SITE	LOCATION	ACRES	PERMANENTLY PRESERVED?	FACILITIES
Torrey Preserve	Gurleyville Rd	30	No	<ul style="list-style-type: none"> hiking trails segment of the Nipmuck Trail field leased to local farmer
UCONN				
Fenton River Forest Tract**	Storrs Rd	440	No	<ul style="list-style-type: none"> Nipmuck Trail including permanent trail easements multiuse trails
Hillside Environmental Education Park (HEEP)**; part of environmental remediation of landfill closure	N. Hillside Rd and Hunting Lodge Rd	64	Yes; Preserved via CT DEEP conservation easement	<ul style="list-style-type: none"> trail network 2 wildlife observation platforms viewing platform overlooking the park
North Eagleville Forest Tract**	N. Eagleville Rd	130	No	<ul style="list-style-type: none"> hiking trails (connects to Shelter Falls Park)
Spring Hill Forest Tract**	Storrs Rd	187	No	<ul style="list-style-type: none"> Nipmuck Trail including permanent trail easements forest management demonstration trail multiuse trails
Spring Manor Farm (public access limited to trail)	Rte 32	220	No	<ul style="list-style-type: none"> student garden with produce supplied to UConn Dining Services hiking trail connects to Merrow Meadow Park and Mansfield Depot part of Willimantic River Greenway
STATE				
Eagleville Dam and northerly portion of Eagleville Preserve	S. Eagleville Rd	22	No	<ul style="list-style-type: none"> fishing and canoe/Kayak access to Willimantic River hiking trails
Echo Woods	Cemetery Rd	57	Yes; Joshua's Trust	<ul style="list-style-type: none"> hiking trails adjacent to Joshua's Trust Bradley Buchanan Woods and Pond Lot
Shelter Falls North Parcel (leased to the Town) Managed as part of Shelter Fall Preserve	Birch Rd/Middle Turnpike	44	No	<ul style="list-style-type: none"> hiking trails
FEDERAL				
Mansfield Hollow State Park Managed by CT DEEP	Bassetts Bridge Rd	500-acre lake 1,937 land acres	Yes; US Army Corps of Engineers	<ul style="list-style-type: none"> boating, boat launch ramp fishing cross-country skiing mountain biking field sports picnic tables

** Managed by Natural Resources Management and Engineering Department

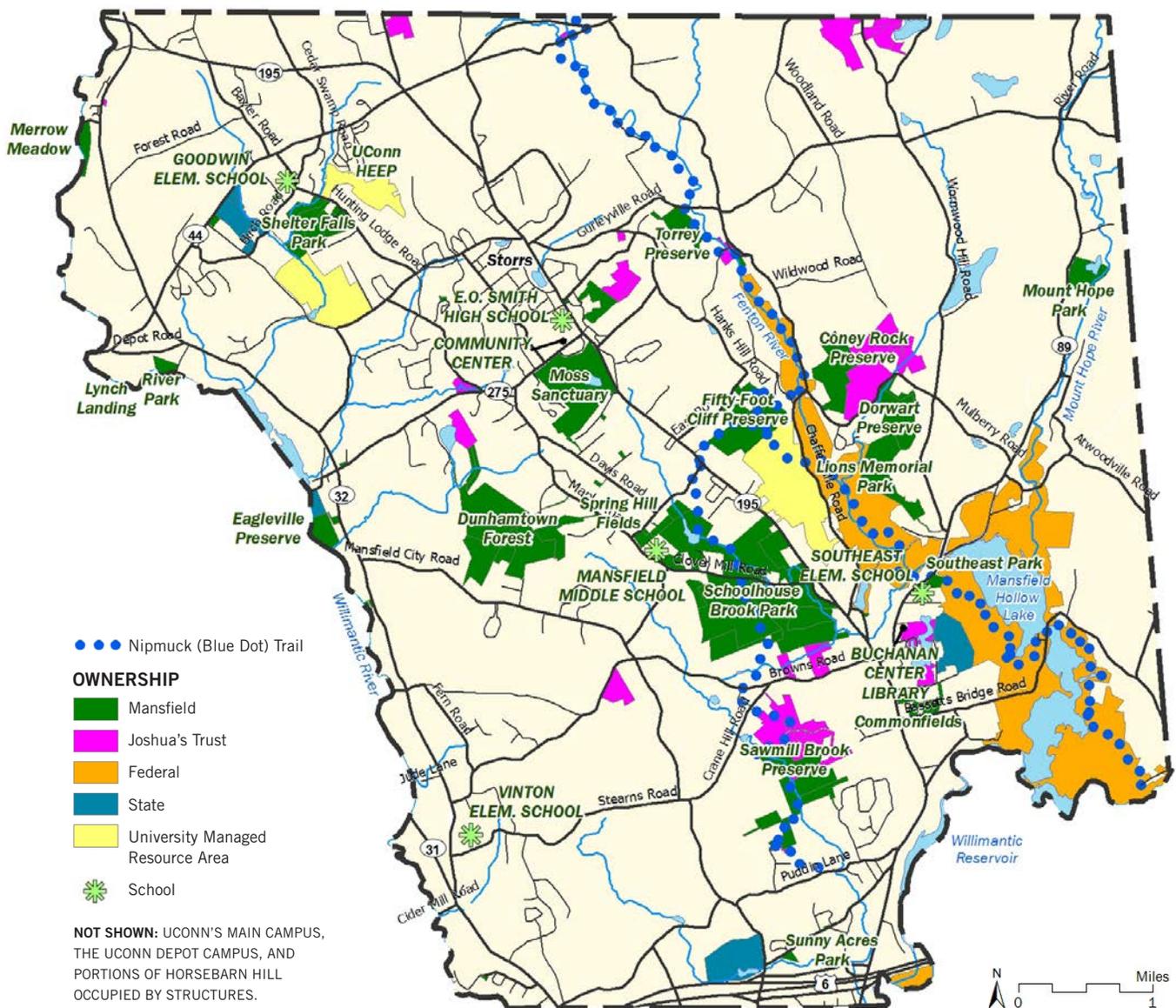
Table 3.1: Preserves and Parks with Public Access in Mansfield (see Map 3.2)

SITE	LOCATION	ACRES	PERMANENTLY PRESERVED?	FACILITIES
JOSHUA'S TRUST				
Bradley Buchanan Woods/Pond Lot	Rte 89 (parking at the Mansfield Public Library, limited parking on Edgewood Lane Ext., Cemetery Rd)	32 combined	Yes; Joshua's Trust	<ul style="list-style-type: none"> hiking trails, canoe, kayak launch
Coney Rock Preserve Jointly managed with the Town	Chaffeeville Rd/ Mulberry Rd, Woodland Rd	Trust owns 176 acres of 235 combined acres	Yes; Joshua's Trust	<ul style="list-style-type: none"> hiking trails panoramic vistas adjacent to Town's 59 acres
Dunham Woods	S Eagleville Rd	17	Yes; Joshua's Trust	<ul style="list-style-type: none"> hiking trails adjacent to Town's Dunhamtown Forest
Gurleyville Gristmill	Stone Mill Rd in Gurleyville	8	Yes; Joshua's Trust	<ul style="list-style-type: none"> historic mill museum picnicking
Harriet Babcock Preserve	Crane Hill Rd, near the intersection with Browns Rd	10	Yes; Joshua's Trust	<ul style="list-style-type: none"> hiking trails connects with Schoolhouse Brook Park
Holt-Kinney Woods	Browns Rd	21	Yes; Joshua's Trust	<ul style="list-style-type: none"> hiking trails connects with Schoolhouse Brook Park
Knowlton Hill Preserve	Knowlton Hill Rd	127 (70 in Mansfield)	Yes; Joshua's Trust	<ul style="list-style-type: none"> hiking trails
Lof Woodlands	Rte 320 (Willington Hill Rd)	18	Yes; Joshua's Trust	<ul style="list-style-type: none"> hiking trails
Mason Mill	Along Fenton River near Old Turnpike Rd	2	Yes; Joshua's Trust	<ul style="list-style-type: none"> historic mill site
Owens Mere	S Eagleville Rd	9	Yes; Joshua's Trust	<ul style="list-style-type: none"> hiking trails small pond
Whetten Woods	Dog Lane (no frontage; enter from the Lutheran Church)	28	Yes; Joshua's Trust	<ul style="list-style-type: none"> hiking trails
Windfield Acres	Thornbush Rd	1	Yes; Joshua's Trust	<ul style="list-style-type: none"> access to the Willimantic River
Wolf Rock Preserve	Crane Hill Rd	107 of 224	Yes; Joshua's Trust	<ul style="list-style-type: none"> hiking trails panoramic vistas adjacent to Town's Sawmill Brook Preserve

B) GREENWAYS AND TRAILS

Mansfield has significant regional and local trail systems. The 37-mile Nipmuck Trail maintained by the Connecticut Forest and Parks Association begins at two trailheads in southern Mansfield and ends at Nipmuck State Forest in Union, CT. Approximately 17 miles of this trail are located in Mansfield. In addition to the Nipmuck Trail, there are over 30 miles of recreational trails on lands owned by the Town of Mansfield, Joshua’s Trust, and UConn. Mansfield’s Parks and Recreation Department provides detailed trail

MAP 3.2: PRESERVES, PARKS AND ACTIVE RECREATION AREAS WITH PUBLIC ACCESS



Map based on best available data as of November 2014

Source: Town of Mansfield Assessor, 2012; Land of Unique Value, 2003



Coney Rock Walk



Brochures and trail maps support active use of the town's many outdoor recreation resources.

guides for Town preserves on the Town's website and via a Trail Map App. Trail guides for the Fenton Tract and Hillside Environmental Education Park (HEEP) are available on UConn websites.

Mansfield has state-designated Greenways² along its four rivers—Willimantic, Fenton, Mount Hope and Natchaug—and their tributaries. State-designated Greenways, selected from among nominees by the Connecticut Greenways Council, are recognized for their value as recreation assets and/or environmental resources. State-designated Greenways are listed in the State Conservation and Development Policies Plan and may receive increased consideration for a variety of grants. The Greenways provide a high-quality aquatic environment that supports a variety of recreational opportunities including trout fishing, paddling and hiking as well as supply public drinking water.

Willimantic River Greenway (2003). Located in the towns of Stafford, Ellington, Tolland, Willington, Coventry, Mansfield, Columbia, Windham, and Lebanon, the Willimantic River is a both a State-designated Greenway and a National Recreation Trail (2012). Recreational opportunities are being developed both along the river for hikers and bikers and on the water for canoes and kayaks. Wells in the watershed are an important source of public drinking water for the UConn campus and the surrounding area.

Natchaug River Greenway (2006). The river traverses the towns of Ashford, Chaplin, Eastford, Mansfield, Union, Windham and Woodstock. In addition to providing recreational opportunities, the watershed provides public drinking water for the Willimantic Reservoir that supplies the City of Willimantic and part of southern Mansfield.

Mount Hope River Greenway (2006). This river is located in Mansfield and Ashford. In addition to providing recreational opportunities, the watershed provides public drink-

² <http://www.ct.gov/deep/cwp/view.asp?a=2707&q=323852>

ing water for the Willimantic Reservoir that supplies the City of Willimantic and part of southern Mansfield.

Fenton River Greenway (2006). Traversing the towns of Ashford, Mansfield, Willington, the Fenton River is one of six rivers in northeastern Connecticut that designated by the Connecticut DEEP as a Wild Trout Management Area due to its high water quality and fish habitat. In addition to providing recreational opportunities, the watershed provides public drinking water for the Willimantic Reservoir that supplies the City of Willimantic and part of southern Mansfield. The watershed also includes public water supply wells in Willington and is an important source of public drinking water for the UConn campus and the surrounding area

4. Scenic Views and Vistas

Open space provides scenic views from roads and trails that influence how people experience Mansfield. These scenes define the town's identity and highlight natural, agricultural and historical resources, including hills, valleys and waterways. Predominantly rural scenes encourage residents and visitors to relax and enjoy valley views from hill-tops, and conversely, views of forested or agricultural hills from the valleys. Stone walls line winding roads that pass fields, forests, and historic villages. There are many vantage points along roads, in parks and on the water. One notable example is Horsebarn Hill, an iconic drumlin (hill or ridge formed by glacial activity). Popular views include farmland



Photo credit: Becky Lehmann

Mansfield has an extensive network of trails and preserves, including Fifty-Foot Cliff Preserve (shown here).

along Route 195, Route 32 and Stearns Road, far-reaching panoramas from Coney Rock, Fifty-Foot Cliff and Wolf Rock Preserves, and water views at Eagleville dam, in Mansfield Hollow, and along the Fenton River. Roads with high scenic value are eligible for designation as a scenic road; more information on this program is provided in Chapter 4. More detailed information on Mansfield's scenic resources can be found in the *2006 Plan of Conservation and Development* and the *2003 Land of Unique Value* study.

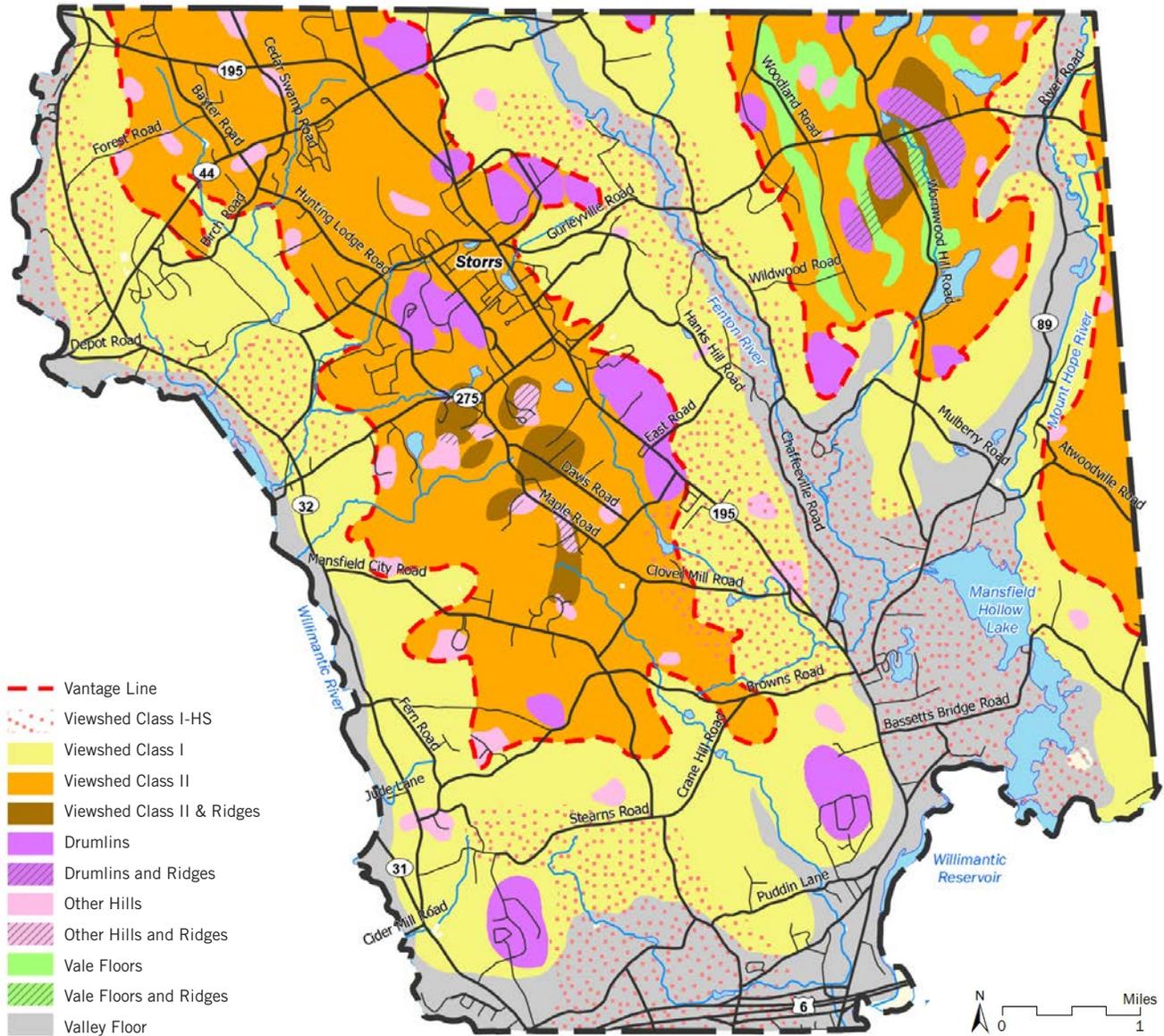
Mansfield's subdivision regulations currently allow flexibility for siting buildings within a building area envelope in order to preserve significant features such as scenic resources, views, and vistas. For other developments, the Planning and Zoning Commission works with applicants through the design review process to site structures or features in such a way that significant views and vistas are preserved. Lot size, building heights, and the location of buildings or features on the site are considered as part of this process.

Map 3.3: Scenic Resources and Classifications identifies the following scenic resources considered in site design and review.

SCENIC RESOURCES CONSIDERED IN SITE DESIGN AND REVIEW

- **Vantage line:** A point, series of points, or a line from which the scenery may be viewed. Also referred to as a prospect.
- **Viewshed I-HS:** Highly sensitive classification because of the interplay of all of the scenic elements that produces intense scenic impact. Critical areas for preservation.
- **Viewshed Class I:** Slopes that rise from the valley floor to meet the hilltops, often containing steep slopes and ledges; sensitive areas to viewers, particularly from above.
- **Viewshed Class II:** Hilltops that offer dramatic vantage points or lines of vantage to the surrounding landscape. These are highly sensitive areas.
- **Viewshed Class II and Ridges:** Those hilltop areas that also contain prominent ridges that become significant vantage areas and also focal points for other surrounding vantage points.
- **Drumlins:** Highly sensitive geological formations (a long ridge or oval-shaped hill formed by glacial drift) that form vantage areas or become focal points from other vantage areas.
- **Drumlins and ridges:** Drumlins that become part of a ridge system, such as in the western ridges of town and thus form vantage areas or focal points; sensitive. A long, narrow elevation of land, or a range of hills. Often a vantage point for viewing or the focal point of a view.
- **Other hills:** Sensitive prominent hills not classed as drumlins or ridges, but important as vantage or focal areas.
- **Vale floors:** These are found especially in the eastern part of town, east of the Fenton River valley, and are an interplay of long ridges and shallow valleys which are called vales. These are sensitive areas that should be considered in planning.
- **Vale floors and ridges:** A combination of these two elements that offers a significant scenic system.
- **Valley floors:** Bottoms of valleys, including the rise of each side of the lowest elevation that forms part of the valley floor; sensitive areas because they can be a focus to a view or vista from above.

MAP 3.3: SCENIC RESOURCES AND CLASSIFICATIONS



Source: Mansfield Plan of Conservation and Development, 2006



Parks, playgrounds, ball fields, sports courts and more support outdoor recreation throughout the year (ice skating at Mansfield Community Center shown above).

5. Recreational Open Space: Parks, Playgrounds and Playing Fields

Also important to life in Mansfield are the parks, playgrounds, ball fields and sports courts used by Mansfield residents of all ages. The Town has numerous active recreation areas on public properties (see Table 3.2), including school athletic facilities that are available for public use when not in use by the school. These facilities are used for programs sponsored by the Town as well as several youth sports leagues. Private outdoor recreation facilities include a driving range, rope and zip-line course, and a multi-use active recreation facility that provides private memberships, youth day camps, and banquet facilities.

Table 3.2 Town-Owned Active Recreation Areas (see Map 3.2)

SITE	LOCATION	FACILITIES
Buchanan Center (Library)	Warrenville Rd	<ul style="list-style-type: none"> • playscape • indoor auditorium with stage
Spring Hill Fields	Spring Hill Rd	<ul style="list-style-type: none"> • multi-use ball fields including football/soccer and softball fields
Lions Club Park	Warrenville Rd	<ul style="list-style-type: none"> • multi-use ball fields including 3 full-size soccer fields • restroom/concession building • picnic pavilion • hiking trails
Schoolhouse Brook Park (Bicentennial Pond)	Clover Mill Rd	<ul style="list-style-type: none"> • wheelchair accessible beach area with bath house • fishing access • picnic pavilion • playscape • hiking trails
Sunny Acres	Meadowbrook Rd	<ul style="list-style-type: none"> • multi-use ball field with baseball diamond • 1 tennis court • 2 outdoor basketball hoops • playscape
E.O. Smith High School	Storrs Rd	<ul style="list-style-type: none"> • Farrell Fields (multi-use ball fields) • tennis courts • running track • outdoor basketball courts • multi-use fields
Elementary schools		<ul style="list-style-type: none"> • playscapes • multi-use ball fields
Community Center	S. Eagleville Rd	<ul style="list-style-type: none"> • skate park • ice skating area
Southeast Park	Warrenville Rd	<ul style="list-style-type: none"> • 3 little league-sized baseball fields • restroom/concession building
River Park	Plains Rd	<ul style="list-style-type: none"> • multi-use ball field
Middle School	Spring Hill Rd	<ul style="list-style-type: none"> • multi-use ball field • tennis courts • running/walking path • outdoor basketball courts

6. Preservation and Protection of Open Space

Mansfield can continue to enjoy and benefit from open space by preserving it and supporting good stewardship of both public and private lands. Most open space is privately owned; the majority of public and private open space is either not protected from development or only temporarily protected. As of 2014, 2,149 acres of land has been permanently protected from development, approximately 7.3% of the Town. If Mansfield Hollow is presumed to be permanently preserved due to its ownership and flood control functions, the percentage of permanently preserved area rises to approximately 14%.

A) CONSERVATION LAND

Conservation land is currently held by a public entity or land trust as a preserve, park, conservation area. Conservation land includes private property (such as agricultural and forest lands) protected by easements. Not all conservation land is permanently protected by easement or deed restriction (see Map 3.4: Public and Protected Open Space).

1) Publicly-Owned Open Space

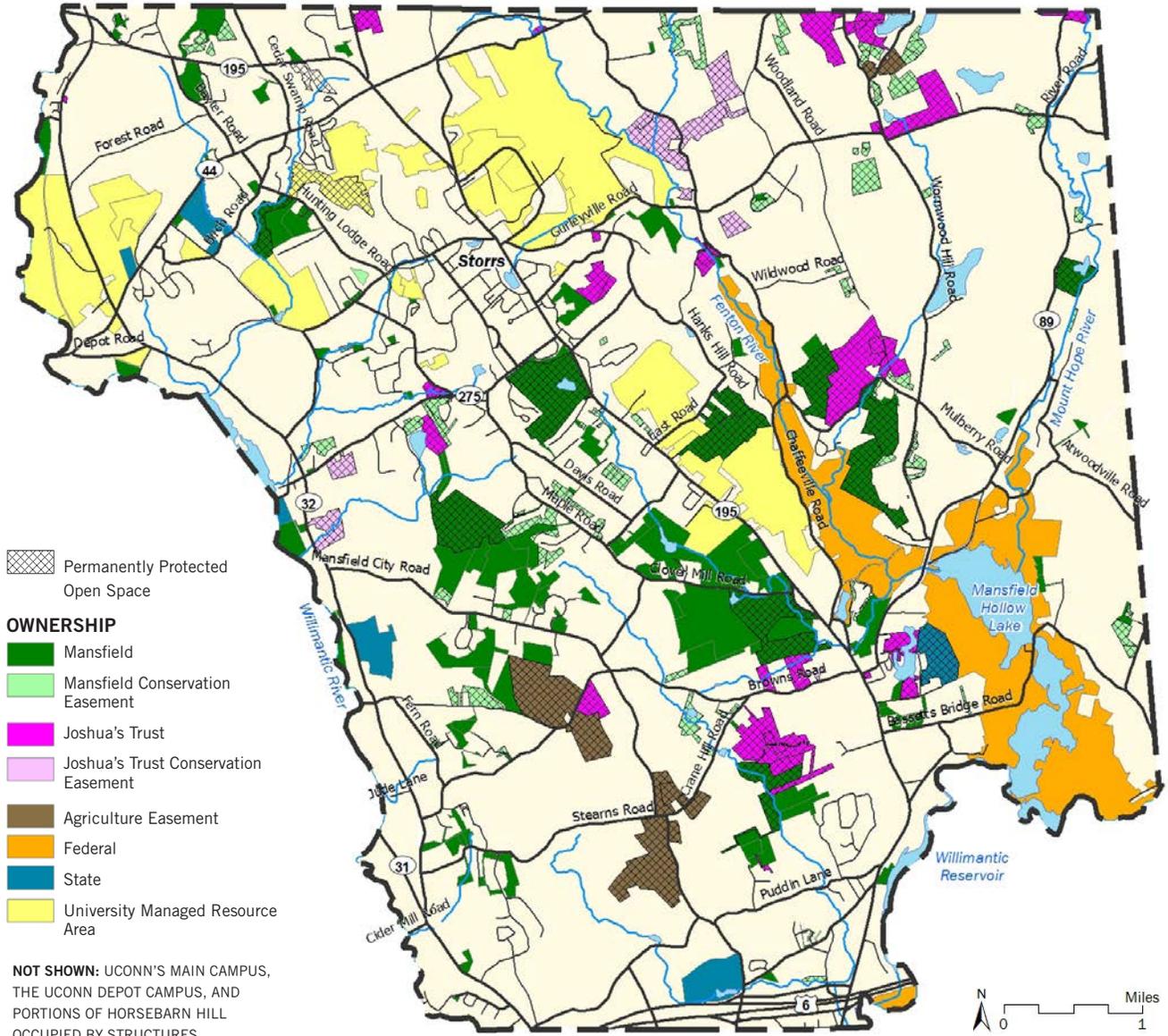
The Town has funded and managed an active open space acquisition program since the mid-1980s that has resulted in the purchase of 32 parcels comprising over 1,000 acres of land. The Town has preserved over 1,100 acres of additional open space through donations and dedication requirements included in the Town's subdivision regulations. Acquisition and management of open space properties are guided by the Town's *Planning, Acquisition, and Management Guidelines for Mansfield Open Space, Park, Recreation, Agricultural Properties and Conservation Easements*, which includes standards to encourage sound transactions, proper documentation, and responsible stewardship for all Town-owned land. Appendix C identifies a series of criteria used to evaluate proposed open space acquisitions based on planning, historic, habitat, water resource, agriculture/forestry, scenic, connectivity, and recreational values.



Mansfield's rivers, lakes, and ponds are recreational resources (River Park shown above).

Federal and state agencies also own a significant amount of open space in Mansfield, including approximately 1,600 acres owned by UConn, 116 acres owned by the CT Department of Energy and Environmental Protection and 2,472 acres owned by the Army Corps of Engineers, most of which comprises Mansfield Hollow State Park (2,300 acres including a 500 acre lake).

MAP 3.4: PUBLIC AND PROTECTED OPEN SPACE



Map based on best available data as of November 2014

Source: Town of Mansfield Assessor, 2012

Public ownership does not guarantee permanent protection from development. Currently, only 165 acres of UConn property and 795 acres of Town-owned properties are permanently preserved as a result of the funding used to acquire the property or conservation easements held by another organization (see Map 3.4: Public and Protected Open Space and Table 3.1). As the town grows, there could be pressure to use open space for other municipal, state or federal uses, or to sell the property to a private landowner.

2) Land Trust Open Space

Joshua's Tract Conservation and Historic Trust (Joshua's Trust), a regional non-profit volunteer land trust, owns and/or manages approximately 24 properties totaling 585 acres, all of which are permanently protected from development.

3) Private Land Protected Through Conservation Easements

Over 775 acres of privately held land is protected through conservation easements held either by the Town (463 acres) or Joshua's Trust (314 acres). Town conservation easements are typically acquired as part of subdivision open space dedications and can only be amended by action of the Town Council.

Both the State and the Town have permanently preserved agricultural land through restrictive easements on privately owned farmland, also known as a Purchase of Development Rights (PDR). The State of Connecticut Department of Agriculture has purchased the development rights on approximately 290 acres in southwestern Mansfield, restricting the use of that land to agricultural activities. In addition, the Town holds three agricultural easements on private farmland (28.5 acres).

B) TOOLS FOR PRESERVATION OF OPEN SPACE

As funds for public acquisition of open space land are limited, it is important to identify other tools that can be used by private property owners to preserve open space land over both the short and long term. Some of these tools include:

1) Easements and Purchase of Development Rights (PDR)

Conservation easements or restrictions are legal agreements between a landowner and a nonprofit, typically a land trust or a government agency, that permanently limit uses of the land in order to conserve it. The property owner continues to own and control the land and can sell it and pass it to heirs. Easements can apply to a part of a property and do not require public access. Future owners are bound by the terms of the easement. The entity that holds the easement is responsible for enforcing it. Easements that are donated, rather than sold, to the enforcing agency often meet federal tax code requirements for a tax-deductible charitable donation.

2) Public Act 490

Privately owned open space can be temporarily protected by participating in a state-authorized tax abatement program. Public Act 490 is Connecticut's Land Use Value Assessment Law. Under PA 490, farm land, forest land, and open space are assessed based on the current "use value" of the land rather than the fair market value, typically for a development use. The use value is lower for farm and forest lands, therefore making the property taxes on these lands lower. The goal is to encourage landowners not to develop their land. Should the owner decide to sell or develop the land, municipalities can recapture the lost tax revenue within 10 years of the 490 application. Municipalities are required to use PA 490 assessments on qualified farmland and forested land.³ Currently, Mansfield has 3,257 acres of farmland and 5,169 acres of forested land in PA 490 status. The PA 490 use value assessment for non-agricultural or non-forestry open space uses is optional for municipal property tax; Mansfield does not currently offer this PA 490 assessment.

3) Regulatory Tools for Open Space Preservation

The subdivision process provides one of the most commonly used tools for preservation of open space. Municipalities are authorized by Connecticut General Statutes to require the provision of open spaces, parks and playgrounds as part of a subdivision approval. In Mansfield, current subdivision regulations require up to 15% of the land area contained within a conventional subdivision to be set aside for open space, park or recreational areas; for cluster subdivisions, the percentage increases to 40%. Typically, the preservation of open space through subdivision approvals is accomplished through dedication of conservation or agricultural easements depending on the character of the land. Dedication of land to the Town for public open space can also be required, and is typically reserved for areas where public access is desired. Chapter 4 identifies a new type of regulatory tool, Natural Resource Protection Zoning (NRPZ), which could be used to increase the area preserved as open space through new subdivisions. Appendix D contains examples of how NRPZ might impact layout and overall open space preservation in a typical subdivision.

7. Stewardship and Maintenance of Open Space

The benefits of open space depend on its condition. Sometimes, allowing natural areas to care for themselves can be sufficient. More often, knowledgeable management provides the most protection and benefit of an open space area. Most public agencies and non-profits responsible for stewardship have management plans for their open space lands, including Joshua Trust preserves, UConn farm and forestlands, and Town parks and preserves. Town staff and volunteers develop management plans for each Town property, using the *Planning, Acquisition, and Management Guidelines for Mansfield Open Space, Park, Recreation, Agricultural Properties and Conservation Easements*. Each

³ http://www.cfba.org/images/resources/complete_490guide_cfba.pdf.

management plan adopted by the Town Council describes the natural and cultural resources and sets short and long-term objectives for that property.

Mansfield relies on volunteers for much of the maintenance and management of its network of parks, preserves, and trails, including brush clearing, trail blazing, and plant/wildlife surveys. Tasks outlined in the Town's numerous management plans will likely require allocation of Town resources in addition to volunteers to complete various tasks such as trail improvement, forest management, and invasive species removal.

Just as with public land, good stewardship of open space on private land is important to maintaining its benefits to the owners and to the surrounding environment. Educational events and materials are available from state and federal agencies and non-profit organizations, which offer information on topics such as farm or forest management and backyard wildlife habitats.



Volunteers at work on Dorwart Preserve Bridge.

8. Natural Resource Agencies and Organizations

In addition to Joshua's Trust, the Town works with a number of local and regional organizations to promote, manage, and advocate for natural areas, trails and greenways and to sponsor educational events. These collaborative relationships have resulted in mutual support for grant applications, management of parks and natural areas and participation in educational events such as Walktober and CT Trails Day. Some of these organizations include:

- **The Last Green Valley:** a 35-town National Heritage Corridor extending from eastern Connecticut to south-central Massachusetts, whose mission is to promote and conserve the region's heritage, natural resources, and working lands.
- **Friends of Mansfield Hollow:** a volunteer organization that promotes the enjoyment of Mansfield Hollow State Park.
- **Willimantic River Alliance:** a regional organization focused on protection and preservation of the Willimantic River and its watershed.
- **Thames River Basin Partnership:** a regional organization focused on protecting agricultural and natural areas, ground and surface water, biodiversity, and coastal zone resources.
- **Connecticut Forest and Parks Association (CFPA):** a private, non-profit organization dedicated to the conservation and enhancement of Connecticut's natural resources; activities include management of the Nipmuck Trail.

- **Eastern CT Conservation District (ECCD):** formerly the county-based soil and water conservation districts, ECCD is a non-profit dedicated to helping the towns and citizens of Eastern Connecticut address conservation needs.

These partner organizations will be essential to the Town's ability to successfully achieve its goals related to preservation and maintenance of parks, open space, and agricultural areas.

ACTION PLAN

Each chapter within this Plan includes an action plan: a set of suggestions for how to put the Plan to work and begin transforming ideas into action. Each action plan identifies some of the **entities that are expected to have a key role in** achieving specific action items (town departments, committees/ commissions, outside organizations, etc.); a target timeframe to complete each action; and the types of resources that we anticipate may be needed for implementation (staff time, volunteer time, operating budget, capital improvement program, grants, etc.).

Action plans include:

- **Goals** that describe the outcomes our community hopes to achieve;
- **Strategies** for advancing each goal; and
- **Actions**—specific steps our community can take over the short term (before end of 2019), medium term (between 2020 and 2024) and long term (between 2025 and 2035) in support of each strategy.

Action plans are tools for focusing efforts and resources on the issues our community cares about most. The action plans will:

- Guide town officials as they continue to shape policies and allocate resources in the years to come;
- Refocus the efforts of town staff and committees as they work to advance community goals;
- Provide a foundation for developing annual budgets and workplans; and
- Evolve over time in response to new opportunities and circumstances.

Action plans set the agenda for our community’s many officials, volunteers, committee members and staff for the years ahead, and align their work with the community’s vision **but do not provide a guarantee that resources will be available to advance each action.** While these action plans are comprehensive in nature, they are not intended to preclude the Town from pursuing other actions as opportunities arise. **As additional actions and initiatives are contemplated, they should be evaluated with regard to how the action will help to advance the vision and goals** contained in the overall Plan.

Key of Abbreviations	
TOWN DEPARTMENTS & SERVICES	
Building & Housing Inspection	Town of Mansfield Department of Building & Housing Inspection
DPW	Town of Mansfield Department of Public Works
Facilities	Town of Mansfield Facilities Management Department
Finance	Town of Mansfield Finance Department
Fire	Division of Fire & Emergency Services / Office of the Fire Marshal
Fire Marshal	Office of the Fire Marshal
Human Services	Town of Mansfield Department of Human Services
Information Technology	Town of Mansfield Information Technology Department
Library	Town of Mansfield Public Library
Parks & Rec	Town of Mansfield Parks & Recreation Department
Planning	Town of Mansfield Planning & Zoning Office
Police	Mansfield Resident State Trooper's Office
OTHER ABBREVIATIONS	
CT DEEP	State of Connecticut Department of Energy and Environmental Protection
CT DPH	State of Connecticut Department of Public Health
EHHD	Eastern Highlands Health District
Emergency Management	Emergency Management Advisory Council
IWA	Inland Wetland Agency
PZC	Planning & Zoning Commission
Town/Gown	Town/University Relations Committee

CHAPTER 3: OPEN SPACE, PARKS AND AGRICULTURAL LANDS

Goal 3.1

Natural resources within Mansfield’s public and private open spaces are protected and well-managed.

Measures of Effectiveness:

- Number of properties with adopted management plans
- Number of properties with management plans that are implemented and updated
- Increase number of acres of permanently preserved open space to at least 21% of Town’s land area

Strategy A | Continue efforts to protect important natural and agricultural resources through property acquisition, development rights, easements and clustering development.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Evaluate and prioritize Town acquisition of private properties, development rights and easements using the Open Space Evaluation Criteria identified in Appendix C.</p> <p>The criteria should be reviewed and updated periodically through Town Council adoption with PZC input.</p>	<p>PZC</p> <p>Open Space Preservation Committee</p> <p>Agriculture Committee</p>	Ongoing	<p>Staff Time</p> <p>Volunteer Time</p>
<p>2. Support land preservation activities through regular contributions to the Mansfield Open Space Acquisition Fund.</p> <p>This program provides funding for activities related to open space acquisition, purchase of development rights, and conservation easements. These funds also provide leverage for state and federal grant programs.</p>	Town Council	Ongoing	<p>CIP</p> <p>Bond Issuance</p>
<p>3. Seek other funding sources and cooperative projects for land preservation projects.</p> <p>Examples include state and federal grants, partnerships with non-profit organizations, private foundations and use of crowd-funding websites to facilitate private donations.</p>	<p>Parks & Rec</p> <p>Open Space Preservation Committee</p>	Ongoing	<p>Staff Time</p> <p>Volunteer Time</p>
<p>4. Identify opportunities for connections between Town parks and other preserved properties such as those owned by Joshua’s Trust.</p>	<p>Parks & Rec</p> <p>Open Space Preservation Committee</p>	Ongoing	<p>Staff Time</p> <p>Volunteer Time</p>
<p>5. Conduct outreach to agricultural and forestland owners about land preservation programs.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • <i>CT Dept. of Agriculture Purchase of Development Rights Program for large farms and Community Farms Preservation Program for small farms</i> • <i>USDA Agricultural Conservation Easement Program</i> 	<p>Parks & Rec</p> <p>Agriculture Committee</p>	Ongoing	<p>Staff Time</p> <p>Volunteer Time</p>

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>6. Consult with land conservation organizations such as the Land Trust Alliance on recommended acquisition practices.</p>	<p>Parks & Rec Open Space Preservation Committee</p>	Ongoing	<p>Staff Time Volunteer Time</p>
<p>7. Consider providing financial assistance on a case-by-case basis for costs associated with donation of easements.</p> <p>For property owners willing to donate conservation or agricultural easements, the Town could provide financial resources to assist with costs of surveys, appraisals, legal work, etc.</p>	Town Council	Short Term	<p>CIP Open Space Bond</p>

Strategy B | Permanently protect important natural resources in Mansfield from development.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Establish criteria to evaluate key natural resources on Town-owned land and create a priority list of Town-owned properties in need of permanent protection.</p> <p>Criteria should include areas that are critical to preserve wildlife, waterway, and forest corridors; undeveloped lands within public drinking supply watersheds; flood hazard areas and properties with farmland soils. These criteria should also be used to evaluate the need for permanent protection during the open space acquisition process.</p>	<p>Open Space Preservation Committee Conservation Commission PZC Town Council</p>	Short Term	<p>Staff Time Volunteer Time</p>
<p>2. Develop and implement a program to permanently protect key Town-owned open space and agricultural properties from future development and ensure that these properties continue to serve the purpose for which they were acquired.</p> <p>Potential tools include conservation/agricultural easements held by either a land trust or a government agency. Restrictions that apply in perpetuity are preferable.</p>	<p>Open Space Preservation Committee Conservation Commission Town Council PZC</p>	Short Term	<p>Staff Time Volunteer Time Operating Budget CIP Grants</p>
<p>3. Encourage state and federal agencies that own property in Mansfield to permanently preserve important natural, agricultural and scenic resources.</p>	<p>Conservation Commission PZC Open Space Preservation Committee Town Council</p>	Short Term	<p>Staff Time Volunteer Time</p>

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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Strategy C | Steward Town-owned land and natural resources based on the best available research.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Develop, periodically update, and implement management plans for all Town-owned open space, including parks, preserves, natural areas and agricultural lands.</p> <p>Management plans should include strategies to preserve and enhance natural resources on these properties. <i>See Chapter 2 for more information.</i></p>	Parks & Rec Open Space Preservation Committee Parks Advisory Committee Conservation Commission	Ongoing	Staff Time Volunteer Time Operating Budget CIP
<p>2. Develop a robust volunteer stewardship program.</p> <p>Key ingredients to a successful program include:</p> <ul style="list-style-type: none"> • <i>Establishing a volunteer organization system that is sustainable without major staff oversight;</i> • <i>Continuing to foster partnerships with UConn, the Alternative Incarceration Center, Eagle Scouts, Joshua’s Trust, E.O. Smith High School and other organizations; and</i> • <i>Incorporating successful volunteer management practices used by other organizations including Joshua’s Trust, surrounding towns and the Land Trust Alliance.</i> 	Parks & Rec	Ongoing	Staff Time Volunteer Time
<p>3. Continue to partner with local and regional organizations on stewardship.</p>	Open Space Preservation Committee Conservation Commission Parks Advisory Committee	Ongoing	Staff Time Volunteer Time Operating Budget CIP Grants

Strategy D | Identify resources to support conservation and stewardship of privately owned open space resources.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Work with conservation organizations to educate owners of parcels with key natural resources on the benefits of preserving those resources through stewardship and management plans and in the longer term, donation of conservation and/or agricultural easements. Include information on available tax benefits.</p> <p><i>See related actions under Goal 2.1, Strategy B.</i></p>	Conservation Commission PZC Town Council	Ongoing	Staff Time Volunteer Time

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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ACTIONS	WHO	WHEN	RESOURCES
2. Actively monitor conservation easements held by the Town.	Conservation Commission Parks & Rec	Ongoing	Staff Time Volunteer Time Operating Budget
3. Consider expanding availability of optional tax abatement/incentive programs for open space, forest and agricultural lands.	Finance Town Council Conservation Commission	Medium Term	Staff Time Operating Budget

Strategy E | Update planning, acquisition and management guidelines for Mansfield open space, park, recreation, agricultural properties and conservation easements.

ACTIONS	WHO	WHEN	RESOURCES
1. Identify criteria for use of various conservation tools. The guidelines should include criteria for when various tools are appropriate (open space dedication, conservation easements, purchase of development rights, etc.).	Parks & Rec Open Space Preservation Committee Conservation Commission	Short Term	Staff Time Volunteer Time
2. Establish specific criteria to evaluate the sale of Town-owned property. Criteria should include consideration of open space/recreation resources based on Open Space Acquisition Criteria, property liability, as well as conditions that could be applied to ensure that the sale of such property does not result in greater potential development, etc.	Parks & Rec Open Space Preservation Committee PZC Town Council Conservation Commission	Short Term	Staff Time Volunteer Time
3. Strengthen policies related to preserving land through Conservation Easements. Tools to consider include requiring a public hearing and a super-majority of the Town Council to approve changes to conservation easements.	Town Council Conservation Commission Open Space Preservation Committee	Short Term	Staff Time, Volunteer Time

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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CHAPTER 3: OPEN SPACE, PARKS AND AGRICULTURAL LANDS

Goal 3.2

Mansfield has more land being used for agriculture.

In the context of this goal, agriculture includes a variety of types and scales from the backyard garden to the hobby farmer to commercial enterprises. For goals, strategies and actions related to agriculture as an economic enterprise see Chapter 6.

Measures of Effectiveness:

- Number of acres actively being used for agriculture
- Number of acres of Town-owned land leased for agricultural use
- Number of acres of State and Federal land leased for agricultural use
- Number of acres protected by agricultural easements, including purchase of development rights

Strategy A | Continue to support agricultural use of Town-owned land.

ACTIONS	WHO	WHEN	RESOURCES
1. Lease Town-owned land to local farmers for agricultural use.	Agriculture Committee Town Council	Ongoing	Staff Time Volunteer Time
2. Require lessees of Town-owned agricultural land to follow good stewardship practices. Examples include planting of cover crops, edge management, soil testing, returning organic matter to the soil, responsible use of pesticides. The Town’s adopted Agricultural Land Usage Agreement should be updated periodically to reflect recommended practices.	Agriculture Committee Town Council	Ongoing	Staff Time Volunteer Time
3. Consider long-term leases that will allow farmers to recoup significant investments made in improving viability of land for agricultural production such as installation of wells and farmland restoration projects.	Agriculture Committee Town Council	Ongoing	Staff Time Volunteer Time
4. Identify Town-owned prime farmland that could potentially be restored to agricultural use and include in agriculture leasing program.”	Agriculture Committee	Medium Term	Staff Time Volunteer Time
5. Consider supporting development of a community farm. A Community Farm is an area with agricultural activity beneficial to the community. Activities could include education, providing food for the needy, and incubating beginning farming enterprises. • <i>Examples include Community Farm of Simsbury and The Northhampton Community Farm in Massachusetts.</i>	Agriculture Committee	Long Term	CIP Private funding Grants

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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Strategy B | Encourage agricultural use of other public and privately held lands that contain suitable soils.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Update the Town’s Model Conservation Agreement and develop a <i>Model Agriculture Easement</i> to facilitate use of preserved property for agricultural purposes and encourage private land trusts to adopt similar provisions in easements.</p>	<p>Agriculture Committee Conservation Commission PZC</p>	Short Term	<p>Staff Time Volunteer Time Operating Budget</p>
<p>2. Work with state and federal agencies to identify property suitable for agricultural use and advocate for the development of programs to lease such properties to local farmers.</p>	<p>Planning Agriculture Committee</p>	Medium Term	<p>Staff Time Volunteer Time</p>
<p>3. Identify private land and land trust parcels suitable for agricultural use and explore opportunities with landowners to lease land to farmers.</p> <p>Potential resources include Farmlink and Farmland ConneCTions programs.</p>	<p>Planning Agriculture Committee</p>	Medium Term	<p>Staff Time Volunteer Time</p>
<p>4. Identify privately owned prime farmland (including land trust parcels) that could potentially be restored to agricultural use and assist landowners in applying for the State’s Farmland Restoration Program.</p>	<p>Planning Agriculture Committee</p>	Medium Term	<p>Staff Time Volunteer Time</p>

SHORT TERM = 2015–2019 MEDIUM TERM = 2020–2024 LONG TERM = 2025–2035

CHAPTER 3: OPEN SPACE, PARKS AND AGRICULTURAL LANDS

Goal 3.3

Mansfield’s park and preserve system, including natural and active recreation areas, provides access to residents and meets the needs of the population.

Measures of Effectiveness:

- Number of Town-owned parks and preserves that include universally accessible elements
- Number of events in Town-owned parks and preserves
- Number of residents within ½ mile of a park or open space

Strategy A | Identify park and recreation needs.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Plan for open space needs in and near areas intended for compact development such as Storrs Center, Four Corners and the East Brook Mall/Freedom Green area.</p> <p><i>See Chapter 8: Future Land Use and Community Design for a map of proposed Mixed-Use Centers and Compact Residential Areas.</i></p>	Planning Parks & Rec Open Space Preservation Committee Parks Advisory Committee	Ongoing	Staff Time Volunteer Time
<p>2. Develop a Parks and Recreation Master Plan.</p> <p>The plan should include an inventory and assessment of conditions in all parks and evaluation of all recreation programs; a vision for the Town’s parks and recreation program; goals for parks and for programs; implementation and funding strategies; and a program of actions to implement the plan. Assessment of recreation needs and preferences should be based on current users as well as non-users to identify gaps in programming and facilities.</p>	Parks & Rec Parks Advisory Committee Town Council	Short Term	Staff Time Volunteer Time CIP
<p>3. Expand outdoor recreation facilities at the Community Center.</p> <p>Future plans include the community playground, splash park, picnic pavilion, and restroom facilities.</p>	Parks & Rec	Short Term	CIP
<p>4. Upgrade parks and recreation facilities in accordance with master plan.</p>	Parks & Rec	Medium Term	CIP, Operating Budget

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>5. Consider alternatives to increase availability and sustainable maintenance of athletic fields.</p>	<p>Parks & Rec Recreation Advisory Committee Region 19 Mansfield Board of Education</p>	<p>Medium Term</p>	<p>Staff Time Grants CIP</p>

Strategy B | Continue to develop a safe network of walking and biking trails to improve connectivity and provide opportunities for outdoor recreation and alternative transportation.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Identify opportunities for connection within the current trail system and construct as funding allows.</p> <p>Continue to evaluate potential for trail network connections as part of open space acquisition process and review of proposed developments. Also consider connections to other publicly accessible open space resources and collaborate on trail development for those properties.</p>	<p>Parks & Rec Open Space Preservation Committee Parks Advisory Committee</p>	<p>Ongoing</p>	<p>Staff Time Volunteer Time Grants CIP Developers</p>
<p>2. Identify parks and trail routes that would be appropriate for biking and establish policies to minimize conflicts with other uses.</p> <p>Town trails are currently limited to pedestrians except for trails at Schoolhouse Brook Park. Given growing interest in biking, the Town should consider allowing biking on designated trails.</p>	<p>Parks & Rec Parks Advisory Committee Recreation Advisory Committee</p>	<p>Short Term</p>	<p>Staff Time Volunteer Time</p>
<p>3. Identify and implement universal access improvements to expand opportunities to residents with physical disabilities and limitations.</p> <p>Bicentennial Pond is a high priority as plans have been completed and permits obtained. <i>(See related actions under Goal 5.5).</i></p>	<p>Parks & Rec Open Space Preservation Committee Parks Advisory Committee</p>	<p>Medium Term</p>	<p>Staff Time Volunteer Time Grants CIP</p>

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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Strategy C | Promote understanding and enjoyment of open space in parks, greenways, and scenic or historic areas.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Continue to promote and sponsor recreational activities that showcase town natural, historic and scenic resources.</p> <p>Examples include:</p> <ul style="list-style-type: none"> • <i>Walktober</i> • <i>CT Trails Day</i> • <i>Historic district walking tours</i> • <i>“View Trail” bike rides</i> • <i>Parks and Recreation events</i> 	<p>Parks & Rec Non-Profit Organizations Parks Advisory Committee</p>	<p>Ongoing</p>	<p>Staff Time Volunteer Time Operating Budget</p>
<p>2. Use technology such as social media, smart phone apps and website updates in addition to brochures to increase awareness of local and regional open space and recreation resources.</p>	<p>Parks & Rec Information Technology</p>	<p>Short Term</p>	<p>Staff Time Grants Operating Budget CIP</p>



CHAPTER 3: OPEN SPACE, PARKS AND AGRICULTURAL LANDS

Goal 3.4

Mansfield’s land use policies and regulations for public and private open spaces protect natural resources, preserve scenic views, and expand opportunities for agriculture and active recreation.

Measures of Effectiveness:

- Increase in number of developers having pre-application meetings with Town advisory committees
- Increase in percentage of open space preserved through subdivision process

Strategy A | Strengthen land use regulations that promote protection of open space and scenic resources.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Consider an “Open Space” or “Conservation” zoning district for municipal properties.</p> <p>While permanent conservation easements (see Goal 3.1, Strategy B) provide the most protection for open space, an open space or conservation zoning district applied to public or semi-public open spaces can provide some protection for open space resources by limiting development to structures that serve a recreation or public preserve purpose. Proposals to use the property for other uses would require a zoning change, providing a formal mechanism for public discussion of the proposed change.</p>	PZC	Short Term	Staff Time Community Challenge Grant
<p>2. Update Zoning and Subdivision Regulations to promote preservation of natural resources and provision of open space and recreational features.</p> <p>Regulations should address both rural areas and areas designated for more intense development such as Mixed-Use Centers and Compact Residential areas. Tools that should be considered include:</p> <ul style="list-style-type: none"> • <i>Natural Resource Protection Zoning (See Chapter 4 for more information and related actions)</i> • <i>Requiring conservation/cluster development</i> • <i>Encouraging use of community septic systems to promote clustering</i> 	PZC Open Space Preservation Committee Conservation Commission	Short Term	Staff Time Community Challenge Grant
<p>3. Protect scenic views by requiring developers to identify scenic resources and protection measures as part of the subdivision and development review process.</p> <p>See Map 3.3: Scenic Resources and Classifications.</p>	PZC Open Space Preservation Committee Conservation Commission	Short Term	Staff Time Community Challenge Grant

SHORT TERM = 2015–2019

MEDIUM TERM = 2020–2024

LONG TERM = 2025–2035

ACTIONS	WHO	WHEN	RESOURCES
<p>4. Revise common driveway regulations to strengthen protection of interior forest tracts and other sensitive natural resources.</p> <p>Common driveways offer many benefits, including preserving views of natural areas from the public roads rather than encouraging more building along road frontage and reducing land disturbance and impervious surfaces if sized to accommodate one car at a time. However, common driveways can also be an inexpensive way for developers to develop back acreage which could otherwise only be accessed by a new road, thereby allowing development of land that previously would not have been economically feasible.</p>	<p>PZC</p> <p>Open Space Preservation Committee</p> <p>Conservation Commission</p>	<p>Short Term</p>	<p>Staff Time</p> <p>Community Challenge Grant</p>

Strategy B | Integrate open space planning into the beginning of the development process.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Encourage developers to meet with relevant advisory committees as part of the pre-application process to identify open space priorities and objectives.</p> <p>Information on natural resources as well as surrounding land uses and potential connections should be included in the pre-application discussions (<i>see related actions under Goal 2.6, Strategy A</i>).</p>	<p>Planning</p> <p>PZC</p> <p>Open Space Preservation Committee</p> <p>Conservation Commission</p> <p>Parks Advisory Committee</p> <p>Agriculture Committee</p>	<p>Ongoing</p>	<p>Staff Time</p> <p>Volunteer Time</p>
<p>2. Update Zoning and Subdivision regulations to include specific objectives for design of parks and open spaces that are part of development proposals.</p> <p>In addition to protection of natural resources, regulations should identify specific design objectives to help create a sense of place and increase sustainability, such as integration of stormwater facilities into the landscape, use of common greens as a focal point and multi-functional landscaping such as harvestable nut and fruit-bearing trees.</p>	<p>PZC</p> <p>Open Space Preservation Committee</p> <p>Sustainability Committee</p>	<p>Short Term</p>	<p>Staff Time</p> <p>Community Challenge Grant</p>

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>3. Update Zoning Regulations to include requirements for provision of parks and open spaces in areas designated as Mixed Use Centers and Compact Residential Areas.</p> <p>Examples include mandatory open space requirements for multi-family developments, thresholds for provision of active recreation amenities and design guidelines for open spaces provided as part of commercial and mixed-use developments.</p>	<p>PZC Open Space Preservation Committee Parks Advisory Committee</p>	Short Term	<p>Staff Time Community Challenge Grant</p>
<p>4. Provide easy access to information and resources that highlight Town priorities for protection of natural, cultural and scenic resources for use by developers in the beginning stages of project design.</p> <p>Examples include website updates and informational brochures distributed with application materials.</p>	<p>Planning PZC</p>	Short Term	<p>Staff Time Volunteer Time</p>

Strategy C | Continue to encourage agricultural use of land.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Update regulations, policies, and incentives to strengthen protections for agricultural lands and operations, including buffer requirements.</p>	<p>PZC Agriculture Committee</p>	Short Term	<p>Staff Time Community Challenge Grant</p>

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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4 COMMUNITY HERITAGE AND SENSE OF PLACE



Mansfield Center; date unknown

TOPICS IN THIS CHAPTER INCLUDE

Development Forms and Patterns

Preserving Rural Character

Preservation of Historic and Scenic Resources

Accommodating Future Growth

This chapter focuses on how the natural systems and open spaces described in previous chapters merge with man-made features to create a sense of place that is uniquely Mansfield. Understanding how the community has developed over time and how people want to live in the future is an essential foundation for the important topics covered in later chapters: preserving the town's highly valued rural character and historic resources, identifying locations best suited for future growth, and establishing a vision for the forms new development should take.

The 2006 Plan of Conservation and Development includes extensive information on the town's archeological resources and historic villages; readers should refer directly to that report for more detail, which is incorporated into this plan by the reference.

what the **community** said

COMMUNITY HERITAGE AND SENSE OF PLACE

Participants in the Mansfield Tomorrow process consistently voiced a desire to preserve the sense of place in Mansfield—the overall rural character and historic elements. Many see the need to direct any new growth to designated areas, in order to preserve that character and sense of place.

Themes in the comments on community character, sense of place, and historic preservation included:

- Importance of historic character and open space to overall quality of life
- Concern with impacts of new development on historic and rural character
- Need for balance between economic development and preservation
- Interest in focusing new development in compact areas in and near existing development to retain rural character
- Concern with urbanization of Storrs
- Desire to maintain rural aspects of town through smart growth to preserve the original quality of life that attracted many people here in the first place
- Interest in preserving and enhancing the rich architectural variety in Mansfield: a mix of historic stone and wood frame houses, contemporary residences, adaptively reused mills and country stores, and other design typologies add character and value to which new development should contribute
- Support for the continued evolution of Storrs Center into a walking-friendly downtown with small businesses that can help support an environmentally and socially sustainable future
- Desire to maintain and enhance community connectedness (a strong sense of community, friendly people who socialize) as new development occurs

“Mansfield feels like it’s in a protective bubble from the rest of the hub-bub of life. Let’s keep it that way with smart, limited, efficient development.”

“[I hope Mansfield will be] a thriving community, featuring a great quality of life.”

“[I’d like to see] growth of neighborhoods rather than continuing to build housing all around town individually on existing roads.”

FROM MANSFIELD RESIDENTS

MANSFIELD'S COMMUNITY AND SENSE OF PLACE TODAY



Middle Turnpike

The analysis and recommendations in this chapter are focused around three themes:

- Preserving rural character in the majority of the town
- Preserving historic resources and character
- Accommodating future household growth and diversity in areas designated for compact and mixed-use development

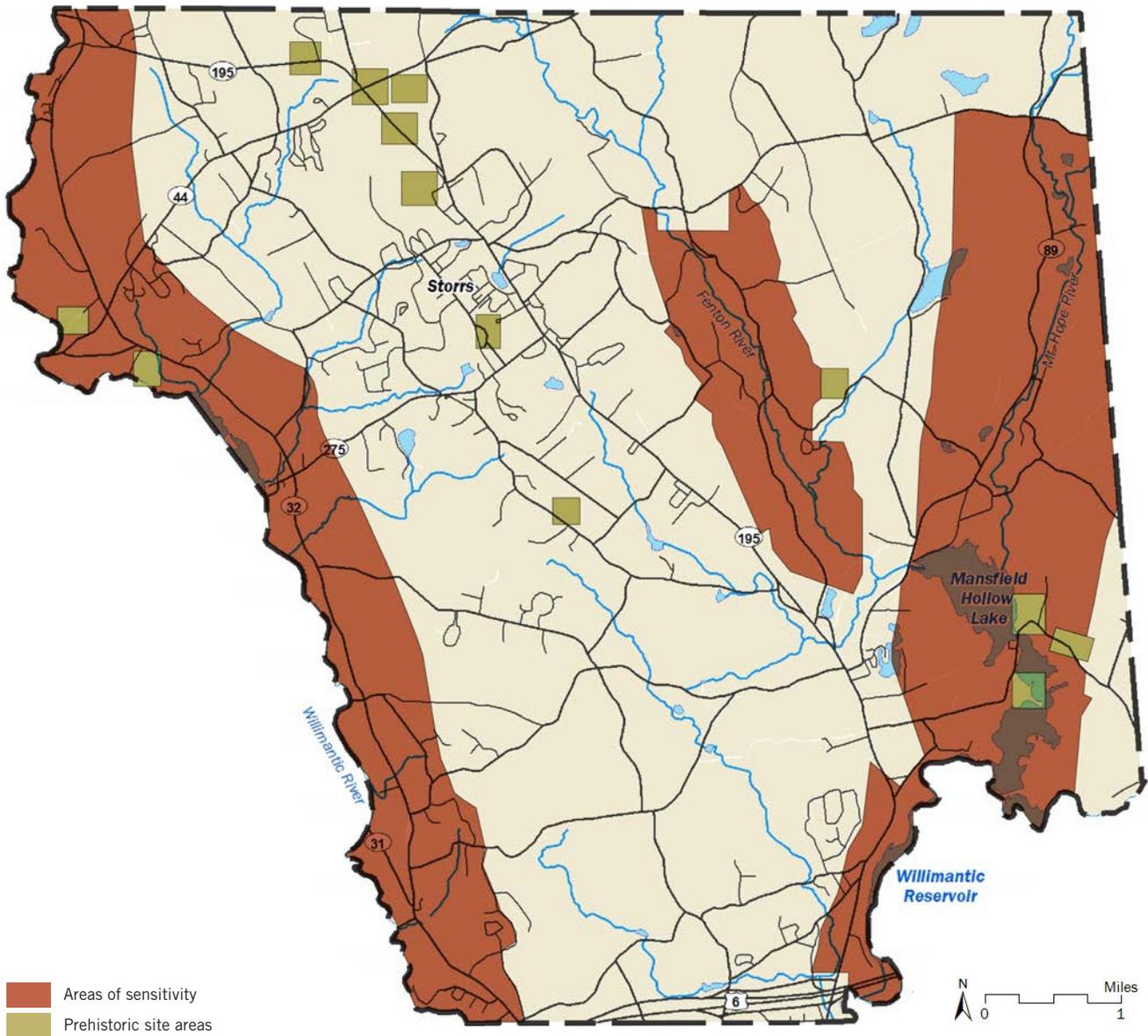
Situated in Connecticut's "Quiet Corner," Mansfield is one of 35 towns that comprise The Last Green Valley™ (TLGV), a National Heritage Corridor designated in 2004. As described by the National Park Service (<http://www.nps.gov/maps/full.html?mapId=01a03739-ab0c-40eb-bc3d-6791d3bb67fa>), the area "... is known as the Last Green Valley due to the surprisingly rural character of the 1,085 square-mile area defined by the Quinebaug and Shetucket Rivers systems and the rugged hills, forests, and agricultural fields that surround them in northeastern Connecticut and south-central Massachusetts. The area encompasses architecturally significance mill structures and villages that typify New England settlement in one of the last unspoiled and undeveloped areas in the northeastern US." Preserving the natural, cultural and historic resources in this area is a priority for Mansfield and other member communities.

What is a Village?

A village is a cluster of houses and associated buildings, located within a rural area. Villages are smaller than towns and larger than hamlets.

Mansfield's past can be read in its present landscape. Old foundations and structures along its rivers and streams denote the location of former mills. The stone walls that line the landscape outline the fields and pastures of its agricultural heritage. Its eighteenth and nineteenth century houses define its many historic villages. The town's future character will be largely influenced by its success in preserving its historic and archaeological heritage.

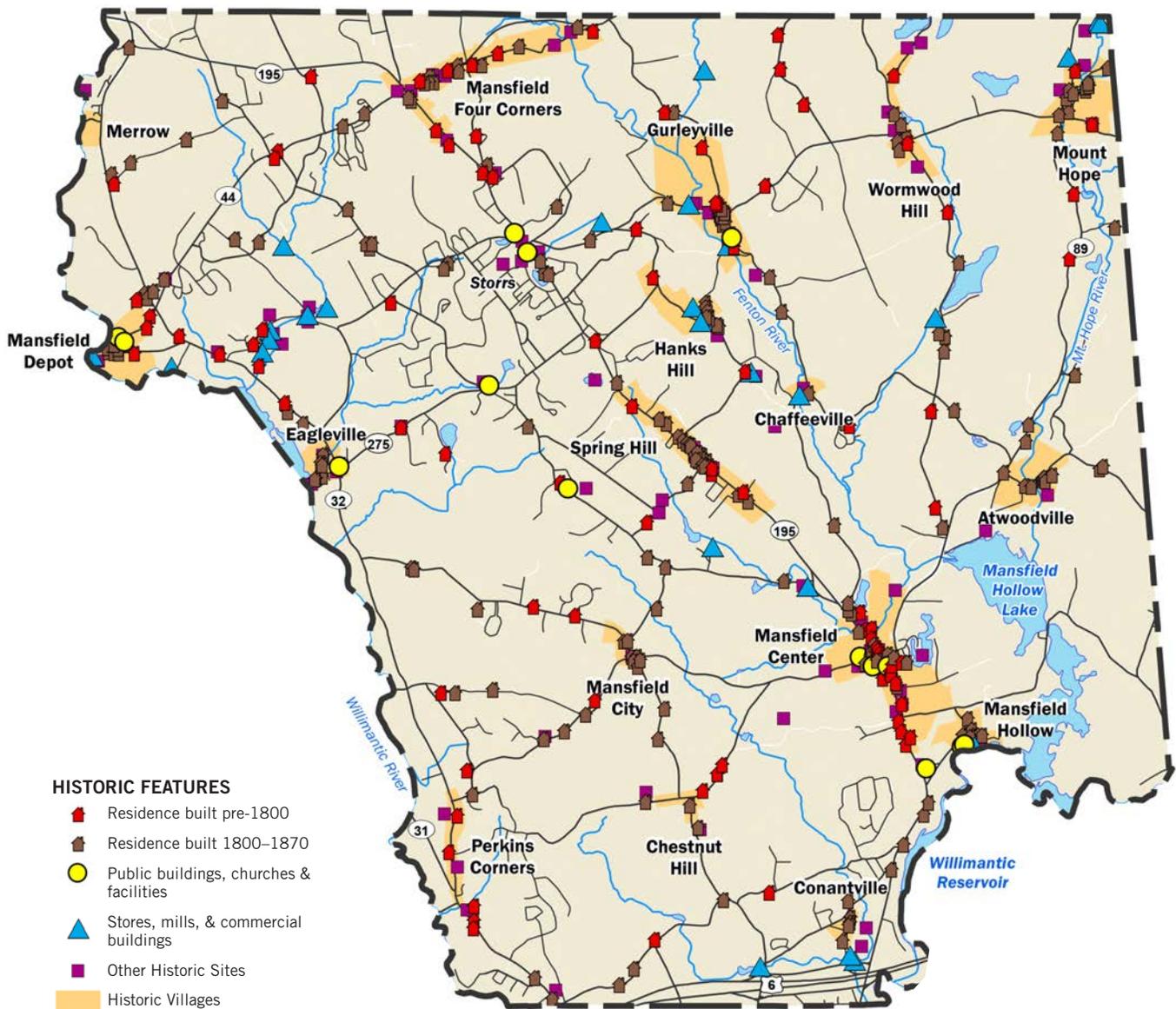
MAP 4.1: ARCHAEOLOGICAL ASSESSMENT



Source: CT DEEP, 2010; Mansfield Plan of Conservation and Development, 2006

Mansfield is a town of villages, farmland, forests, and rivers. Although there were no permanent Native American settlements in Mansfield, native peoples used the area seasonally for gathering, hunting and fishing; these seasonal communities were concentrated along rivers or streams, lakes and other water bodies. This settlement pattern is reflected in Map 4.1: Archaeological Assessment, which identifies areas of archaeological sensitivity. Mansfield’s early colonial settlements developed in a series of 18 village centers typically located near churches, mills or important crossroads. Houses were

MAP 4.2: HISTORIC RESOURCES



Source: Land of Unique Value study, 2003; Town of Mansfield, 2013

clustered near these centers which were often surrounded by agricultural land or woodlots. Each village had a unique character based on its natural setting, industrial or agricultural origins, and period of initial growth but all shared patterns that promoted safety, social interaction, and a sense of community. Over time, many villages were irreversibly altered through road widening or expansions and the destruction of historic structures, whether by nature or by man. Of the 18 original villages, 17 remain today as shown on Map 4.2: Historic Resources; continued preservation of the village cores was a priority in the 2006 POCD. While Mansfield has few neighborhoods in the traditional sense due to its rural character, many Mansfield residents identify with one of the historic villages.

Suburban patterns of development that emerged in the mid-20th century were generally linear along roadways or organized around cul-de-sacs on former farmland. Houses were typically built on larger lots and their designs tended to reflect national and international styles rather than traditional New England village characteristics. During the 20th century, somewhat denser development occurred in the few areas of town where public water and sewer was available: the UConn main campus and adjacent neighborhoods served by University water and sewer plants; and the far southern part of Mansfield adjacent to the Town of Windham, with access to that town’s water and sewer services.

1. Development Forms and Patterns

Mansfield is predominantly characterized by areas with single family residences, a large institutional presence in the University and significant open space, both in a natural state and as agricultural land. Multi-family development is located primarily around the University, although multi-family complexes are found in the southern part of town as well.

Commercial development can be found in Storrs Center, Four Corners and the southernmost end of Route 195. Smaller scale commercial development can be found in Perkins Corner, Mansfield Center, Eagleville, Mansfield Depot and Merrow.

Table 4.1 Town of Mansfield Distribution of Parcel Sizes, 2012

PARCEL SIZE	NUMBER OF PARCELS	PERCENT OF TOTAL PARCELS
Under one acre	991	26%
One to two acres	1,136	30%
Two to five acres	971	26%
Five to ten acres	292	8%
Ten to twenty acres	159	4%
Twenty or more acres	222	6%

DATA SOURCE: MANSFIELD ASSESSOR, 2012

While many residents identify with the historic villages, development has not been organized by village locations for a long time, as can be seen in the distribution of lots. Most of the state roads in Mansfield and many of the local roads are lined with lots for single-family houses, especially but not exclusively west of Route 195. According to Assessor’s data, 56% of the land parcels in Mansfield are two acres or less. (Ten percent are over 10 acres in size, including

protected and state-owned parcels. Note that contiguous property under one owner may include multiple parcels.)

Mid twentieth century single-family subdivisions, usually built to house University faculty and staff, are largely found around the University campus. In general, development patterns are characteristic of the semi-rural patterns that emerged throughout New England in the twentieth century with the decline of rural economies. Farms sold road frontage for infill houses and back land for subdivisions as agriculture declined, so that it became common to see a mix of historic and twentieth century houses every 100 or 200 feet along rural roads, depending on required frontage length. Typically, the older houses are set fairly close to the road, while the new houses are set further back to comply with zoning regulations established in 1959.

Through this planning process, Mansfield residents expressed interest in new development patterns that cluster development and encourage more neighborhood-oriented housing patterns.

COMMERCIAL AREAS

The town has four main areas of commercial activity which, with the exception of Storrs, have developed in and around former village cores. These areas were all identified in the *2006 Plan of Conservation and Development* as appropriate for higher density and business development.

Storrs Center. Storrs was actually not one of Mansfield's historic villages until it became the site of the Storrs Agricultural School, now known as the University of Connecticut, in 1881. However, it is now home to a mixed-use town center and main street corridor being developed along Route 195 near UConn's School of Fine Arts complex. Storrs Center is a public/private initiative led by the non-profit Mansfield Downtown Partnership, created by the Town of Mansfield and the University of Connecticut in 2001. To date,



Storrs Center

development has included several buildings with commercial uses on the ground floor and apartments on upper floors, a stand-alone grocery store, an intermodal transportation center, a parking garage, and a town square that will serve as the location for various community events such as the annual Celebrate Mansfield festival and outdoor movies and concerts. Future phases include additional mixed use buildings as well as a residential neighborhood with for-sale units. There are parcels in the Storrs Center area that were not included in the Special Design District created for the project; owners of these properties could seek to expand the district in the future.

Four Corners. Originally called North Mansfield, this village was first settled in 1750 and has long been a center of commercial activity given its location at the convergence of three turnpikes: the Windham-Mansfield Turnpike that continued to Willington; a branch off of that road called the Windham-Tolland Turnpike and the Boston (Middle) Turnpike between Boston and New York. Today, Four Corners is a busy commercial center at the intersection of Routes 195 and 44 that serves as a primary gateway to the town and the university. The intersection is populated by a national pharmacy chain, two gas stations/convenience stores, and a small retail building with two shops; additional commercial development stretches to the north along Route 195 and west along Route 44. The remains of the more historic village area are primarily to the east along Route 44 and Old Turnpike Road, where residences built before 1870 remain. The commercial part of Four Corners is a primary redevelopment focus for the town and was designated as a planned business/mixed-use area in the 2006 *POCD*. Public water service is expected to be extended to Four Corners by 2017; an extension of sewer service is being designed.



Four Corners



East Brook Mall in South Mansfield

South Mansfield. The southern end of the Route 195 spine in Mansfield contains a diverse mix of historic villages, modern residential subdivisions, strip mall retail, and rolling agricultural fields. Route 6 was rebuilt to highway scale in the 1970s as the first segment of a planned highway to Providence. The project was never completed and the Route 6 right-of-way takes up significant land equipped with water and sewer services that could accommodate compact growth.

South Mansfield includes the East Brook Mall area and historic Conantville/Chestnut Hill, portions of which are currently provided with water and sewer service by Windham Water Works and the Windham Water Pollution Control Authority. The area north of the Route 6 interchange is dominated by large auto-oriented shopping malls and is not a pedestrian-friendly area despite having a sidewalk along parts of the western edge of Storrs Road. Just to the west is a mix of small offices and residences including Conantville and larger condominium developments such as Freedom Green and East Brook Heights. Conantville was a mill settlement and still has houses that represent typical 19th century mill village architecture. It is the only historic village that does not include at least some parcels with two-acre zoning. The commercial area along Route 195 south of the interchange includes a few smaller businesses (vacant gas station, office building), and a large 1960's era apartment complex that is located in both Mansfield and Windham.

Because of access to sewer and water services in Conantville, it is zoned for 20,000 square foot residential lots, with some properties zoned for business uses on its eastern and southern edges, as well as one Design Multiple Residence parcel. It is almost entirely built out.

West of Conantville is Pleasant Valley, with its prime farmland soils, and Chestnut Hill, a farming settlement with views that are classified as some of the most significant in Mansfield. Chestnut Hill is characterized by large agricultural parcels mostly owned by Willard J. Stearns & Sons, Inc. (Mountain Dairy). Both Pleasant Valley and Chestnut Hill have working farms that the Town would like to see continue.



Office building at Perkins Corner

Perkins Corner. This village along busy Route 32 in the southwest corner of the town is a combination of residential, commercial and office development including an outdoor movie theater, driving range, bowling alley, auto parts yard, motorcycle shop, and a 2-story professional office building in addition to the Vinton Elementary School and a cemetery. The nonresidential uses occupy most of the area on Route 32 between Cider Mill Road and Stearns Road. Most of the land in Perkins Corner has some type of existing development.

VILLAGES WITH SMALL COMMERCIAL AREAS

In addition to the main commercial areas described above, Mansfield also has smaller neighborhood scale business areas located in four of the villages.

Mansfield Center. The village of Mansfield Center lies mainly along Storrs Road/Route 195. It was first settled in 1692, making it the oldest section of town. Most of the original houses from the 18th and early 19th centuries are still extant in the northern portion of the original settlement. Typical of an early New England village, the houses are



Mansfield Center

clustered around the town meetinghouse/church with a few small shops and stores scattered throughout, as well as woodlots, fields and an ancient cemetery. There is also a common-field located on Storrs and Bassett's Bridge Roads, set aside by the town in 1703 and still in its original use as a field for growing hay and various grains.

Today Mansfield Center is the largest of the villages and one of the most diverse, with single-family homes, duplexes, and multifamily residential; professional offices; and commercial/retail development. There are no public water or sewer services. Many

land parcels along Storrs Road are relatively narrow and deep, which supports the sense of village closeness, while parcels located off the road are much larger. Traffic along Storrs Road/Route 195, the Town's main artery, affects walkability. Efforts to improve pedestrian access to and within the village included the construction of a sidewalk along Route 195 between Route 89 and Bassetts Bridge Road and a planned sidewalk along Route 89, from Route 195 to Southeast School.

Mansfield Depot. When the railroad came through in 1847, Mansfield Depot was transformed from a primarily farming community to a mill village, complete with a general and agricultural supply store, the railroad station, an organ pipe factory, a school, and much later, a church. The general store-agricultural store, church, and the residences remain.

Eagleville. Eagleville is named for the Eagle Manufacturing Company, whose factory was built circa 1814. The factory was next to the Willimantic River and was destroyed by fire in 1956. The several duplex houses in this village were originally mill workers' houses, and the present store was the mill's company store. Mansfield's first Catholic Church was built here in 1935. Before modern transportation, Eagleville was an important transportation center where cargo and passengers were unloaded and then carried to the Storrs Agricultural College, now UConn, by stage coach or wagon.

Merrow. A cluster of 19th-century houses remains in the central core of this former mill village. Immediately north is a large mobile home park. Like Eagleville and Mansfield Depot, Merrow is situated next to the Willimantic River and the railroad track, which made it the ideal site for several industries in the 19th century and a grain store in the 20th century. A former insurance office and restaurant is now used as a dance studio.



Dance studio in Merrow; this building has been adapted over time to accommodate different businesses.



Houses in Atwoodville, one of Mansfield's small historic villages

OTHER VILLAGES

Most of the other named villages in Mansfield are primarily residential, of varying sizes and character. Villages such as Spring Hill, Mansfield Hollow and Gurleyville that have either national or local historic designations are described in detail later in this chapter. Wormwood Hill, Mansfield City, Atwoodville and Chaffeeville are very small with a few houses clustered together in rural wooded settings, although Atwoodville and Chaffeeville had large silk mills along the Mt. Hope and Fenton Rivers. Hanks Hill, a former mill settlement and the site of the first water-powered silk mill in America (1810), today includes a working farm and is mostly wooded. It has several historic residences mixed with mid-twentieth century modern and other contemporary houses. Mount Hope is another agricultural community that turned industrial taking advantage of the power provided by the Mount Hope River. Here stood a grist mill, a sumac mill, and a large helve and wagon spoke factory. They are gone now except for their ruined foundations; the store structure remains.

2. Preserving Rural Character

Mansfield has been moving toward a development pattern that is intended to concentrate growth in a few designated areas—such as Storrs Center, Four Corners and South Mansfield—and preserve a pattern of rural character elsewhere. The biggest concern around development expressed by participants in the planning process is that the rural character which residents see as central to the identity of Mansfield may be lost to addi-

tional residential or other growth over the next ten to twenty years. How can Mansfield preserve rural character at the same time as it accommodates new growth?

Using the Concept of Place to Preserve Rural Character. Because Mansfield’s rural character is not an undifferentiated area that is “not-urban,” it is important to understand the elements of rural character and plan and zone appropriately for these elements. Mansfield has different kinds of rural places: historic small villages, mill villages, farms, managed forests, natural forests, wetlands, and so on. Appropriate minimum lot sizes in villages where people clustered their houses should encourage this historic pattern.

Village Character. Mansfield zoning regulations currently provide for general design review by the Planning and Zoning Commission in ten of Mansfield’s villages: Eagleville, Gurleyville, Hanks Hill, Mansfield Center, Mansfield Depot, Mansfield Four Corners, Mansfield Hollow, Mount Hope, Spring Hill, and Wormwood Hill. The design review applies to all exterior construction with design criteria focused on compatibility with existing character.

Another tool available to protect the character of established villages is establishment of Village Zoning Districts as authorized by Connecticut General Statutes [C.G.S. Sec. 8-2(j)]. The purpose of these districts is to protect areas of distinctive character, landscape or historic value as identified in a municipality’s POCD. Alterations to properties or structures in designated village districts require public hearings and review by a Village District Consultant who meets statutory requirements for education and experience. Creation of such districts would provide greater protection to historic village

What is “rural character?”

When asked to define rural character in the Mansfield context, residents describe the rhythm of forests, farms, meadows, hills and waterways that provide scenic vistas and support the town’s robust network of natural resources. They speak of Mansfield’s living legacy of forests, farms and small villages. Throughout the planning process, community members emphasized the value they place on the town’s rural character and the importance of preserving it over time.



Historic stone church in Eagleville

areas and areas with significant scenic value than current design guidelines. Regulations can include standards for design and placement of new buildings and modification of existing buildings, as well as maintenance of public views and standards that promote retention of historic, traditional or significant character and adaptive reuse.

Rural Residential Areas. Mansfield has zoned most of the town for two-acre lots based on detailed studies of soil types, wetlands, aquifers, geology and topography. The large lot size is needed to accommodate wells and septic systems in areas with poor soils and other physical constraints such as steep slopes. While the Mansfield Subdivision Regulations allow for smaller lot sizes and frontages as part of a conservation subdivision where houses are clustered together, use of a cluster design is not required. Additionally, conservation subdivisions do not always result in an optimum solution that really preserves the environmental, farming, forestry, or scenic nature resource values desired. Two acre zoning can result, over time, in the filling up of road frontage with housing,



House in Mansfield Depot



Fields, farms and houses characterize Gurleyville and Mount Hope.

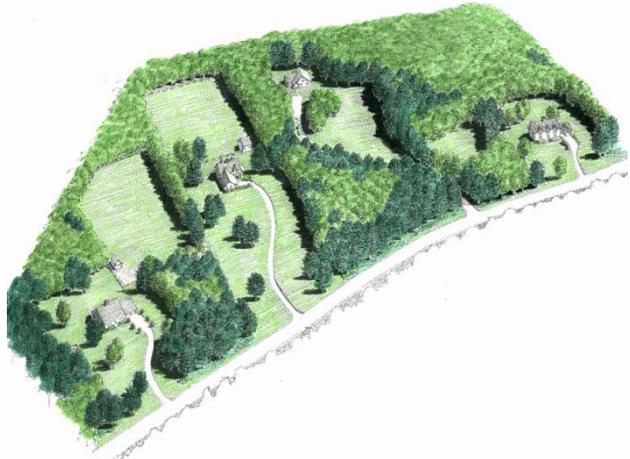


which reduces rural character as seen from public roads and tends to fragment habitat, leaving enclaves of “rural character” in pockets of conservation land or a few remaining farms. One tool Mansfield could use to avoid this outcome in rural residential areas—particularly those served by water and sewer infrastructure—is Natural Resources Protection Zoning (NPPZ).

Natural Resources Protection Zoning. The next step in the evolution of conservation zoning is NRPZ, which can take a number of forms, but the essence is to combine low underlying densities with compact patterns of development so that significant areas of land are left permanently undeveloped and available for agriculture, forestry, recreation, watershed, carbon sequestration, and wildlife habitat.”¹ NRPZ does not have a defined lot size or density but instead uses a formula to calculate the amount of developable land and undeveloped land, and the number of units.

While similar to conservation subdivision zoning in many respects, NRPZ regulations provide a number of different approaches to establishing subdivision design that protects and preserves critical natural and environmental features on development sites. In fact, one of the more important steps in enacting NRPZ regulations is to make the use of the regulations in subdivision design mandatory. When cluster and open space subdivision regulations are optional or require extensive public review and special permits, most developers are not likely to use them. A system that allows these development approaches by right (without a special permit), but that provides sufficient guidance to produce desired outcomes, is more likely to be successful.

It is important in designing NRPZ that serious consideration be given to how the regulations are structured in terms of the formulas that determine the lot yield (the number of housing lots created) under the NRPZ regu-



*These three images illustrate NRPZ zoning. Image 1 shows a parcel with one house. Image 2 shows a conventional subdivision of large-lot housing. Image 3 shows the housing units clustered village-style. (Source: Jeff Lacy, *Natural Resource Protection Zoning*, www.neainfo.org/Natural%20Protection%20Zoning.pdf)*

1 Jeffrey R. Lacy, AICP, Robert W. Ritchie, Esq., and Joel S. Russell, Esq., “Natural Resource Protection Zoning: The Green Side of Smart Growth,” December 2010, http://www.mass.gov/envir/smart_growth_toolkit/bylaws/green_side_smart_growth_nprz.pdf

lations versus the lot yield of a conventional subdivision, which is typically based on underlying zoning. Because NRPZ is a new concept, public discussion about how this tool works and how it might best be tailored to Mansfield will be important in shaping and implementing regulations. Discussion might consider:

- Areas of town where NRPZ could help advance community goals—and areas where other regulatory tools would be more appropriate
- Existing density patterns and resources
- Potential impacts on individual property rights (actual or perceived)

In addition, communities without public water or public sewer systems in rural areas, like Mansfield, will need to work with state and regional health district development policies and regulations to make NRPZ development work. While NRPZ has not been adopted as yet by any Connecticut municipality, there appears to be no legal impediment to its use.

Ultimately, NRPZ is a tool Mansfield can use to preserve natural resources and important features of the land while encouraging development of neighborhoods, rather than simply new streets and housing lots. Appendix D provides examples of how NRPZ formulas employed by various communities can be used to cluster housing and preserve a greater amount of open space by applying the formulas to a recently subdivided parcel in Mansfield. Any formula developed for use in Mansfield will need to be tailored to our community to achieve the vision and goals identified in this plan. NRPZ regulations will also need to include standards to prevent forest fragmentation and address current concerns with use of common driveways (See Goal 3.4, Strategy A, Action 4 for more information).

NRPZ development needs to be supported by either water and sewer infrastructure or community systems. In Mansfield today, a conservation subdivision will still result in individual lots of at least one acre, because each house is required to have a private well and a septic field on its own lot. Without defined lot sizes and densities, NRPZ provides more flexibility to preserve resources, but reduced lot sizes would require community septic systems. While the Eastern Highlands Health District regulates systems with a design flow of less than 5,000 gallons per day, community systems and alternative treatment systems are regulated by the state Department of Energy & Environmental Protection

(CT DEEP) Subsurface Sewage Disposal Program.¹ For Mansfield, a more complex and potentially time-consuming approval process for community systems is in a context where subdivisions tend to be relatively small and there is no incentive to use community systems. If the Town pursues NRPZ, it will need to take a more proactive role in encouraging community septic systems.

¹ The state has issued a Draft Guidance Document for Design of Large-Scale On-Site Wastewater Renovation Systems, http://www.ct.gov/deep/lib/deep/water_regulating_and_discharges/subsurface/2006designmanual/designmanual2006.pdf

3. Preservation of Historic and Scenic Resources

Another defining characteristic of Mansfield and the rural character so prized by residents is its rich history, which is visible in the pre-Revolutionary War to post Civil War buildings that can be found scattered throughout town and clustered in historic villages as well as the views and vistas offered along roads lined with mature trees and stone walls. Preservation of these resources is accomplished through a variety of programs, including those listed below.

NATIONAL REGISTER OF HISTORIC PLACES

Individuals, organizations, or communities may present an application to be listed on the National Register to the National Register Review Board in each state. The criteria for significance include association with historic events or significant persons in the past, embodiment of distinctive characteristics of a type, period, method of construction, as well as structures that represent the work of a master, have high artistic value, or have important information for history or pre-history. Sites or structures on the National or State Register will receive special review if they are likely to be affected by federal or state projects (example: a federally-funded highway construction project, such as road widening). Also, Register designation makes the site eligible for certain grants and tax exemptions. Otherwise, the structures have no special protection, and property owners can modify, or even demolish, their buildings in any way they wish. However, it should be noted that under the Connecticut Environmental Protection Act (C.G.S. Chapter 439, Sec. 22a-19a), any individual or entity can file suit in Superior Court to challenge the “unreasonable destruction of historic structures and landmarks” that are listed on the National Register of Historic Places.

THE CONNECTICUT REGISTER OF HISTORICAL PLACES

The State of Connecticut, through its Historic Preservation Council of the State Historic Preservation Office (SHPO), has its own list of historic places. All of the National Register properties are on its list and the Council adds to the list additional properties. This program may include sites that may not qualify for National Register listing, but are still important to Connecticut’s history.

LOCAL HISTORIC DISTRICTS

The highest level of protection afforded historic structures are for those buildings designated as part of a local historic district, in accordance with C.G.S. Sec. 7-147 et seq. This statutory scheme allows a town to designate local historic districts and to establish a Historic District Commission (HDC) to review potential changes to those buildings located in the district. Although there are some

Table 4.2 Mansfield Historic Districts Designations

HISTORIC DISTRICT	STATUS
Mansfield Center	Local and National
Spring Hill	Local and National
Mansfield Hollow	Local and National
Gurleyville	National
UConn Main Campus - Storrs	National
UConn Depot Campus - Storrs	National

Table 4.3 Mansfield Historic Properties with National Register Status

HISTORIC DISTRICT	STATUS
Eleazer Williams House	National
Mansfield Centre Cemetery	National
Farwell Barn	National
Mansfield Hollow Dam	National

MANSFIELD'S HISTORIC DISTRICTS AND PROPERTIES ON THE NATIONAL REGISTER OF HISTORIC PLACES



UConn

Following are the sites and districts listed on the National Register of Historic Places. Note that there are some solitary structures and sites listed because of their historic significance. Three districts are designated as local historic districts in addition to their National Register status. To date there are ten listings on the National Register.

DISTRICTS

- **Gurleyville National Register District.** Gurleyville was the center of the silk industry in America for many years in the 19th century, along with its neighboring village of Hanks Hill. It was also a very active village with a church, two stores, and all kinds of social events. Its lasting fame is as



Gurleyville

the birthplace of Governor Wilbur Cross who led Connecticut through the depression years of the 1930s. Gurleyville was placed on the National Register in 1975 not only for its fame as a mill village, but also because the district has a good collection of residential architectural styles ranging from the early 1730s to the 1950s in its central cluster. Finally, it is the site of the last surviving stone grist mill in Connecticut, now owned and operated seasonally by Joshua's Tract and Conservation Trust.

- **Connecticut Agricultural School, University of Connecticut Historic District.** The main campus of the University of Connecticut includes 47 buildings, most of which were built in the early to mid-20th century. The Honors House/Cordial Storrs House (c.1757) and the International House/John Gilbert House (1802-1807) are the two remaining examples of 18th and early 19th century architecture. The district was placed on the National Register in 1989.
- **UConn Depot Campus: The Mansfield Training School and Hospital Historic District.** Although several buildings were torn down after the Mansfield Training School was closed in 1993, there are 60 remaining buildings that date from the mid-19th century to the mid-20th century. The Depot Campus achieved National Register status in 1987.

ADDITIONAL (SINGLE) HISTORIC PROPERTIES

- **Eleazer Williams House.** An important contributing structure to the Mansfield Center Local Historic District, the house was built in 1710-1711 for Eleazer Williams, the first minister in Mansfield. National Register status for this site was granted in 1971.
- **Mansfield Centre Cemetery.** This is the oldest cemetery in Tolland County, laid out in 1693, with many fine examples of the artistic carving done by several noted early gravestone carvers. National Register status was granted in 1992.
- **Farwell Barn.** Located on Horsebarn Hill, one of Connecticut's largest and most visible drumlins, this antique wooden barn is an important part of the agricultural history of the School of Agriculture at the Storrs campus of the University of Connecticut. National Register status was granted in 2001.
- **Mansfield Hollow Dam.** Construction on the dikes and giant spillway of the dam began in 1949 to impound waters at the confluence of the Fenton, the Mount Hope and the Natchaug Rivers, creating a 500-acre lake. Built as a flood control project by the U. S. Army Corps of Engineers after World War II, it was finished in 1952 and encompasses 2,472 acres of land. A state park was established shortly after the project was completed (Mansfield Hollow State Park) and it includes the lake and a portion of the federal land. National Register status was granted in 2003.

MANSFIELD'S LOCAL HISTORIC DISTRICTS

Mansfield Center Local Historic District. The first local historic district to be established, Mansfield Center, includes 26 dwellings along with a church, a former (brick) library, and a country store. As Mansfield's first settlement (1692), the district contains the oldest collection of structures in town, including a portion of one house that dates back to 1694. The Eleazer Williams house, built in 1710-11, is also located in the district. Most of the structures were built from the mid-18th to early 19th centuries as 2-story, colonial-style houses, with the exception of three houses built in the Greek Revival style by Edwin Fitch, Mansfield's

noted master-builder and one of Connecticut's early architects. In 1866, the church was destroyed by fire and rebuilt in the same year using Fitch's plans in the Italianate Revival style. The library (site of the first district schoolhouse c.1794, replaced in 1926 with present brick building, now a residence) and six of the houses in the district were built in the 20th century. Established in 1968, the district achieved National Register status in 1972.

Spring Hill Local Historic District. Established in 1973 as Mansfield's second local historic district, Spring Hill has a collection of pre-Civil War 19th century houses, including two in the Greek Revival style also built by Edwin Fitch. The oldest house dates from the 18th century and is the Isaac Sargeant House (c. 1734), formerly known as the Enoch Freeman House, now known as the Altnaveigh Inn. Spring Hill served as the seat of Mansfield's government for 171 years, and the 1843 Town House, now used by the Mansfield Historical Society, is the town's oldest remaining public building. Of architectural note is the First Baptist Church built in 1875—1876 in the "Carpenter Gothic" style. National Register status was granted to the district in 1979.

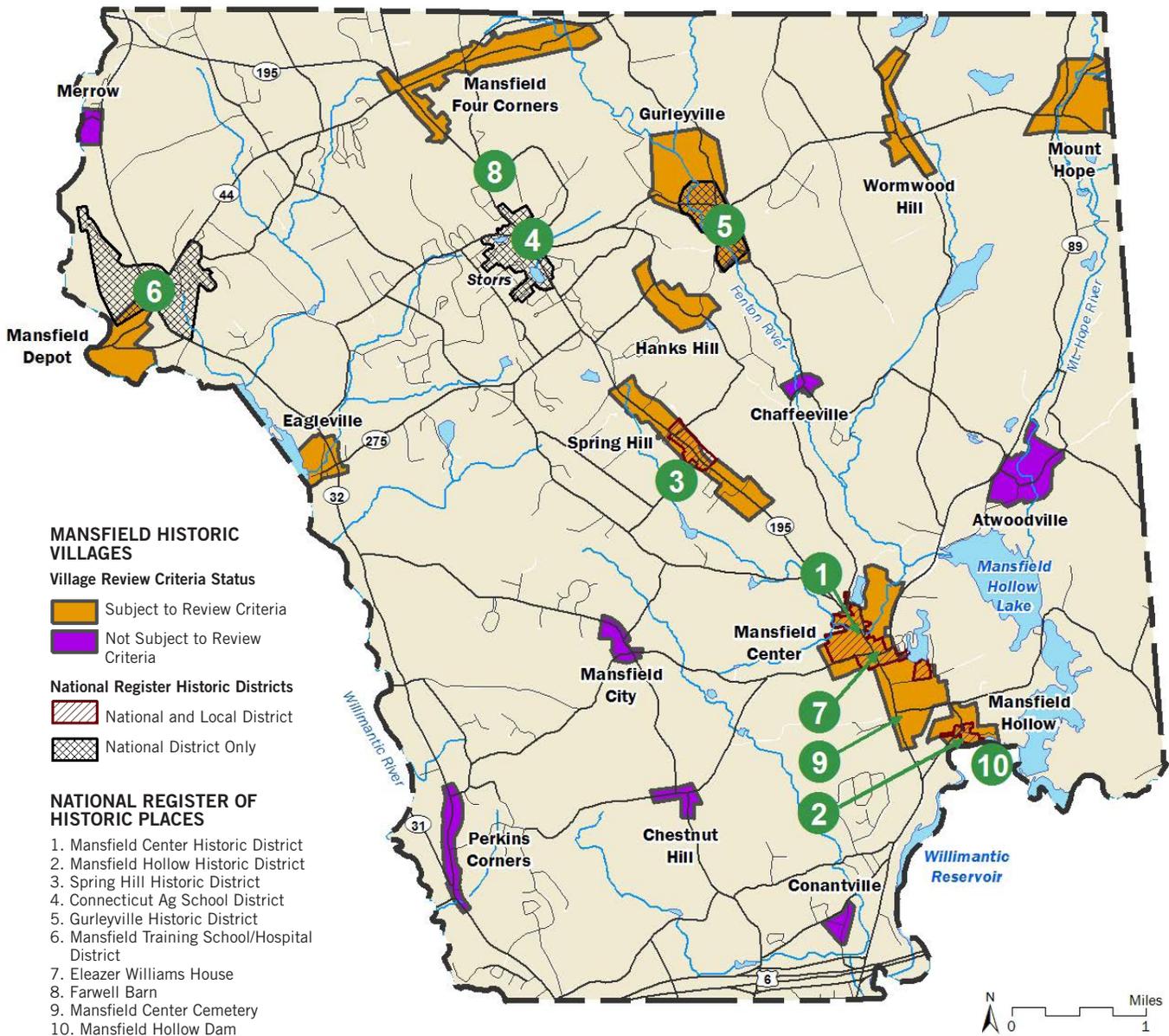
Mansfield Hollow Local Historic District. The third local historic district was established in 1977 and encompasses a cohesive cluster of ten structures from the late 18th to mid-19th centuries, including a former store and a large stone mill. Now known as the Kirby Mill, this last remaining mill in the Hollow was built in 1882 and is currently used by a number of small businesses, including a local company that designs and manufactures small machines. The rest of the structures are 18th to mid-19th century houses, characteristic of the area's history of farms supporting mills and mill workers. At least three houses here were built in the Greek Revival style by Mansfield's master-builder and architect, Edwin Fitch, who also built a wood-frame silk mill in the Hollow, which, along with other small mills, was subsequently torn down to make way for the stone mill. National Register status was awarded to the district in 1979.

All of these local districts appear on both the National Register of Historic Places as well as the Connecticut State Register of Historic Places.

restrictions and conditions under which an HDC may act, generally an HDC will review those exterior changes to an historic structure that are visible from a public road. It is the responsibility of the property owner to submit proposed changes to the HDC. If acceptable, an HDC will issue a Certificate of Appropriateness.

Mansfield has designated three local historic districts: Mansfield Center, Spring Hill and Mansfield Hollow. Map 4.3 illustrates these district boundaries.

MAP 4.3: HISTORIC VILLAGES AND DISTRICTS



Source: National Register of Historic Places; Town of Mansfield, 2013; Mansfield Plan of Conservation and Development, 2006.

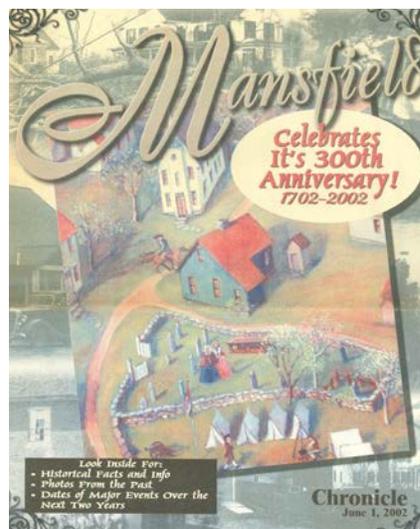
Design and Review Process for Local Historic Districts. The statute gives only general guidance on how to make a determination of appropriateness. In C.G.S. Sec. 7-147f, the Commission is directed to consider the type and style of exterior windows, doors, light fixtures, signs, above-ground utility structures, mechanical appurtenances and the type and texture of building materials, the historical and architectural value and significance, architectural style, scale, general design, arrangement, texture and material of the architectural features involved and the relationship to the exterior architectural style and pertinent features of other buildings and structures in the immediate neighborhood. The Connecticut Commission on Culture and Tourism and historic preservation organizations recommend that Historic District Commissions adopt design standards or criteria to guide decision making, which is allowed by C.G.S. Sec. 7-147c(e).

Characteristics that are suitable for local design guidelines include: height, scale, massing, proportion, roof shape, arrangement of features (windows, doors etc.), setbacks, rhythm and spacing of buildings, materials, texture, surface treatments, architectural details, relationship of accessory buildings, and projections (such as porches). Guidelines should also be considered for evaluation of parking, fences and walls, light fixtures, signs, renewable energy sources, satellite dishes and antennae, monuments and sculptures.² Having guidelines or standards benefits both the Commission and the property owner and helps to legitimize the commission's decisions. Mansfield has not yet adopted specific standards for any of its local districts.

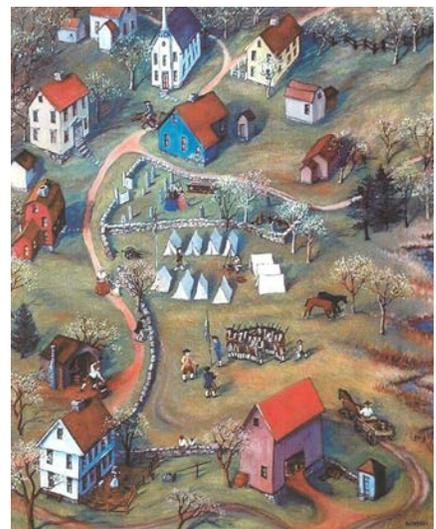
² Information in this section draws from: Connecticut Trust for Historic Preservation, Handbook for Historic District Commissions and Historic Property Commissions in Connecticut, 2010; <http://www.lhdct.org/documents/Handbook%20for%20Historic%20District%20Commissions%20in%20CT.pdf>



Mansfield celebrates its 300th birthday with a giant cake.



Special Chronicle edition marks Mansfield's 300th Anniversary.



Mansfield Center in the 18th century; commissioned by the Town for Mansfield's 300th anniversary. Created by Annie Wandell.

Demolition Delay. One preservation tool that the Town has not yet employed is the adoption of a demolition delay ordinance, which would institute a mandatory waiting period before a historic structure can be demolished. In Connecticut, the waiting period can be up to 180 days. This waiting period provides opportunities for the municipality and other stakeholders to explore options to save the structure. If no buyer or alternative use can be found after the waiting period, the property owner may proceed with demolition.

The Connecticut Trust for Historic Preservation has identified the need for clarity of definitions and procedures in demolition delay and has prepared a model ordinance for use by municipalities.³ An ordinance needs to identify which buildings are included—in National Register Districts, older than 50 years, etc. There needs to be a procedure to decide whether preservation of a structure is preferred. For example, while all buildings over 50 years old might be considered for demolition delay, it is likely that many or most may not be deemed to be of historic interest, so the demolition can proceed. Regulations should also provide for enforcement and penalties when delay is ordered. One of the trickiest aspects of demolition delay is to define “demolition” for the purposes of the ordinance. The Trust suggests the following:

- Removal of a roof for the purpose of: raising the overall height of a roof; rebuilding the roof to a different pitch; or adding another story to a building.
- Removal of one or more exterior wall(s) or partition(s) of a building.
- Gutting of a building’s interior to the point where exterior features (windows, doors, etc.) are impacted.
- Removal of more than 25% of a structure’s overall gross square footage
- The lifting and relocating of a building on its existing site or to another site.
- The delay or withholding of maintenance on a building or structure in such a way as to cause or allow a significant loss of architectural integrity or structural stability. This is often called “demolition by neglect.”

SCENIC ROADS

In recognition of the intrinsic value that is provided by scenic landscapes and vistas, Mansfield has designated eight scenic roads, five of which go through a village (see Map 9.1: Road Systems):

- Codfish Falls Road
- Old Turnpike Road
- Summit Road
- Mount Hope Road (from Wormwood Hill Road to the Chaplin Town Line)

³ <http://cttrust.org/cttrust/page/demolition-delay-ordinances>

- Dog Lane (from Bundy Lane to the crest of the hill east of Route 195)
- Farrell Road
- Stone Mill Road
- Gurleyville Road (from Codfish Falls Road to a point 635 feet east of the intersection with Horsebarn Hill Road)
- Mount Hope Road

Once designated, alterations and improvements to a scenic road require a public hearing by the Planning and Zoning Commission and Town Council approval. Examples of alterations and improvements that require approval include widening of the right-of-way or traveled portion of the road, paving, changing the grade, straightening, removal of stone walls, or removal of mature trees. Emergency, routine and minor maintenance does not require approval of the Council.

For additional information on scenic resources in Mansfield, please see Chapter 3, Section 4: Scenic Views and Vistas.



Mt. Hope Rd.

4. Accommodating Future Growth

Building on previous plans, the *2006 Plan of Conservation and Development* identified areas best suited for future growth, including Storrs Center and areas near Four Corners, UConn's Depot Campus, residential areas immediately west and south of UConn's main campus, Perkins Corner, the East Brook Mall area, and southern Mansfield. These areas all have some level of existing development, ranging from higher density residential development such as Freedom Green in the southern Mansfield area to an eclectic mix of commercial businesses in Perkins Corner to the new downtown at Storrs Center. **Growth in most of these areas is contingent on the existence or extension of public water and sewer service and includes the potential redevelopment of older sites to maximize the use of previously built land while accommodating new growth.** Focusing new development in these areas will help to preserve the rural character of the majority of town while also meeting the desire of residents to have more compact, walkable areas with access to services and transportation.

Chapter 8 identifies a future land use strategy to help achieve the community's goals related to preserving rural character and accommodating future growth in compact areas. This strategy includes:

- Designating the majority of the town as Rural Residential/Agricultural/Forestry
- Recognizing that villages have a different pattern of development through the establishment of Rural Residential Villages and Village Centers
- Identifying areas for Compact Residential development in areas close to the UConn campus and in southern Mansfield
- Establishing three Mixed Use Centers: at Storrs Center, Four Corners, and the 195/Route 6/East Brook Mall area
- Identifying areas of anticipated UConn growth, including the main campus, technology park and Depot Campus (former Mansfield Training School)
- Designating areas for conservation and recreation

Three areas with significant redevelopment potential include Four Corners, envisioned as a mixed-use gateway to the town; the East Brook Mall area, where access to water, sewer and public transit combined with changes in market demands for traditional malls and shopping experiences could combine to present new opportunities to add housing to the existing commercial mix; and areas adjacent to UConn, where proximity to campus, Storrs Center and a multi-modal transportation network could provide for new models of compact housing and neighborhoods for both students and other residents. There is also potential for redevelopment in Perkins Corner if water and sewer service were to be extended to that area. Ensuring that the form and character of new development is complementary to existing uses will be an important task going forward.

ACTION PLAN

Each chapter within this Plan includes an action plan: a set of suggestions for how to put the Plan to work and begin transforming ideas into action. Each action plan identifies some of the **entities that are expected to have a key role in** achieving specific action items (town departments, committees/ commissions, outside organizations, etc.); a target timeframe to complete each action; and the types of resources that we anticipate may be needed for implementation (staff time, volunteer time, operating budget, capital improvement program, grants, etc.).

Action plans include:

- **Goals** that describe the outcomes our community hopes to achieve;
- **Strategies** for advancing each goal; and
- **Actions**—specific steps our community can take over the short term (before end of 2019), medium term (between 2020 and 2024) and long term (between 2025 and 2035) in support of each strategy.

Action plans are tools for focusing efforts and resources on the issues our community cares about most. The action plans will:

- Guide town officials as they continue to shape policies and allocate resources in the years to come;
- Refocus the efforts of town staff and committees as they work to advance community goals;
- Provide a foundation for developing annual budgets and work-plans; and
- Evolve over time in response to new opportunities and circumstances.

Action plans set the agenda for our community’s many officials, volunteers, committee members and staff for the years ahead, and align their work with the community’s vision **but do not provide a guarantee that resources will be available to advance each action.** While these action plans are comprehensive in nature, they are not intended to preclude the Town from pursuing other actions as opportunities arise. **As additional actions and initiatives are contemplated, they should be evaluated with regard to how the action will help to advance the vision and goals** contained in the overall Plan.

Key of Abbreviations	
TOWN DEPARTMENTS & SERVICES	
Building & Housing Inspection	Town of Mansfield Department of Building & Housing Inspection
DPW	Town of Mansfield Department of Public Works
Facilities	Town of Mansfield Facilities Management Department
Finance	Town of Mansfield Finance Department
Fire	Division of Fire & Emergency Services / Office of the Fire Marshal
Fire Marshal	Office of the Fire Marshal
Human Services	Town of Mansfield Department of Human Services
Information Technology	Town of Mansfield Information Technology Department
Library	Town of Mansfield Public Library
Parks & Rec	Town of Mansfield Parks & Recreation Department
Planning	Town of Mansfield Planning & Zoning Office
Police	Mansfield Resident State Trooper’s Office
OTHER ABBREVIATIONS	
CT DEEP	State of Connecticut Department of Energy and Environmental Protection
CT DPH	State of Connecticut Department of Public Health
EHHD	Eastern Highlands Health District
Emergency Management	Emergency Management Advisory Council
IWA	Inland Wetland Agency
PZC	Planning & Zoning Commission
Town/Gown	Town/University Relations Committee
WPCA	Water Pollution Control Authority

CHAPTER 4: COMMUNITY AND SENSE OF PLACE

Goal 4.1

Mansfield honors and preserves its historic resources by protecting them for future generations.

Measures of Effectiveness:

- Number of alterations made in local historic districts without prior approval
- Number of appeals of Historic District (HDC) Commission actions
- Number of historic buildings demolished

Strategy A | Expand community awareness of Mansfield’s historic resources and how they are protected.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Continue to celebrate historic districts through installation of appropriate signs.</p> <p>Signs should be placed at key gateways; informational signs should also be considered within the districts to share area history.</p>	<p>Mansfield Historical Society DPW Historic District Commission</p>	Ongoing	<p>Staff Time CIP Volunteer Time Grants</p>
<p>2. Educate property owners in historic districts on the role and responsibilities of the Historic District Commission (HDC).</p> <p>Providing a clear explanation of the review process and standards under which alterations will be reviewed will help to minimize property owner confusion. Explanatory materials should be included on the town web page for the HDC and included in a brochure mailed annually to owners in the district and real estate agents.</p>	<p>Historic District Commission Town Clerk Planning</p>	Ongoing	<p>Staff Time Operating Budget</p>
<p>3. Develop self-guided walking tours of Mansfield historic districts and villages.</p> <p>Where possible, routes should connect to existing trail systems. <i>See related actions under Goal 3.3, Strategies B and C.</i></p>	<p>Mansfield Historical Society Parks & Rec</p>	Short Term	<p>Staff Time Volunteer Time Grants</p>



Strategy B | Strengthen protection of properties in locally designated historic districts.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Adopt procedural regulations, design standards and guidelines for local historic districts.</p> <p>Regulations and guidelines could include:</p> <ul style="list-style-type: none"> • <i>Procedures for creation/ expansion of districts and for review/issuance of Certificates of Appropriateness</i> • <i>General design standards and guidelines that apply to all historic districts</i> • <i>Design standards and guidelines for specific districts</i> 	Historic District Commission Planning	Short Term	Staff Time Volunteer Time CIP
<p>2. Study the possibility of expanding boundaries of the Mansfield Hollow, Mansfield Center and Spring Hill local historic districts.</p> <p>These districts are smaller than the historic villages; expansion of district boundaries could enhance the Town's ability to ensure new development is compatible with the historic character. No expansions should be considered until the procedural regulations and standards recommended in <i>Goal 4.1, Strategy B, Action 1</i> have been adopted.</p>	Historic District Commission Planning	Medium Term	Staff Time Volunteer Time

Strategy C | Continue to protect villages and other areas with significant historic, cultural and scenic value.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Preserve Town Meeting Notice signposts in Gurleyville, Mansfield Center, Mansfield City, Spring Hill and Wormwood Hill.</p>	DPW	Ongoing	Staff Time Operating Budget
<p>2. Require new street lights in historic villages to be consistent with historic character.</p>	PZC DPW	Ongoing	Private Developers CIP
<p>3. Encourage public utilities to respect community character when considering system improvements and expansions.</p>	PZC Town Council	Ongoing	Staff Time Volunteer Time

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>4. Review the Scenic Road ordinance to determine if any changes are needed.</p>	Town Council PZC Conservation Commission Transportation Advisory Committee	Short Term	Staff Time Volunteer Time
<p>5. Conduct detailed evaluation of village boundaries to identify any needed changes.</p>	PZC Historic District Commission Planning	Medium Term	Staff Time Volunteer Time
<p>6. Consider adoption of a demolition delay ordinance. Prior to the preparation or adoption of such an ordinance, the following issues should be considered:</p> <ul style="list-style-type: none"> • <i>Identification of structures to be included</i> • <i>What actions would constitute ‘demolition’ for the purposes of the ordinance</i> • <i>Process for determining whether preservation is the preferred option for structures covered by the ordinance</i> 	Town Council Historic District Commission PZC Sustainability Committee	Medium Term	Staff Time Volunteer Time
<p>7. Consider applying for designation by the National Park Service as a Certified Local Government (CLG). Designation as a CLG increases access to state and federal historic preservation grants. To be eligible, the Town would need to revise current ordinances and regulations, including adoption of standards for local historic districts as recommended in <i>Goal 4.1, Strategy B, Action 1</i>, as well as determine whether sufficient staff and volunteer capacity exists to meet program requirements.</p>	Town Council Historic District Commission Planning	Medium Term	Staff Time Volunteer Time

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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CHAPTER 4: COMMUNITY AND SENSE OF PLACE

Goal 4.2

Mansfield’s land use regulations maintain rural character in the majority of town, protect historic resources and accommodate future growth in smart growth, compact patterns in designated Mixed Use Centers and Compact Residential areas.

Measures of Effectiveness:

- At least 75% of new residential development is located within areas designated as Compact Residential and Mixed Use Centers.
- Increase in percentage of open space preserved through subdivision process.
- New residential subdivisions maintain rural character and include neighborhood place-making elements.

Strategy A | Strengthen regulations in rural areas to maintain rural character and densities in areas traversed by public utility lines. *See related strategies and actions under Goal 9.5, Strategy B.*

ACTIONS	WHO	WHEN	RESOURCES
1. Update Zoning and Subdivision Regulations in areas designated as Conservation/Recreation/Managed Resource Areas, Rural Residential/Agriculture/ Forestry, Rural Commercial, Rural Residential Village and Village Center to establish overlay zones within 1,000 feet of new water/sewer lines that limit the number of service connections to prevent sprawl and retain low-density character. Connections in these areas should be limited to what could be supported by an on-site well.	PZC	Short Term	Staff Time Community Challenge Grant

SHORT TERM = 2015-2019

MEDIUM TERM = 2020-2024

LONG TERM = 2025-2035

Strategy B | Update zoning and subdivision regulations for general rural districts to promote preservation of natural resources and landscape values. *See Goals 2.6, 3.4 and 9.5 for related strategies and actions.*

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Explore establishment of Natural Resources Protection Zoning as mandatory or with significant incentives for all rural parcels or groups of parcels assembled for a single development.</p> <p>Issues to take into account include identification of a set of natural resource values; a size threshold, such as 10 acres for establishment of mandatory NRPZ; locations appropriate for NRPZ and appropriate densities and formulas, including potential bonuses to off-set costs of designing and permitting community water and wastewater systems. In addition to open space, NRPZ regulations should address preservation of agricultural lands and soils, stone walls and historic structures and ruins as appropriate. Consideration should also be given to requiring NRPZ where it can be supported by the land and only allowing deviations by Special Permit. <i>(See Appendix D for examples of NRPZ formulas).</i></p>	PZC	Short Term	Staff Time Community Challenge Grant
<p>2. Update subdivision regulations to require cluster development and only allow for conventional design if specific criteria are met.</p> <p>Examples of possible exceptions to mandatory clustering could include soil limitations and small infill subdivisions.</p>	PZC	Short Term	Staff Time Community Challenge Grant
<p>3. Work with CT DPH, CT DEEP and the Eastern Highlands Health District to provide clear information on the permitting process for community water and septic systems and model examples.</p> <p>To adopt mandatory NRPZ or incentivize its use in areas with limited infrastructure, the Town should work with CT DPH, CT DEEP and the Health District to provide models and approval procedures for acceptable community systems that can be made available to potential developers.</p>	PZC Planning Eastern Highlands Heath District CT DEEP CT DPH WPCA	Short–Medium Term	Staff Time

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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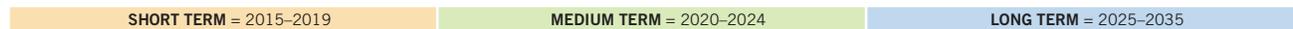
Strategy C | Create regulations for historic villages that distinguish them from Rural Residential/Agriculture/Forestry areas.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Identify average district lot sizes and road frontages in Rural Residential Villages and Village Centers designated on the Future Land Use Map to determine a model for an appropriate minimum lot size.</p> <p>For example, infill and subdivision development adjacent to clusters of housing in existing villages can include provisions to encourage deep lots with relatively short frontages, setbacks similar to the existing average, and compatible facades through inclusion of form-based zoning techniques, which emphasize the physical form of development rather than its use. Lot sizes in rural villages may be smaller than other rural areas to be consistent with existing character provided water and wastewater needs can be met.</p>	<p>PZC Planning</p>	<p>Short Term</p>	<p>Staff Time Community Challenge Grant</p>
<p>2. Identify key form-based characteristics to include in Zoning Regulations and update Historic Village design criteria.</p> <p>These could include site and dimensional considerations such as height and setbacks from the road and architectural characteristics such as roof type, porches, scale relative to other buildings, etc.</p>	<p>PZC Planning</p>	<p>Short Term</p>	<p>Staff Time Community Challenge Grant</p>
<p>3. Consider use of Village Zoning Districts for portions of historic village areas where historic features are relatively intact such as Atwoodville, Eagleville, Gurleyville, Hanks Hill, Mansfield Center, Mansfield City, Mansfield Hollow, Mansfield Depot, Mansfield Four Corners, Mount Hope, Spring Hill and Wormwood Hill.</p> <p>Each area needs to be evaluated in collaboration with property owners in terms of key characteristics, desired level of protection, staff and commission capacity to handle additional reviews, etc.</p>	<p>PZC Historic District Commission Planning</p>	<p>Short–Medium Term</p>	<p>Staff Time Volunteer Time</p>

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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Strategy D | Strengthen protections for historic and cultural features.

ACTIONS	WHO	WHEN	RESOURCES
1. Update Zoning Regulations to include protections for stone walls similar to those contained in the Subdivision Regulations.	PZC	Short Term	Staff Time Community Challenge Grant
2. Update Subdivision Regulations to include design standards for new subdivisions in or adjacent to historic districts and villages to ensure development is compatible with the historic development pattern and reduce impacts on historic resources.	PZC	Short Term	Staff Time Community Challenge Grant
3. Update Zoning Regulations to allow for adaptive reuse of historic buildings. <i>See Chapter 8 for more detail.</i>	PZC	Short Term	Staff Time Community Challenge Grant



Strategy E | Establish regulations that encourage compact, village style development in designated Mixed-Use Center and Compact Residential areas with public water and sewer. See *Future Land Use Map (Map 8.3)* and related goals/strategies in Chapter 8.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Update Zoning Regulations for the Four Corners (Route 195/Route 44) and East Brook Mall (Route 195/Route 6) Mixed Use Center areas to allow for business, residential and mixed-use development and include form-based development standards to ensure desired character and connectivity.</p> <p>Expansion of allowable uses may be contingent on access to public water and sewer infrastructure based on existing soil constraints. Regulations in the Pleasant Valley area should continue to include preservation of at least 35% of prime agricultural land, and provision of a buffer for adjacent agricultural land.</p>	PZC	Short Term	Staff Time Community Challenge Grant
<p>2. Create Zoning Regulations for Compact Residential areas that provide for village style, walkable developments and include form-based development standards (standards that focus on the physical form development should take) to ensure desired character and connectivity.</p> <p>Examples of possible design guidelines/standards include centering of new development around common open spaces and use of lanes/alleys to focus on pedestrians and bicyclists.</p>	PZC	Short Term	Staff Time Community Challenge Grant
<p>3. Consider allowing expansion of the Storrs Center Special Design District.</p> <p>Any proposed expansion of the district would need to meet the criteria established in the Zoning District for application of the SC-SDD zone. It is expected that any expansion would be initiated by property owners and/or the Mansfield Downtown Partnership (MDP), not the Commission.</p>	PZC Mansfield Downtown Partnership	Short–Medium Term	Staff Time
<p>4. Consider the creation of Special Design Districts for the East Brook Mall commercial area (Route 195/Route 6) and Four Corners to allow for mixed-use redevelopment.</p> <p>Districts should include a master plan and design guidelines specific to that area. Cooperation between multiple property owners would be needed.</p>	PZC	Medium Term	Staff Time

SHORT TERM = 2015–2019

MEDIUM TERM = 2020–2024

LONG TERM = 2025–2035

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5 COMMUNITY LIFE



Celebrate Mansfield Festival, 2014
Photo credit: Kim Bova Photography

TOPICS IN THIS CHAPTER INCLUDE

- Education
- Public Safety
- Community Enrichment
- Health and Wellness
- General Government Services

Prior chapters have focused on the physical features and elements that make Mansfield a special place to live; this chapter focuses on the community services and amenities that influence how people experience Mansfield and interact with one another. The quality and nature of services available in a community such as education, public safety, community enrichment, recreation, health and wellness contribute to the overall sense of community and quality of life enjoyed by residents. How and where these services are provided impact how they are used by the community and influence decisions on future improvements to community facilities, including locations of new facilities. The desire of Mansfield residents to maintain a high level of service also influences the need for economic growth to financially support those services.

what the **community** said

COMMUNITY LIFE

The range and quality of community services provided by the Town is highly valued by Mansfield residents, but many raised concerns about the ability of the Town to continue funding the high level of service and programs offered today, much less expanding services given the potential impact on taxpayers.

Themes in the comments on community services included:

- Need for broader understanding of the role that a high-quality education system plays in attracting and retaining families to the community and maintaining property values
- Need for greater attention to average students; high performing and special needs students are currently seen as receiving more benefits
- Concern with cost of education, particularly with regard to renovation/construction of schools and cost per student compared to achievement levels
- Desire to expand focus on education for people of all ages, with a stronger emphasis on early childhood education
- Need for greater transportation and housing options to allow seniors to age in Mansfield
- Desire for expanding role of the private market in meeting senior service needs and limiting the role of town government in providing opportunities for seniors to interact and thrive
- Concern with cost of Community Center and associated programs; some residents would like membership in the Community Center to be free for all Town residents; others do not believe that the Town and tax payers should be responsible for providing/subsidizing these services
- Desire for more outdoor, low-cost recreation opportunities such as trails and bikeways and better integration of wellness programs with the arts
- Desire for Community Center to be more of a community gathering place
- Concern with cost of expanded public safety services and potential budgetary impact
- Need for State or UConn to provide funding to assist the Town in meeting increased public safety demands due to university expansion
- Concern with impact of service demands in neighborhoods near campus on the ability of police to patrol and respond to issues in other areas of town
- Desire to increase the self-sufficiency of residents and the level of volunteerism related to public safety
- Interest in expanding shared services with other communities provided that changing to a shared service model would not reduce the level of service currently enjoyed by residents or result in the loss of Mansfield's small-town feel

“The people make Mansfield special. The agricultural economy, the natural areas, the focus on community services also make Mansfield special.”

“[I would like to see] excellence in schools [and] services; efficient town government, resulting in reasonable tax rates.”

“[I would like to see a] commitment to open and transparent community dialogue and communication to encourage, promote [and] ensure community participation and democratic process.”

FROM MANSFIELD RESIDENTS

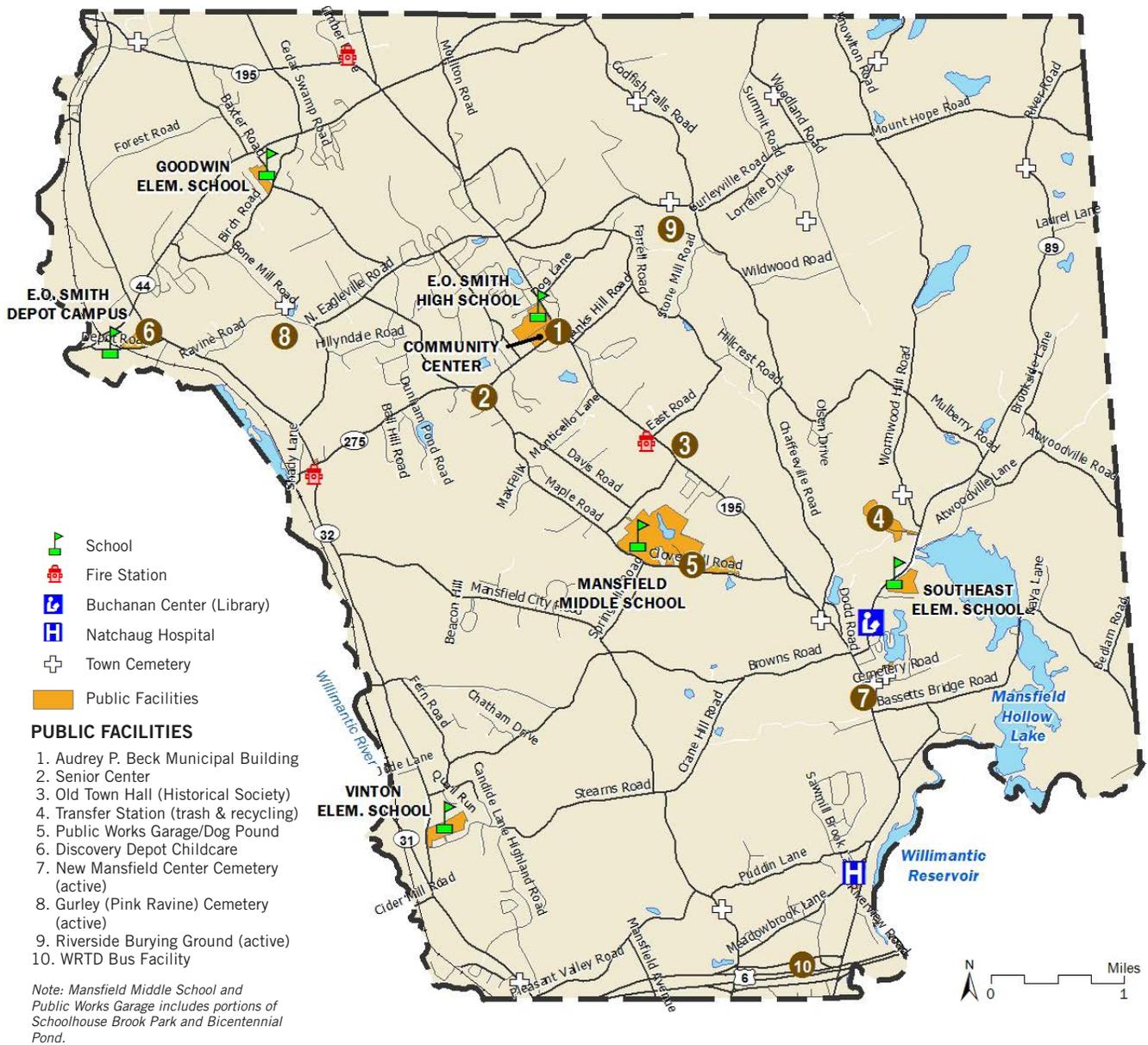
COMMUNITY SERVICES AND FACILITIES TODAY



Dance at the Mansfield Community Center

Mansfield offers a wide array of high-quality services to its residents in the areas of education, public safety, library services, senior services, recreation, and arts and culture. When compared to communities of similar size (in terms of permanent—not student—population), Mansfield offers a much more diverse portfolio of services to its residents. In many cases, the quantity, quality and variety of services offered both by the Town as well as other organizations are directly related to the presence of the university. This is particularly true for education and enrichment opportunities. These services and amenities are provided through an extensive network of community facilities, which are depicted on Map 5.1: Public Facilities and listed in Table 5.1. More detailed information on key facilities is provided in the pages that follow under descriptions of current services.

MAP 5.1: PUBLIC FACILITIES



Source: Town of Mansfield, 2013

For information on local open space resources, see Map 3.2: Preserves, Parks and Active Recreation Areas with Public Access.

Table 5.1—Major Town and Community-Owned Facilities

FACILITY	DESCRIPTION	USE
GENERAL GOVERNMENT FACILITIES		
Audrey P. Beck Municipal Building (1935)	Intersection of Storrs Road (Route 195) and South Eagleville Road (Route 275) 27,000 square feet	Administration Public Meeting Space State Police Resident Troopers Office Eastern Highlands Health District Board of Education administration
Public Works garage and materials depot (1980)	4 buildings totaling, 21,000+ sf, some unheated at Clover Mill Road Additional materials storage: Transfer station site—off Warrentville Rd (Route 89)	Garage and materials storage; fueling station for Town vehicles
Animal Control Facility (1975)	Clover Mill Rd—adjacent to public works garage	Animal shelter
Transfer Station and Recycling Station	26.7-acre parcel situated on Warrentville Road in the southeastern portion of town.	Transfer station and recycling center
Storrs Center Parking Garage (2012)	Royce Circle—owned by Town, managed by Storrs Center Alliance for seven years after completion 671 parking spaces	Parking
Nash-Zimmer Transportation Center (2014)	Royce Circle—connected to Storrs Center Parking Garage 5,500 square feet	Open 2014. Bicycle commuter facilities, information on transit services, office space for the Mansfield Downtown Partnership
Bus Garage (1970)	Stafford Road Owned by Town, leased to bus company 6,300 square feet	Bus maintenance facility
EDUCATION FACILITIES		
Discovery Depot (1991)	Depot Road—owned by Town, leased by non-profit agency 12,000 square feet	±100-student childcare center
Goodwin Elementary School (1957)	Hunting Lodge Road at Birch Road 37,864 square feet	School and play area
Southeast Elementary School (1957)	Warrentville Road (Route 89) east of Storrs Road (Route 195) 39,133 square feet	School and play area
Vinton Elementary School (1956)	Stafford Road (Route 32) at Stearns Road 35,654 square feet	School and play area
Mansfield Middle School (1969)	Maple Road at Spring Hill Road 115,000 square feet	School

Table 5.1—Major Town and Community-Owned Facilities, continued

FACILITY	DESCRIPTION	USE
E.O. Smith High School (1958)	Storrs Road (Route 195) at Bolton Road Renovated and expanded in 2002 New tennis courts and track completed in 2011 Includes Farrell athletic fields at the end of Charles Smith Way 245,000 square feet	School; owned and managed by Region 19 Board of Education
E.O. Smith High School at the Depot Campus (1918)	Depot Road (former Reynolds School) Renovated in 2008 as a non-traditional learning center for high school students 6,000 square feet	School, leased and managed by Region 19
PUBLIC SAFETY FACILITIES		
Fire Station 107 (1952)	Stafford Road (Route 32) south of South Eagleville Road (Route 275) (Eagleville) -owned by Mansfield Firefighters Association; Town responsible for maintenance and upgrades	Fire and Emergency Medical Services
Fire Station 207 (1969)	Storrs Road (Route 195) at Timber Drive (Four Corners) 2,972 square feet	Fire and Emergency Medical Services
Fire Station 307 (1954)	Storrs Road (Route 195) at East Road (Spring Hill) Renovated and expanded in 1997—owned by Mansfield Firefighters Association; Town responsible for maintenance and upgrades	Fire and Emergency Medical Services
COMMUNITY ENRICHMENT AND RECREATION FACILITIES		
Buchanan Center (1942; expanded and renovated 2002)	Warrenville Rd (Route 89) 15,760 square feet total	Library: 13,500 sf Community Room: 2,260 sf (stage and separate entry)
Community Center (2003)	South Eagleville Road (Route 32) adjacent to Municipal Building; pools, fitness center, teen center, gymnasium, meeting rooms 35,000 square feet	Recreation and community use
Senior Center (1980)	Maple Rd—2,000 square foot wellness center added 1996 8,814 square feet	Senior Center
Old Town Meeting House (1843) and Town Office Building (1935)	Located on 0.7 acre lot on Storrs Rd In Spring Hill Historic District	Museum managed on a part-time seasonal basis by the Mansfield Historical Society
Eagleville Schoolhouse (1900)	Located on 1.7 acre lot at S. Eagleville Rd (Route 275) and Stafford Rd (Route 32)	Former Town one-room school. Leased to Joshua's Trust for office use until 2014. Future use undetermined

Table 5.1—Major Town and Community-Owned Facilities, continued

FACILITY	DESCRIPTION	USE
ACTIVE CEMETERIES (SEE SECTION 5.5 FOR A LIST OF INACTIVE CEMETERIES WITH POTENTIAL FOR CREMATION LOTS)		
Gurley (Pink) Cemetery	Bone Mill and Ravine Roads	Maintained by the Mansfield Cemetery Committee with DPW
New Mansfield Center Cemetery	Cemetery Road	Maintained by the Mansfield Cemetery Committee with DPW
Riverside Burying Grounds	Gurleyville Road	Maintained by the Mansfield Cemetery Committee with DPW

1. Education

Mansfield takes great pride in the quality of its education system. Almost all school-age children in Mansfield attend public schools. Approximately 50 (2.5% of the total) attend private schools. The public school system is well regarded, with the Town’s elementary/middle school system ranked 32 out of 164 systems in Connecticut according to *www.schooldigger.com*. The quality of the education system plays a significant role in maintaining property values and attracting new families to Mansfield.

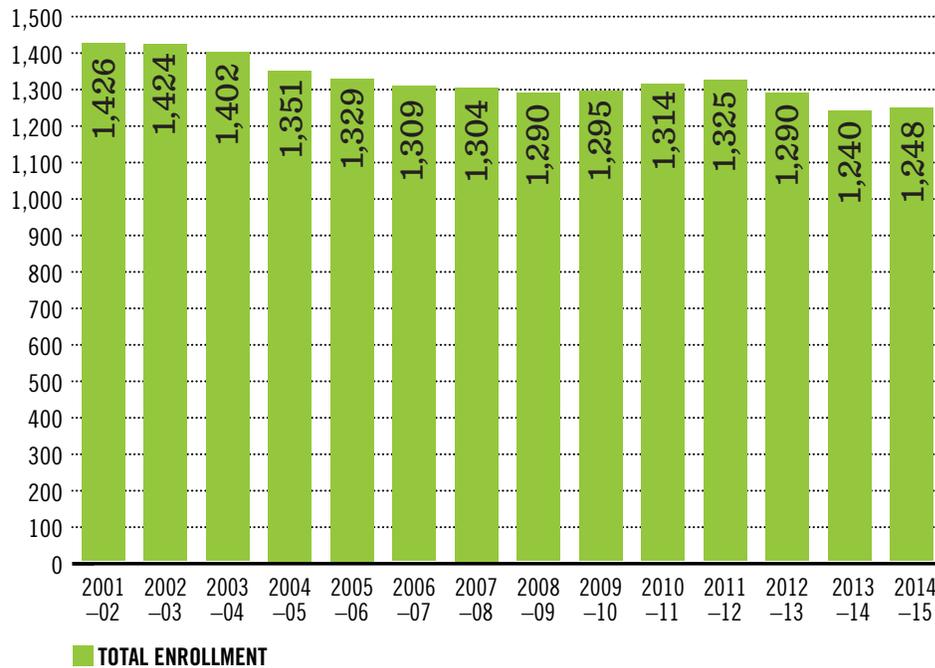
A) EARLY CHILDHOOD EDUCATION

Mansfield is committed to supporting high-quality early care and educational opportunities for young children. The Department of Human Services along with the Mansfield Advocates for Children (MAC) work to prepare young children for the transition from home to the school environment through school readiness programs, family literacy activities, and providing programs and opportunities for teachers to collaborate. Pre-kindergarten programs are offered at each elementary school at no cost to families; priority placement is given to children identified as needing additional support with remaining slots filled by lottery. The Town also provides support and services to the Mansfield Discovery Depot located on Depot Road which provides childcare, pre-school and kindergarten programs. Additional child care and pre-school alternatives are offered by a variety of private organizations, including two Montessori schools, one of which offers classes for children up to 12 years of age.

B) ELEMENTARY AND MIDDLE SCHOOL

The Mansfield Board of Education (MBOE) operates three elementary schools that serve children in pre-kindergarten through 4th grade (Goodwin, Southeast and Vinton) and the Mansfield Middle School for grades 5 through 8. These schools serve a fairly diverse population: 11% of Mansfield students come from homes where English is not the primary language, 2% of students are English Language Learners (ELL), and 12% of students have some type of physical, intellectual, emotional or learning disability. In 2014–2015, 26.69% of students were eligible for free or reduced price lunches, up from 15% in 2004–2005.”

Figure 5.1—Mansfield Elementary and Middle School Enrollment



Elementary and Middle School Enrollment. Since 1990, student enrollment in the Mansfield school system has fluctuated between a low of 1,141 students in 1991 and a high of 1,454 students in 1999. As shown in Figure 5.1, enrollment has decreased from over 1,400 students in 2001-2002 to 1,248 students in the fall of 2014. Enrollment is projected to remain fairly stable over the next 10 years, reaching an estimated enrollment of 1,239 in 2022. These projections are based primarily on birth and enrollment trends. However, enrollment can be affected by many other factors, including changes in the community that attract families with young children. Such changes could reverse the slow decline seen over the last fifteen years.

FACILITIES. *In 2005, the Mansfield Board of Education (MBOE) initiated a study of existing facilities to identify physical improvements to meet programmatic needs and educational objectives. From 2006 to 2012 the School Building Committee, MBOE and Town Council evaluated options, including renovation of the existing elementary schools, construction of 1 or 2 new elementary schools, and replacement of the three existing schools. Renovations to the Middle School were also identified through this process, including window and roof replacement, installation of solar panels and replacement of modular classrooms.*

Due to the projected cost for gut renovations to the three elementary schools and the limited state reimbursement available for projects of this nature, the MBOE in 2012 recommended the construction of two new elementary schools and closure of one of the existing schools. Based on state funding formulas, new construction was eligible for a higher percentage of

state funding. During Town Council consideration of the plan in 2012, it became apparent that there was no clear community consensus on the best way to address educational needs identified by the school board. Key concerns included the loss of ‘neighborhood schools’ and the overall cost of the project and resulting burden on taxpayers.

In 2013, the Town Council declined to send the proposed new building projects to public referendum for funding but approved a five-year repair and maintenance plan for the schools, noting that such improvements did not include educational enhancements and that future plans for the long-term improvement of the schools needed to be addressed in that five-year period.

C) HIGH SCHOOL

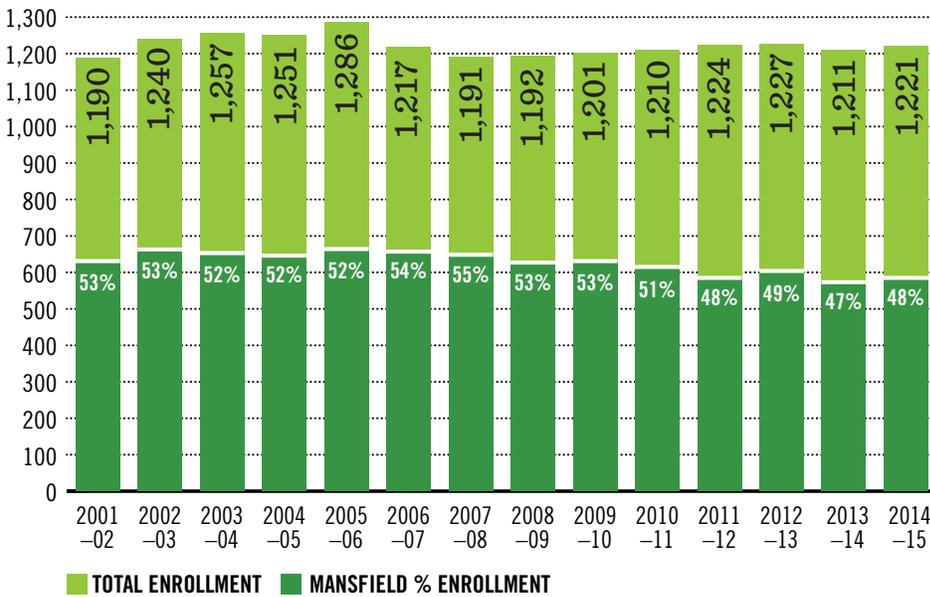
E.O. Smith is the regional high school serving residents of Mansfield, Ashford and Willington (Region 19), as well as residents of Columbia on a tuition basis. The district is distinguished by its specialty academic programs, including an Agri-Science Program that attracts students from nearby communities on a tuition basis; a non-traditional learning center that can serve up to 40 students; and an extensive array of Early College Education (ECE) options, including 30 UConn cooperative classes, 3 ECSU courses and 10 community college courses taught by E.O. Smith faculty. Additionally, approximately 50 students take courses at the UConn campus each semester. Collectively, E.O. Smith students earn more ECE college credits than any other high school in the state.

The region has also partnered with UConn to expand opportunities for 18-21 year old special education students that have completed four years of high school through the S.T.A.A.R. (Students Transitioning to Age Appropriate Routes) Program. The program offers students an opportunity to interact with college peers while expanding vocational and independent living skills.

High School Enrollment. As shown in Figure 5.2, total enrollment has fluctuated over the last ten years from a high of 1,286 in 2005-2006 to a low of 1,191 in 2007-2008. Current district enrollment projections anticipate a decline in enrollment over the next 10 years to approximately 1,121 students in 2022. As with the elementary and middle school’s enrollment projections, this estimate is based on population trends, particularly births.



E.O. Smith High School serves over 1,000 students from Mansfield, Ashford, Willington and Columbia.

Figure 5.2—Regional School District 19—E.O. Smith High School Enrollment

The percentage of students from Mansfield has dropped from 53% of total enrollment in 2001 to 48% in 2014 due to a 250% increase in the number of tuition students from other communities since 2001. If the number of Mansfield households with children under 18 grows significantly over the next 10 years, so may the percentage of Mansfield students at E.O. Smith.

Mansfield children also have the option of attending either the Windham Technical High School or Magnet schools located in other districts. On average, approximately 45 high school age students attend either the Technical High School or Magnet schools each year.

FACILITIES. *The main campus of E.O. Smith is located on Storrs Road between Town Hall and the UConn campus and also includes the Farrell athletic fields located at the terminus of Charles Smith Way, formerly known as Post Office Road. The Depot Campus houses the non-traditional learning center at the former Reynolds School building on Depot Road; the property was leased by the Town to Region 19 for a period of 20 years in 2004.*

The High School's main campus underwent a significant renovation and expansion in 2000 and additional improvements have been made since, including the addition of tennis courts and various track and athletic field improvements completed in 2011. The outdoor recreation facilities are available for community use when not in use by the school. The five-year capital plan adopted as part of the 2014-15 budget identifies \$3.875 million in capital improvements, the most significant of which is a two-year, \$3 million roof replacement project.

D) ADULT EDUCATION

Mansfield residents have access to a variety of adult education programs to further their knowledge. Region 19 participates in a 14-town adult education consortium managed by Vernon Public Schools. Through this program, Mansfield residents have access to free basic adult education courses including: Credit Diploma Program, National External Diploma Program, GED test preparation, citizenship and workplace education. These courses are all offered at E.O. Smith High School.

Both UConn and ECSU offer a variety of continuing education options, including degree and non-degree programs and continuing professional education. Senior citizens meeting certain requirements are eligible for tuition waivers for non-degree courses. The UConn Center for Learning in Retirement (CLIR) offers courses at the Mansfield Depot Campus for retirees and other adults with the goal of providing “meaningful and serious intellectual activities for retirees and other adults from all walks of life, conducted in an informal and relaxed atmosphere,” as they advertise.

Informal programs on a variety of topics are offered through the Mansfield Public Library, Mansfield Senior Center and Parks and Recreation. Library programs are advertised through the Town’s monthly e-newsletter and an on-line calendar of events. Parks and Recreation programs change each quarter and require advanced registration; all programs are advertised in the quarterly mailing, which is direct mailed to all residents as well as residents in Ashford, Columbia, Coventry and Willington and published on-line. Senior Center programs are advertised in the monthly senior center newsletter.

E) HIGHER EDUCATION

The UConn campus, located in Storrs, is the state’s largest university campus. For the 2013 fall semester, there were 22,148 students enrolled at the Storrs campus: 18,026 undergraduates and 4,122 graduate students. The university has changed significantly over the last 20 years in both size and facilities as a result of the UConn 2000 and UConn 21st Century initiatives. This 20-year, \$2.3 billion investment in the university was approved by the legislature in 1995 with the goal of both restoring and enhancing UConn’s infrastructure and enhancing programmatic excellence. The Storrs campus has changed significantly, with the addition of new classroom buildings and residence halls as well as significant infrastructure upgrades. Current enrollment reflects this investment, representing a 41% increase over enrollment in Fall 1995. The University’s land holdings have also changed in recent years, with the sale of property to Storrs Center Alliance for the creation of a new downtown, sale of the Moss Sanctuary property to the Town of Mansfield, and acquisition of various properties adjacent to the core campus.

In 2013, the Connecticut Legislature approved a \$1.5 billion program to improve UConn facilities, increase faculty and expand undergraduate enrollment in the areas of Science, Technology, Engineering and Math (STEM). Known as Next Generation Connecticut (NextGenCT), this initiative is anticipated to increase enrollment at the Storrs Campus

by up to 5,000 students over the next 10 years. An ambitious faculty hiring program is also underway. In 2012, UConn announced plans to add 290 faculty system-wide; the NextGenCT initiative will add another 259 faculty system-wide. Up to 260 new faculty from these two programs are expected to be located at the Storrs Campus. The NextGenCT initiative is also expected to include infrastructure upgrades, building renovations, new laboratory/research space and two new dormitories. UConn officials have indicated that, while NextGenCT currently provides funding for 800 beds, the University fully expects to bond for construction of additional beds with the goal of housing at least 70% of undergraduates on campus. As part of the NextGenCT initiative, UConn is developing a 20-year master plan for the Storrs campus to guide future growth.

In addition to UConn, Mansfield enjoys close proximity to Eastern Connecticut State University (ECSU) in Willimantic. ECSU's athletic fields are located in Mansfield north of Route 6 and west of Mansfield City Road. Minor improvements to the athletic facilities are proposed over the next several years as part of ECSU's overall campus master plan, which was developed in 2008. No additional plans have been announced for the remainder of the undeveloped acreage. Update of the 2008 master plan is anticipated within the next several years.

2. Public Safety

A) POLICE SERVICES

Since 1955, police services in Mansfield have been provided through the State's Resident Trooper program. The State shares 30% of the cost of the trooper program, while the Town pays for the remaining 70%, including 100% of any overtime costs requested by the Town. The number of troopers assigned to Mansfield grew in 1998-2013 from 5 to 10, including a full-time Resident Trooper Sergeant who manages the department. In 2013 only one part-time sworn officer was employed by the Town. State Police Troop C provides service when the Resident Trooper's office is closed or when additional support is needed. Resident Troopers work closely with the UConn Police Department to address off-campus issues.

FACILITIES. *The Resident Trooper program operates out of Town Hall. Addition of four troopers as recommended in the 2012 police services study, will require more office space—either an expansion of current space or relocation of the Resident Troopers to another municipal space.*

UConn Police Department. The University's police department has the same authority as any municipal police department and has responsibility for the protection of lives and property on University property. The Department includes a Community Police Unit that provides crime prevention educational programs to University students, faculty and staff. In addition, it sponsors a Citizens Police Academy held annually for ten weeks in the fall that is open to Mansfield residents as well as University affiliates. The UConn

Police Department works closely with the Town to address public safety concerns in and around the campus, including

VISION FOR POLICE SERVICES

In 2010 the Town initiated a study to evaluate options for police services. A primary component of the study involved community input on policing needs and priorities; this input was provided through a series of stakeholder interviews, focus groups and an on-line survey. The vision identified by the community included:

- Coverage 24 hours a day, seven days a week, 365 days a year
- Officers sensitive to the town's unique needs
- A community policing strategy that allocates officer time based on Town priorities
- Timely response to emergencies and an eventual response to non-emergencies

B) FIRE AND EMERGENCY SERVICES

Since 2005, fire and emergency medical services have been provided by a combined department consisting of both career and volunteer firefighters. The Fire and Emergency Services Department is led by a career fire chief and staffed by 13 full-time firefighters and 11 part-time firefighters. Additional support is provided by the Mansfield Firefighters Association, which had 40 volunteers in 2013. The department also provides fire prevention and emergency management services.

Consistent with national trends, the vast majority of calls for service are for emergency medical services as compared to fire incidents. In FY2013, the Department deployed personnel and equipment in response to 1,809 calls, of which 70% were for EMS services. Many of those calls serve seniors and college students, and are for injuries such as falls and alcohol-related illness/injuries. One of the current challenges for the Fire Department is a declining volunteer base.

Mansfield is one of 14 towns that participate in the Tolland County Mutual Aid Fire Service. Mutual aid for non-Tolland County towns is provided on an informal basis.

Figure 5.3—Emergency Service Requests, FY2012–2013

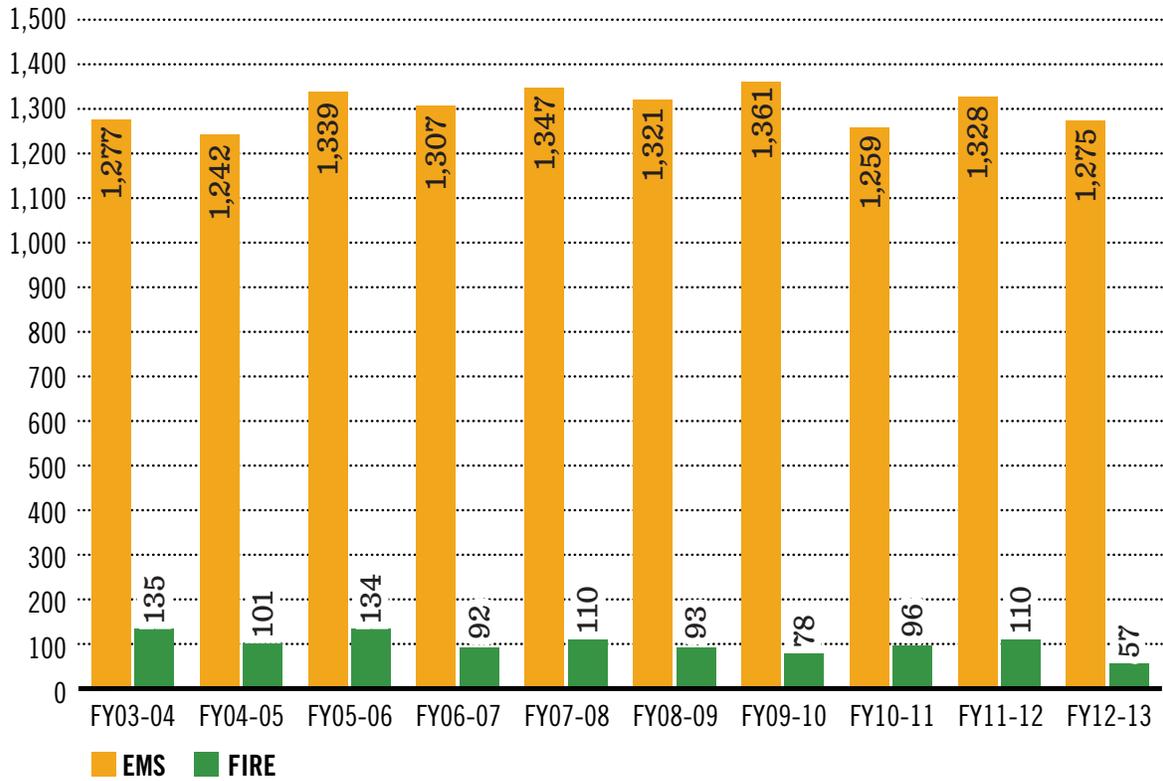
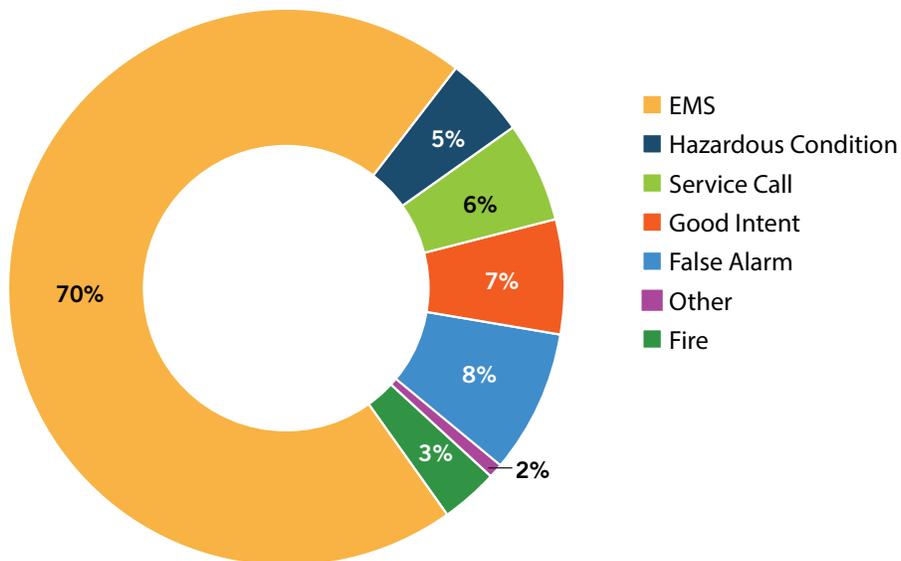


Figure 5.4—Fire and EMS Calls, FY2003–2013



The Mansfield Fire Department provides fire prevention education programs to residents of all ages.



Fire Prevention Services. The Fire Department also provides fire prevention services through the Office of the Fire Marshal, including plan review and permitting for new construction and building renovations, issuing permits for activities such as open burning, fireworks, and wood stoves, fire investigations and community outreach and education. The Fire Marshal's Office also inspects existing buildings for compliance with fire safety requirements. As of 2012, Mansfield had almost 1,600 occupancies requiring annual inspection. The number of annual inspections is expected to continue to increase as new residential units at Storrs Center are occupied.

Emergency Management. The Fire Marshal also serves as the Town's emergency management director, with support from the Emergency Management Advisory Council. In 2011-12 there was a significant increase in emergency management activities due to severe storms, including Tropical Storm Irene in August 2011, Winter Storm Alfred in October 2011, and Hurricane Sandy in October 2012. Each of these events required multi-day recovery efforts due to extended power outages and downed trees. Recovery efforts included continuous staffing of the Emergency Operations Center as well as respite center and shelter activities. If more severe storms and extended power outages occur in the future, residents will also need to become more self-sufficient to reduce demands on Town services.

Updates to the Town's Emergency Operations Plan and development of a Disaster Recovery Plan are priority activities. In addition to disaster recovery operations, renewed

focus is needed on hazard mitigation to reduce impacts from future incidents. While the Town participates in periodic updates of the regional hazard mitigation plan, hazard mitigation tools and techniques should also be incorporated into overall department operations and policy updates.

FACILITIES. *Fire Department administration, including fire prevention and emergency management services, are currently located in Town Hall. Fire and EMS services currently operate out of three fire stations (see Map 5.1: Public Facilities). These stations are all situated on the north side of town and need upgrades due to changes in fire service staffing, operation and apparatus. Identified deficiencies include lack of dormitory space, lack of administrative office space, and apparatus bays that are too small to accommodate modern equipment. The 2006 POCD identified the construction of a new fire station in the southern part of town as a possible need based on new commercial and multi-family development, as well as the replacement of the Fire Station #107 (Eagleville), which was deemed insufficient for operational and organizational needs. These recommendations were based on a 1993 Fire Services Master Plan.*

UConn Fire Department. The University has a 24/7 fire department composed of four platoons of firefighters, Fire Inspectors and Chief Officers responding from one station, all of whom are also EMT licensed, certified in hazardous materials, and trained in specialized areas such as radiological emergencies and confined space rescue. The Department is equipped with two engines, a tower ladder, four basic life support ambulances, a pair of hazardous materials response vehicles, a decontamination trailer and numerous support vehicles. The University of Connecticut Public Safety Dispatch Center is located in the Public Safety Building at 126 North Eagleville Road, and is staffed around the clock by Public Safety Dispatchers. The UConn Public Safety Dispatch Center answers 9-1-1 calls made from the Storrs campus and dispatches the appropriate emergency resources.

C) ANIMAL CONTROL DIVISION

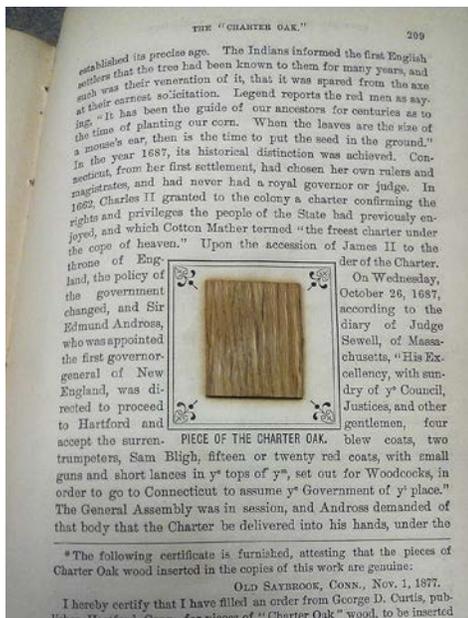
The Animal Control Division provides public education, enforces state statutes on dogs and cats, responds to complaints, enforces ordinances related to spaying and neutering of cats, and impounds stray and injured pets. Other duties include an annual canvas for unlicensed dogs, unvaccinated pets and unaltered cats.

FACILITIES. *The majority of unclaimed pets are adopted through the Mansfield Animal Shelter, located off Clover Mill Road near the Public Works Garage. On average, over 80% of impounded animals are adopted; only sick and very aggressive pets are euthanized. The existing shelter was built in 1975, and is not well suited to current operational needs, including the operation of a boarding facility for abandoned cats.*

3. Community Enrichment

A) LIBRARY SERVICES

The Mansfield Public Library located in the Buchanan Center on Warrenville Road (Route 89) provides a diverse array of programs for residents of all ages and is one of the most widely used community facilities, with over 85,000 visits annually. It is an anchor of Mansfield life, fostering social interaction and creative learning—what is sometimes called a “Third Place” for community life separate from home and work or school. In addition to maintaining an extensive collection of over 82,000 digital and paper materials, the library provides computer and internet access and monthly delivery service on request. The library also provides extensive programming for children and teens and



One book in the library's special collections contains a piece of the Charter Oak.



Marigold the Guinea Pig inspects the library's seed display.



Storytelling and science create a magical dragon at the library.



Everyone looks forward to Talk Like a Pirate Day at the library.

collaborates with local schools, including annual summer reading programs, Books on Buses, and a mobile computer lab offering access to school educational programs. Mansfield Friends of the Library, an independent organization, raises money for the library through book sales and hosts monthly book discussion groups.

FACILITY. *The Library occupies 13,500 square feet of the 15,760 square foot building, with a community meeting room (the Buchanan Center, equipped with a stage and separate entry) in the remainder. The Library was expanded and renovated in 2002. According to a 2010 ADA (Americans with Disabilities Act) Compliance Report prepared by the Department of Building and Housing Inspection, the building needs ADA restroom improvements, an accessible route to the stage, and push buttons for entry doors. Lack of a generator limits the ability of the library to serve the community during mass power outages. The library is not on a bus route and walking and biking to the library is also difficult due to its location on a busy roadway with no off-road pedestrian or bicycle facilities. The Town received a grant in 2014 that will fund the construction of walkway connection to Storrs Road, provided the necessary permits and easements are obtained.*

B) SENIOR SERVICES AND FACILITIES

Most of Mansfield's senior services are offered by the Department of Human Services through the Mansfield Senior Center, which is located on Maple Road, in close proximity to over 180 units of age-restricted housing. The Center is also on the Willimantic-Storrs bus route operated by WRTD. Providing programming and services to Mansfield residents age 55 and over, the Center has over 1,300 members and over 18,000 visits annually. Activities and programs include support groups, computer classes, health programs, exercise classes, bingo, art classes, chorus, meals, trips and volunteer opportunities. The wellness center also offers health screenings, immunization, social services

SENIOR CENTER SURVEY FINDINGS

In 2013, a Senior Center evaluation was completed to determine the effectiveness of current programming. The primary source of information for the evaluation was a survey of Senior Center visitors and program participants. Approximately 50% of visitors during the month of April 2013 completed the survey. Survey respondents were primarily female (74%) and Caucasian (94%). The age of respondents was evenly distributed among the following age groups: 55-70 years; 71-80 years and 81 years and older. Over eighty percent of respondents come to the center between 1 and 4 times each week. Ninety-eight percent of respondents would recommend the Senior Center to a friend or family member "most of the time" or "sometimes," and responses were similarly positive for a series of outcome measures related to interaction with other people, physical health, outlook on life, access to/information about other services and resources, and ability to maintain independence.

MANSFIELD COMMISSION ON AGING

The Mansfield Commission on Aging produces a long-range plan every three years to identify trends and issues related to housing, economics, employment, health and nutrition, recreation, and to meet the needs of Mansfield's aging population. The Commission's goals for 2013-2014 included:

- Monitor the Mansfield Tomorrow planning process with a continued focus on priority issues of senior safety, information dissemination, senior center space needs, health care needs, and ever-changing federal benefit programs.
- Continue to advocate for the installation of a bus shelter at the Route 275/Community Center bus stop.
- Advocate for increased hours for the volunteer driver coordinator.
- Encourage the Downtown Partnership to make the new Storrs downtown senior friendly.
- Track the development of independent living/assisted living facilities in Mansfield.
- Continue to monitor the effectiveness of the Senior/Adult Services Social Worker in meeting senior needs.
- Develop a basic guide for seniors to use in emergencies.

and medical services through a variety of programs. Information on related services and referrals to other agencies are also provided. The Senior Center Association assists in development of programming at the Senior Center and produces the monthly newsletter. As the town's population 55 and over continues to increase, demand for senior services is expected to grow.

FACILITY. *The current Senior Center on Maple Road was built in 1980 and has over 8,800 square feet of floor area, including a ±2,000 square foot wellness center that was added in 1996. The current building has reached capacity given the current programming levels and overall use of the facility. A 2008 architectural study of the building identified the potential for a \$2.27 million project adding 1,235 square feet and interior renovations to address space needs. However, the project was not pursued due to the cost and a scaled down project to create accessible restrooms, expand office space and add parking was estimated at a construction cost of \$300-400,000 and \$60,000 for design. Due to the economic climate and no guarantee of grant funding for the renovations, the Town Council elected not to move forward with the improvement project. In the near term, improvements to ADA accessibility are a priority given the age and disabilities of the clientele. The 2010 ADA Compliance Report prepared by the Department of Building and Housing Inspection identified several needed improvements, particularly with regard to restroom facilities. However, the ability of the Town to address these deficiencies is hampered by the overall layout of the center as well as availability of funding.*

C) ARTS AND CULTURE

Between the University, the community, and private organizations, Mansfield residents enjoy a wealth of cultural opportunities.

UConn-Associated Programs. One of the benefits of being home to the state's flagship university is access to a wide variety of cultural activities and resources that would not normally be available in a community the size of Mansfield, including performances, museums, and enrichments programs.

Community Arts and Culture Programming. Mansfield has a wide array of cultural events and programs offered throughout the year by both the Town and local organizations. Main community events include the annual Memorial Day parade held in Mansfield Center and the Celebrate Mansfield Festival, now in its eleventh year. Sponsored by the Mansfield Downtown Partnership, the Festival includes a morning parade, afternoon concert and juried art show as well as information booths for local organizations. Local

UConn-ASSOCIATED ARTS & CULTURE RESOURCES

- **Jorgensen Center for the Performing Arts.** Each year, the Jorgensen attracts more than 70,000 people to over 25 productions, including music, dance, comedy, and family entertainment. The Center also houses the Harriet S. Jorgensen Theatre, which is the home of the Connecticut Repertory Theater.
- **William Benton Museum of Art.** The Benton Museum is the official state art museum and is one of seventeen world-class museums and historic sites featured on the Connecticut Art Trail. Exhibitions include works from the 15th to 21st centuries as well as faculty works and travelling exhibits. The museum is located on Glenbrook Road in the core campus area.
- **Ballard Institute and Museum of Puppetry.** The Institute has an extensive collection of over 2,500 puppets from all over the world as well as archival materials related to the history of puppetry. Located on the Depot Campus since 1996, the Museum moved to its new space at Storrs Center in 2014.
- **Connecticut Archaeology Center/Connecticut State Museum of Natural History.** Located on Hillside Road in the core campus area, the CAC and Museum of Natural History host exhibits integrating Connecticut's natural and cultural history. The Archaeology Center also provides property owners and developers with assistance in preservation of archaeological resources.
- **Contemporary Art Galleries.** Located at the School of Fine Arts on Bolton Road, the Contemporary Art Galleries offer exhibits as well as art and history lectures.
- **Community School for the Arts.** The Community School for the Arts located at UConn's Depot Campus provides music and visual arts classes to children and adults, serving over 1,100 people annually.

Mansfield offers cultural events and programs throughout the year (Square Fair shown right).



non-profit organizations such as the Mansfield Historical Society and StoDo Arts sponsor smaller educational and cultural events throughout the year. Town sponsored programs and classes are offered year-round at the Community Center, the Public Library, and the Senior Center.

4. Health and Wellness

The overall health and well-being of community residents has impacts both on quality of life and demand for certain types of services. By focusing on preventative measures, communities can help to improve health outcomes and better manage demand for support services.

A) HEALTH

The Connecticut Health Equity Index maintained by the Connecticut Association of Directors of Health (CADH) tracks a variety of indicators related to community well-being, including public safety, health and socio-economic conditions. The key to effectively using the Health Equity Index is to identify where community-based policies can have an impact on health outcomes. For Mansfield, the Index suggests three key areas of concern: incidence of liver disease; incidence of lung cancer; and alcohol-related deaths. Policies and programs that encourage healthy eating and physical activity may help to reduce the incidence of fatty liver disease. Similarly, policies aimed at reducing smoking, tobacco use, and exposure to second-hand smoke may help to reduce the incidence of lung disease. (As is always the case with Mansfield in town by town comparisons, its unique demographic profile affects the analysis; rates of alcohol and tobacco use are often higher among young adults.)

KEY MEDICAL FACILITIES

- **Natchaug Hospital.** Located on Storrs Road in southern Mansfield, Natchaug Hospital provides behavioral health services for both psychiatric illness and chemical dependency to residents of eastern Connecticut.
- **UConn Health Center Urgent Care.** As part of its new facilities in Mansfield, the Health Center opened an urgent care facility at Storrs Center in 2014. The walk-in clinic is open daily and staffed by Emergency Department physicians.
- **United Services.** United Services provides psychosocial, mental health, chemical abuse, education and prevention services. Currently located in Windham, United Services is hoping to relocate to a new facility in Mansfield once financing is secured.
- **Windham Hospital.** Located in Willimantic, and operated by the Hartford Healthcare Network, Windham Hospital is the closest hospital for many Mansfield residents. Hartford Healthcare also has facilities in Storrs, including a family healthcare center, medical offices, an urgent care clinic and a physical therapy rehabilitation center.
- **Med-East Walk-In Clinic.** Located on Route 32 in Willimantic just over the town line, this walk-in medical clinic provides basic medical services to residents and visitors. The clinic is affiliated with Windham Hospital and is open daily.
- **UConn Student Health Services.** This ambulatory facility provides a wide range of health services to university students who have paid the Storrs Campus General University Fee. Students enrolled in programs that do not require the general university fee are not eligible for services and must rely on available community health services.
- **VNA East.** VNA East is a non-profit, Medicare-certified, state-licensed, home and community healthcare agency that provides in-home healthcare and hospice services as well as community healthcare services, such as wellness clinics in various locations across eastern Connecticut.

While each of the above facilities can be accessed by Windham Regional Transit District (WRTD) service, other medical practitioners are located in areas not currently served by public transit, including Perkins Corner and Conantville.

HEALTH FACILITIES. *Mansfield residents are fortunate to have good access to a variety of health services. In addition to numerous medical and dental practitioners located in town, a number of hospital and urgent care facilities are located in Mansfield or in nearby Windham.*

Health Advocacy Organizations. The Eastern Highlands Health District (EHHD) serves as the local health department for 10 eastern Connecticut towns, providing a variety of environmental health, health promotion and emergency preparedness services. EHHD, headquartered in Mansfield Town Hall, received a grant award from the Connecticut Department of Health in November 2011 to implement the Community Transformation initiative in the 10 towns served by the District. The goal of this initiative is to engage a diverse coalition of community members to improve policies and the environment in the areas of tobacco-free living, healthy eating and active living, and provision of quality clinical preventive services. Efforts are focused on at-risk populations and groups experiencing health disparities. The grant is funded by the Center for Disease Control (CDC).

To assist with implementation of the Community Transformation grant, EHHD organized the Tolland County Community Transformation Coalition. An expansion of the existing Community Health Action Response Team (CHART), the coalition includes representatives from 13 towns, organizations involved in the three policy areas identified above and five sectors (Community at Large, Worksites, Schools, Organizations and Health Care).

B) ORGANIZED RECREATION AND OPPORTUNITIES FOR ACTIVE LIVING

Mansfield Community Center. The majority of Mansfield’s managed indoor recreational activities and programs take place at the Community Center built in 2003. The 35,000 square foot Community Center is located adjacent to the Municipal Building, at the in-



Fitness class at the Community Center

tersection of Storrs Road (Route 195) and South Eagleville Road (Route 275). It includes an indoor swimming pool, therapy pool, gymnasium with elevated walking track, fitness center, dance/aerobics room, a teen center, childcare room, arts and crafts rooms, community meeting room, sitting room with computers, free wi-fi, and a skate park. The Community Center also provides equipment rental to support outdoor recreation, offering kayaks, and volleyball and badminton sets. The Community Center is the proposed site of a new community playground, which would be located adjacent to the existing skate park.

The Center and its programs are supported by membership fees of approximately \$50 per household per month as of late 2013 for Mansfield residents. Residents of other towns can also be members, at somewhat higher fees. Mansfield residents who meet income eligibility guidelines can receive a partial waiver for a number of program and service fees, including membership to the Community Center. Information on the Town's fee waiver program can be found on the Town's Parks and Recreation webpage as well as in all Parks and Recreation seasonal brochures and activity registration forms.

OUTDOOR RECREATION FACILITIES. *As described in Chapter 3, Mansfield also has an extensive network of outdoor recreation resources at parks, preserves, and sports facilities. Organized activities are provided by the Department of Parks and Recreation, youth sports leagues (including football, soccer, baseball, lacrosse and hockey), and nonprofit organizations. Current fields are at or near capacity based on existing demands. Improvements to existing fields and additional fields will be needed to meet increased demand.*

C) HUMAN SERVICES

Mansfield provides a wide array of services to address social and behavioral health needs of Mansfield residents through the Department of Human Services. Programs generally target youth and seniors due to the strong constituencies that exist for those services. Youth and family service programs focus on education, prevention/therapy and crisis intervention. There are fewer programs and services directed at adults; however, demand for adult services is expected to increase as residents age and as the Town works to increase the supply of affordable housing. Current services are focused on adults and families that are vulnerable to due financial issues or physical/mental disabilities. Services include case management, advocacy, connecting individuals with available resources and monitoring.

In addition to the specific programs described above, the Department of Human Services is also responsible for coordinating respite center and shelter efforts during storm events, which have become more common in recent years.

D) FOOD SECURITY AND RESOURCES

Mansfield has two major supermarkets, both of which are located on Storrs Road and accessible by public transit: Big Y in southern Mansfield and Price Chopper in Storrs.

Mansfield also has smaller specialty markets such as Champion's General Store in Eagleville. For access to locally grown foods, the Storrs Farmers Market operates year-round, offering a weekly market May through November, and a bi-weekly market December through April. The farmers market currently accepts supplemental nutrition vouchers from the USDA's Women, Infant, and Children (WIC) program. SNAP (Supplemental Nutrition Assistance Program or "food stamps") EBT cards are not currently accepted at the market. Residents can also purchase locally grown foods at individual farmstands or purchase a share in the Shundahai Farm CSA (Community Supported Agriculture).

Residents with limited financial resources have access to food through a variety of sources. The Town's Department of Human Services operates a food pantry that is funded through community donations, and the department also refers clients to a food pantry, My Brother's Keeper, operated by Hope Lutheran Church four days each month. Foodshare, a nonprofit serving Greater Hartford communities, brings a food truck twice a month to Mansfield at Wright's Village. The Senior Center provides lunch Monday through Friday for seniors 60 and older for a suggested donation. Seniors younger than 60 are welcome to participate in the lunches, but are asked to pay the actual cost of the meal.

While Mansfield has a wide range of food sources and options for residents of different income levels, the rural character of the community can pose a challenge for accessing those resources. For example, most residents do not live within walking distance of the bus route that serves the two major supermarkets. The need to access these resources by car places additional burdens on residents with limited incomes as well as those who are unable to drive.

5. General Government Services

The Town of Mansfield operates under the council-manager form of government, in which the Town Council functions as the legislative and policy-making body, and the Town Manager serves as the chief executive officer. Mansfield has a rich history of community involvement in local government. Residents can volunteer to share their knowledge and expertise through service on one of the Town's many appointed commissions and advisory committees.

FACILITIES. *The Audrey P. Beck Municipal Building (Town Hall) and the Public Works Garage are the two main facilities from which general government services are managed. The former Storrs Grammar School was converted into the town's municipal building in the late 1970s. The building currently houses town administrative offices, the Resident Trooper's office and administrative offices for the Mansfield Board of Education and the Eastern Highlands Health District. A project to expand Town Hall by 1,000 square feet was included in the 2006/07 budget but did not move forward. No significant renovations have*

HOW OUR TOWN OPERATES

Town staff and departments. Town Departments are currently organized by five major functions:

- *General Government:* Town management, human resources, Town Clerk, Registrars of Voters, finance, revenue collection, assessor, information technology, and facilities management functions
- *Public Safety:* police, fire and emergency medical services, fire prevention, emergency management and animal control functions
- *Public Works:* engineering, road services, grounds maintenance, equipment maintenance and waste disposal functions
- *Community Development:* building inspection, housing inspection and planning/zoning functions
- *Community Services:* services for all ages (early childhood, youth, adult, family and senior services), library and parks and recreation functions

The Town shares services between departments and agencies to reduce costs and improve efficiency. The Town's Finance and Information Technology Departments provide service to the Mansfield Board of Education, Region 19 Board of Education and the Eastern Highlands Health District. Mans-

field's facilities staff is responsible for maintaining Town buildings, including the three elementary schools and middle school.

Elected Officials. In addition to the Town Council, the following boards and commissions are elected by Mansfield voters: Planning and Zoning Commission/Inland Wetland Agency/Aquifer Protection Agency, Mansfield Board of Education, Region 19 Board of Education (4 members), Zoning Board of Appeals and the Board of Assessment Appeals.

State-authorized commissions. Mansfield has three Commissions established by Town Ordinance as authorized by Connecticut General Statutes: the Conservation Commission, the Economic Development Commission, and the Historic District Commission.

Advisory committees. The Town Council has created over 20 advisory committees to provide guidance on various issues to elected officials and town staff. Members are generally appointed by the Town Council based on the recommendations of the Council's Committee on Committees. A full list of committees can be found on the Town website.

been made to the building since its conversion. Space is currently constrained and needs are expected to continue to grow based on the types of services provided in the building and the number of employees. Due to the age of the building, significant investment in various structural and mechanical components is anticipated, including ADA improvements as identified in the 2010 ADA Compliance Report. Addressing some of the ADA issues such as accessibility to the restrooms in the east wing and adding accessible counters to many offices is hampered by the layout of the building. The layout also presents challenges for both modern office operations and the types of services provided. A thorough evaluation of space needs and improvements should be conducted and included in a town facilities plan.

The Public Works Garage (and ancillary storage and support buildings) were constructed in the 1980s. Identified deficiencies include insufficient facilities for parking, storage, vehicle washing, and maintenance bays and lack of canopy and spill runoff controls for the fueling station.

Cemeteries. There are 21 cemeteries in Mansfield. Table 5. 2 identifies the number and location of available burial plots in cemeteries owned and/or maintained by the Town; additionally, there are numerous private cemeteries which may have additional availability. Three of the town’s historic cemeteries also have significant potential for expanding the availability of cremation lots: Thompson Cemetery on Codfish Falls Road (144 potential cremation lots), Pleasant Valley/Jacobs Cemetery on Mansfield City Road (700 potential cremation lots) and the Mount Hope Cemetery on Warrenville Road (400 potential cremation lots). Significant infrastructure improvements would be required for the actual development of these cremation lots, including new parking, and vehicular and pedestrian access.

Table 5.2 Available Plots in Cemeteries Owned and/or Maintained by the Town

CEMETERY	AVAILABLE BURIAL LOTS	AVAILABLE CREMATION LOTS	UNDEVELOPED LOTS
New Mansfield Center	684	73	51
Gurley	61	18	N/A
Riverside Burying Grounds*	—	196	N/A
Total	745	287	N/A

*Scattering area; no set limit

While there are sufficient existing burial plots to meet needs in the coming years given 10-20 average burials per year and increasing trends toward cremation, the Sexton has identified a potential need to expand the Gurley Cemetery (also known as Pink or Pink Ravine) due to high demand. Located on Bone Mill Road just north of the intersection with Ravine Road, the cemetery is surrounded by University of Connecticut property; as such, an expansion would require acquisition of property from the state. The area directly to the north of the cemetery has been identified as a potential expansion area, with sufficient space for additional plots as well as parking and maintenance facilities.

ACTION PLAN

Each chapter within this Plan includes an action plan: a set of suggestions for how to put the Plan to work and begin transforming ideas into action. Each action plan identifies some of the **entities that are expected to have a key role in** achieving specific action items (town departments, committees/ commissions, outside organizations, etc.); a target timeframe to complete each action; and the types of resources that we anticipate may be needed for implementation (staff time, volunteer time, operating budget, capital improvement program, grants, etc.).

Action plans include:

- **Goals** that describe the outcomes our community hopes to achieve;
- **Strategies** for advancing each goal; and
- **Actions**—specific steps our community can take over the short term (before end of 2019), medium term (between 2020 and 2024) and long term (between 2025 and 2035) in support of each strategy.

Action plans are tools for focusing efforts and resources on the issues our community cares about most. The action plans will:

- Guide town officials as they continue to shape policies and allocate resources in the years to come;
- Refocus the efforts of town staff and committees as they work to advance community goals;
- Provide a foundation for developing annual budgets and work-plans; and
- Evolve over time in response to new opportunities and circumstances.

Action plans set the agenda for our community’s many officials, volunteers, committee members and staff for the years ahead, and align their work with the community’s vision **but do not provide a guarantee that resources will be available to advance each action.** While these action plans are comprehensive in nature, they are not intended to preclude the Town from pursuing other actions as opportunities arise. **As additional actions and initiatives are contemplated, they should be evaluated with regard to how the action will help to advance the vision and goals** contained in the overall Plan.

Key of Abbreviations	
TOWN DEPARTMENTS & SERVICES	
Building & Housing Inspection	Town of Mansfield Department of Building & Housing Inspection
DPW	Town of Mansfield Department of Public Works
Facilities	Town of Mansfield Facilities Management Department
Finance	Town of Mansfield Finance Department
Fire	Division of Fire & Emergency Services / Office of the Fire Marshal
Fire Marshal	Office of the Fire Marshal
Human Services	Town of Mansfield Department of Human Services
Information Technology	Town of Mansfield Information Technology Department
Library	Town of Mansfield Public Library
Parks & Rec	Town of Mansfield Parks & Recreation Department
Planning	Town of Mansfield Planning & Zoning Office
Police	Mansfield Resident State Trooper’s Office
OTHER ABBREVIATIONS	
CT DEEP	State of Connecticut Department of Energy and Environmental Protection
CT DPH	State of Connecticut Department of Public Health
EHHD	Eastern Highlands Health District
Emergency Management	Emergency Management Advisory Council
IWA	Inland Wetland Agency
PZC	Planning & Zoning Commission
Town/Gown	Town/University Relations Committee

CHAPTER 5: COMMUNITY LIFE

Goal 5.1

Mansfield provides high-quality services that connect residents to each other and the community.

Measures of Effectiveness:

- Number of residents participating in town programs and activities increases

Strategy A | Integrate delivery of community services.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Explore opportunities to provide services at multiple facilities.</p> <p>Integration of community enrichment programming offered by different departments would help to expand access to services while also providing a short term solution to constrained facilities such as the Senior Center and the Community Center. Examples include providing library branches/outlets at multiple town facilities through creation of reading rooms and small lending libraries. Any future assisted living developments could be asked to provide some community meeting space for senior and other community services and programs.</p>	<p>Library Parks & Rec Human Services</p>	Ongoing	<p>Staff Time Operating Budget CIP</p>
<p>2. Partner with area organizations to maintain and enhance services.</p> <p>Regional organizations such as Eastern Highlands Health District, VNA East, the Access Agency and Foodshare provide valuable services and assistance to Mansfield residents. The Town should continue to work with these organizations and others to expand access to needed services.</p>	<p>Human Services EHHD</p>	Ongoing	Staff Time
<p>3. Pursue innovation in service delivery.</p> <p>Identify best practices in delivering community enrichment and support services to improve both efficiency and quality of service.</p>	<p>Human Services Parks & Rec Library</p>	Ongoing	Staff Time



Strategy B | Improve public awareness of existing programs and resources.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Publish a monthly newsletter to update residents on current issues and upcoming programs.</p> <p>Since its initial publication in 2012, the Mansfield Minute has grown from 2 pages to 4 pages. As the publication becomes more successful, consideration should be given to a quarterly expanded edition that is mailed to all residents.</p>	Town Manager Library	Ongoing	Staff Time Operating Budget
<p>2. Develop a consolidated on-line calendar of programs and events.</p> <p>Currently, each department maintains a separate calendar of enrichment programs. A consolidated calendar should be searchable by area of interest and include events sponsored by other groups such as UConn and local organizations where possible. The calendar should also be in a mobile-friendly format.</p>	Information Technology Park & Rec Library Human Services	Short Term	Staff Time Operating Budget
<p>3. Prepare and maintain a comprehensive resident resource guide.</p> <p>Over the years, the Town has published various resource guides to advise residents of services and amenities such as the Mansfield Family Resource Guide published by MAC in 2010. Creation of a comprehensive guide with specific sections for residents of different ages and needs would reduce overlap and encourage more interaction between different constituencies. The guide should be updated annually and be available in both digital and hard copy formats.</p>	Town Manager All Departments	Medium Term	Staff Time Operating Budget Donations Sponsor/ Advertising Fees

Strategy C | Expand volunteer opportunities and participation.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Identify programs that could benefit from volunteer assistance.</p> <p>While a robust program of community services contributes to the quality of life enjoyed by Mansfield residents, many of these services are discretionary and are the most likely to be impacted by budgetary issues. Identification of specific programs that could benefit from increased volunteer participation can help preserve these programs when staff capacity is limited. Possible examples include the holiday donation program and food pantry.</p>	Town Council	Medium Term	Staff Time Volunteer Time

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>2. Develop and maintain volunteer database. Creation of a volunteer database that includes contact information and areas of interest can help departments match opportunities with interested residents.</p>	Information Technology	Medium Term	Staff Time Operating Budget
<p>3. Strengthen volunteer recruitment opportunities. A comprehensive list of volunteer activities should be maintained and published on the Town’s website and in the monthly newsletter to recruit volunteers for one-time and recurring events.</p>	Town Council	Medium Term	Staff Time

Strategy D | Strengthen relationships between UConn faculty, staff, students and the community.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Work with UConn to sponsor joint university/community events. UConn students are a part of the Mansfield community for the time that they are here. Making them feel welcome and a part of the community will help to instill feelings of respect and pride for their home away from home, and influence the way they interact with the community at large. Working with the university to host joint events is one way to increase positive interaction between permanent residents and the student population.</p>	Town/Gown UConn Student Government	Ongoing	Staff Time Operating Budget
<p>2. Partner with University colleges and departments to involve students in local projects. Mansfield has a long history of partnering with various faculty members to engage students in community projects. Examples include the 2003 Land of Unique Value study and the 2012 Community Connectedness study. These partnerships produce tremendous value for a nominal cost when compared to hiring private consultants, and have the added benefit of involving students in solving community problems. This practice should be continued as funds allow.</p>	Town Manager All Departments UConn Colleges UConn Career Services	Ongoing	Staff Time Operating Budget CIP Grants
<p>3. Encourage UConn to include town residents on committees and in planning for special projects. UConn often involves town staff on various standing and special project committee such as the UConn Master Plan Advisory Committee. Expanding participation on these committees to residents could help to reduce conflicts as projects are finalized and implemented.</p>	Town Council Town Manager	Ongoing	Staff Time Volunteer Time

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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Strategy E | Provide improved access to services for elderly and special needs residents.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Identify and implement minimum renovations needed to improve efficiency and operations at the Senior Center.</p> <p>Even with implementation of a distributed service model, the Senior Center is in need of ADA accessibility and other building and site improvements. Given the extent of current needs and condition of the building, this project may be undertaken separately from the larger facilities plan identified in <i>Goal 5.5, Strategy B</i>.</p>	<p>Facilities Human Services Town Council</p>	<p>Short–Medium Term</p>	<p>Staff Time CIP Grants</p>



CHAPTER 5: COMMUNITY LIFE

Goal 5.2

Mansfield is a lifelong learning community and continues to provide high-quality public education for children and youth.

Measures of Effectiveness:

- Student achievement based results on State and District assessments
- All Mansfield Schools student achievement levels are established at the State and Mansfield Board of Education
- A high school graduation rate established by the State and Regional Board of Education
- Evidence of student college and career readiness based on targeting standards and outcomes established by the boards of education

Strategy A | Continue to provide programs that prepare children to succeed in school.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Improve school readiness.</p> <p>The State of Connecticut’s “Ready by 5 and Fine by 9” program identifies communities as a key partner in ensuring that early childhood development needs are met to provide a solid foundation for success as children enter the school system. The Town should continue to support the efforts of the Mansfield Advocates for Children, Board of Education and Mansfield Public Library to improve school readiness through early childhood education and literacy programs.</p>	<p>Town Council</p> <p>Mansfield Advocates for Children</p> <p>Mansfield Board of Education</p> <p>Human Services Library</p> <p>UConn Work/Life Oversight Committee</p>	Ongoing	<p>Staff Time</p> <p>Volunteer Time</p>
<p>2. Provide comprehensive, quality education programs for students at all levels while recognizing that some students may require non-traditional learning opportunities and innovative instructional approaches to be successful.</p> <p>Possible resources include the NEAG School of Education at UConn and Region 19.</p>	<p>Mansfield Board of Education</p>	Ongoing	<p>Staff Time</p> <p>Operating Budget</p>
<p>3. Support high-quality schools that are adequately staffed and properly equipped.</p> <p>Mansfield’s schools are essential to maintaining high-quality education for the community’s children, property values, and the overall quality of life. Mansfield is in competition with other communities for the best teachers and to maintain these teachers and excellence, Mansfield’s schools need appropriate levels of staffing, supplies, and instructional materials and equipment.</p>	<p>Mansfield Board of Education</p> <p>Town Council</p>	Ongoing	<p>Operating Budget</p>

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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Strategy B | Improve long-term sustainability of the education system to ensure continued high-quality programs and performance within the context of enrollment projections and financial constraints.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Coordinate with other Region 19 school systems.</p> <p>As an initial step toward broader regionalization discussions, the MBOE should work with the boards of education in Ashford and Willington to improve coordination of curricula, administration and transportation.</p>	Mansfield Board of Education	Ongoing	Staff Time Volunteer Time
<p>2. Improve partnerships with the University of Connecticut, Eastern Connecticut State University and area community colleges.</p> <p>The Town, schools, universities and colleges should improve and strengthen their established collaboration through shared education programs and facilities for their mutual benefit, including mutual aid agreements focused on campus and community safety.</p>	Town Council Mansfield Board of Education Region 19 UConn ECSU	Ongoing	Staff Time Volunteer Time
<p>3. Advocate for increases in State education funding.</p> <p>Examples of issues that should be addressed include fully funding the education formula, adjusting the formula, changes to minimum budget requirements, and increases in State funding for special education including the excess costs formulas for programs required outside of the district.</p>	Town Council Mansfield Board of Education Region 19 Board of Education State Senator and Representatives	Short Term	Staff Time Volunteer Time
<p>4. Advocate for changes to State school construction reimbursement formulas.</p> <p>Current state funding formulas do not support sufficient funding for renovating or constructing new elementary schools. Without changes to state funding formulas, it is unlikely that the Town can financially support ‘renovate like new’ projects at the existing schools unless Town taxpayers are willing to fund the project.</p>	Town Council Mansfield Board of Education	Short Term	Staff Time Volunteer Time

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>5. Initiate a new school facilities planning process.</p> <p>A new process should include a strong community engagement program, clear identification of existing and projected deficiencies of existing facilities, a statement of project goals, alternatives to address deficiencies and assessment of the financial, educational and community impacts of those alternatives. Opportunities for alternative/non-traditional funding sources should also be identified. The community should be engaged early and often to identify priorities and areas of compromise.</p>	<p>Mansfield Board of Education Town Council</p>	<p>Medium Term</p>	<p>Staff Time Volunteer Time Operating Budget CIP</p>
<p>6. Participate in discussions regarding creation of a regional K-8 school district.</p> <p>Like Mansfield, surrounding communities have been experiencing declining enrollment. Unless there is significant change in enrollment trends, it will become more difficult to financially sustain individual school districts. The Town should participate in discussions with Region 19 and surrounding towns about the possible creation of a regional K-8 school district. The status of discussions and potential ramifications on Mansfield schools should be considered during the school facility planning process.</p>	<p>Mansfield Board of Education</p>	<p>Medium-Long</p>	<p>Staff Time Volunteer Time</p>

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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CHAPTER 5: COMMUNITY LIFE

Goal 5.3

Mansfield public safety services—police, fire and EMS—protect life and property through a robust program of education, enforcement, and preparedness.

Measures of Effectiveness:

- Number of volunteer firefighters increases
- Number of fire investigations remains stable or declines
- Number of DUIs decreases
- Number of Nuisance Ordinance citations decreases
- Number of EMS calls related to substance abuse and preventable injuries decreases

Strategy A | Ensure efficient and effective deployment of resources.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Enhance volunteer recruitment and retention programs.</p> <p>Mansfield’s ability to meet public safety service demands is dependent on maintaining a robust volunteer network, including fire fighters, emergency medical technicians, neighborhood watch groups and animal shelter workers. The Town should continue efforts to retain and expand the volunteer corps, including professional development opportunities and initiatives aimed at recruiting UConn students with volunteer experience in their home communities.</p>	<p>Fire Mansfield Firefighters Association Town Council</p>	<p>Ongoing</p>	<p>Staff Time Volunteer Time</p>
<p>2. Update the Fire and Emergency Services Master Plan.</p> <p>The last fire services master plan was prepared in 1993, prior to the creation of a combination career/volunteer fire department. An updated master plan should identify optimal service standards including emergency response times based on the recommendations for combination fire departments identified in NFPA Section 1720, and actions that would need to be taken with regard to facilities, equipment and staffing to achieve those objectives. Facility planning should be integrated with the overall town facilities plan identified in <i>Goal 5.5, Strategy B</i> and take into account changing emergency management responsibilities and land use plans to ensure that any new facilities are appropriately designed and sited, based on Town goals and future needs.</p>	<p>Fire Mansfield Firefighters Association Town Council</p>	<p>Short Term</p>	<p>Staff Time Volunteer Time Operating Budget CIP</p>

SHORT TERM = 2015–2019

MEDIUM TERM = 2020–2024

LONG TERM = 2025–2035

ACTIONS	WHO	WHEN	RESOURCES
<p>3. Expand regional public safety partnerships.</p> <p>The Town currently has informal mutual aid agreements with surrounding communities. Continued support of these partnerships is essential to effective emergency response. The Town should also participate in efforts to develop a regional animal control program instead of the town-by-town services currently provided.</p>	<p>Fire Police</p>	Ongoing	Staff Time
<p>4. Partner and work cooperatively with the UConn Police and Fire Departments on provision of emergency services.</p> <p>Close coordination in training and services with the UConn Police and Fire Departments will continue to be essential to ensure quality of life to all residents.</p>	<p>Fire Police</p>	Ongoing	Staff Time
<p>5. Enhance police and public safety resources consistent with the vision identified in the 2010 Police Services Study.</p> <p><i>See Chapter 5, section 2 (Public Safety) for more information.</i></p>	<p>Town Manager Town Council</p>	Ongoing	<p>Staff Time Operating Budget</p>
<p>6. Seek state and other grant funding to support enhancements to public safety services.</p> <p>In addition to various federal grants that are available to enhance public safety services, the Town should actively advocate for additional state funds to assist in meeting the public safety demands spurred by the continued expansion of UConn and the anticipated growth in off-campus student population.</p>	<p>Fire Police</p>	Ongoing	Staff Time
<p>7. Periodically assess the Town's public safety service needs.</p> <p>Public safety and emergency service needs should be assessed every three to five years to address changes in the community such as type and location of development, population increases or decreases, and availability of funding for services. Changes in service delivery models may be needed, based on the evaluation.</p>	<p>Fire Police</p>	Ongoing	Staff Time

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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Strategy B | Focus on prevention and education as tools to manage costs and demands for public safety services. See Goal 7.3 for education and enforcement actions related to neighborhood quality of life.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Expand efforts to reduce fires and fire-related injuries.</p> <p>Community education and outreach programs such as distribution of smoke and carbon monoxide detectors should be maintained and expanded as staffing and funding levels allow. Sufficient resources are also needed to maintain compliance with statutorily mandated inspection schedules.</p>	Fire Marshal	Ongoing	Staff Time Volunteer Time Operating Budget
<p>2. Proactively enforce building, housing and fire codes as funding and staffing levels allow.</p> <p>Enforcement of fire, building and housing codes are an important tool in preventing fires and injuries, both of which contribute to escalating emergency service demands. Proactive inspection activities are currently constrained by other demands related to permitting and fire investigation. Additional staff may be needed as the Town continues to grow.</p>	Building & Housing Inspection Fire Marshal	Ongoing	Staff Time Operating Budget
<p>3. Raise public awareness on best practices for building and property maintenance.</p> <p>Regular maintenance of buildings and properties can reduce the potential for fire and other safety hazards. The Town should continue to expand efforts to educate the public on how to properly maintain buildings and properties, such as annual cleaning of chimneys/wood stoves, tree trimming, etc.</p>	Building and Housing Inspection Fire Marshal	Ongoing	Staff Time Operating Budget
<p>4. Collaborate with UConn and local and regional health and human service organizations on alcohol awareness, wellness and injury prevention programs.</p> <p>The vast majority of service calls requiring Fire Department response are for emergency medical services. Collaborating with UConn and local and regional health and human service organizations on community education and individual outreach can help to address both immediate and long-term concerns.</p>	Human Services EHHD Fire Park & Rec	Ongoing	Staff Time Operating Budget
<p>5. Continue to encourage and engage Mansfield's youth to become active in the community.</p>	Fire Police	Ongoing	Staff Time Operating Budget

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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Strategy C | Strengthen capacity to respond to disasters.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Conduct periodic training and disaster drills for Town staff and community partners.</p> <p>While first responders are prepared for these types of events, disaster response often involves support from other agencies and staff that may not be familiar with emergency response protocols. Regular training and drills will provide support staff with the knowledge and tools needed to be able to effectively respond during an actual emergency.</p>	Emergency Management	Ongoing	Staff Time
<p>2. Continue to coordinate with local and regional organizations on temporary shelter activities.</p> <p>During past storm events, Mansfield has worked with the Red Cross to establish a regional shelter and with local organizations (Mansfield Community Center, E.O. Smith High School, UConn) on respite services. Mansfield should continue to cultivate these relationships and identify specific procedures for respite and shelter activities to ensure efficient provision of services.</p>	Emergency Management Human Services Parks & Rec Region 19 Mansfield Board of Education UConn	Ongoing	Staff Time Volunteer Time
<p>3. Develop and implement a community education program on preparing for natural disasters.</p> <p>Residents need to be prepared to shelter in place for 3 to 5 days. To improve resident capacity, an education and outreach program should be developed that identifies actions families should take in advance of a coming storm as well as protocols for what type of community services can be expected. Information on disaster and emergency response should be available on the Town website, through schools, in hard copy, and via mobile phones. The program should also encourage development of neighborhood support networks to facilitate neighbors helping neighbors during emergency situations.</p>	Emergency Management Emergency Management Advisory Council EHHD Human Services Library	Ongoing	Staff Time Volunteer Time Operating Budget

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>4. Enhance communications with the community.</p> <p>Communication with the public prior to, during and after incidents is critical to the Town’s ability to efficiently respond to emergencies. Currently the Town relies primarily on its website and press releases to keep the public informed of emergency response efforts. Efforts to improve availability of public information should include use of social media, email lists, distribution of information at key town facilities such as the schools, Library, Senior Center and Community Center and the Code Red community notification system.</p>	<p>Emergency Management Fire Police</p>	<p>Ongoing</p>	<p>Staff Time</p>
<p>5. Update the Town’s Emergency Operations Plan (EOP).</p> <p>The Emergency Operations Plan establishes the framework for the Town’s response to natural and manmade emergencies by establishing protocols and assigning responsibilities to various town staff and partner agencies. As an initial step, the EOP should be updated to reflect best practices as identified in FEMA’s Comprehensive Preparedness Guide (CPG) 101: Developing and Maintaining Emergency Operations Plans. The revised EOP should include procedures and timeframes for regular updates.</p>	<p>Emergency Management</p>	<p>Short Term</p>	<p>Staff Time Volunteer Time</p>
<p>6. Create a Mansfield Community Emergency Response Team (CERT).</p> <p>FEMA has developed a model to train community members to serve as an extension of first responders until professional services can arrive. The CERT program initiation and maintenance should follow the recommendations outlined by FEMA.</p>	<p>Emergency Management</p>	<p>Short Term</p>	<p>Staff Time Volunteer Time</p>

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>7. Expand membership on the Emergency Management Advisory Council.</p> <p>The current Emergency Management Advisory Council as established in the Code of Ordinances is comprised of the Mayor, Town Manager, Director of Eastern Highlands Health District, Superintendent of Schools, Director of Public Works, Senior Resident Trooper, Chief of the Mansfield Volunteer Fire Company, Chief of the Eagleville Fire Department, Emergency Service Administrator and two other persons to be appointed by the Town Manager. The Committee membership should be updated to include the Fire Chief in lieu of the two volunteer fire chiefs as well as adding members to address disaster recovery planning.</p>	Town Council	Short Term	Staff Time Volunteer Time
<p>8. Replace or upgrade emergency generators and communications equipment at key town facilities.</p> <p>The continued operation of certain town facilities (Fire Stations, Town Hall, Community Center, Public Works Garage) during an extended power outage is essential to the Town’s ability to provide emergency response and community shelter activities. Many of the generators are several decades old, increasing the potential for catastrophic failure during an event. Some facilities that serve elderly and special needs populations such as the library and senior center do not have emergency generators; installation of generators at these facilities should be a priority. Similarly, telephone and internet communication systems are integral to emergency response efforts and must be maintained.</p>	Facilities Information Technology	Short–Medium	CIP Grants
<p>9. Prepare a Disaster Recovery Plan.</p> <p>The focus of an Emergency Operations Plan (EOP) is typically on emergency preparation and how to respond as the emergency is occurring. A disaster recovery plan includes both pre- and post-disaster strategies to guide the community’s recovery. FEMA’s September 2011 National Disaster Recovery Framework outlines the key responsibilities and actions that should be taken at the local level to ensure that communities are adequately prepared to implement recovery operations. This document should be used as the foundation for development of a disaster recovery plan for Mansfield.</p>	Town Manager Emergency Management Emergency Management Advisory Council Planning	Medium Term	Staff Time Volunteer Time Grants

SHORT TERM = 2015–2019 MEDIUM TERM = 2020–2024 LONG TERM = 2025–2035

CHAPTER 5: COMMUNITY LIFE

Goal 5.4 Mansfield is a healthy, active community.

Measures of Effectiveness:

- Increase in number of community gardens
- Increase in community fitness event participants
- Reductions in incidence of liver disease, lung disease and alcohol-related deaths

Strategy A | Increase access to healthy foods, with strong support for locally grown foods. See Goal 6.4 (Economic Development) for related actions on promoting agriculture.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Support creation of additional community gardens.</p> <p>The Town currently has one community garden that is fully leased each year, which is located on university property subject to an informal agreement. New gardens should be targeted to areas with a concentration of multi-family units and small-lot single family neighborhoods.</p>	Parks & Rec	Ongoing	Staff Time Operating Budget
<p>2. Expand school gardens at elementary and middle schools.</p> <p>Although much of the school year is not during the growing season, further development of school gardens can provide both educational and nutrition benefits. The elementary and middle schools currently have greenhouses; this hands-on opportunity enriches the educational experience, and can be paired with health and nutrition education. Potential partners include UConn and E.O. Smith agriculture programs to provide assistance in starting and maintaining the gardens. The potential for maintaining gardens when schools are not in session should be explored.</p>	Mansfield Board of Education	Ongoing	Staff Time Volunteer Time Operating Budget
<p>3. Provide healthy choices at community facilities and events.</p> <p>Establish a town goal of having at least 50% of food options in community facilities (i.e. vending machines) and at town meetings/events be healthy. Examples of healthy choices can be found in EHHD’s Healthy Meetings brochure. Encourage UConn to adopt a similar policy.</p>	Town Manager	Ongoing	Staff Time Operating Budget

SHORT TERM = 2015–2019

MEDIUM TERM = 2020–2024

LONG TERM = 2025–2035

ACTIONS	WHO	WHEN	RESOURCES
<p>4. Support efforts to facilitate use of SNAP benefits at the Storrs Farmers Market.</p> <p>While the State of Connecticut has a program that would provide a free EBT equipment to markets that register with the USDA, there are added costs that the Market would need to absorb including an annual subscription service and staffing (both at the market and to distribute checks to individual vendors after each market). The Town should work with the Market to identify possible funding resources such as other grant programs to offset these additional costs.</p>	<p>Agriculture Committee</p> <p>Parks & Rec</p> <p>Human Services</p> <p>Storrs Farmers Market</p>	<p>Medium Term</p>	<p>Staff Time</p> <p>Volunteer Time</p> <p>Grants</p>

Strategy B | Promote active living. See Goals 3.3 (Strategies A, B, and C), 9.1 (Strategy B), and 5.6 (Strategy A) for related strategies and actions.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Support community-wide fitness events.</p> <p>Each spring, the Town sponsors the John E. Jackman Tour de Mansfield, with 5-mile, 20-mile and 40-mile bicycle routes through town. Events such as these foster community spirit, provide opportunities for residents to get together and promote active living. Other opportunities include continued participation in and cross-promotion of events such as Connecticut Trails Day, Walktober, and local running events such as 5-K races as well as support for regional events that come through town.</p>	<p>Parks & Rec</p> <p>EHHD</p>	<p>Ongoing</p>	<p>Staff Time</p> <p>Operating Budget</p>
<p>2. Educate the public on the benefits of health and wellness.</p> <p>Identify health and wellness benefits of various town initiatives as part of event promotion and reporting.</p>	<p>Parks & Rec</p> <p>EHHD</p>	<p>Ongoing</p>	<p>Staff Time</p>

Strategy C | Promote healthy living and behaviors.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Utilize Community Center as resource for all residents to remain active.</p>	<p>Parks & Rec</p>	<p>Ongoing</p>	<p>Staff Time</p>



ACTIONS	WHO	WHEN	RESOURCES
<p>2. Encourage owners of multi-family housing developments to adopt smoke-free policies.</p> <p>Smoke-free housing policies provide both health and public safety benefits to residents, as well as possible financial advantages to property owners such as reduced insurance rates and lower apartment cleaning costs. Information on the benefits of a smoke-free housing policy as well as suggestions on how to move forward can be found in HUD's Smoke-Free Housing: A Toolkit for Owners/Management Agent of Federally Assisted Public and Multi-Family Housing.</p>	EHHD	Ongoing	Staff Time
<p>3. Consider adopting smoke-free policies for Town facilities and properties.</p> <p>Adoption of smoke-free policies for Town facilities similar to those adopted for parks would protect residents from the impacts of second-hand smoke on Town properties.</p>	Town Manager Town Council	Short Term	Staff Time



CHAPTER 5: COMMUNITY LIFE

Goal 5.5

Mansfield maintains high-quality public facilities that support town goals.

Measures of Effectiveness:

- Number of ADA accessibility issues in Town facilities decreases
- Increase in transit, bicycle and pedestrian access to town facilities
- Decrease in municipal energy consumption

Strategy A | Use physical design to foster community interaction.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Improve connections between existing civic buildings and the greater community.</p> <p>Schools, libraries, parks and other civic buildings are anchors of community life and should be designed to maximize connections to the community at large. Many of our existing civic facilities such as the library and our schools are accessible only by car. Improving transit, bicycle, and pedestrian access to these facilities should be a priority.</p>	<p><i>See Goal 9.1 for specific actions related to improving transportation options</i></p>		
<p>2. Integrate ‘Third Places’ into centers of community activity.</p> <p>Third places are where people connect with one another and their community. Some are privately-owned, such as breakfast places; others are public—libraries, parks and playgrounds. Collectively these places are the backbone of community life. Projects such as the Mansfield Community Playground offer opportunities to not only create a new third place, but also to strengthen community connections by engaging residents in its transformation from idea to reality. As areas such as Four Corners and the East Brook Mall area redevelop, public spaces should be integrated into the design to foster community connections.</p>	<p>Town Council PZC Parks and Rec</p>	<p>Ongoing</p>	<p>Staff Time CIP Grants</p>

ACTIONS	WHO	WHEN	RESOURCES
<p>3. Encourage use of universal design principles in design of both public and private spaces.</p> <p>Universal design goes beyond the requirements of the Americans with Disabilities Act to encourage the design of spaces to be usable by all people. The Center for Universal Design at the University of North Carolina has developed a set of universal design principles that could be used as a guide for review of both public and private development projects. (http://www.ncsu.edu/www/ncsu/design/sod5/cud/about_ud/udprinciples.htm)</p>	<p>Town Council PZC Advisory Committee on Needs of Persons with Disabilities</p>	<p>Ongoing</p>	<p>Staff Time</p>
<p>4. Adopt site selection and design criteria for new civic facilities.</p> <p>If new civic facilities are contemplated, they should be located and designed to foster community interaction. Site selection and design criteria would help to ensure that new facilities meet broader community goals as well as specific service needs. Key concepts that should be included in these criteria include: connectivity to community amenities and public spaces, accessibility (walking, biking, transit), and environmental suitability. The siting criteria developed by the Sustainability Committee during its review of the school building project should be used a starting point. Building design/architectural standards should also be considered, including minimum standards for energy efficiency and green design. These criteria should be adopted by both the Planning and Zoning Commission and Town Council. A thorough analysis of potential sites should be undertaken with ample opportunity provided for community input before a preferred site is selected.</p>	<p>Town Council PZC Sustainability Committee Planning</p>	<p>Short Term</p>	<p>Staff Time Volunteer Time</p>

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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Strategy B | Identify facility improvements to meet service and sustainability goals.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Improve ADA accessibility of Town facilities and properties.</p> <p>A thorough review of ADA access to Town buildings was conducted in 2010. Recommended improvements should continue to be implemented as funding is available to improve the ability of all residents to participate in town activities. Consideration should also be given to improving access to other Town facilities, such as recreation areas and playgrounds, as part of the development of a Parks and Recreation Master Plan. Similarly, site improvements should also be identified and implemented to improve access.</p>	<p>Facilities DPW Parks & Rec Town Council</p>	<p>Ongoing</p>	<p>Staff Time Operating Budget CIP Grants</p>
<p>2. Identify short-term and long-term costs of any proposed facility improvements.</p> <p>As part of facility planning efforts, long-term maintenance requirements should be identified so that upgrades can be included in future budgets.</p>	<p>Facilities Finance Town Council</p>	<p>Ongoing</p>	<p>Staff Time</p>
<p>3. Phase-in improvements over multiple fiscal years when possible.</p> <p>To facilitate implementation of improvement plans, efforts should be made to phase improvements in over multiple years when possible.</p>	<p>Town Manager Facilities Finance Town Council</p>	<p>Ongoing</p>	<p>Staff Time</p>



ACTIONS	WHO	WHEN	RESOURCES
<p>4. Develop a Public Facilities Master Plan.</p> <p>Several of Mansfield’s Town buildings are over 50 years old. While improvements have been made over the years, many of these facilities may need updates to improve both energy efficiency and overall function based on current operations. Other sections of this Plan have recommended specific facility planning for operations such as emergency services, schools and parks/recreation; similar planning should be done for general Town facilities as well as park restroom and storage buildings. The resulting master plan should be formally adopted by the Town Council after review by the Planning and Zoning Commission and other relevant Town advisory committees.</p> <p>Where new construction is considered, options for reusing portions or all of existing buildings should be explored. Master plans should also identify policies for the amount of construction and demolition debris produced on a construction site to be reused or recycled. <i>See Goal 5.5, Strategy A, Action 4 for details on site selection and design criteria that should be adopted to guide development of new facilities.</i></p> <p>Once the respective facilities master plans have been completed, improvements will need to be prioritized prior to inclusion in the Capital Improvement Program. Factors to be considered in developing a priority list of improvements should include costs, financing, service impacts, potential for energy/operations savings, and ability to phase improvements over time.</p>	<p>Town Manager Facilities Town Council</p>	<p>Short Term</p>	<p>Staff Time CIP</p>

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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CHAPTER 5: COMMUNITY LIFE

Goal 5.6

Mansfield’s policies, programs and land use regulations support community service and health/wellness goals.

Measures of Effectiveness:

- Increase in number of community gardens
- Increase in number of outdoor recreation facilities in developed areas
- Increase in miles of sidewalks, bikeways and walking trails

Strategy A | Strengthen regulations related to provision of community recreation and amenities to support community service and health objectives.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Require new age-restricted and assisted living communities to include community meeting space for senior programs/services.</p>	PZC	Short Term	Staff Time Community Challenge Planning Grant
<p>2. Require new developments to address opportunities for active living.</p> <p>In addition to current minimum open/recreation space for multi-family housing, regulations should encourage active recreation opportunities both on-site and through connections to existing town trails, sidewalks and parks.</p>	PZC	Short Term	Staff Time Community Challenge Planning Grant
<p>3. Encourage creation of community gardens in multi-family and small lot single-family developments.</p> <p>Update zoning and subdivision regulations to encourage creation of community gardens in new developments where lot sizes would not accommodate private gardens.</p>	PZC	Short Term	Staff Time Community Challenge Planning Grant
<p>4. Consider impacts of proposed regulation changes, policies and significant development projects on community health.</p> <p>Policies and regulations that influence how and where various uses are built can impact overall community health. As the key health concerns identified in Mansfield are incidence of liver disease, lung disease and alcohol-related deaths, consideration of health impacts could be targeted to how policies, regulations and new developments can have a positive impact on these community health issues. For instance, by increasing access to healthy food and opportunities for physical activity, by reducing potential impacts of air pollution and proximity/concentration of package stores.</p>	PZC Town Council	Ongoing	Staff Time Community Challenge Planning Grant

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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6 DIVERSIFYING THE ECONOMY



TOPICS IN THIS CHAPTER INCLUDE

Economic Conditions and Trends

Key Existing Economic Sectors

Potential Growth Opportunities

This chapter focuses on Mansfield's economy and the role it plays in supporting the quality of life that is highly valued by residents, including the importance of sustaining and growing Mansfield's agricultural sector. A strong, diverse economy provides multiple benefits for residents, including jobs, access to goods and services, and financial support for community services such as education, public safety and recreation through a robust commercial tax base. Economic growth must also be balanced by sensitivity to preserving the unique character that is Mansfield, particularly in the more rural residential areas of the community.

This planning effort included the development of stand-alone strategy reports on economic development and agriculture. Much of the information and analysis in this chapter has been summarized from those documents; readers should refer directly to those reports for more detail.

what the **community** said

DIVERSIFYING THE ECONOMY

Throughout the planning process, community members focused on the need for balanced, managed economic growth that supports community goals and objectives without compromising the rural character enjoyed by the majority of town. While residents expressed concern with local tax burdens and recognized that growth in the commercial tax base could help compensate for declining state revenues and alleviate tax burdens on homeowners, there was clear concern expressed with the potential impacts of new growth on the community. Themes in the comments on growing the Mansfield economy included:

- Desire for a greater variety of retail establishments and more retail establishments targeting a non-student clientele
- Desire to retain existing agricultural businesses and encourage formation of new ones
- Need to retain and support existing and locally owned businesses
- Need to expand markets for locally produced agricultural goods
- Desire to increase the availability of locally grown food
- Need to improve Town policies and regulations to be more farm-friendly
- Preference for focusing retention and recruitment efforts on businesses with a strong commitment to the town
- Need to understand and address traffic impacts that might be associated with new development
- Desire for clustering new development and providing sidewalks linking residential areas to commercial clusters
- Concern with expanding the built footprint of the town (including the new UConn Technology Park) and associated impacts of new development on the town's character, including impacts of new water and sewer infrastructure to support growth
- Preference for redevelopment of existing sites instead of developing vacant properties
- Concerns with how much retail the town can support
- Questions as to whether redevelopment efforts would succeed without a redevelopment agency to help guide new development

“I would like to see the rural character of Mansfield maintained. At the same time to develop the infrastructure such that the economics of living in town are well balanced by growth of the tax income (i.e., by making it attractive for new businesses and tax paying enterprises to come to town.”

“[I’d like to see] smart growth... that expands tax base in an environmentally smart way, partners with the University, and encourages professionals and families to live here.”

“I envision a Mansfield where you don’t have to go out-of-town for amenities that modern 20-and-30-somethings take for granted.”

FROM MANSFIELD RESIDENTS

MANSFIELD'S ECONOMY TODAY



Photo credit: Don Couture

Storrs Center

From its roots as an agrarian economy in the 18th century to a town of mill villages centered around small-scale industries in the 19th century to the expansion of UConn as the state's flagship public university campus in the mid-twentieth century, Mansfield has continually adapted to changing economic conditions. The growth of UConn brought many benefits to the community, such as enhanced water, wastewater and transportation infrastructure and access to arts, culture, education and recreation amenities unparalleled in similarly-sized communities. The presence of UConn also had a significant influence on the Town's revenue stream. Inclusion of UConn students in the town's overall population resulted in higher educational cost sharing payments to the Town than would have otherwise been received. Combined with significant State PILOT (Payment in Lieu of Taxes) revenues, the Town was able to support a wide variety of community services and activities without actively engaging in economic development.

Conditions have changed in the 21st century, and Mansfield should take a fresh look at its economic underpinnings. State revenues have significantly declined over the last ten years, forcing the Town to find new sources of revenue to maintain its high level of services. UConn has become a linchpin in statewide economic development efforts with a focus on Science, Technology, Engineering and Math (STEM) activities designed to catapult UConn into the top tier of public research institutions and attract new talent

and businesses to the state. As the town’s population ages, the need to attract and retain younger professionals and families will be essential to Mansfield’s continued economic diversity and viability.

The Town must take a more active role in economic development activities to maintain the high level of services expected by residents, of equal importance is the need to ensure that new business growth and development is balanced with other goals related to preservation of natural resources and rural character. In addition, growth of the agricultural sector has been identified as a key objective by the community, both to increase food security and community resiliency, and also because of the scenic and rural character of the community. Farm and forest lands also contribute to the Town’s economy by providing “ecosystem services,” such as clean water, and by requiring lower levels of Town services than residences.

Together, these aspirations and circumstances provide a foundation for shaping town economic development efforts in the years ahead.

GUIDING ECONOMIC DEVELOPMENT IN MANSFIELD

- Preserve Mansfield’s rural and small-town character while providing a healthy economy that supports essential public services like schools.
- Emphasize “sustainable development” that meets the needs of the present without compromising the needs of future generations, and that balances the pursuit of economic prosperity with environmental quality and social equity.
- Support businesses that are already established within the community.
- Focus new business development and expansion efforts on low-impact, high-value businesses such as research and development, professional and business services, and small-scale production of high-value products—businesses that generally have a small footprint and limited environmental impacts.
- Site new businesses and developments preferably on land that is already developed or zoned for commercial and industrial development.
- Support sustainable, productive agriculture and forestry, farmland preservation and farmland restoration. Tax revenues from these land uses exceed the cost of community services for the Town.
- Provide active leadership in the region’s agricultural identity and successes.
- Establish flexibility in land use and business regulation that supports entrepreneurship and new business development consistent with the town’s existing character.
- Sustain the community’s cultural and natural assets through appropriately focused and scaled tourism activities.
- Expand retail and consumer services focused on meeting the needs of local residents and workers, or on drawing visitors with unique offerings that reinforce the town’s identity.
- Develop, attract and retain a talented workforce to support innovation, job creation, and new business ventures that are key to the long-term success of the local economy.
- Collaborate regionally where working with adjacent communities through regional entities has the potential to achieve economic synergies and shared benefits.
- Protect the water resources that economic growth depends on.

The pages that follow provide more information on existing economic conditions, trends and opportunities for Mansfield as well as the variety of tools and resources available to help the town achieve its goals.

WHAT IS “ECONOMIC DEVELOPMENT?”

Most fundamentally, economic development is about maintaining and expanding businesses that export their products to consumers outside the community, thereby importing income and increasing local employment and wealth. These types of businesses are referred to as the “traded sector.” The income from the traded sector circulates within the community, creating demand for goods and services from businesses that primarily service local residents such as retail and consumer services; these types of economic activities are referred to as the “sheltered sector.” Sheltered sector businesses such as supermarkets and pharmacies, local attorneys, physicians and accountants, and automotive repair shops and hair salons, provide goods and services primarily to people who live and work in the community

While attracting income from outside the community is the foundation of economic development efforts, communities often have two other economic development goals:

- **Expansion of the sheltered sector.** While the sheltered sector typically relies on income from the traded sector for its development, local impediments to the growth of the sheltered sector such as a lack of suitable land and buildings or the absence of critical infrastructure must be addressed to ensure that the sheltered sector grows to its full potential. Addressing these impediments can increase employment and provide residents convenient access to a wider array of goods and services. Mansfield residents have expressed a desire for more retail and services.
- **Expansion of the tax base.** Commercial, industrial, agricultural and forest properties are typically net generators of tax revenue. Retention and expansion of these land uses provide revenue to reduce the residential property tax burden while maintaining quality public services which, in addition to enhancing quality of life, can be an important factor in attracting additional business activity.

TOOLS IN THE ECONOMIC DEVELOPMENT TOOL BOX

Communities can use a range of tools to achieve economic development goals. These tools are not applied in isolation, but are typically complementary and synergistic in supporting the overall economic development program, including agriculture.

- **Entrepreneurship and small business development.** Tools to help small businesses start up and grow include entrepreneurial training programs, one-on-one technical assistance, networking and col-

laboration venues, and various forms of public or quasi-public business financing.

- **Business Retention and Expansion (BRE).** Established businesses face a range of challenges as they seek to retain profitability and pursue expansion opportunities. Business retention and expansion programs typically involve one-to-one outreach, identification of key issues that threaten retention or impede growth, and follow-up to directly resolve these issues or broker needed assistance. Econom-

ic gardening, a variant of business retention and expansion programs, involves intensive market and competitive analysis to assist rapidly expanding firms to develop new products and markets.

- **Business recruitment.** This approach uses marketing and incentives to induce established businesses that may be expanding or building new facilities to locate in a community. Recruitment is typically a state or regional function, particularly in areas with small communities with limited economic development capacity and incentive funding, and is typically targeted to larger businesses.
- **Workforce development.** Businesses need appropriately trained and skilled workers to provide quality products and services at profitable levels. Education and training institutions need to understand the workforce needs of local employers and work with employers to ensure that their programs are responsive. Workforce development efforts typically take place at the regional level, particularly in rural areas, but local communities can collaborate with employers on career development at the K-12 level.
- **Talent attraction and retention.** As the ability to attract skilled professional and technical workers is critical to success of high-value, high-wage, growth businesses, the community environment is an important factor in decisions by these businesses about where to locate. Communities are consequently paying more attention to developing the amenities necessary to attract highly skilled workers who have choices of where to live and work.
- **Regulatory and tax policies.** Businesses newly locating in a community or moving into new space typically need to obtain certain regulatory approvals, particularly when there is a change in use or need to make a physical alteration to the property. The more these regulations and regulatory processes can be made user friendly without compromising community safety and environmental quality, the less they are an impediment to attracting and retaining desirable businesses. Communities can also offer various forms of tax incentives to promote desirable forms of business development
- **Real estate and infrastructure development.** As businesses start, expand or relocate in a community, they need appropriate land, space and infrastructure to meet their facility needs. If a community targets certain kinds of business activity as part of its economic development strategy, it must ensure that its land use regulations and infrastructure investments are aligned with those targets.
- **The local role in economic development.** How a community uses these economic development tools is a function of its own resources and capacities, as well as the mission, resources and capacities of other local or regional organizations that can be mobilized as partners. In general, the community wants to adopt the least costly and resource-intensive role necessary to achieve the desired outcome. Potential roles for the Town of Mansfield in implementing an economic development plan include:
 - > Information provider
 - > Broker (matching businesses with service providers)
 - > Catalyst (convening partners to develop a program or resource)
 - > Partner
 - > Investor
 - > Program developer and manager

1. Economic Conditions and Trends

For detailed information on current economic conditions, please refer to the July 2013 *Mansfield Tomorrow Economic Development and Agriculture Strategy Reports*.

A) MANSFIELD HAS THE ECONOMIC PROFILE OF A “COMPANY TOWN” AND ITS ECONOMY IS PERFORMING RELATIVELY WELL.

Leading Economic Sectors. As home to the state’s flagship university campus, the Mansfield economy relies heavily on state government. In 2011, state government accounted for 56.2% of total jobs in town, an 8.7% increase over 2001. In contrast, private industry accounted for 36.4% of total employment in 2011, an increase of 9% since 2001. Other major economic sectors include health care and social assistance, and accommodation and food services; these sectors also experienced significant growth between 2001 and 2011, with increases of 29.1% and 27.5%, respectively. These three sectors also experienced the greatest growth between 2001 and 2011.

The following industries experienced declines from 2001 to 2011: construction, manufacturing, finance and insurance, real estate and rental/leasing, and administrative/support and waste management/remediation services.

Unemployment. As shown in Table 6.1, Mansfield is performing relatively well in terms of employment growth and unemployment compared to regional and state averages. However, average annual wages, while exceeding the regional average, still lag the state average.

	MANSFIELD	REMAINDER OF WINDHAM/TOLLAND COUNTIES	STATEWIDE
% Employment Growth 2001-2011	8.0%	2.4%	-3.2%
Unemployment Rate 2011	7.5%	8.5%	8.8%
Average Wage 2011	\$49,637	\$40,180	\$61,110

Source: Quarterly Census of Employment and Wages and Local Area Unemployment Statistics, U.S. Department of Labor

How Mansfield Compares to the Region. According to data comparing employment growth in Mansfield to the remainder of the Tolland-Windham region, there are three sectors which have seen strong growth in the region but not in Mansfield, presenting potential opportunities for new business growth:

- *Professional and technical services* (including legal, accounting, architecture, design, engineering, computer-related, and research and development services among others)

- *Administrative and waste management services* (including office administrative services, employment placement agencies, business services, security services, and building services among others)
- *Other services* (including automotive, consumer product repair, laundry and personal care services among others)¹

Data on employment relative to population for major industries oriented heavily to local consumers indicates that Mansfield is capturing more than its share of employment in food services, health care, and other services, but less than its share of retail employment. The level of retail activity is expected to grow with the completion of Storrs Center, although a large share of the new businesses are in food services (see Table 6.2).

	MANSFIELD	REMAINDER OF TOLLAND & WINDHAM COUNTIES
Retail	22.2	35.7
Accommodation & Food Services	43.0	21.7
Health Care & Social Assistance	42.8	18.1
Other Services	11.8	9.5

Source: Quarterly Census of Employment and Wages, U.S. Department of Labor; U.S. Census Bureau, 2013

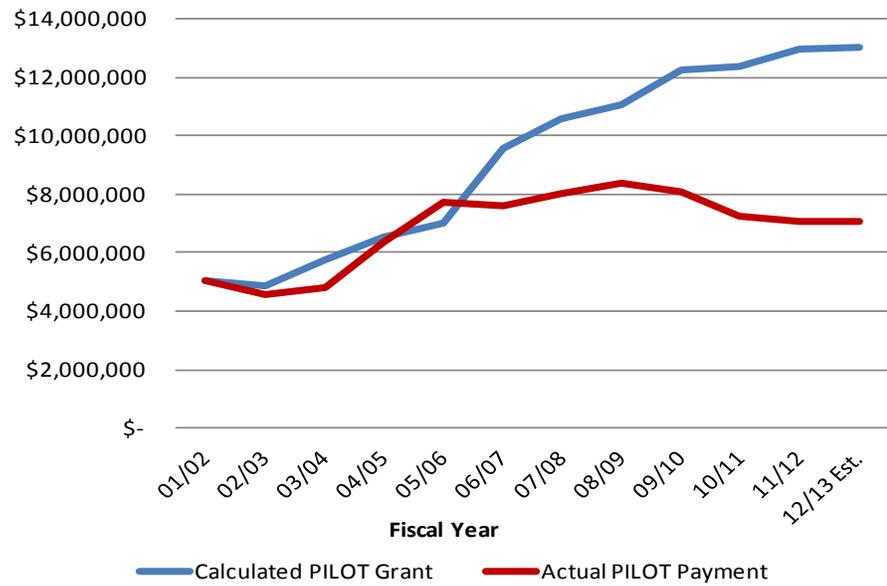
B) MANSFIELD’S ECONOMIC STRUCTURE HAS FISCAL IMPLICATIONS.

The key role played by UConn in Mansfield’s economy has significant impacts not only on the nature of employment and business activity, but also on local tax revenue. The tax-exempt status of UConn and other state-owned property makes the town heavily dependent on state aid for local revenue, particularly given that **the value of tax exempt property in Mansfield exceeds the value of taxable property**. Intergovernmental transfers accounted for 37.45% of the Town’s revenues in FY 2014, almost double the average of 18.8% for Connecticut municipalities in the 10,000-30,000 population range.²

The largest source of intergovernmental transfers, the state’s Payment In Lieu of Taxes (PILOT) for state-owned properties, is based on an effective tax rate that is about one-quarter of that paid by private property owners and in recent years the state has not paid the full amount. Moreover, major sources of state aid, including PILOT payments and Pequot Grants (unrestricted grants to municipalities from the proceeds of a state fund based on casino gaming revenue), have been flat or declining in recent years (see Figures 6.1 and 6.2). While UConn provides some public services that reduce the Town’s costs such as water and sewer services to some town residents and businesses, free access to the university bus system for residents, and campus police, these services are unlikely to fully compensate for the lower effective tax rate paid on UConn property.

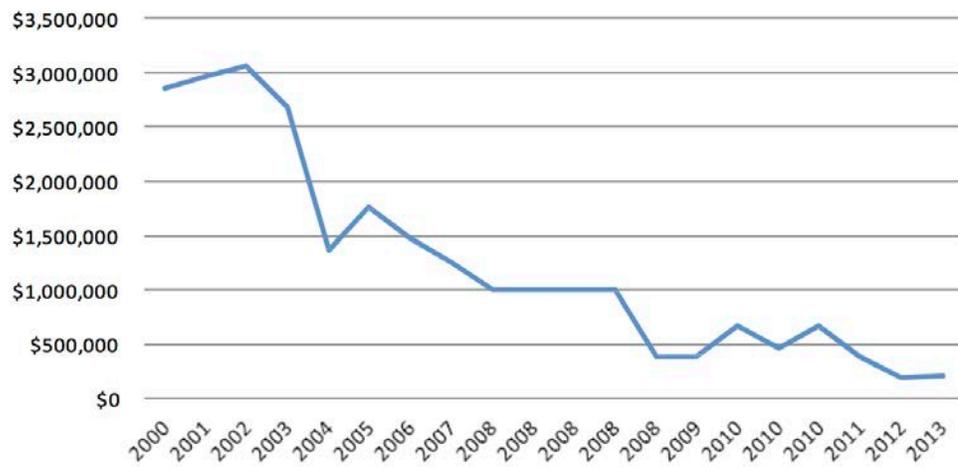
1 Data on subsectors is not available at the municipal level.
 2 Source: Connecticut Office of Policy and Management

Figure 6.1: Mansfield PILOT Grant—Calculated and Actual by Fiscal Year, FY2002–2013



Source: Town of Mansfield

Figure 6.2: Mansfield Pequot Grant, 2000–2013



Source: Town of Mansfield

Declines in state aid create greater dependence on local revenues to maintain local public services. The ability to expand commercial and industrial land uses and tax revenues can reduce pressures to increase property tax rates with the attendant burden on residential taxpayers. Municipal tax studies have shown that commercial and industrial properties, along with agricultural land and open space, generate significantly more revenue than the cost of municipal services they require, whereas residential properties, especially single family houses, generate costs in excess of revenues (particularly because of the costs of school funding).³

Grand list data for Mansfield indicates that while the share of assessed property value comprised of commercial (including multi-family residential properties) and industrial property in FY2011 was about average relative to other Connecticut communities in the 10,000 to 30,000 population range, the assessed value per capita is very low. Because the overall cost of municipal services generally rises in proportion to population, this indicates that the cost of services absorbed by commercial and industrial property taxes in Mansfield is also relatively low. It also suggests that commercial and industrial property development in Mansfield could be significantly increased without leading to excessive development relative to other communities of its size (see Table 6.3).

³ See, for example, *Planning for Agriculture: Guide for Connecticut Municipalities, 2012. Edition*. The report cites data from nine Connecticut communities with populations ranging from 5,000 to 25,000 that show commercial and industrial properties costing municipalities a median of \$0.27 in services per \$1.00 in tax revenues compared to costs of \$1.09 for residential properties. Agricultural/open space land costs a comparable \$0.31 in services. It also cites national data showing a median of \$0.29 in services for commercial and industrial properties and \$0.35 in services for agricultural land/open space versus \$1.16 for residential properties.

Table 6.3: Measures of Fiscal Capacity Derived from Commercial/Industrial (C/I) Tax Base: Mansfield vs. Other Connecticut Communities Population 10,000-30,000, FY2011

	C/I ASSESSED VALUE AS PERCENT OF TOTAL GRAND LIST	C/I ASSESSED VALUE PER CAPITA
Mansfield	13.2%	\$4,879
Mansfield Rank	29 of 66	58 of 66
Median	12.4%	\$13,193
Range	1.1% - 40.9%	\$2,822-\$48,042

Source: Connecticut Office of Policy and Management

LIGHT INDUSTRY: A GOOD FIT FOR MANSFIELD?

Many towns and cities are finding that light industrial businesses, when appropriately located, can be a great fit for their community. Unlike heavy industry—which often brings impacts such as noise and heavy truck activity—many light industrial uses occur without disruption to neighbors, and offer benefits such as jobs and contributions to the local tax base. Examples include warehouse space, wholesale facilities, and limited assembly or production activities—for instance, manufacture of high tech medical devices or production of gourmet foods.

Communities can craft zoning regulations that specify what is and is not permitted in a light industrial area. For instance, Mansfield could require that light industrial uses not pose nuisances, including smoke, gas, odors, dust, noise, vibrations, soot, or disruptive lighting. Mansfield could also regulate outdoor activities (e.g., loading, service, vehicle or equipment storage) to prevent disruption to neighbors.

Increases in commercial values resulting from the Storrs Center development are not reflected in the above comparison; however, the Storrs Center Fiscal Impact Study completed in October 2012 projects that the addition of Storrs Center to the Grand List will increase assessed commercial property values very significantly—by about 50 percent in 2014. Even with this increase, Mansfield will still remain on the low end of comparably-sized communities in assessed commercial and industrial property values per capita.

C) MANSFIELD'S WORKFORCE IS HIGHLY EDUCATED.

Understanding the skills and employment status of Mansfield's working residents can be important in determining what kinds of businesses and economic sectors the town is best positioned to attract as well as which of these are a good match for the employment needs of residents. In this regard, it is important to distinguish the characteristics of jobs in Mansfield, which are described above, from the characteristics of the town's workforce. Many employed residents of Mansfield work in other communities and conversely, many of Mansfield's workers live elsewhere.⁴

Lead Employment Sectors. Given the large number of local jobs in the education and health services sectors, it is not surprising that over half of the town's working residents work in these sectors, a much higher proportion than in the rest of the Tolland-Windham region or the larger Hartford Consolidated Statistical Area (CSA). The retail trade and the combined arts, entertainment and recreation, and accommodation and food services sectors are next in importance (employing about 11% and 8% of residents respectively) and employ approximately the same proportion of residents as the region and the CSA. Small proportions of residents are employed in other industries, both in absolute terms, and in most cases, relative to the region and CSA.

Type of Employment. Half of Mansfield's working residents are employed in generally higher-paying management, business, science, and arts occupations, a considerably higher proportion than at the regional and CSA levels. Fewer, but still considerable numbers, are also employed in sales and office occupations, and in service occupations, in roughly the same proportions as at the regional and CSA levels. Residents working in these occupations are likely to include UConn students working in retail sales and food service occupations. Very few residents are employed in blue collar occupations such as construction, production, and transportation (see Figure 6.3).

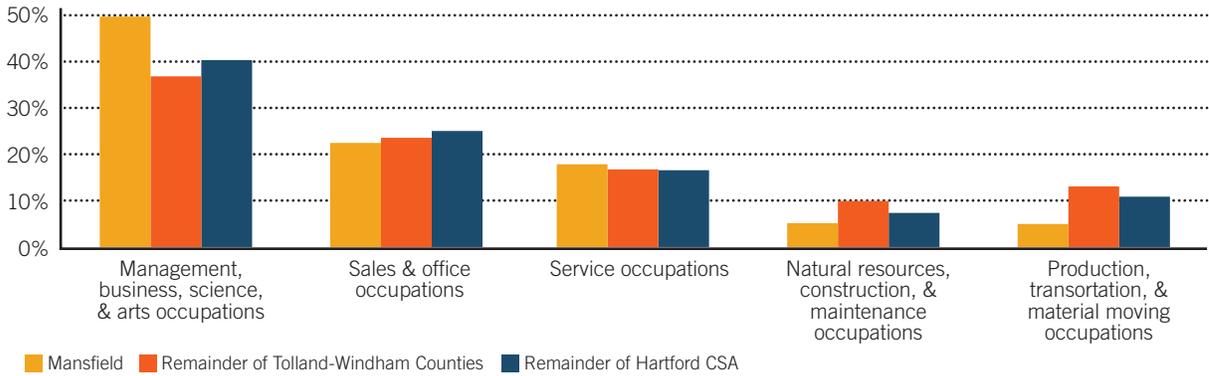
Education Levels. Consistent with high levels of employment in highly-skilled occupations, Mansfield residents are also highly educated. This is particularly evident in the percentage of residents over 25 with graduate or professional degrees. One-third hold such degrees, more than double that at the regional or CSA level. The town's highly-educated workforce can provide a considerable advantage in attracting businesses

⁴ According to data from the 2006-2010 American Community Survey, 41 percent of working Mansfield residents worked in other communities whereas 60 percent of workers employed in Mansfield lived elsewhere.

seeking highly-skilled workers (see Figure 6.4). The high educational and skill levels of Mansfield residents contribute to relatively high family incomes and low family poverty rates⁵ (see Table 6.4).

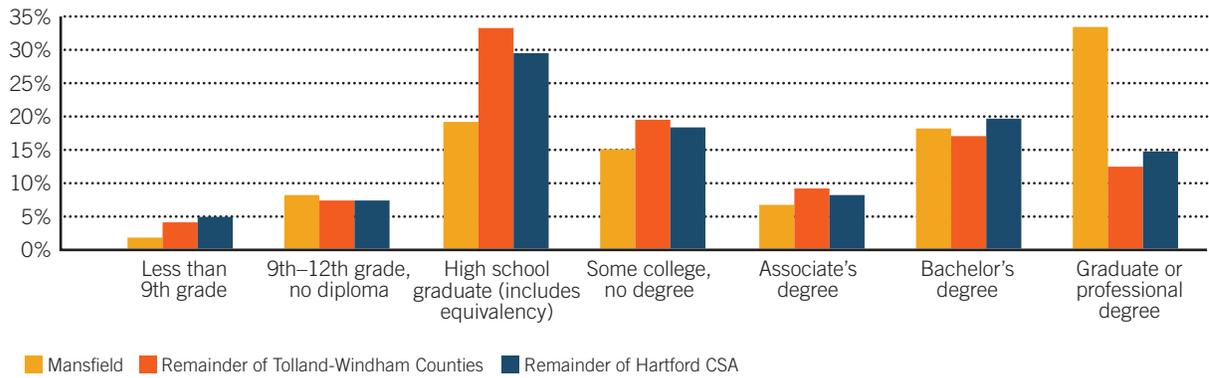
5 While household data is often used as a broader indicator of resident economic status, family data is used here to exclude the considerable number of student households, which would skew data downward and likely result in misleading comparisons to regional and CSA data.

Figure 6.3: Employment by Occupation, Population 16+ (2007–2011 average)



Source: American Community Survey; U.S. Census Bureau

Figure 6.4: Education Levels, Population Age 25+ (2007–2011 average)



Source: American Community Survey; U.S. Census Bureau

Table 6.4: Family Economic Status, 2007-2011 Average				
	MANSFIELD	TOLLAND COUNTY	WINDHAM COUNTY	HARTFORD CSA
Median Family Income	\$90,518	\$80,333	\$72,060	\$83,214
Mean Family Income	\$111,101	\$93,033	\$81,664	\$102,093
Family Poverty Rate	5.1%	3.5%	8.5%	8.5%

Source: American Community Survey, U.S. Census Bureau

As noted earlier, Mansfield has a relatively low unemployment rate. However, unemployment rates vary significantly depending on educational levels. While the town residents without a high school diploma make up a relatively small proportion of the working age population (ages 25-64), they suffer disproportionately from high unemployment. Those with only a high school diploma are also somewhat more likely than average to be unemployed. This suggests the need for additional low- to middle-skill jobs and training opportunities to meet the employment needs of these residents (see Table 6.5).

Table 6.5: Unemployment Rate by Educational Attainment, Mansfield Residents Age 25-64: 2007-2011 Average

LEVEL OF EDUCATION	UNEMPLOYMENT RATE	% OF POPULATION 25-64
Less than high school graduate	43.2%	7.3%
High school graduate (includes equivalency)	8.2%	39.7%
Some college or associate's degree	3.0%	
Bachelor's degree or higher	1.2%	53.0%

Source: American Community Survey, U.S. Census Bureau

2. Key Existing Economic Sectors

Mansfield has a number of established economic sectors that should be sustained and potentially expanded. These include higher education, food and beverage services, health care, and agriculture.

A) HIGHER EDUCATION/UCONN

Higher education is Mansfield’s leading “traded sector” by a wide margin, and is less a sector than a single dominant institution, the University of Connecticut. With over 22,000 students and over 5,000 faculty and staff, UConn draws income into the community and creates jobs. Direct employment at UConn has increased over the past decade. State government employment in Mansfield, primarily accounted for by UConn, increased by about 500 jobs between 2001 and 2011. The average state government wage in 2011 was almost \$60,000, significantly more than for most other economic sectors within the town. Additional direct spending by students and visitors on off-campus housing, retail, food services, entertainment and recreation, and other local goods and services brings significant additional income to the town economy.

Direct income to the university is further circulated within the community through spending by the university, administration, faculty and staff on local goods and services. Other indirect sources of income and jobs are businesses that are operated by university faculty, including a considerable number of small consulting businesses, and businesses that have been established locally to commercialize university research.



Accommodation and food services businesses in Mansfield employ over 1,000 people (Storrs Center shown at left).

B) FOOD AND BEVERAGE SERVICES

The accommodation and food services sector employed 1,139 wage and salary workers in 2011. Most of the employment is in food and drinking places—Mansfield has only a small number of lodging establishments, including two hotels and one bed and breakfast. The relatively high proportion of jobs to local population in this sector likely reflects strong demand for food and beverage services among the large student population.

Employment in this sector increased by about 250 between 2001 and 2011, or over 25 percent. The quality of jobs, however, is very low with average wages of under \$20,000 in 2011, lower than in any other economic sector for which data is available. Many of these jobs are part-time, which accounts in part for the low wage levels.

C) HEALTH CARE AND SOCIAL ASSISTANCE

This sector employed 1,134 wage and salary workers in 2011. It can also be considered partly traded and partly sheltered since some of the larger health care organizations such as Natchaug Hospital, VNA East and large specialty practices serve a regional population while some smaller practices primarily serve a local population. The relatively high proportion of jobs to local population in this sector indicates that a significant portion of clients are from outside the community.

Employment in this sector increased by about 250 between 2001 and 2011, or almost 30 percent. The average wage in 2011 was about \$42,000, somewhat below the overall average wage for jobs in Mansfield.

D) AGRICULTURE

While not a major economic driver in terms of income or jobs, agriculture remains important to Mansfield. 22,175 acres of farm and forest (75% of Mansfield) contribute to the Town's economy by providing "ecosystem services," such as clean water, and by requiring lower levels of Town services than residences. Preserving these benefits is critical to Mansfield's business and fiscal success. Agricultural enterprises use the most business-related acreage in town (16%). Agriculture (farm and forest) provides residents with locally-grown food products, creates opportunities for value-added food processing businesses, and supports farm and forest-based tourism. Preserving and expanding the agricultural economy can help to maintain a diversified local economy, contribute to lower property taxes, and preserve the town's rural character—which also has potential as a major attraction for prospective businesses and employees.

There are many elements to maintaining and strengthening the town's agricultural identity, but one critical component is maintaining agricultural activity. Farmland that is conserved and farmed is the ultimate goal. In this regard, agriculture in Mansfield faces many of the same challenges being faced throughout the state, the region and even the country.

i) Private agriculture in Mansfield

Agriculture is changing across America. As farms get bigger in the Midwest, farms in New England are getting smaller but more numerous, up an average of 19% in New England between 2002 and 2007 (with a 0.1% increase in Connecticut). Following regional trends, the median farm size in Tolland County decreased from 38 acres in 2002 to 25 acres in 2007, while the number of farms increased from 398 to 484.⁶ The 2007 Cen-

⁶ 2007 Census of Agriculture. State and County Data: Connecticut.



Photo credit: James D. Gilligan

Mansfield's agricultural enterprises are a valued part of the town's economy (Mountain Dairy shown above).

Table 6.6: Mansfield's Agricultural Enterprises 2014

Arrowhead Farms	Honey, goat milk, pumpkins, berries, vegetables, angora wool, and non-edibles	Mountain Dairy	Milk and dairy products
Bailey's Maple Syrup and Honey, LLC	Maple syrup and honey	Phenix Farm	Maple syrup, hay/alfalfa
Bird Walk Farm	Eggs, seasonal lamb, pork, chicken	Pleasant Valley Harvest	Organic fruits and vegetables
Cedar Ledge Tree Farm	Christmas trees. Natural stone for walls, walks, patios. Pumpkins. Firewood	Round the Bend Farm	Vegetables
Country Stop & Goods	Produce and country goods	Sawmill Brook Farm	Equine board facility offering beginner through advanced lessons in all disciplines. Miles of trail riding. Facility also houses Magnolia Run horse rescue.
Don's Rhubarb	Rhubarb	Shundahai Farm	Fruits and vegetables. CSA.
Foxfire Farm	Raw milk	Storrs Farmers Market	Year-round farmers market
Fox Fire Stables	Equine boarding facility with indoor and outdoor riding arenas.	Storrs Regional FFA	Christmas trees, plants, eggs
Gardens at Bassetts Bridge Farm	Rhubarb, tomatoes, asparagus, pumpkins, blueberries, hanging baskets, annuals and perennials	Thistle Springs Farm	Hay and beef cattle. Sand and gravel
G.M. Thompson and Sons, Inc.	Agricultural supply	Thompson's Christmas Tree Farm	Christmas trees
Hillside Farm	Milk, mulch bark and feed hay	Three Green Acres/Chelsea's Blue Ribbon Lamb	Sheep-lamb for meat, wool blankets, show animals (Hampshire Sheep and Jersey Cattle)
Ledgecrest Greenhouses	Annuals, perennials, herbs, vegetables plants and spring flowering plants	Tri-County Greenhouse	Annuals, perennials, herbs and vegetables plants, mums
Maple Crest Farm	Rhubarb, blueberries, raspberries are sold wholesale. Tree fruit, jams, honey, yellow wax beans, potted raspberry plants. Aloe, Christmas cactus, hand-painted egg shells. By appointment only.	Twin Ponds Farm	Hay, lumber, firewood, nursery stock, plant stock, seasonal berries
Matthews Farm	Blueberries	University of Connecticut	Ice cream, eggs, plants and flowers. Annual live stock sale.
Mike's Stand	Organic tomatoes, peas, broccoli products from other farms as seasonally available.	Valley Farms	Kobe-style beef, hogs, free-range eggs
		Windover Farm	Heritage swine, cattle and sheep, pork and lamb.

sus of Agriculture identified 19 farms in Mansfield, five of which support farming as a primary occupation.⁷ Agriculture in Mansfield is diverse, producing dairy products, livestock and meat products, fruits and vegetables, honey, maple syrup, Christmas trees and nursery stock, as well as agritourism experiences. Every two to three years, the Mansfield Agriculture Committee inventories all agricultural operations in town and develops a “Mansfield Grown” brochure and website link (www.mansfieldct.org/mansfieldgrown). The last inventory in 2012 identified close to 40 agricultural enterprises—19 self-identified as farms, plus other enterprises including one Community Supported



A 2010 Town survey identified approximately 40 agricultural enterprises in Mansfield, including farms, farm stands, and agritourism destinations (Stearns Farm shown above).

Agriculture (CSA) operation, farm stands, agritourism destinations, and retail outlets. A 2010 survey by the Town identified close to 40 agricultural enterprises—19 self-identified as farms, plus other enterprises including farm stands, agritourism destinations, retail outlets, and so on. Agriculture in Mansfield is diverse, producing dairy products, livestock and meat products, fruits and vegetables, honey, maple syrup, Christmas trees and nursery stock, as well as agritourism experiences.

Scale of operations. While the Mansfield dairy farms own or lease over 1,800 acres of land, the majority of Mansfield farms are small, under 50 acres (some under 5 acres) and with sales less than \$50,000. Seven (39%) of 19 Mansfield farms identified in the 2007 agricultural census had sales over \$50,000 (2 horticultural operations, 3 dairy operations, 2 animal operations, including products, and 1 cattle and calves operation). While Mansfield farms make up just under 4% of farms in Tolland County, they account for more than 7% of the operations in Tolland County with sales over \$50,000. Mansfield has one of only three dairy processing facilities in the state. This facility has a producer/handler license that enables it to compete with federal milk prices and remain competitive.

The 2007 Census showed that the average net income for farms in Tolland County was \$15,307, up significantly from an average of \$5,833 in 2003 but still significantly below the state average of \$25,087.⁸ Assuming the average net income for Mansfield farms is the same as for Tolland County it is not surprising that only 26% of Mansfield farms support farming as the primary occupation, versus 55% of all Connecticut farms and 49% of farms in New England. If we assume the 19 farms in Mansfield make the average Tolland County farm income it would account for 0.1% of all the income earned by residents in Mansfield.⁹ In a 2010 survey of Mansfield farmers, some of the major challenges identified by respondents were “financial stability, lack of funding, [and] input costs.”

⁷ 2007 Census of Agriculture. Data by Zip Code: 06268 and 06269.

⁸ 2007 Census of Agriculture. State and County Data: Connecticut.

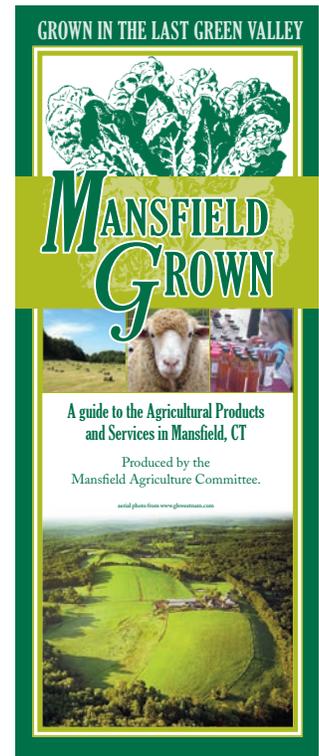
⁹ Assumes 11,027 jobs in the community at average salary of \$49,637 per Peter Kwass, Mansfield Economy Fact Sheet.

Employment. Data from the 2010 Census showed that less than 2% of the Mansfield population was employed in agriculture compared with Connecticut communities with the highest proportion of residents employed in agriculture, such as Scotland and Preston that have between 4% and 8% of the population.¹⁰ The majority of farms in Tolland County do not hire farm labor and of the farms that do, 90% hire fewer than 10 workers. The Connecticut Department of Labor reports 398 jobs in Tolland County in the agriculture, fishing and hunting sector in 2011, making up just 1% of all Tolland County jobs.¹¹ Access to farm labor is a challenge for local and regional farms.

Markets. According to the 2010 survey of Mansfield farmers, the majority of farmers market their products direct to consumers through roadside stands or farmers markets and/or sell wholesale to restaurants and stores. Of the 19 operations with self-identified farmers, 11 do direct marketing only, one does wholesale only and seven do a combination of direct marketing and wholesale. While this type of marketing and sales usually ensures that farmers get the highest possible price for their products, it also requires that farmers spend a lot of time building and maintaining relationships with many individual buyers. Direct marketing and direct wholesale marketing also puts the burden of transportation and distribution on the farmer.

Mansfield is home to a year-round farmers market, Storrs Farmers Market, providing a direct-market outlet to local farmers and value-added producers. (Currently just under 30% of the producers listed on the Storrs Farmers Market website are from Mansfield.) In addition to the Farmers Market, the Town produces a “Mansfield Grown” brochure featuring a guide to locally produced agricultural products and services—the brochure includes 29 farms and stores (in addition to the farmers market) providing locally produced goods. One Mansfield farm offers a CSA (Community Supported Agriculture) program. *Farmfresh.org*, a local food guide for Southern New England, identifies 6 producers in Mansfield with farm stands making direct sales to consumers.

Ownership and Management. Mansfield has a mix of entrepreneurial and lifestyle farmers. The vast majority of farm households in the U.S. rely on off farm income to support themselves¹² and there is no evidence this is likely to change. In 2012, off-farm income sources are forecasted to account for about 84% of the national average farm household income, compared with about 16% from farming activities.¹³ Farming is often a lifestyle choice as much as an economic endeavor. This means that farmers often lack, or fail to apply, the business skills required to grow their enterprises, establish track records



The Mansfield Grown brochure provides information on local agricultural products and producers.

10 Percentage of Population with Farming, Fishing & Forestry Jobs in Connecticut by Zip Code: 06268 and 06269. <http://zipatlas.com/us/ct/storrs-mansfield/zip-code-comparison/percentage-farming-jobs.htm>

11 Tolland County: Covered Employment and Wages by Industry. 2011 QCEW Program Data. http://www1.ctdol.state.ct.us/lmi/cty_tolland.asp

12 Schnepf, Randy. “U.S. Farm Income.” Congressional Research Service. December 10, 2012.

13 Schnepf, Randy. “U.S. Farm Income.” Congressional Research Service. December 10, 2012.

CSA stands for Community Supported Agriculture, a popular way for consumers to buy food directly from farmers through a subscription program. In this model, the consumer pays for a “farm share” (a percentage of the food produced that season) up front and receives a weekly box of produce during the growing season. This provides farmers the opportunity to do marketing and have cash flow during the winter and spring seasons.

of sales, and qualify for investments that would help them further expand. While those who choose to farm as a lifestyle can and do make important contributions to the agricultural landscape, the environment, and other indirect economic and social aspects of quality of life, continuing agriculture into the future will likely require a mix of lifestyle farmers and entrepreneurial farmers. The entrepreneurial farmers will require the same type of business planning, management, and financing assistance that any small business needs. By understanding the potential for farming as a business, the Town can encourage innovative enterprises and help connect agricultural entrepreneurs with appropriate business-related services.

The average age of farmers in Connecticut is 57.6, higher than the New England average of 56.6.¹⁴ While the average age of farmers has been a concern regionally and nationally for a number of years, in recent years more young people have been choosing to farm. With the presence of UConn, Mansfield is in a position to engage young people in its agricultural community in ways that would be harder for a more isolated community. There is evidence that some young people are already interested in farming in Mansfield. More can be done to attract and retain a new generation of farmers. Young farmers often find farmland unaffordable. It will also be important to work with the current generation on transition plans where there is interest in passing the farm to another generation.

ii) **UConn agriculture in Mansfield**

As Connecticut’s land grant university, UConn owns and maintains approximately one quarter of the active farmland in Mansfield, and is home to several agricultural operations including an Equine Center specializing in the breeding of Morgan horses, the Dairy Center and Creamery, Livestock Unit and Poultry Unit. Many of these facilities are open to the public 365 days a year, making UConn a popular agri-tourism destination. UConn’s Dairy Bar, serving award winning ice cream produced in the Creamery from UConn dairy cows, is one of the top 10 tourism destinations in Connecticut, attracting over 200,000 visitors per year.¹⁵ UConn officials are committed to keeping the agricultural land it currently uses in active use.¹⁶

14 2007 Census of Agriculture. State and County Data.

15 Schirm, Nicole. “Education and so much more!” Holstein World; New England Holstein Annual. March 2013.

16 Phone Interview. Greg Weidemann, Dean, UConn College of Agriculture and Natural Resources. 4/8/13.

3. Potential Growth Opportunities

A) RESEARCH AND TECHNOLOGY

The increasing emphasis at UConn on research and development and university-industry relationships provide Mansfield with an opportunity to capture technology companies spinning out of UConn and those seeking research partnerships with the university.

The State of Connecticut economic development strategy includes a focus on UConn as a driver of 21st century economy prosperity. Major planned investments by the State in UConn over the next 10-20 years promise to significantly affect the Mansfield economy.

- **NextGenCT.** This initiative, which includes significant investments in campus facilities and increases in faculty and enrollments, focuses on expanding the level of research, technology commercialization and new enterprise development at the Storrs Campus, which could spur increased demand for R&D, office, and light manufacturing space in Mansfield. The increase in students and faculty could also generate growth in other economic sectors including retail, accommodation and food services, and other consumer services.
- **UConn Technology Park.** The Tech Park, as currently envisioned, will involve the build-out of up to 900,000 square feet over a 10-20 year timeframe. The first building in the park, the Innovation Partnership Building (IPB), will be State-owned and operated. Most of the other buildings are expected to be privately developed and to house corporate research facilities, emerging technology firms, and possibly federal labs. While Tech Park land is expected to remain State property, these private facilities are envisioned to be equipment-intensive and thus to generate a high level of property taxes to Mansfield on the improvements (buildings and equipment). While the nature, scale and timing of the Park's construction remain undetermined at this time, its completion has the potential to result in significant business development, job creation, and local property tax revenues over time. In the shorter run, the graduation of firms from the new incubator could increase the number of second stage firms desiring to expand within Mansfield as they seek to maintain proximity to UConn facilities and relationships with UConn researchers.
- **UConn Technology Commercialization Partners.** UConn and the State of Connecticut have greatly expanded resources to support technology commercialization and entrepreneurship. UConn's Office of the Vice President for Research operates a variety of programs specifically aimed at promoting technology-based economic development related to UConn's research strengths. These programs provide resources for companies seeking the expertise of UConn faculty and researchers, manage the intellectual property created at the university in life and physical sciences, assist in creating new start-up companies based on technologies developed by faculty and staff, and accelerate the establishment and development of entrepreneurial companies through incubator space and support services.

- **Connecticut Innovations (CI)** is another important source of support for startup and early stage companies. CI provides a variety of financing and technical assistance tools, including SBIR matching grants, the TechStart Accelerator Program, the Seed Investment Fund, ELI Whitney Fund early stage venture capital funding, the Clean Tech Fund, and the BioScience Facilities Fund, which finances wet lab and related space.

Mansfield already has a small base of research and development (R&D) and technology firms that, while generally small and not highly visible, generate income, tax revenues, and high-quality employment, and have the potential to grow. While the UConn campus provides fertile ground for technology commercialization and entrepreneurship, Mansfield is hampered by a shortage of R&D space and land zoned for R&D facilities as firms grow and look for larger space. Some firms are reported by UConn staff and Town officials to have relocated outside of Mansfield for this reason. Without the development of additional R&D space, Mansfield will continue to lose growing technology firms to other communities.

B) PROFESSIONAL AND BUSINESS SERVICES

Mansfield has a significant number of small firms (generally four or fewer employees) that provide a wide range of business and professional services in regional or even national markets. These include engineering and architectural services, computer programming and computer systems design, graphic design, environmental consulting, management consulting, and other business services. As described earlier, these types of businesses (classified under professional and technical services and administrative services) have been growing in the Tolland-Windham region during the past decade but not in Mansfield. More attention to accommodating the growth needs of these types of firms could yield more business and employment growth within Mansfield.

C) RETAIL AND CONSUMER SERVICES

Data indicate that Mansfield has a relatively small retail sector. Increases in students and faculty at UConn as well as the ability to realize the growth opportunities described above will increase the base of consumers (i.e., residents, employees, and students), potentially creating greater demand for retail and consumer service businesses. However, because the Mansfield population has typically dropped during the summer, the seasonal nature of the market has made it difficult in the past for some retail and service businesses to survive over the long term. More summer programs on campus, as well as advertising to year-round residents, would help support retail, especially in Storrs Center and other areas near campus. As UConn upgrades residence halls with air conditioning and other improvements, it is expected that summer programs will expand.

The new Storrs Center has met with considerable initial success in leasing ground floor space to commercial tenants. Anecdotal evidence suggests that the Storrs Center

merchants did better than expected in the summer of 2013, their first summer. The experience at Storrs Center with commercial lease and occupancy rates during the next few years will provide one indication of the potential for further expanding retail and consumer services within the town.

D) TOURISM

Mansfield has a wide variety of tourism attractions that could draw more visitors, particularly from within the southeastern New England market. Mansfield is located approximately 22 miles from I-91, a major North/South transportation corridor, and 30 miles from I-90, a major East/West corridor. The town is 20 miles from Hartford, 85 miles from Boston and 137 miles from Manhattan. This location places the town in a prime tourism location. While the town lacks a major tourism destination, its location in the Last Green Valley combined with a mix of arts, history and cultural heritage, outdoor recreation, and tourism venues and events offer a diverse tourism experience.

- **Arts.** Mansfield offers a number of high-quality performing and visual arts attractions, primarily through UConn. For more information, see Chapter 5: Community Life.
- **History and Cultural Heritage.** Historical and cultural heritage attractions include: the Gurley Gristmill, the only remaining stone mill of its kind in Connecticut; the Mansfield Historical Society and Museum, which offers exhibits and educational programming related to Mansfield's 300 year history; and the Connecticut State Museum of Natural History, which hosts exhibits integrating Connecticut's natural and cultural history.
- **Outdoor Recreation.** Several parks and recreation areas are located within the town, including Mansfield Hollow State Park, the Albert E. Moss Forest, Shelter Falls Park, the David Storrs Chapin Coney Rock Preserve, the Knowlton Hill Preserve, and the Wolf Rock Nature Preserve. These sites offer a wide range of outdoor recreation activities, including hiking, biking, boating, fishing, bird watching, rock climbing, and cross-country skiing. The new Adventure Park at Storrs, an aerial park, offers a family-oriented rope and zip line course. Special events include the annual Wilimantic Down River Canoe and Kayak Race from Tolland to Mansfield, and Walktober, a series of hundreds of hikes and other regional events that attract thousands of visitors annually from New England and beyond.
- **Agri-tourism.** According to the 2007 census of agriculture 2% of CT farms (and 2% of Tolland County farms) offered agri-tourism and recreational services, ranking Connecticut number three in New England for the percentage of farms involved in agri-tourism. Local agri-tourism attractions include UConn, Cedar Ledge Tree Farm, with a range of fall and Christmas season activities, and Bassett's Bridge Farm, best known for its stroll gardens displaying perennials, annuals, herbs, shrubs, and trees. These provide a powerful engine for further development of agri-tourism, cross-marketing eco-tourism, and adventure tourism opportunities that can be compatible with agricultural enterprises.



Photo credit: Peter Morenus/UConn

UConn's Ballard Institute & Museum of Puppetry is a unique attraction, drawing people of all ages.



Mansfield offers a range outdoor recreation activities, including kayaking, hiking, fishing and cross-country skiing (River Park shown above).

The 2013 Tourism Impact Report commissioned by the The Last Green Valley (TLGV) demonstrates the potential for tourism as an economic growth sector. Tourism activities in the region have grown substantially over the past few years, from 1.3 million visitors with \$158 million in economic impact in 2010 to 1.9 million visitors in 2013 with \$278 million in economic impact. While 66% of visitors to the Last Green Valley are day trippers (compared to 35% statewide), the number of visitors with overnight stays increased from 25% to 34%. Visitors with higher household incomes spent more per visit; however, those with lower incomes visited more frequently.¹⁷

Mansfield and the surrounding region are well-positioned to tie into the state's tourism branding and marketing initiative, "Connecticut...Still Revolutionary." The initiative seeks to link the state's historic past with its legacy and continued role as a center of innovation. The region's historic sites, some tied to Revolutionary War figures such as Nathan Hale, Samuel Huntington, and Governor Jonathan Trumbull, its role in the industrial revolution, and its significance today as a center of leading edge research at UConn, can all be capitalized upon to strengthen the region's position as a tourism destination.

Expanding tourism in Mansfield could strengthen the town's economy and, in particular, create more activity during the quiet summer months when UConn is not in full session. Expanding agri-tourism offers the additional benefit of providing supplemental income to farmers. This is likely to require more intensive local efforts to highlight the town's attractions within the regional tourism market that could include the development of themed trails, tourism packages, and special events, and working with other towns in the region to provide a more diverse and appealing visitor experience. It may also require further development of local visitor infrastructure (e.g., inns, bed and breakfasts, and campgrounds) that could help to attract more visitors to Mansfield and increase their spending while here.

E) AGRICULTURE: LOCAL MARKETING AND VALUE-ADDED PRODUCTION

Connecticut in general and Mansfield in particular are both utterly dependent on food that comes from hundreds and even thousands of miles away. A 2012 report by the Zwick Center for Food and Resource Policy estimated that locally produced food accounts for 2.5% of Connecticut's total food expenditures. That means 97.5% of the value of all food is imported from other states and countries.

Although Connecticut is likely to remain dependent on other states and countries for food, increasing the amount of food produced locally is a worthy goal. The Governor's Council on Agricultural Development has proposed a target of 5% of food expenditures on locally-grown food by the year 2020. One of the ways of facilitating increased local production is through more effective marketing. Mansfield is well served by a year-

¹⁷ 2013 Tourism Impact Report summary sheet, commissioned by The Last Green Valley and prepared by Witan Intelligence.

round farmer's market and has one active CSA farm. Mansfield can build on this modest current agricultural marketing platform and benefit from lessons learned by others and the structures they develop.

Those seeking to farm full-time (and even part-time) often need to move from production of raw materials to production of value-added products. Even those producing raw materials, must, if they choose to market at any significant scale, meet ever higher safety and quality standards to find and maintain a footing in the marketplace. Some of the costs associated with value-added production—trainings and certifications, labeling and packaging, and enhanced distribution—can be shared among groups of farmers, but only when there is sufficient volume of similar product to warrant it. With the exception of its dairy operation, Mansfield's agricultural activity is so diverse and currently at a scale so small as to make it difficult to justify individual farmers investing in any particular type of shared value-added facility. However, if subsidized facilities come on line, existing and future Mansfield farmers will have the opportunity to develop new products and serve new markets. Such a facility could enable the Town to promote a regional approach to agricultural facilities and marketing.

ECONOMIC DEVELOPMENT RESOURCES

The development of Mansfield's economy is influenced by its economic development resources. These include its human resources, entrepreneurial climate, physical infrastructure, economic institutions, and general quality of life. Effectively utilizing these resources and filling critical resource gaps can support and accelerate economic development efforts.

ENTREPRENEURSHIP AND SMALL BUSINESS DEVELOPMENT RESOURCES

Programs and services available to technology businesses are described in the "Potential Growth Opportunities" section above. Other regional and state programs and services for businesses include the following:

- **Small Business Development Centers (SBDCs).** The SBDC's central office and one of its regional centers are located at UConn's Storrs campus. SBDCs provide businesses with assistance on a range of business functions, including business plan development, financial planning, loan packaging, marketing, employee management, and regulatory compliance. They also provide specialized assistance in government contracting, international trade, and for minority, women and veteran businesses.
- At the state level, the **Connecticut Development Authority** (now including Connecticut Innovations) offers financing programs addressing a range of business needs. In addition to the Bioscience Facilities Fund described earlier, these include loans and loan guarantees for small and mid-sized businesses; grants, seed financing, venture capital, and loans for early-stage and technology-intensive businesses; targeted programs providing export financing, loans and loan guarantees for advanced energy projects; and loans for IT companies.
- The **Connecticut Department of Economic and Community Development** offers two business loan programs, the Small Business Express Program and

loans to manufacturers for projects with strong economic development potential. DECD, both directly and through partner organizations, provides technical assistance to businesses on a range of issues, and also works with qualifying businesses to provide state tax incentives.

CAREER EDUCATION AND WORKFORCE DEVELOPMENT RESOURCES

- Workforce development services for jobseekers and employers in Mansfield are provided by the **Eastern Connecticut Workforce Investment Board (WIB)**, one of five regional workforce investment boards in Connecticut. The career center serving Mansfield is located in Willimantic. Services to job seekers include job search assistance, career counseling, job development and placement, seminars on a wide range of topics, training referrals, and training funds for individuals with high barriers to employment to be used for training by certified training providers. Services to employers include employee recruitment assistance, reimbursement for on-the-job training, and workforce literacy assistance. The WIB also provides services to at-risk and out-of-school youth.
- **Windham Technical High School** is the regional technical school serving Mansfield and 19 other communities. The school serves high school students who seek a combination of traditional academics and training in a trade or technology field. The school offers students training in architectural technology, electrical, automotive technology, electronics, carpentry, health technology, heating, ventilation and air conditioning, manufacturing technology, and culinary arts. It also offers adults training as dental assistants.
- **Eastern Connecticut State University**, in addition to its bachelor's and post-graduate degree programs,

offers short-term (six months or less) on-site and on-line training in a range of career fields.

- **UConn** offers a range of adult learning opportunities, both on-site and on-line.

CULTURE, RECREATION AND TOURISM RESOURCES

- **Mystic Country** (www.mystic.org) (Eastern Regional Tourism District) is the state's designated marketing organization for eastern Connecticut, operated by the Chamber of Commerce of Eastern Connecticut. The organization hosts a detailed tourism website, produces and distributes a printed visitors' guide, provides advertising opportunities for tourism businesses, and assists meeting and event planners. With the highest-profile tourism attractions, notably the casinos, Mystic Seaport, and the Long Island Sound coastline, concentrated in the southeast, the northeast suffers from a less intensive focus than was the case when it had its own marketing organization.
- **The Last Green Valley Inc.** (www.tlgv.org) is a 35-town National Heritage Corridor in eastern Connecticut and south-central Massachusetts that promotes heritage and natural resource tourism as part of its mission. TLGV hosts an extensive website that includes a calendar of events and an interactive map, publishes guides and maps, and sponsors special events such as the annual Walktober. It also provides co-operative advertising opportunities for its business members.
- **WindhamARTS** was organized to foster and promote the arts and cultural life of the Windham Region. It has been named by the state as Northeast CT's Designated Regional Service Organization for the arts. The organization hosts an on-line arts calendar.

In addition to these regional organizations, the Windham Region Chamber of Commerce and the Tolland County Chamber of Commerce publish downloadable

and printed brochures that provide extensive listings of tourism venues and events, lodging, restaurants and other visitor information. However, the chambers have not been actively involved in tourism development strategies or focused marketing initiatives.

PHYSICAL INFRASTRUCTURE AND HOUSING

The quality of public infrastructure to serve businesses and the availability of housing to meet workforce needs are important factors in economic development. In Mansfield, the limited availability of water and sewer service, and its absence in many areas zoned for business development, as well as the limited range of housing choices present potential barriers to future economic development. Housing and physical infrastructure are addressed in detail in other sections of the Plan (see Chapters 7 and 9).

ECONOMIC DEVELOPMENT CAPACITY & GRANT PROGRAMS

Economic development functions in Mansfield are handled by the Town Manager and the Director of Planning and Development. Mansfield does not have a dedicated staff position for economic development.

- Town staff are assisted by a recently re-established **Economic Development Commission**, whose mission is to conduct research into local economic conditions and trends, make recommendations regarding economic development, and coordinate the activities of and cooperate with organizations to promote economic development.
- Two chambers of commerce serve Mansfield businesses—the **Windham Regional Chamber of Commerce** and the **Tolland County Chamber of Commerce**. Both chambers provide tourism information and also focus on business networking, advertising and promotional opportunities and legislative affairs. As relatively small chambers, neither plays an extensive role in economic development.

- In 2014, Mansfield joined the **Capitol Region Council of Governments (CRCOG)**, which provides a wide variety of services to its member communities, including transportation planning assistance and coordination with CTDOT. Another possible resource with this move to the Capitol Region is the **Metro-Hartford Alliance**, the economic development organization for the Hartford region, including all members of CRCOG. As part of its efforts, Metro-Hartford Alliance prepares the Hartford Region Comprehensive Economic Development Strategy (CEDS), which prioritizes projects and is required to obtain project funding from the Economic Development Administration. Mansfield is currently covered by the 2010 Eastern Connecticut CEDS, which will remain in effect until the Hartford Region CEDS is updated to include Mansfield and other new CRCOG communities.
- At the state level, the Office of Policy and Management manages the **Small Town Economic Assistance Program (STEAP)**, which funds economic development, community conservation and quality of life projects for localities that are ineligible to receive Urban Action bonds.
- The State Department of Economic and Community Development manages the **Small Cities Community Development Block Grant (CDBG) Program**, which provides funding and technical support to communities with populations of less than 50,000 for projects that achieve local community and economic development objectives.

ACTION PLAN

Each chapter within this Plan includes an action plan: a set of suggestions for how to put the Plan to work and begin transforming ideas into action. Each action plan identifies some of the **entities that are expected to have a key role in** achieving specific action items (town departments, committees/ commissions, outside organizations, etc.); a target timeframe to complete each action; and the types of resources that we anticipate may be needed for implementation (staff time, volunteer time, operating budget, capital improvement program, grants, etc.).

Action plans include:

- **Goals** that describe the outcomes our community hopes to achieve;
- **Strategies** for advancing each goal; and
- **Actions**—specific steps our community can take over the short term (before end of 2019), medium term (between 2020 and 2024) and long term (between 2025 and 2035) in support of each strategy.

Action plans are tools for focusing efforts and resources on the issues our community cares about most. The action plans will:

- Guide town officials as they continue to shape policies and allocate resources in the years to come;
- Refocus the efforts of town staff and committees as they work to advance community goals;
- Provide a foundation for developing annual budgets and workplans; and
- Evolve over time in response to new opportunities and circumstances.

Action plans set the agenda for our community’s many officials, volunteers, committee members and staff for the years ahead, and align their work with the community’s vision **but do not provide a guarantee that resources will be available to advance each action.** While these action plans are comprehensive in nature, they are not intended to preclude the Town from pursuing other actions as opportunities arise. **As additional actions and initiatives are contemplated, they should be evaluated with regard to how the action will help to advance the vision and goals** contained in the overall Plan.

Key of Abbreviations	
TOWN DEPARTMENTS & SERVICES	
Building & Housing Inspection	Town of Mansfield Department of Building & Housing Inspection
DPW	Town of Mansfield Department of Public Works
Facilities	Town of Mansfield Facilities Management Department
Finance	Town of Mansfield Finance Department
Fire	Division of Fire & Emergency Services / Office of the Fire Marshal
Fire Marshal	Office of the Fire Marshal
Human Services	Town of Mansfield Department of Human Services
Information Technology	Town of Mansfield Information Technology Department
Library	Town of Mansfield Public Library
Parks & Rec	Town of Mansfield Parks & Recreation Department
Planning	Town of Mansfield Planning & Zoning Office
Police	Mansfield Resident State Trooper’s Office
OTHER ABBREVIATIONS	
CT DEEP	State of Connecticut Department of Energy and Environmental Protection
CT DPH	State of Connecticut Department of Public Health
EHHD	Eastern Highlands Health District
Emergency Management	Emergency Management Advisory Council
IWA	Inland Wetland Agency
PZC	Planning & Zoning Commission
Town/Gown	Town/University Relations Committee

CHAPTER 6: DIVERSIFYING THE ECONOMY

Goal 6.1

Mansfield has balanced economic development efforts with sensitivity to preserving the town’s unique blend of rural character and college town amenities to create an attractive location for businesses, workers and residents.

Additional economic development will provide multiple benefits, including increasing the number and type of available jobs and helping the Town to offset the impact of continuing declines in state revenues on municipal operations, services and budgets. These objectives must be balanced with the desire to preserve and protect the rural character of residential areas of the community.

Measures of Effectiveness:

- Number of businesses locating on previously developed sites
- Increase in assessed value of taxable commercial and light industrial properties

Strategy A | Ensure Mansfield has sufficient resources and capacity for economic development.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Collaborate with local, state and regional entities to advance economic development efforts.</p> <p>Potential partners include Mansfield Downtown Partnership, UConn, MetroHartford Alliance, Small Business Development Center, DECD, CT Department of Agriculture, Northeast Connecticut Economic Alliance, and CTInnovations.</p>	<p>Economic Development Team Town Council</p>	Ongoing	Staff Time
<p>2. Expand economic development capacity of Town staff.</p> <p>Given their extensive other duties, it will be difficult for either the Town Manager or Director of Planning and Development to play a lead operating and staff role in economic development efforts. Consequently, if practicable, the Town should consider creating a staff position or contracting for these services. This expansion of service could be done independently or by partnering with neighboring towns to fund a joint position or contract.</p>	Town Council	Short Term	Operating Budget

Strategy B | Continue to focus new commercial and light industrial development in the Four Corners, Storrs Center, Perkins Corner and Route 195/Route 6 areas to preserve rural character in other parts of the community (see Section 1.B of this chapter for more information on light industry as an option for Mansfield).

See Chapter 8 for additional information on why these areas have been identified as the primary commercial/business development focus areas. For strategies and actions related to expanding agricultural businesses and activities, see Goal 6.4.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Expand allowable uses in the four target areas to include Research and Development (R&D) and light industrial uses.</p> <p>See text box in Section 1.B of this chapter for a description of light industrial uses.</p>			
<p>2. Consider expanding R&D and light industrial uses to the UConn’s Depot Campus if the property transitions from State to private ownership.</p>			
<p>3. Allow for small-scale commercial businesses and development in the King Hill Road, Route 32/Route 195, Mansfield Depot and Mansfield Center areas.</p> <p>Development standards for each area should take into account surrounding context. For example, new development in the King Hill Road area may differ in form and scale (due to its location adjacent to the core UConn campus) from development in Mansfield Center, one of Mansfield’s historic villages.</p>			
<p>4. Support improvements to water, wastewater and transportation infrastructure, including bicycle and pedestrian improvements, in the four commercial target areas to support business growth and redevelopment.</p> <p>Availability of public infrastructure is a critical component for economic and business development; this type of infrastructure allows for more compact development, reducing the amount of land needed for development. Two of the four target areas (Storrs Center and Route 195/Route 6 areas) currently have water and wastewater infrastructure. Water and sewer infrastructure for Four Corners are expected to be available in 2016. In the longer term, water and sewer service to Perkins Corner may be available through connections to Windham water and sewer services. See Goals 9.1 and 9.2 for more specific actions related to transportation, water and wastewater infrastructure.</p>	<p>Town Council PZC</p>	<p>Ongoing</p>	<p>CIP Grants Bonds Property owners Developers</p>

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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Strategy C | Maintain and enhance community services and amenities that make Mansfield a great place to live and work. See Chapter 5 for related goals and strategies.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Promote continuing education and professional development programs available through UConn and ECSU. Include information on Town website and promote through Library and Mansfield Community Center publications.</p>	Parks & Rec Information Technology Library Economic Development	Ongoing	Staff Time
<p>2. Offer a wide variety of community enrichment services and programming. For information on existing services and additional strategies and actions, see Chapter 5.</p>	Parks & Rec Library Human Services	Ongoing	Staff Time Operating Budget
<p>3. Expand housing and transportation options.</p>	See Goals 7.4 and 9.1 for specific strategies and actions.		
<p>4. Increase diversity of available consumer goods and services.</p>	See Goals 6.2 and 6.3 for specific strategies and actions.		
<p>5. Collaborate with UConn and ECSU to help elementary, middle and high school students develop their knowledge, skills and talents. Potential areas for partnership/collaboration include:</p> <ul style="list-style-type: none"> • Summer enrichment programs • Entrepreneurship programs for high school students • Enhancements to STEM education in public schools • Related Arts <p>For additional education strategies involving the Region 19 Board of Education and the Mansfield Board of Education (MBOE), see Goal 5.2.</p>	Region 19 Board of Education Mansfield Board of Education	Medium Term	Staff Time Operating Budget

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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Strategy D | Promote Mansfield’s assets and amenities.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Develop marketing materials showcasing Mansfield’s amenities and services for use by local realtors and UConn to encourage new employees to live in Mansfield.</p> <p>As UConn continues to expand faculty and staff, efforts should be made to encourage new employees to live in Mansfield. A ‘Welcome to Mansfield’ package could include information on schools, community services and amenities, neighborhoods, housing options and regional assets such as nature-based recreation activities and proximity to cities such as Hartford, Providence, Boston and New York. Information and collaterals could also be made available on the Town website. As these materials could also be helpful in attracting faculty and students, the Town should seek funding support from UConn.</p>	<p>Economic Development Commission</p> <p>UConn</p> <p>Economic Development Team</p>	Short Term	<p>Staff Time</p> <p>Volunteer Time</p> <p>Operating Budget</p> <p>UConn</p>

Strategy E | Offer a welcoming environment to young professionals, entrepreneurs and innovators to attract and retain talent.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Enlist local and regional organizations to develop and implement a program of professional development and enrichment activities.</p> <p>Potential organizations include MetroHartford Alliance, Windham and Tolland Chambers of Commerce, UConn, Windham Arts, Innovation East, the Small Business Development Center, Mansfield Downtown Partnership and regional EDCs. Possible activities include:</p> <ul style="list-style-type: none"> • <i>Organizing networking events</i> • <i>Developing venues and events for showcasing talent</i> • <i>Professional development opportunities</i> • <i>Promoting cultural, entertainment and recreational events</i> • <i>Recognizing accomplishments of residents through local publications and events</i> 	<p>Economic Development Commission</p>	Medium Term	<p>Staff Time</p> <p>Volunteer Time</p> <p>Operating Budget</p>

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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CHAPTER 6: DIVERSIFYING THE ECONOMY

Goal 6.2

Mansfield has an entrepreneurial environment that supports business formation, expansion, and retention.

Measures of Effectiveness:

- Increase in total number of businesses

Strategy A | Establish a business retention and expansion (BRE) program.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Develop a business visitation program using surveys or structured interviews to assess business status and identify outstanding or potential issues.</p> <p>Items for consideration/inclusion in the program include:</p> <ul style="list-style-type: none"> • Identifying target businesses based on criteria such as size, location, growth potential, and possibility of the business relocating out of Mansfield due to existing concerns • Developing mechanisms to address issues identified in visits, either directly or through referral to other organizations, and follow-up to ensure that issues are resolved • Developing protocols for visits, tracking, and follow-up • Identifying key issues and business needs based on surveys/interviews • Identifying volunteers with business knowledge to conduct surveys and interviews • Providing training for staff and volunteers to ensure consistency and program effectiveness • Involving regional chambers of commerce in helping to recruit volunteers 	<p>Economic Development Commission</p> <p>Economic Development Team</p>	<p>Ongoing</p>	<p>Staff Time</p> <p>Volunteer Time</p> <p>Operating Budget</p>
<p>2. Include agricultural enterprises in BRE activities.</p> <p>The Agriculture Committee can assist in targeting farm businesses for BRE outreach.</p>	<p>Economic Development Commission</p> <p>Agriculture Committee</p>	<p>Ongoing</p>	<p>Staff Time</p> <p>Volunteer Time</p>
<p>3. Prepare a Business Retention and Expansion plan with more specific strategies to foster entrepreneurship, small business development and talent retention.</p>	<p>Economic Development Commission</p>	<p>Medium Term</p>	<p>Staff Time</p> <p>Volunteer Time</p> <p>Operating Budget</p>

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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Strategy B | Connect businesses with information and resources.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Strengthen relationships with state and regional business organizations to expand knowledge of and access to business assistance resources.</p> <p>Examples include CT Small Business Development Center, Northeast CT Economic Alliance, MetroHartford Alliance, CT Department of Economic and Community Development, CT Department of Agriculture, UConn Cooperative Extension</p>	Economic Development Team	Ongoing	Staff Time
<p>2. Provide opportunities for businesses to connect with one-another.</p>	Economic Development Commission Agriculture Committee Economic Development Team	Ongoing	Staff Time Operating Budget
<p>3. Expand and periodically update the business and agriculture sections of the Town website.</p> <p>The pages should be clearly accessible from the homepage and include the following information:</p> <ul style="list-style-type: none"> • <i>Community profile</i> • <i>Information on how to locate a business in Mansfield</i> • <i>Information on permitting process with links to key pages</i> • <i>Information on assistance programs</i> • <i>Information on available sites</i> • <i>Testimonials from existing businesses and farmers</i> • <i>Links to local, state and regional organizations, organized by type with a brief description of each</i> • <i>Primary point of contact</i> 	Economic Development Commission Agriculture Committee Information Technology Economic Development Team	Short Term	Staff Time Volunteer Time
<p>4. Identify available commercial and agricultural properties for sale/lease and market through sites such as CERC's Site Finder website (www.ctsitefinder.com), www.farm-link.uconn.edu, and www.newenglandfarmlandfinder.org.</p>	Economic Development Team	Short Term	Staff Time Operating Budget
<p>5. Partner with area organizations and nearby communities to host informational events on topics of interest to local businesses.</p> <p>Coventry has an existing program in place; the Town should explore partnering on future programs of common interest to businesses in both communities.</p>	Economic Development Commission Agriculture Committee	Short Term	Staff Time Volunteer Time Operating Budget

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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Strategy C | Reduce regulatory barriers to business growth. *For recommended changes to zoning regulations, see Goal 6.5.*

ACTIONS	WHO	WHEN	RESOURCES
1. Improve the permitting process by providing clear information, streamlining review and providing on-line service.	<i>See Goal 6.5 for specific recommendations.</i>		
2. Periodically evaluate and update permit fee structure to ensure that it is not a barrier to economic development. As part of any review, the Town should review fees in comparable communities to remain competitive.	Economic Development Team Town Council	Ongoing	Staff Time
3. Work with state and regional organizations and other communities to advocate for regulatory change at the state level to make Connecticut a more business-friendly state. Potential partners include the Connecticut Conference of Municipalities, Windham and Tolland Chambers of Commerce, Capitol Region Council of Governments, MetroHartford Alliance and CERC.	Economic Development Team	Ongoing	Staff Time

Strategy D | Promote local businesses and celebrate their success.

ACTIONS	WHO	WHEN	RESOURCES
1. Work with area businesses to reinvigorate the Mansfield Business and Professionals Association (MBPA).	Economic Development Commission Economic Development Team Windham Chamber of Commerce	Ongoing	Staff Time Volunteer Time
2. Update the Town’s website to include business and agricultural portals that showcase local businesses, farms and products. Information can include business listings, highlights of local products and experiences, and recognition of local business success stories, such as chamber awards.	Economic Development Commission Agriculture Committee Economic Development Team Information Technology	Short Term	Staff Time Volunteer Time

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>3. Include articles and features in the Town newsletter spotlighting local businesses and agricultural/forestry enterprises.</p>	<p>Economic Development Commission</p> <p>Agriculture Committee</p>	Ongoing	<p>Staff Time</p> <p>Volunteer Time</p>
<p>4. Develop local business and agriculture guides.</p> <p>A local business guide and map can help inform residents about the variety of goods and services available in the community.</p>	<p>Economic Development Commission</p> <p>Agriculture Committee</p> <p>Economic Development Team</p> <p>Mansfield Downtown Partnership</p>	Short-Medium	<p>Staff Time</p> <p>Volunteer Time</p> <p>Operating Budget</p> <p>Ad/Sponsors</p>
<p>5. Continue to encourage residents and businesses to buy local.</p> <p>Past efforts have focused on holiday shopping events. The program could be expanded to have a more year-round focus.</p>	<p>Economic Development Commission</p> <p>Economic Development Team</p> <p>Mansfield Downtown Partnership</p>	Medium Term	<p>Staff Time</p> <p>Operating Budget</p>

Strategy E | Expand local business assistance programs.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Seek funding for capital improvement projects that will support local business growth consistent with Town objectives.</p> <p>Possible funding sources include the Connecticut Small Town Assistance Program and Small Cities grants.</p>	<p>Economic Development Commission</p> <p>Economic Development Team</p> <p>Mansfield Downtown Partnership</p>	Ongoing	<p>Staff Time</p> <p>Grants</p> <p>CIP</p>
<p>2. Consider developing local small business programs.</p> <p>Revolving loan and grant programs can help small businesses and farms finance improvements needed to help them succeed and grow. Funding for these types of programs may be available through state and federal grants, including the Department of Housing’s Small Cities program.</p>	<p>Economic Development Commission</p> <p>Town Council</p> <p>Economic Development Team</p>	Medium-Long	<p>Staff Time</p> <p>Grants</p>

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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CHAPTER 6: DIVERSIFYING THE ECONOMY

Goal 6.3

Mansfield has a growing and diversified economy that helps to maintain the high-quality services desired by residents.

Measures of Effectiveness:

- Increase in number of businesses in sectors identified as potential local and regional growth sectors
- Number of businesses related to UConn R&D or faculty expertise establishing operations in Mansfield
- Increases in, improvements to, or expanded access to tourism venues
- Number and square footage of new office, R&D, and light industry establishments
- Increase in assessed value of taxable commercial, industrial and agricultural properties
- Increase in number and diversity of job opportunities

Strategy A | Establish a regional business marketing program.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Collaborate with nearby towns on regional marketing efforts.</p> <p>Potential activities include:</p> <ul style="list-style-type: none"> • <i>Joint grant applications for economic development activities including marketing and shared staff</i> • <i>Development of regional marketing materials</i> • <i>Development of informal collaborative efforts such as cross-referrals of prospects that are not a good fit with the initial contact community.</i> 	<p>Economic Development Commission</p> <p>Agriculture Committee</p> <p>UConn</p> <p>Economic Development Team</p>	Ongoing	<p>Staff Time</p> <p>Operating Budget</p> <p>Grants</p>
<p>2. Conduct outreach to commercial property developers that specialize in businesses aligned with the Town's marketing and development objectives.</p> <p>Lab space and multi-tenant space for early stage technology firms are potential targets for discussion.</p>	<p>Economic Development Team</p> <p>Economic Development Commission</p>	Ongoing	<p>Staff Time</p> <p>Volunteer Time</p>
<p>3. Target businesses in economic sectors that are strong and growing regionally, technology businesses related to UConn, agricultural-related businesses and businesses providing underrepresented consumer goods and services.</p> <p>Initial efforts should focus on firms that are well-matched to current commercial property inventory; targeting can be broadened as more specialized facilities (e.g. with lab space) are developed. <i>See Strategy B for additional actions related to UConn-related businesses.</i></p>	<p>Economic Development Commission</p> <p>UConn</p> <p>Economic Development Team</p> <p>Mansfield Downtown Partnership</p> <p>Agriculture Committee</p>	Medium Term	<p>Staff Time</p> <p>Volunteer Time</p> <p>Operating Budget</p>

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>4. Strengthen relationship with the Connecticut Department of Economic and Community Development (DECD) to encourage referrals of firms and site selection consultants seeking a location in Connecticut for businesses consistent with target economic sectors.</p>	Economic Development Team	Ongoing	Staff Time
<p>5. Pursue state and federal funding to support economic development activities and projects.</p> <p>Potential sources include Small Cities CDBG grants, US Economic Development Administration (EDA) grants, US Department of Agriculture (USDA) grant and loan programs.</p>	Economic Development Team	Ongoing	Staff Time Operating Budget CIP (If match required)
<p>6. Organize familiarization tours for businesses, site selectors, and commercial property developers to highlight available properties and the Town’s assets and amenities.</p> <p>Tours could involve Town officials, real estate professionals, business leaders and university representatives, as appropriate.</p>	Economic Development Commission Economic Development Team	Short–Medium	Staff Time Volunteer Time Operating Budget
<p>7. Develop a menu of state and local incentives to support development of businesses and properties aligned with Town objectives.</p> <p>Potential incentives include:</p> <ul style="list-style-type: none"> • <i>Providing local Tax Increment Financing (TIFs) to finance public improvements associated with desired development projects, potentially in conjunction with a state TIF for large-scale projects through Connecticut Innovations</i> • <i>Fixing the assessment of privately developed and owned buildings for up to seven years</i> • <i>Offering funding to reduce the development costs of incubators or other multi-tenant facilities (potential funding sources include Small Cities and STEAP grants)</i> • <i>Supporting funding applications to Connecticut Innovations Bioscience Facility Fund</i> • <i>Working with developers to obtain brownfields remediation funding</i> • <i>Acquiring and land-banking property</i> 	Town Council Economic Development Commission Economic Development Team	Short–Medium	Staff Time Operating Budget Grants CIP

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ACTIONS	WHO	WHEN	RESOURCES
<p>8. Work with the Town of Windham and the CT Department of Economic and Community Development to explore creation of an Airport Development Zone for the Windham airport.</p> <p>Airport development zones provide local property tax and state corporate tax incentives to businesses engaged in manufacturing, R&D related to manufacturing and other services related to the airport.</p>	<p>Economic Development Team</p> <p>Economic Development Commission</p> <p>Finance</p> <p>Town Council</p>	Short–Medium	<p>Staff Time</p> <p>Operating Budget</p>

Strategy B | Collaborate with UConn to maximize the local economic benefits of the University's presence.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Increase efforts to capture businesses graduating from UConn's Technology Incubation Program (TIP) in Mansfield.</p> <p>These firms often need small scale R&D and office space with special fit-up for wet or dry lab space; however, demand has been insufficient for private developers or property owners to develop space involving the additional costs generated by fit-up requirements. Possible activities include:</p> <ul style="list-style-type: none"> • <i>Quantifying demand, both existing and previous, through documentation of TIP graduates that moved to other communities due to lack of space</i> • <i>Updating zoning regulations to expand areas where R&D businesses are allowed and streamlining review procedures (See Goal 6.5, Strategy C for specific recommendations)</i> • <i>Identifying potential funding sources and partners for a small-scale R&D start-up/incubator facility. The Axis901 project in Manchester (coworking space owned by the Town and developed through a partnership with Manchester Community College and First Niagara Bank) could be a potential model.</i> 	<p>Economic Development Commission</p> <p>Economic Development Team</p>	Ongoing	<p>Staff Time</p> <p>Operating Budget</p> <p>Grants</p>
<p>2. Work with UConn to explore the potential for public-private partnerships to redevelop under-utilized state-owned land such UConn's Depot Campus and the Bergin Correctional Facility for mixed public and private use.</p> <p>Possible actions include:</p> <ul style="list-style-type: none"> • <i>Working with the Town and other stakeholders to explore reuse options.</i> • <i>Conducting site and feasibility studies, including potential for adaptive reuse of historic buildings</i> • <i>Exploring potential for brownfields assessment and remediation grants to address possible contamination</i> 	<p>UConn</p> <p>Economic Development Team</p> <p>Mansfield Downtown Partnership</p>	Medium Term	<p>Staff Time</p> <p>Operating Budget</p> <p>UConn</p> <p>Private funds</p>

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Strategy C | Promote Mansfield as a tourism destination.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Collaborate with nearby communities and The Last Green Valley to develop joint marketing efforts and promote more effective and targeted marketing of northeast Connecticut by Mystic Country and the Connecticut Office of Culture and Tourism.</p>	<p>Economic Development Commission</p> <p>Economic Development Team</p> <p>Mansfield Downtown Partnership</p>	Ongoing	<p>Staff Time</p> <p>Volunteer Time</p>
<p>2. Support UConn in developing additional summer adult and youth summer learning programs, using empty dormitory rooms for lodging.</p>	Town Council	Ongoing	Staff Time
<p>3. Supplement and enhance regional tourism development and marketing activities, with a particular emphasis on summer tourism.</p> <p>Expanding summertime activity to achieve a greater balance with other seasons will help provide a more stable market for businesses serving local consumers and visitors and increase year-round job opportunities.</p>	<p>Tourism-related businesses</p> <p>Economic Development Commission</p> <p>Economic Development Team</p> <p>Mansfield Downtown Partnership</p>	Short-Medium	<p>Volunteer Time</p> <p>Staff Time</p> <p>Operating Budget</p>
<p>4. Develop a local tourism promotion organization.</p> <p>Other small communities with significant tourism assets have developed marketing efforts to supplement regional efforts. Activities could include:</p> <ul style="list-style-type: none"> • <i>Development of a visitor website and packages</i> • <i>Organization of special events</i> • <i>Development of theme trails</i> • <i>Installation of wayfinding signage</i> • <i>Operation of a visitor kiosk in Storrs Center</i> • <i>Promotion of additional tourism infrastructure (such as more lodging rooms)</i> 	<p>Tourism-related businesses</p> <p>Economic Development Team</p> <p>Mansfield Downtown Partnership</p>	Short-Medium	<p>Staff Time</p> <p>Operating Budget</p> <p>Grants</p>

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Strategy D | Collaborate with surrounding communities to generate mutually desirable economic activity.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Work with surrounding communities to convene periodic joint meetings of Economic Development Commissions to discuss economic activity, challenges and opportunities and potential collaborations.</p>	<p>Economic Development Commission Economic Development Team</p>	Ongoing	<p>Staff Time Volunteer Time Operating Budget</p>
<p>2. Participate in efforts to update the regional Comprehensive Economic Development Strategy (CEDS).</p>	<p>Economic Development Team</p>	Ongoing	<p>Staff Time</p>
<p>3. Explore potential for partnering with one or more nearby municipalities on a joint economic development project.</p> <p>Connecticut General Statutes allow for municipalities to partner on joint development projects, whereby municipalities can share in both the costs and revenues of a project. Regional projects can be more competitive in obtaining state and federal grants. Potential projects that may benefit from such an approach include:</p> <ul style="list-style-type: none"> • <i>Technology incubator/start-up space</i> • <i>Development of regional value-added processing, aggregation and distribution facilities (such as meat processing) that would support local agricultural enterprises</i> <p>See Goal 6.3, Strategy B, Action 1 and Goal 6.4, Strategy F for more information on these projects/needs.</p>	<p>Economic Development Commission Town Council Economic Development Team Agriculture Committee</p>	Medium-Long	<p>Staff Time Operating Budget CIP Grants</p>

CHAPTER 6: DIVERSIFYING THE ECONOMY

Goal 6.4

Agriculture is valued by the community and expanding with increased acreage, higher production and growing market opportunities.

In addition to being an economic development asset, agricultural lands and open spaces also provide ecosystem and revenue benefits to the Town. See Goal 10.3, Strategy B, Action 4 for specific recommendations on how the Town can continue to preserve and enhance open space and agricultural lands.

Measures of Effectiveness:

- Increase in agricultural acreage, managed forests, production and distribution
- Increase in average farm income
- Increase in number of full-time farmers
- Number of Mansfield farms supplying products to local schools, businesses and institutions

Strategy A | Increase visibility of agriculture to strengthen the agricultural identity of the town and region. See Goal 5.4 for additional strategies related to increasing access to local food.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Promote food production by non-farming residents and private, non-commercial agricultural activities. Connect residents with programs and resources for growing their own food at home or in community gardens. See Goal 5.4, Strategy A, Action 1 and Goal 5.6, Strategy A, Action 3 for specific actions on increasing the availability of community gardens.</p>	<p>Agriculture Committee Parks & Rec</p>	Ongoing	<p>Staff Time Volunteer Time Operating Budget</p>
<p>2. Feature local products at community events.</p>	All Departments	Ongoing	<p>Staff Time Operating Budget</p>
<p>3. Preserve scenic vistas of working agriculture. See related action under Goal 3.4, Strategy A.</p>	<p>PZC Agriculture Committee Town Council</p>	Ongoing	Staff Time
<p>4. Develop a program to recognize local farmers who are making a contribution to agriculture and forestry.</p>	Agriculture Committee	Short Term	<p>Staff Time Volunteer Time Operating Budget</p>



ACTIONS	WHO	WHEN	RESOURCES
<p>5. Identify Mansfield as an agricultural community through signs.</p> <p>Post signs at town gateways showing support for agriculture; develop signage to identify preserved agricultural lands; increase the visibility of agricultural producers through directional signs, both permanent and temporary/seasonal.</p>	<p>Agriculture Committee DPW</p>	Short Term	<p>Staff Time Volunteer Time Operating Budget</p>
<p>6. Encourage schools to promote agriculture.</p> <p>Highlight local foods on school menus; incorporate nutritional and agriculture-based curriculum, and provide students with experiential learning opportunities through farm visits, taste tests and composting.</p>	<p>Agriculture Committee Mansfield Board of Education Region 19 Board of Education UConn</p>	Short–Medium	<p>Staff Time Volunteer Time Operating Budget</p>

Strategy B | Promote agricultural experiences for the public.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Encourage UConn to strengthen connections with local farms through events, trips to farms and other agri-tourism sites, purchasing food from local farms, etc.</p>	Agriculture Committee	Ongoing	<p>Volunteer Time Staff Time</p>
<p>2. Support and encourage agricultural education and activities for youth, including 4-H program and Region 19’s Agri-Science Program.</p> <p>Potential activities include a recognition program for youth achievements in agriculture.</p>	<p>Agriculture Committee Mansfield Board of Education Region 19</p>	Ongoing	<p>Staff Time Volunteer Time</p>
<p>3. Organize events on farms, forest lands and at the Storrs Farmers Market.</p>	Agriculture Committee	Ongoing	<p>Volunteer Time Operating Budget</p>
<p>4. Work with other communities, regional organizations and the state to develop and brand an ‘Agricultural Trail’ to showcase local agri-tourism activities.</p> <p>Leverage the success of UConn’s Dairy Bar to encourage visits to local farms and help connect interested farmers to other local and regional agri-tourism destinations, activities and initiatives. <i>See Goal 6.5, Strategy B, Action 2 for strategies to reduce regulatory barriers to agri-tourism in Mansfield.</i></p>	<p>Agriculture Committee Economic Development Commission Economic Development Team</p>	Short-Medium	<p>Staff Time Volunteer Time Operating Budget</p>

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Strategy C | Continue to connect farmers with resources. See Goal 6.2 for related strategies and actions.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Connect farmers with state programs and resources at the CT Department of Agriculture such as Farm-to-School, Farm-to-Chef, and Farm Viability Grants.</p>	<p>Agriculture Committee Economic Development Team</p>	Ongoing	<p>Staff Time Volunteer Time</p>
<p>2. Conduct outreach to farmers to ensure that they are aware of available local tax incentives. Examples include PA 490, abatements and exemptions unique to agricultural activities, and other business tax incentives such as those identified in Goal 6.3, Strategy A, Action 7 as may be adopted by the Town Council.</p>	<p>Agriculture Committee Economic Development Team</p>	Ongoing	<p>Staff Time Volunteer Time</p>
<p>3. Include a representative from the UConn School of Agriculture and Natural Resources as a member of the Agriculture Committee.</p>	<p>Town Council UConn</p>	Short Term	Volunteer Time
<p>4. Support the development of a local farmers network to enhance opportunities for collaborating and sharing information.</p>	<p>Agriculture Committee Nearby Towns</p>	Short Term	Volunteer Time
<p>5. Partner with UConn to make information about upcoming speakers, events and research related to agriculture more easily accessible to farmers and the public.</p>	<p>Agriculture Committee Economic Development Team</p>	Short Term	<p>Staff Time Volunteer Time</p>
<p>6. Work with nearby communities to develop an annual or semi-annual event that brings together regional farmers and people from relevant support organizations. Potential topics include education on marketing channel selection and exploring the potential for a regional cooperative to facilitate sales to institutions, restaurants and grocery stores.</p>	<p>Agriculture Committee</p>	Short–Medium	<p>Volunteer Time Operating Budget Sponsors</p>

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Strategy D | Ensure that Town officials and the public understand the value of agriculture and forestry to Mansfield.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Identify the full range of benefits related to agriculture and forestry and communicate to officials and the community.</p> <p>This will help communicate why agriculture is important to people with different priorities, such as contributions to sustainability, community character, economic development and climate change mitigation.</p>	<p>Agriculture Committee</p> <p>Open Space Preservation Committee</p> <p>Conservation Commission</p> <p>Economic Development Team</p>	Ongoing	<p>Staff Time</p> <p>Volunteer Time</p>
<p>2. Provide ongoing education to Town employees and commission/committee members on the importance of agriculture in the community, contributions to the community, and why it is the Town’s policy to support agriculture.</p> <p>Identify potential impacts for each department, board and commission on agricultural viability and educate staff accordingly.</p>	<p>Agriculture Committee</p> <p>Economic Development Team</p>	Ongoing	<p>Staff Time</p> <p>Volunteer Time</p>
<p>3. Recruit farmers to serve on all relevant Town committees, commissions and boards to ensure that challenges and opportunities related to agriculture can be brought to the table.</p> <p>In addition to the Agriculture Committee, important groups include the Conservation Commission, Economic Development Commission, Open Space Preservation Committee, Sustainability Committee and Town/University Relations Committee.</p>	<p>Town Council</p> <p>Town Democratic and Republican Town Committees</p> <p>Agriculture Committee</p>	Ongoing	<p>Staff Time</p> <p>Volunteer Time</p>
<p>4. Ask Town boards and committees to identify any actions related to agriculture within annual reports.</p>	Town Manager	Ongoing	<p>Staff Time</p> <p>Volunteer Time</p>

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Strategy E | Support legislation, policies and regulations that increase farm viability.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Advocate for changes to state legislation and policies to support farming and expanding markets.</p> <p>Potential issues include enabling legislation for agricultural tax incentives, health regulations related to production and processing of food, and coordinating regulations between states, such as weight of trucks.</p>	<p>Agriculture Committee</p> <p>Economic Development Commission</p> <p>Economic Development Team</p>	Ongoing	<p>Staff Time</p> <p>Volunteer Time</p>
<p>2. Conduct annual outreach with farmers to review existing regulations and identify impacts on the viability of their operations.</p>	<p>Agriculture Committee</p> <p>Economic Development Team</p>	Ongoing	<p>Staff Time</p> <p>Volunteer Time</p>

Strategy F | Support the expansion of agricultural operations and agriculture-related businesses. *See Goal 3.2 for strategies and actions related to increasing available agricultural land.*

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Incubate and retain new farm operations.</p> <p><i>See related business strategies under Goal 6.2, Strategy A and Goal 6.2, Strategy B.</i></p>	Agriculture Committee	Ongoing	<p>Staff Time</p> <p>Volunteer Time</p>
<p>2. Encourage UConn to include representatives from the Town to ensure that new agricultural initiatives meet the needs of local and regional farmers.</p>	<p>Economic Development Team</p> <p>Agriculture Committee</p>	Ongoing	<p>Volunteer Time</p> <p>Staff Time</p>
<p>3. Support food processing and agricultural product distribution initiatives.</p> <p>The Last Green Valley calls for a regional food hub to process and distribute food, such as Willimantic's Commercially Licensed Cooperative Kitchen (CLiCK). Additional regional initiatives include a mobile slaughtering unit and multi-processing centers for meat, poultry, fruits and vegetables.</p>	<p>Agriculture Committee</p> <p>Economic Development Commission</p>	Ongoing	<p>Staff Time</p> <p>Volunteer Time</p>
<p>4. Consider establishing a small grant program to assist farmers in growing their business.</p> <p>Examples of potential projects include but are not limited to creation of a CSA, signs, marketing materials, and organic certification.</p>	<p>Town Council</p> <p>Agriculture Committee</p>	Short-Medium	<p>Operating Budget</p> <p>CIP</p> <p>Grants</p>

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Strategy G | Support new market channels for local agricultural products.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Increase the volume of local foods in public and private institutions (i.e. school food service, child care and pre-k programs, hospitals, correctional facilities, etc.). <i>See related action under Goal 6.4, Strategy C.</i></p>	<p>Agriculture Committee Mansfield Board of Education Region 19 Board of Education</p>	Ongoing	<p>Volunteer Time Operating Budget</p>
<p>2. Work with UConn Dining Services to continue their programs to purchase local food. UConn has demonstrated commitment to procuring local foods whenever possible and is active in efforts to change procurement guidelines for State institutions to make it easier to buy local food. There are tentative plans to move UConn’s production kitchens to a new facility at the Bergin campus which would allow more processing (cut, cook, chill, freeze) and make it easier for Dining Services to contract directly with local farmers.</p>	<p>Agriculture Committee</p>	Ongoing	<p>Volunteer Time Staff Time</p>
<p>3. Help make connections between farmers and new restaurants, stores and the distributors that supply them. The public school system already participates in the Connecticut Farm to School program by receiving fruits, corn, pumpkins and squash from an orchard in Killingly. The Farm to School program is actively recruiting farms. Restaurants can connect with local farmers by participating in a similar state Farm to Chef program.</p>	<p>Agriculture Committee Economic Development Team</p>	Ongoing	<p>Volunteer Time Staff Time</p>
<p>4. Incorporate SNAP EBT payment programs at the Storrs Farmers Market.</p>	<p><i>See Goal 5.4, Strategy A, Action 3 for specific recommendations.</i></p>		

Strategy H | Support marketing of agricultural products and agriculture-related businesses.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Identify projects for marketing local agriculture and apply for funds from the Connecticut Farm Viability Program. Potential projects include a ‘Grown in Mansfield’ brand and signage programs as identified in <i>Goal 6.4, Strategy A, Action 5.</i></p>	<p>Agriculture Committee</p>	Short Term	<p>Staff Time Operating Budget Grants</p>
<p>2. Promote local farms and products on the Town website and at community events.</p>	<p><i>See related strategies under Goal 6.2, Strategy D and Goal 6.4, Strategy A.</i></p>		

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CHAPTER 6: DIVERSIFYING THE ECONOMY

Goal 6.5

Mansfield’s land use regulations are farm-friendly and support business retention and expansion efforts while protecting community character.

Measures of Effectiveness:

- Increase in non-residential grand list
- Increase in number of new businesses
- Increase in agricultural production and distribution
- Increase in number and square footage of new office, R&D and light industry businesses on redeveloped sites

Strategy A | Reduce barriers to business growth in Zoning and Subdivision Regulations.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Revise subdivision process and requirements to distinguish between single-family subdivisions and non-residential/multi-family residential subdivisions.</p> <p>As the subdivision process is the sole opportunity to review single-family subdivisions, the standards and requirements are extensive. However, many of these requirements are duplicative or not applicable to multi-family residential and non-residential projects as these are either located in developed areas, are subject to another review process such as site plan review or special permit, or have detailed design and performance standards identified in the Zoning Regulations.</p>	PZC	Short Term	Staff Time Community Challenge Planning Grant
<p>2. Reduce the number of business uses needing special permit approval by including more robust development standards for specific uses to ensure quality development.</p> <p>Development review processes can also be a tool to direct businesses and uses to the four business target areas identified in <i>Goal 6.1, Strategy B</i>. Items to be considered include:</p> <ul style="list-style-type: none"> • <i>Locations—approvals through site plan and/or zoning permit review may be more appropriate in major commercial areas than smaller neighborhood/village business areas which have residential neighborhoods in close proximity</i> • <i>Areas/situations where certain uses may not be appropriate in all locations, necessitating special permit review</i> • <i>Thresholds for requiring PZC site plan approval</i> • <i>Thresholds for administrative review and approval through zoning permit process</i> • <i>Specific standards and requirements for uses, site and building development</i> 	PZC	Short Term	Staff Time Community Challenge Grant

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ACTIONS	WHO	WHEN	RESOURCES
<p>3. Refine existing provisions regarding non-conforming uses.</p> <p>Regulations for non-conforming uses, particularly commercial and higher density residential uses, should allow for continuation and potential limited expansions. Significant intensification inconsistent with the goals of this plan should be discouraged.</p>	PZC	Short Term	Staff Time Community Challenge Grant
<p>4. Update sign regulations to improve usability and allow for adequate business marketing while minimizing sign clutter and maintaining high aesthetic standards.</p>	PZC	Short Term	Staff Time Community Challenge Grant

Strategy B | Support growth of agriculture and agri-tourism through changes to regulations.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Update Zoning and Subdivision Regulations to remove barriers to farm viability.</p> <p>Issues to be reviewed/addressed include but are not limited to:</p> <ul style="list-style-type: none"> • <i>Keeping of livestock</i> • <i>Compatible farm businesses</i> • <i>Signage</i> • <i>Parking</i> • <i>Farm worker housing</i> • <i>Hoop houses or other growing structures</i> • <i>Horticulture</i> • <i>Farm-energy opportunities</i> • <i>Agricultural activities on small residential lots</i> • <i>Buffers as part of new residential developments locating next to existing farms</i> <p>Potential resources for model regulations include: Eastern RC&D's Guidance and Recommendations for Connecticut Municipal Zoning Regulations and Ordinances for Livestock (2012) and RIDEM's Community Guidance for Maintaining Working Farms and Forests (2012).</p>	PZC	Short Term	Staff Time Community Challenge Grant
<p>2. Review and revise Zoning Regulations to reduce barriers to agri-tourism activities.</p> <p>Agri-tourism can include pick-your-own programs, mazes and hayrides, farm-to-table events, weddings, fishing events, and other types of agriculture and natural resource tourism. Issues to be reviewed/addressed include design standards, signage, parking and review procedures.</p>	PZC	Short Term	Staff Time Community Challenge Grant

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ACTIONS	WHO	WHEN	RESOURCES
<p>3. Update Zoning Regulations to enable development of infrastructure that would support agriculture-related businesses, such as inputs, food waste, aggregation, processing, distribution, etc.</p> <p>Some of these activities may be water/wastewater intensive, requiring a location with access to public water and sewers.</p>	PZC	Short Term	Staff Time Community Challenge Grant

Strategy C | Support expansion of Research and Development (R&D) and light industrial uses in appropriate locations. See *Map 8.3: Future Land Use for locations of proposed Mixed Use Centers and Commercial areas.*

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Update zoning regulations for areas designated as Mixed Use Centers and Commercial in the Future Land Use Plan to allow R&D uses.</p> <p>There are many different types of R&D uses, some of which require dry lab space (such as computers, electronics, robotics labs), wet lab space (where chemicals, drugs, other materials are handled), and biolabs (labs dealing with biological materials). Regulations should be updated to identify development standards and review procedures specific to R&D uses. Appropriate areas for consideration include Four Corners, Storrs Center, Route 6/Route 195/Pleasant Valley area in southern Mansfield and Perkins Corner. Issues to consider include:</p> <ul style="list-style-type: none"> • Areas/situations where certain uses may not be appropriate in all locations, necessitating special permit review • Thresholds for requiring PZC site plan approval • Thresholds for administrative review and approval through zoning permit process • Specific standards and requirements for uses, site and building development (See Goal 6.5, Strategy C, Action 4). • Environmental performance standards • Transportation connections • Wastewater disposal 	PZC	Short Term	Staff Time Community Challenge Grant

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ACTIONS	WHO	WHEN	RESOURCES
<p>2. Limit R&D businesses with biological laboratories to labs that meet the Centers for Disease Control (CDC) criteria for Biosafety Levels 1 and 2 until additional research is done to determine whether there are any areas where a Biosafety Level 3 lab could be located with appropriate safeguards and review procedures. Biosafety Level 4 labs should not be allowed.</p> <p>R&D businesses with biolabs should only be allowed with special permit approval; review criteria should include requirements for monitoring procedures to ensure conformance with federal safety standards.</p>	PZC	Short Term	Staff Time Community Challenge Grant
<p>3. Update zoning regulations for areas designated as Mixed Use Center and Commercial to allow light industrial uses.</p> <p>Light industrial uses include uses such as warehouses, wholesale facilities, and limited assembly production activities. Regulations should identify appropriate locations where such uses could be allowed. Areas and items to be considered include those identified above under <i>Goal 6.5, Strategy C, Action 1</i> as well as appropriate size/scale. Some areas may need size limitations to ensure compatibility with surrounding development.</p>	PZC	Short Term	Staff Time Community Challenge Grant
<p>4. Develop design standards and guidelines for R&D and light industrial uses, as well as appropriate industrial performance standards.</p> <p>Performance standards for industry involve measurable limits on noise, lighting, emissions and similar issues. Modern R&D and light industrial uses often have no external impacts. Design standards and guidelines will ensure compatibility with surrounding areas in terms of heights, massing, landscaping, character visible from the road, location of parking and similar issues.</p>	PZC	Short Term	Staff Time Community Challenge Grant

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7 HOUSING



TOPICS IN THIS CHAPTER INCLUDE

Housing in Mansfield Today

Affordable Housing

Housing Growth: Trends and Needs

Housing Tools and Resources

As Mansfield changes and grows, so does its housing needs. An aging population and changes in the types and locations of housing desired by young professionals and families are generating a desire for a wider variety of housing options. This chapter focuses on how to meet current housing needs as well as the needs and demands of a growing and changing population. Particular attention is given to demands for more affordable and workforce housing, the special needs of an aging population and strategies to protect the quality of existing housing and neighborhoods.

The data in this chapter has been summarized from the Mansfield Tomorrow Housing Strategy Report published in July 2013; please refer to that report for more detailed information.

what the **community** said

HOUSING

Participants in Mansfield Tomorrow process expressed interest in having a larger variety of housing options, both in design and levels of affordability.

Themes in the comments on housing included:

- There should be more compact, walkable housing options built near East Brook Mall, Four Corners and King Hill Road.
- Seniors need more options to age in place or to stay in Mansfield in assisted living.
- Landlord requirements should be better enforced to manage the rental stock and maintain the character of existing neighborhoods.
- Uninhabited housing should be regulated to protect home values and prevent blight.
- Better walking and bicycle paths should connect residential areas to destinations such as schools, recreation areas, and the UConn campus. Encourage new development along existing bus routes to support use of public transportation services.
- New development should model sustainable design principles and sensitively integrate into its natural setting to protect the physical environment.

“[I hope Mansfield will be] a thriving community, featuring a great quality of life.”

“I would hope to see more rental housing, for the elderly and handicapped. Right now... there is no housing for me to ‘trade up’ to [if I sell my home]. We need new ‘accessible’ (ADA) and ‘affordable’ housing for the retired people of this community.”

FROM MANSFIELD RESIDENTS

HOUSING IN MANSFIELD TODAY



House in Freedom Green

The analysis and recommendations in this chapter are focused around three themes:

- Increasing the availability of affordable housing
- Maintaining a high quality of community life
- Integrating sustainability and alternative housing options in Mansfield.

1. Housing in Mansfield Today

Population. The population of Mansfield is almost equally divided between people who live in households—families, single persons, nonfamily groups—and people who live in what the U.S. Census calls “group quarters”—university resident halls, nursing homes, and, until 2011, the prison. At the time of the 2010 census, 51% of the population lived in households and 48% lived in group quarters (mostly in on-campus housing). Of the 13,636 people living in households, it is estimated that approximately 2,500 of those were UConn students based on commuter student data.

Households. The U.S. Census Bureau divides households into family and non-family households. Family households include people living together who are related by blood, marriage, or adoption. Family households do not necessarily have children living with

them. Married couples without children at home and other related adults living together are classified as family households. Nonfamily households can include single persons living alone as well as groups of non-related people.

The characteristics of Mansfield’s population living in households are in many ways consistent with trends in Connecticut and the nation as a whole. More than a quarter of households are single person households; the population of householders is aging; and a minority of households have children living at home.

HOUSEHOLDS IN MANSFIELD

Key characteristics of Mansfield’s households in the 2010 census:

- 44% of total households are nonfamily households. The majority (58%) of these nonfamily households are single person households, with the rest made up of unrelated persons living together.
- 26% of all Mansfield households are single person households, approximately the same as the national percentage in 2010. Single householders can be found across the adult age spectrum, from students and young people starting out in life to people in middle age and senior citizens. The increase in single person households is a national trend that is expected to continue, with more single persons over age 65 living alone as the Baby Boomers age.
- 56% of all households are family households.
- 26% of all Mansfield households have children, with 18% of all Mansfield households composed of traditional nuclear families composed of a married couple with their own children.
- 42% of all householders in Mansfield are age 55 or older and 24% are age 65 or older.
- The average household size is 2.44 persons.

TOTAL HOUSEHOLDS	5,586	100%
Total nonfamily households	2,448	44%
Single person households	1,426	26%
Total family households*	3,138	56%
Husband-wife with own children	994	18%
Multigenerational households	114	2%
All households with children	1,446	26%

* Family household = people related by blood, marriage or adoption

SOURCE: US CENSUS BUREAU

More detailed information on the demographic characteristics of Mansfield residents and households can be found in Appendix A.

A) A GENERATIONAL TRANSITION IN HOUSING

The impact of these demographic characteristics on housing is that communities need to offer a diversity of housing types to meet the needs and preferences of a population of diverse households. In the 1950–1990 period when most of Mansfield’s housing stock was built, the housing market concentrated on family households with children, most of whom were looking for a three-bedroom single-family home on a lot with some play space for children in a neighborhood or community with good schools.

As households have become more diverse, real estate preferences are also less homogeneous than they were a generation ago. While some of Mansfield’s housing stock has undoubtedly been renovated to meet market preferences of the 1990s and 2000s (e.g., more bathrooms, upgraded kitchens, larger rooms), buyers of single-family homes may not find the town’s older homes as attractive as newer housing. While the reputation of Mansfield’s school system will continue to draw families with children, some of the existing suburban-style housing stock may not be as attractive to other types of households.

People look for different housing types as they go through the life cycle. By 2025, the population of Connecticut residents aged 65 and older is expected to increase by 55%; and those aged 55 to 64 by 20%. The group most likely to purchase larger homes, people aged 35 to 54, is expected to decline by 12%. Many baby boomers want to downsize, while many millennials prefer housing with access to amenities and less need to drive.¹ A repeated theme in public comment during this planning process has been the desire for more walkable and bikeable neighborhoods with less dependence on car travel in daily life. At the same time, there is a very strong desire to preserve the rural character of the town.

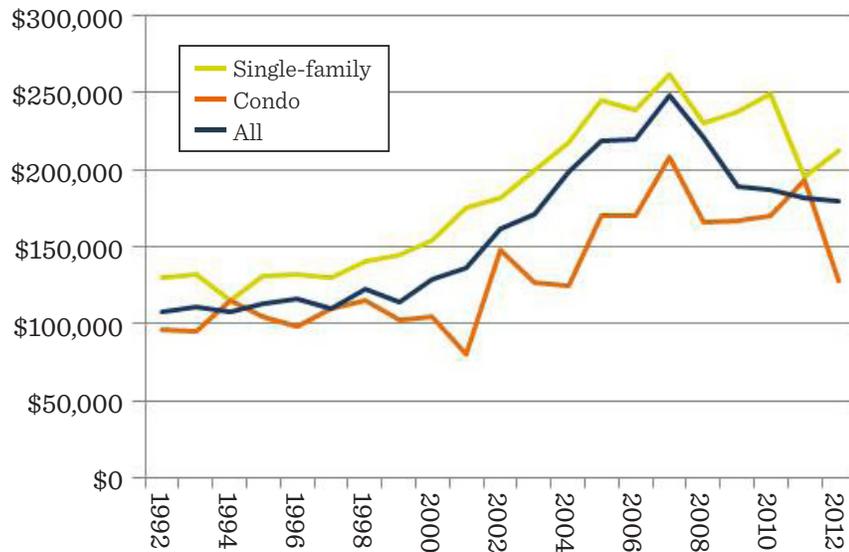
B) HOUSING STOCK

Number and Tenure of Housing Units. About two-thirds of occupied housing units are owner-occupied and one-third are renter-occupied. At the time of the 2010 census, there were 6,017 total housing units in Mansfield, an increase of 536 units since 2000. Of those units, 5,586 were occupied and 431 (7.2%) were vacant. Vacant units may be on the market, waiting for new tenants or owners to move in, or unoccupied for other reasons. The Town’s vacancy rate was below the state vacancy rate of 8.5%.

Housing Type and Age. Approximately sixty percent of Mansfield’s housing units are single-family homes and the majority of the housing stock was built between 1950 and 1989. Many are ranch style homes typical of subdivision housing during that era. Except for the recently built apartments in Storrs Center, multifamily developments (rental or condominium) in Mansfield are typically comprised of buildings with 3–6 units or garden apartments.

¹ www.handt.cnt.org

Figure 7.1: Residential Median Sales Price, 1992–2012



SOURCE: THE WARREN GROUP

Housing Costs. Mansfield experienced the housing bubble of the 2000s, with prices rising from the 1990s to a peak in 2007, and then declining precipitously to pre-bubble levels. Median single-family home prices peaked at \$262,300 in 2007, and median condo prices peaked at \$208,000 in the same year. The economic recession also brought about an increase in foreclosures. While there were only 8 foreclosures in 2008, pre-foreclosure files jumped to 56 in 2009, representing about 9% of total housing units. A pre-foreclosure filing occurs when a property is declared in default and the property owner has a defined period in which to pay before the property goes into foreclosure.

New Construction Trends. Building permit data from 2000 to 2012 show that single-family permits peaked in 2006—a year before the price peak—and declined thereafter to very low levels by 2010. Because Storrs Center Phase 1A and 1B were permitted starting in 2010, multifamily permits shot up in that period.

Forty-seven subdivisions creating 265 new lots were approved between 2000 and 2012, with only 5 subdivisions and 27 lots created between 2009 and 2012. Sixty-five approved lots have not been built as of 2013. Most of these subdivisions are located on large parcels in the more rural parts of Mansfield. Thirty-five lots were created at least partially within village areas (see Map 7.1: Approved Residential Subdivisions).

C) HOUSING FOR SENIORS

Mansfield’s population is aging. In 2010, approximately 60% of all householders were 45 and older; 42% were 55 and older and 24% were 65 and older. As they get older, some Mansfield residents will want to stay in town but will need smaller units or single floor

housing for independent living, or they will need assisted living. There are three housing options targeted to seniors in Mansfield: Glen Ridge, which is a condominium community with 51 units; Juniper Hill, with 100 apartments for independent or assisted living, which accepts Housing Choice (Section 8) Vouchers; and the Mansfield Housing Authority’s Wright’s Village with 40 units for elderly and disabled housing. Masonicare has purchased a property on Maple Road with the intent of developing senior housing and assisted living; the project has not moved forward due to lack of public water supply.

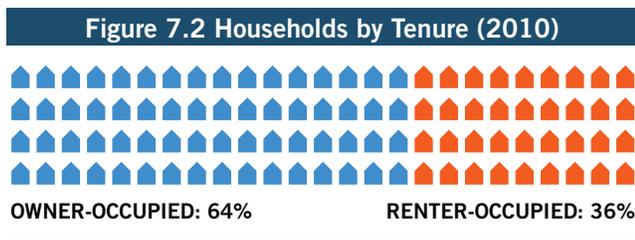
The concept of “naturally occurring retirement communities (NORCs)” describes neighborhoods or buildings in which a large proportion of residents are senior citizens. These are not purpose-built retirement communities and were not designed specifically to meet the needs of elderly persons. While this concept is typically applied to urban areas, it may have some applicability in Mansfield. The Jewish Federation of North America developed a NORC Aging in Place Initiative that has been promoting and testing a supportive services model for NORCs. Information is available at www.norcs.org.

From a policy point of view, the Town should encourage the location of senior housing in proximity (ideally walking distance) to locations where seniors can find activities, such as Storrs Center or the East Brook Mall area. Apartments or condos in Storrs Center would be suitable for senior living. Redevelopment of the East Brook Mall into a mixed use lifestyle center could provide an excellent location for senior living. Independent seniors might also find attractive options in alternative housing models such as co-housing (which is for all age groups), where residents live in separate units but intentionally live as a community, taking some meals together and designing and maintaining the co-housing development together. More information on co-housing is available later in this chapter.

D) RENTAL HOUSING TRENDS

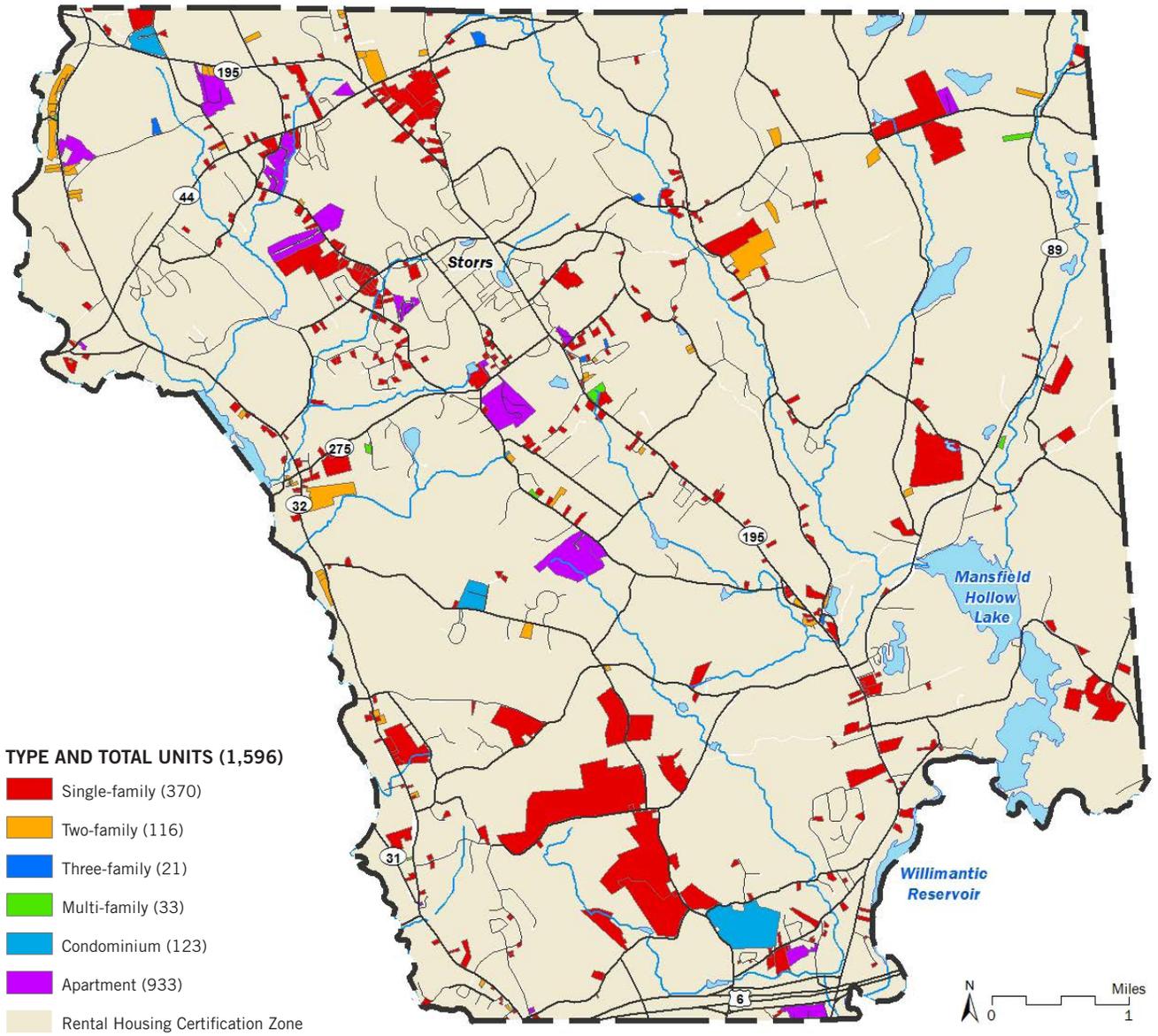
Many Mansfield homeowners, especially those living near the UConn campus, are concerned about ensuring a balance between owner-occupied housing and investor-owned housing for rental. While the rental market is heavily influenced by both undergraduate and graduate student populations, over one-third of householders living in rental units are age 36 years and older (36.5%). Since 2007, Mansfield’s Landlord Registration Ordinance requires owners of rental housing to register as landlords and maintain their current address with the Housing Inspection office. Owner-occupied units are exempt from

the registration requirement. A total of 1,596 units were registered as of 2014, including 370 single-family houses. In fall 2013, approximately 290 single-family houses were rented to students, according to UConn’s Office of Off-Campus Student Services, though it is not clear if all of these are located in Mansfield. To discourage conversions of single-family homes to rental property, the Planning



SOURCE: US CENSUS BUREAU

MAP 7.2: LANDLORD REGISTRATIONS BY TYPE



Source: Town of Mansfield, February 2014

and Zoning Commission changed the maximum number of unrelated individuals that could be considered a family from four to three in 2010.

In fall 2014, the Town Council expanded the Housing Certification Zone to include the entire town. All rental units are now required to undergo biannual inspections for compliance with minimum housing standards, with the exception of owner-occupants with an accessory unit for rent.

Quality of Life and Code Enforcement. Off-campus student housing is a concern for many Mansfield homeowners who live in proximity to apartment complexes occupied by students and to single-family homes that have been rented to students. Mansfield has already established some best practice programs to manage off-campus student housing and student behavior, including rental registration, and limitations on the number of unrelated people in single-family homes. The Town has also adopted various ordinances to minimize neighborhood blight, including a litter ordinance and residential parking ordinance that requires approval of a tenant and guest parking plan for all rental units in the certification zone. While the parking regulations have reduced blight from haphazardly parked vehicles, the ordinance has created challenges for enforcement. Previously, enforcement officers would simply count vehicles to identify potential problem properties; now properties must be monitored for several days with identification of specific vehicles each day.

In 2011, the Town adopted a nuisance ordinance to further address neighborhood quality of life issues. The ordinance holds landlords liable for the actions of their tenants if multiple citations are received within a specified time period. The Department of Building and Housing Inspection works with the police to track issuance of citations and notify landlords of their responsibilities. As of 2013, 58 citations had been issued to individuals, and 7 property owners had been fined \$250 for repeat offenses.

While efforts of the Department of Building and Housing Inspection, UConn Office for Off-Campus Student Services, and the Town's Resident Troopers have been increasingly effective in recent years through consistent enforcement, education, and outreach, many homeowners believe that enforcement could be more effective.

E) ON-CAMPUS HOUSING

UConn has historically housed a relatively large percentage of its students. Comparisons of UConn with other institutions located in rural or semi-rural settings and with institutions that UConn considers its academic peers indicate that UConn houses a much higher percentage of students on campus, hovering around 70% (see Table 7.2). Based on fall 2012 enrollment figures, 69% of undergraduates were housed on campus. Data from the previous year indicated 73% of students were housed on campus. In recent years, the number of graduate students in campus housing has decreased.

Table 7.2 National Universities of Over 14,000 Students Located In Rural Settings

INSTITUTION	LOCATION	UNDERGRAD ENROLLMENT	TOTAL ENROLLMENT	% STUDENTS IN CAMPUS HOUSING
Bowling Green University	Bowling Green, OH	15,059	17,577	45%
Cornell University	Ithaca, NY	14,167	21,131	57%
University of Connecticut	Storrs, CT	17,815	25,868	73%
Georgia Southern University	Statesboro, GA	17,525	20,212	25%
Miami University	Oxford, OH	14,936	17,395	48%
Mississippi State University	Mississippi State, MS	16,312	20,424	25%
Northern Arizona University	Flagstaff, AZ	20,750	25,364	32%
Sam Houston State University	Huntsville, TX	14,921	17,527	22%
Southern Illinois University	Carbondale, IL	15,000	19,817	29%
U. of Mississippi (Ole Miss)	University, MS	15,346	18,224	33%
University of New Hampshire	Durham, NH	12,609	15,172	59%
University of Rhode Island	Kingston, RI	13,219	16,317	43%
Washington State University	Pullman, WA	22,763	27,327	36%
Penn State	State College, PA	38,954	45,628	37%

2. Affordable Housing

Affordable housing is defined by the federal government as housing that costs no more than 30% of household income. In Mansfield, the rental housing market is more costly in relation to median incomes than the for-sale market because of the pressure from student demand. The Census Bureau's 2013 American Community Survey estimated that approximately 14.1% of Mansfield's families had incomes at or below the poverty level in the previous 12 months.

Participation levels in state and local assistance program also indicate that a significant number of Mansfield's residents struggle economically:

- An average of 646 Mansfield residents a month received food stamp assistance in 2013. (Source: End Hunger Connecticut)
- 23% of public school students were eligible for free or reduced lunch in 2013.
- 237 elderly and disabled residents received assistance applying for State tax relief programs in FY13.
- 128 families received assistance (food, gifts and cash) as part of the Town's holiday program in FY13.
- 32 families received cash assistance from the Mansfield Holiday Fund in FY13.
- 124 households received emergency financial and/or food pantry assistance in FY13.

A) STATE AFFORDABLE HOUSING GOALS

Connecticut State Law 8-30G sets a goal of 10% assisted affordable housing for every municipality. “Assisted housing” means housing that receives some form of subsidy and, in most cases, has long-term affordability as a requirement of the assistance. In Connecticut towns that do not meet the 10% goal, developers with an affordable housing project can override zoned densities through what is called the affordable housing land use appeal process. According to the state’s list for the purposes of the affordable housing land use appeal process, Mansfield has 654 units of assisted housing (including 153 federal housing vouchers, of which only 129 are funded).

According to the state’s 2012 Affordable Housing Appeals List of Exempt Municipalities, Mansfield has 10.94% affordable units. Table 7.3 shows how this number is calculated. The state uses the decennial census as the base for total housing units, which means that new housing at Storrs Center and elsewhere will not be added to the base until census 2020 housing unit numbers are released. Based on these numbers, as of the 2010 Census, Mansfield could have added up to 563 units of market rate housing without falling below the 10% affordability threshold. However, including unfunded vouchers to meet the 10% goal in Mansfield means that 24 “ghost” affordable units are included. Moreover, the housing vouchers are what is known as “tenant-based” or “mobile” vouchers because they are attached to the tenant and not a particular housing unit. They are limited to Mansfield and a few surrounding towns for the first year, but thereafter a tenant could take the voucher to use anywhere in the United States. Technically, therefore, Mansfield has fewer affordable units than indicated in the state list.

In the 2010-2012 period, 350 units of housing (mostly multifamily units in Storrs Center) received zoning permits. Assuming additional units are built by the census of 2020, including build-out of Storrs Center, Mansfield will need to add affordable units to its inventory in order to continue to have at least 10% of its units affordable according to state law. To demonstrate how Mansfield could fall below the 10% threshold for affordable housing and become vulnerable to zoning appeals over density, Table 7.3 shows how known and estimated housing growth can affect this percentage. If no new affordable units were to be added to the inventory by the census in April 2020 and another 400 units of housing were to have been completed, then Mansfield’s percentage of affordable units would drop to 9.7%. Nineteen (19) units of affordable housing would need to be added to the inventory by 2020 to remain at 10% based on these housing unit growth projections.

Table 7.3 Percent Affordable Housing in Mansfield: State 2012 List and Estimates with Additional Housing

	TOTAL HOUSING UNITS 2010 CENSUS, PLUS	GOVERNMENTALLY ASSISTED UNITS	TENANT RENTAL ASSISTANCE (VOUCHERS)	CHFA/ USDA MORTGAGES	DEED RESTRICTED UNITS	TOTAL ASSISTED UNITS	PERCENT AFFORDABLE	ADDITIONAL AFFORDABLE UNITS TO REACH 10%
State 2012 list	6,017	417	153	86	2	658	10.94%	0
Add 2010-2012 permits for market rate units	6, 017 + 350 = 6,367	417	153	86	2	658	10.33%	0
Estimated additional 400 market rate units by April 2020	6,367 + 400 = 6,767	417	153	86	2	658	9.7	19

SOURCES: STATE 2012 AFFORDABLE HOUSING APPEALS LIST OF EXEMPT MUNICIPALITIES; U.S. CENSUS; TOWN OF MANSFIELD

Since the tenant-based rental vouchers do not actually ensure that a specific unit of housing will remain permanently affordable, the Town could aim for 10% affordable units exclusive of the vouchers. In that case, the total affordable units based on the table above would be only 505 units instead of the 654 recognized by the State. As shown in Table 7.4, when the rental vouchers are not counted as affordable units, only 8.39% of units would be affordable as of 2012; this would decrease to 7.46% in 2020 if housing unit growth occurs as projected above and no affordable units are added to the inventory.

Table 7.4 Percent Affordable Units Not Counting Housing Vouchers

	TOTAL HOUSING UNITS 2010 CENSUS, PLUS	TOTAL ASSISTED UNITS MINUS HOUSING VOUCHERS	PERCENT AFFORDABLE	ADDITIONAL AFFORDABLE UNITS TO REACH 10%
State 2012 list	6,017	505	8.39%	97
Add 2010-2012 permits for market rate units	6, 017 + 350 = 6,367	505	7.93%	132
Estimated additional 400 units by April 2020 for market rate	6,367 + 400 = 6,767	505	7.46%	172

SOURCES: STATE 2012 AFFORDABLE HOUSING APPEALS LIST OF EXEMPT MUNICIPALITIES; U.S. CENSUS; TOWN OF MANSFIELD

B) AFFORDABILITY OF OWNERSHIP HOUSING

The latest study of housing affordability (for ownership housing) in Connecticut analyzed 2010 and 2011 median incomes in the state's municipalities in relation to the median price of housing. The purpose of the study was to determine whether a household with the median income could afford to purchase a single-family home at the median price. The calculation was based on a conservative formula: a buyer with a 10% down payment and no debt, 4.5% fixed-rate, 30-year mortgage, 1% annual property tax rate (based on fair market value), a 2.1% mortgage insurance premium and \$60 per month in property insurance. A town or city was considered unaffordable if its median household income was lower than the qualifying income.

For 2011, the gap between the income needed to qualify for a median price house and the town median income in Mansfield was less than \$10,000, putting Mansfield in the “most affordable” category compared to other Connecticut municipalities. The qualifying income was \$55–65,000 to buy a house in the \$175,000–\$200,000 range. By definition, half of the households could not afford the median priced house because they were below the median household income.² There is no indication that the high percentage of college students in Mansfield was taken into account in the analysis of data for Mansfield.

C) HOUSING COSTS AS A PERCENTAGE OF INCOME

Another way to look at the need for affordable housing is to identify households that are “cost-burdened.” This means that they pay more than 30% of their income for housing. Home-Connecticut used the American Community Survey estimates for the 2005–2009 period to estimate the number of households in Mansfield that are cost-burdened. This data indicates that approximately 1,400 households with incomes under \$34,999 were cost burdened in that period—accounting for about 25% of all households. An additional estimated 600 households in other income brackets were also paying more than 30% of income for housing. This means that some 2,000 households or about 40% of Mansfield’s households were paying more than 30% of their income for housing during this period. While this estimate is useful, it is important to point out that student incomes cluster at the low end of the income scale and it is not clear how students and student households were treated in the analysis. In addition, because of the small number of households in Mansfield, when the sample is further subdivided—by income group for example—the ACS estimates are less dependable and tend to have large margins of error.

D) COST OF HOUSING PLUS TRANSPORTATION

The Center for Neighborhood Technology has developed an index that shows the combined cost of housing and transportation as a percentage of median income—the H+T Index. The purpose is to demonstrate that the cost of housing is not the only variable that should be considered when evaluating affordability. People who live in what are called “location-efficient” neighborhoods—compact, mixed use, and with convenient access to jobs, services, transit, and amenities—tend to have lower transportation costs. People who live in location inefficient places that require automobiles for most trips are more likely to have high transportation costs. The data for Mansfield indicate that a few places, such as the Storrs area, have an H+T index in the 40–50% range, but the index for most Mansfield locations is well over 50%. This means that housing and transportation together take up over 50% of median income. The median income data used is for the Hartford MSA, not for Mansfield alone.³

² “Affordability in Connecticut, 2011,” Home Connecticut, October 2012, <http://www.pschoosing.org/news/affordability-in-connecticut-2011>

³ www.handt.cnt.org

E) ASSISTED HOUSING

Mansfield has a small inventory of assisted (subsidized) housing that also serves surrounding communities. The Mansfield Housing Authority owns and operates two housing developments with a total of 75 units of housing for families, elderly and disabled persons:

- *Holinko Estates*, located off of Hunting Lodge Road, has 35 units of family housing for households with incomes at or below 80% of area median income. In 2013, income limits ranged from \$51,550 for a family of two to \$64,000 for a family of four. While these units are assisted, they are limited to moderate income families that can afford to pay 30% of their income or the base rent, meaning that families generally need an income of \$30-32,000 per year to qualify. Households can wait for a year or more for units to become available. The property does have sufficient land to allow for expansion of the development.
- *Wright's Village*, located off of Maple Road, contains 40 units for elderly persons at least 62 years old and persons of any age certified as totally disabled by federal agencies. This property is also limited to moderate income residents. As with Holinko Estates, prospective tenants can spend a year or more on the waiting list.

Due to income limitations as described, applicants for public housing can find that they are too poor to qualify to live at either property. The two developments have mortgages from the Connecticut Housing Finance Agency but receive no federal assistance. Operating funds come from the money collected in rent. The federal government pays for the Housing Choice Voucher program (Section 8) and provides a small (and declining) fee for administration.

Who needs affordable housing?

The households who seek affordable housing in Mansfield are the working poor—people who may work in the university dining hall, where a single person with two children might make \$30,000 a year, or in retail, where annual income can be even lower. Residents in affordable housing also include graduate students, particularly those with families, who may be working as teaching assistants at relatively low wages.

What does affordable housing look like and where should it be located?

Contemporary affordable housing looks like other kinds of housing in a community. In Mansfield, any new affordable housing would be designed to be compatible in scale and design with other housing in town. Small multifamily developments would be most appropriately located in Compact Residential areas and Mixed Use Centers where there is access to public transportation. Scattered site rental housing could take the form of one- to four-family houses that could be designed to look like farmhouses.

F) HOUSING CHOICE VOUCHERS (SECTION 8)

In addition to public housing units, the Housing Authority administers Housing Choice Vouchers (Section 8) funded by the federal government. Voucher holders pay 30% of their income to a private landlord and the voucher program pays the rest up to a Fair Market Rent for the region published every fiscal year by HUD. The Fair Market Rent (FMR) limit that is applied to Mansfield is calculated for the Hartford-East Hartford-West Hartford metropolitan region. As a result, the FMR is typically low compared to rents in Mansfield. Because the student population creates a high demand for rental housing, rents are high compared to other jurisdictions, particularly for three- and four-bedroom units. Vouchers issued by the Mansfield Housing Authority can be used during the first year in the towns of Mansfield, Coventry, Willington, Ashford and Chaplin. Thereafter, a voucher holder can technically take the voucher anywhere in the country. (HUD encourages the destination housing authority to absorb these vouchers and release the funds back to the original housing authority.) Landlords participating in the program must have their rental units inspected by the Housing Authority.

3. Housing Growth: Trends and Needs**A) HOUSING TRENDS 1990–2010**

Population and housing growth in Mansfield is driven by changes in university enrollment and employment more than any other factor. Growth estimates for Mansfield are highly sensitive to decisions made by UConn because of the university's role in the town's economy and the fact that approximately half the population (students, faculty, and staff) is made up of university-affiliated people. Population declined by 383 people between the 1990 and 2000 censuses, although the number of households and housing units grew, probably reflecting declining household size both in the non-student and the off-campus student population. Between 2000 and 2010, the population grew by 5,823 people, but the number of households grew only by 295. If all of these additional households had the average household size in 2010—2.44 persons—only 720 of the new persons in the population were added to the household group.

Non-householders (group quarters residents such as students living on campus and nursing home or prison residents) accounted for 5,103 people or an estimated 88% of population growth during the 2000s. While only an estimated 295 households were added to the population in that decade, 536 housing units were added—which, of course, was the period of the housing bubble. Although transportation data indicate that about 1,300 people who live in Mansfield commute to Hartford County for work, Mansfield has not become a bedroom community for the City of Hartford. The exurban sprawl development characteristic of the era of the housing bubble, when high housing prices tended to push some single-family homebuyers to communities more distant from their work (“drive till you qualify”), seems unlikely to return in the short- to medium-term because of slow economic growth and changing housing preferences.

B) ESTIMATED GROWTH

Household Growth Potential, 2010-2030. Current population projections from the Connecticut Economic Resource Center, the Connecticut Department of Transportation, and the Connecticut State Data Center show very slow growth for Mansfield. However, these projections are now obsolete because they do not take into account the 2013 announcements about the NextGenCT initiative and accompanying increases in student enrollment and number of faculty, as well as potential Technology Park employees. Given these announcements, it is expected that Mansfield's population and number of households will grow over the next two decades.

Student Population Growth Potential. The University's NextGenCT initiative aims to expand enrollment at the Storrs campus in 10 years by 5,000 undergraduate students. UConn currently houses approximately 70% of its undergraduates on campus, a higher percentage than peer institutions. While the initiative sets specific targets for undergraduate enrollment growth, its focus on STEM disciplines combined with UConn's goal of being a top-tier public research university is expected to result in increasing graduate student enrollment as well. While graduate student enrollment is projected to increase, UConn is no longer guaranteeing on-campus housing for graduate students. As a result, demand for lower-cost off-campus housing to accommodate this population is growing.

Estimated Population and Households in 2025. The 2013 *Mansfield Tomorrow Housing Strategy Report* developed population, household, and housing unit estimates for the year 2025, using 2010 census data for base population and household numbers; data from UConn on planned faculty and enrollment growth as part of the NextGenCT initiative, and Technology Park job projections. The report estimated that Mansfield's total population could grow to over 33,000 over the next ten years, of which 5,000 are assumed to be students. This projection was based on a number of assumptions in an attempt to estimate the maximum potential demand for housing units to accommodate this population growth—it assumed that higher proportions of new faculty members will choose to live in Mansfield than previously; that the Technology Park will have created 1,000 new jobs in Mansfield, and that all of the new students will live in Mansfield. Based on the assumptions in the report, Mansfield could anticipate adding between 600 and 1,000 units of housing by 2025, above and beyond the units being constructed at Storrs Center. Actual housing demand could be higher given that the assumptions did not reflect potential staff and graduate student growth, or lower (in the range of 350 to 750 units) if one or more of the assumptions does not come to fruition.

4. Housing Tools and Resources

As the Town looks to expand the type and variety of housing to meet projected needs, there are several tools that should be considered.

A) INCLUSIONARY ZONING AND AFFORDABLE HOUSING TRUST

With new housing expected as a result of employment and enrollment growth, Mansfield should establish a program to grow the number of permanently affordable units in the town to meet the needs of residents and to continue to meet the state's goal of 10% affordable housing in each municipality. This can be done through the establishment of inclusionary zoning and a Mansfield Affordable Housing Trust. Because rental housing is where affordability issues are most pressing in Mansfield, the Town may wish to focus on production of affordable housing rentals. The Town itself does not have to become an affordable housing developer but can partner with experienced nonprofit housing developers in Connecticut.

Inclusionary zoning regulations would require that developers of a certain number of housing units must provide 10% of units as affordable units indistinguishable in materials and quality from the market units or make payments to produce the affordable housing elsewhere in the town. Issues to be considered include: the threshold number of units to be included in the program, whether single-family or only multifamily developments should be included, and whether the regulations should be targeted only to mixed-use and compact residential areas or areas served by public services. Consideration of these issues is needed to avoid unintended consequences such as incentivizing development outside the designated mixed-use and compact residential areas.

Payments in lieu of producing housing would go to an Affordable Housing Trust set up by the Town. The Trust could also accept grants and other funds. The Town can then use the funds in the Trust to assist developers of affordable housing in building new housing, or, if there are units that are persistently vacant or in poor condition, for rehabilitation. The purpose of setting up an Affordable Housing Trust is to create an entity that can receive funds to be applied to the creation of new or rehabilitated affordable housing. In addition to payments in lieu of housing received from developers, Mansfield can apply to the state Small Cities CDBG Funds, which are federal funds that pass through the state. The Trust can also accept philanthropic funds. The Housing Authority has set up a non-profit subsidiary (Mansfield Nonprofit Housing Development Corporation) which will allow them to access funds that cannot be accepted by the Housing Authority. This housing development corporation could become the Trust or could be designated as manager of the Trust.

Typically, households are eligible for affordable units if their incomes are 80% or below the "Area Median Income" or AMI for the size of their household. Mansfield could set the eligibility limits, such as 60% or 50% of AMI, in order to target the populations that find affordable housing most difficult to access in Mansfield. Households that wish to access affordable housing have to be screened for income eligibility. Screening should be done by experienced organizations. In Mansfield, this could be the Housing Authority, or, if a rental development were to be developed by a nonprofit housing developer who retained ownership and management of the property, the screening could be performed by the management.

B) DEED RESTRICTIONS

In order to make housing permanently affordable, a deed restriction detailing the affordability requirements must be recorded. In the case of ownership housing, the deed restriction typically limits the extent to which an owner can capture any increased value over time, with some provision for value capture for significant improvements or investment made by the owner (for example, an addition to the house). This is done in order to preserve affordability for future owners.

C) INCENTIVE HOUSING ZONES (IHZ)

The State of Connecticut has established the option of IHZs for municipalities as a way to encourage the development of affordable housing. Grant funds are available for developing IHZ zones and regulations; and financial incentives are provided upon issuance of permits for housing units in IHZ zones. Few places in Mansfield currently meet IHZ criteria requiring public sewer and water and bus services; however, Four Corners, areas adjacent to the university, and the East Brook Mall area may be eligible in the future. IHZ requirements include:⁴

- At least 20% of the housing units within the district must be affordable.
- Affordable means households with incomes at 80% or below the Area Median Income (not the town median) will pay no more than 30% of their income.
- IHZs must be consistent with state, regional and local POCDs.
- May not be subject to special permit processes
- Can be mixed use, age-restricted, include design standards and incentives, and designate the number of units and type of units.

D) CO-HOUSING

Co-housing is an alternative housing model that has been successful in communities similar to Mansfield. In co-housing projects residents participate in the design and operation of their housing community. While residents own their own housing units, they are committed to the idea of living in a community with common spaces and activities. Typically co-housing is designed as attached or single-family homes in a cluster around a courtyard or pedestrian street. Most co-housing communities have 20 to 40 households, though there are some smaller and larger examples.

Co-housing developments require special zoning; Ithaca, New York is home to a growing co-housing community and could be a resource for zoning regulations. Special consideration will need to be given to regulations to ensure that they cannot be used to circumvent limitations on the number of unrelated individuals considered a family.

⁴ <http://www.ct.gov/doh/cwp/view.asp?a=4513&Q=530592>

Characteristics of Co-Housing

According to the Cohousing Association of the United States, characteristics of cohousing include:

- *Participatory process.* Future residents participate in the design of the community so that it meets their needs
- *Neighborhood design.* The physical layout and orientation of the buildings (site plan) include a sense of community. (In Mansfield, sites should also be designed in accordance with the Sustainability Principles identified in Chapter 1, particularly with regard to preservation of natural systems and resources.)”
- *Common facilities.* Common facilities are designed for daily use, are an integral part of the community, and are always supplemental to the private residences. The common house typically includes a common kitchen, dining area, sitting area, children’s playroom and laundry, and also may contain a workshop, library, exercise room, crafts room and/or one or two guest rooms. Except on very tight urban sites, cohousing communities often have play-ground equipment, lawns and gardens as well. Since the buildings are clustered, larger sites may retain several or many acres of undeveloped shared open space.
- *Resident management.* Residents manage their own cohousing communities, and also perform much of the work required to maintain the property. They participate in the preparation of common meals, and meet regularly to solve problems and develop policies for the community.
- *Non-hierarchical structure and decision-making.* Leadership roles naturally exist in cohousing communities, however no one person (or persons) has authority over others....Most cohousing groups make all of their decisions by consensus, and, although many groups have a policy for voting if the group cannot reach consensus after a number of attempts, it is rarely or never necessary to resort to voting.
- *No shared community economy.* The community is not a source of income for its members. Occasionally, a cohousing community will pay one of its residents to do a specific (usually time-limited) task, but more typically the work will be considered that member’s contribution to the shared responsibilities.¹

¹ <http://cohousing.org>

ACTION PLAN

Each chapter within this Plan includes an action plan: a set of suggestions for how to put the Plan to work and begin transforming ideas into action. Each action plan identifies some of the **entities that are expected to have a key role in** achieving specific action items (town departments, committees/ commissions, outside organizations, etc.); a target timeframe to complete each action; and the types of resources that we anticipate may be needed for implementation (staff time, volunteer time, operating budget, capital improvement program, grants, etc.).

Action plans include:

- **Goals** that describe the outcomes our community hopes to achieve;
- **Strategies** for advancing each goal; and
- **Actions**—specific steps our community can take over the short term (before end of 2019), medium term (between 2020 and 2024) and long term (between 2025 and 2035) in support of each strategy.

Action plans are tools for focusing efforts and resources on the issues our community cares about most. The action plans will:

- Guide town officials as they continue to shape policies and allocate resources in the years to come;
- Refocus the efforts of town staff and committees as they work to advance community goals;
- Provide a foundation for developing annual budgets and work-plans; and
- Evolve over time in response to new opportunities and circumstances.

Action plans set the agenda for our community’s many officials, volunteers, committee members and staff for the years ahead, and align their work with the community’s vision **but do not provide a guarantee that resources will be available to advance each action.** While these action plans are comprehensive in nature, they are not intended to preclude the Town from pursuing other actions as opportunities arise. **As additional actions and initiatives are contemplated, they should be evaluated with regard to how the action will help to advance the vision and goals** contained in the overall Plan.

Key of Abbreviations	
TOWN DEPARTMENTS & SERVICES	
Building & Housing Inspection	Town of Mansfield Department of Building & Housing Inspection
DPW	Town of Mansfield Department of Public Works
Facilities	Town of Mansfield Facilities Management Department
Finance	Town of Mansfield Finance Department
Fire	Division of Fire & Emergency Services / Office of the Fire Marshal
Fire Marshal	Office of the Fire Marshal
Human Services	Town of Mansfield Department of Human Services
Information Technology	Town of Mansfield Information Technology Department
Library	Town of Mansfield Public Library
Parks & Rec	Town of Mansfield Parks & Recreation Department
Planning	Town of Mansfield Planning & Zoning Office
Police	Mansfield Resident State Trooper’s Office
OTHER ABBREVIATIONS	
CT DEEP	State of Connecticut Department of Energy and Environmental Protection
CT DPH	State of Connecticut Department of Public Health
EHHD	Eastern Highlands Health District
Emergency Management	Emergency Management Advisory Council
IWA	Inland Wetland Agency
PZC	Planning & Zoning Commission
Town/Gown	Town/University Relations Committee

CHAPTER 7: HOUSING

Goal 7.1

Mansfield’s housing options include housing affordable to low and moderate income individuals and families.

Measures of Effectiveness:

- Number of housing units meeting affordability standards meets or exceeds 10% of overall units in 2020
- Decrease in percentage of households spending more than 30% of income for housing
- Decrease in percentage of households spending more than 50% of income for housing and transportation

Strategy A | Develop programs to increase the inventory of permanently affordable housing.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Create a Mansfield Affordable Housing Trust to receive funds such as grants or payments made in lieu of producing affordable housing units (see Goal 7.4, Strategy A, Action 1) and apply those funds to the creation or rehabilitation of affordable housing.</p> <p>The Mansfield Housing Authority has established a non-profit organization (the Mansfield Nonprofit Housing Development Corporation). This housing development corporation could become the Trust or could be designated as manager of the Trust.</p>	<p>Town Council Town Attorney Finance Mansfield Housing Authority</p>	<p>Short Term</p>	<p>Staff Time Operating Budget</p>
<p>2. Use deed restrictions to permanently designate units as affordable.</p> <p>Policies and regulations should address the terms that would need to be included in deed restrictions for the affordable units, such as term (minimum 30 years), affordability levels (% of AMI) for owner/tenant; and provisions for value recapture.</p>	<p>PZC Planning Town Attorney</p>	<p>Medium Term</p>	<p>Staff Time Operating Budget</p>
<p>3. Consider providing tax credits for properties with long-term affordable housing deed restrictions.</p> <p>In accordance with Connecticut General Statutes (C.G.S. Sec. 12-81bb), eligibility is limited to properties restricted to sale or rental of the property to those whose incomes are at or below 80% of Area Median Income or State Median Income, whichever is less. Deed restrictions must be irrevocable for a period of at least 30 years. Tax credits could help to provide an incentive for owners and developers to place deed restrictions on property.</p>	<p>Town Council Finance</p>	<p>Medium Term</p>	<p>Operating Budget</p>

SHORT TERM = 2015-2019 MEDIUM TERM = 2020-2024 LONG TERM = 2025-2035

ACTIONS	WHO	WHEN	RESOURCES
<p>4. Consider expansion of affordable housing at Holinko Estates.</p> <p>While traditional public housing units may be difficult to finance from state or federal sources, the Mansfield Housing Authority could work with nonprofit or for-profit developers, providing the land free or at below market prices to create a variety of affordable units targeted at a mix of income groups and household types.</p>	Mansfield Housing Authority	Medium Term	Grants Affordable Housing Trust
<p>5. Support work force housing programs for income-eligible residents.</p>	Town Council Finance	Medium-Long	CIP Grants Affordable Housing Trust

Strategy B | Partner with experienced organizations to advance and administer affordable housing programs.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Encourage development of affordable housing by connecting developers with available resources.</p> <p>The Connecticut Department of Housing provides several grant and loan programs to assist in the development of affordable housing.</p>	Planning	Ongoing	Staff Time
<p>2. Use the Mansfield Housing Authority or another experienced organization to screen applicants for income eligibility for affordable housing.</p> <p>Households are typically eligible for affordable housing if their incomes are at or below a certain percentage of the Area Median Income as established by HUD. Screening of applicants for affordable housing should be done by an experienced organization such as the Mansfield Housing Authority, or in the case of rental properties developed, owned and managed by a nonprofit housing developer, screening could be performed by the management.</p>	Planning	Short Term	Operating Budget Grants Affordable Housing Trust

SHORT TERM = 2015–2019

MEDIUM TERM = 2020–2024

LONG TERM = 2025–2035

CHAPTER 7: HOUSING

Goal 7.2

Mansfield’s senior citizens have housing options that allow them to continue to age in their community.

See Goal 5.1, Strategies A and E for actions related to senior services.

Measures of Effectiveness:

- Number of units developed in close proximity to transit and other services
- Number of accessible units developed, including units friendly to an aging population such as single-floor units

Strategy A | Continue to support independent and assisted living options for seniors.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Facilitate the development of an independent/assisted living facility in Mansfield.</p> <p>Potential actions include surveying residents 62 and older to identify the type of housing arrangements they need now or expect to need in the future and whether they would like to stay in Mansfield.</p>	<p>Human Services Town Council</p>	Ongoing	Volunteer Time
<p>2. Support development of senior housing in areas where seniors can take the bus or walk to commercial centers, services and activities.</p> <p>Examples include areas in and around Storrs Center, Four Corners and the Route 195/Route 6 area.</p>	PZC	Ongoing	Staff Time

Strategy B | Develop programs to help seniors stay in their homes as they age.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Consider expanding property tax relief programs for seniors by increasing income eligibility limits for the state ‘circuit breaker’ program and local tax deferral programs.</p> <p>Eligibility is currently limited to seniors with incomes below certain thresholds established by the state. The Town could opt to increase eligible income levels for both the state the local tax deferral programs. However, any increases in the circuit breaker program above the current state thresholds would not be eligible for state reimbursement. Changes to eligibility would need to be balanced with impacts on other taxpayers.</p>	<p>Town Council Finance</p>	Medium Term	Operating Budget



ACTIONS	WHO	WHEN	RESOURCES
<p>2. Explore possibility of developing senior ‘village’ programs through the Mansfield Senior Center that would help seniors remain in their homes and support naturally occurring retirement communities.</p> <p>Programs can be provided on a membership basis and can include driving assistance, access to discounted, vetted providers for household maintenance, and social/cultural programs.</p>	<p>Human Services Senior Center Association</p>	<p>Medium Term</p>	<p>Operating Budget Fees</p>

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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CHAPTER 7: HOUSING

Goal 7.3

Mansfield maintains high-quality living conditions throughout the town.

See Goal 5.3, Strategy B for additional actions related to building and property maintenance.

Measures of Effectiveness:

- UConn houses an average of 70% of undergraduate students over each five year period
- Number of investor-owned single-family homes in neighborhoods close to campus decreases
- Number of properties with repeat nuisance violations decreases

Strategy A | Assist low and moderate income homeowners in maintaining safe and healthy living environments.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Implement a revolving housing rehabilitation loan program for low and moderate-income homeowners, applying for grant funds as needed.</p> <p>Additional activities could include grants/loans to address specific issues such as lead abatement and energy efficiency improvements. Potential funding sources include Small Cities, HUD, USDA and the Neighborhood Assistance Act. Consideration should be given to partnering with nearby communities and regional organizations.</p>	Planning	Ongoing	Staff Time Grants

Strategy B | Strengthen the Town’s ability to respond to neighborhood quality of life issues. See Goal 5.3, Strategy B for additional actions related to building and property maintenance.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Enhance code enforcement systems for rental properties through researching and implementing enforcement practices successfully used by other college communities.</p> <p>Implementation of the Nuisance Ordinance in 2011 has been successful at addressing neighborhood nuisances, particularly in off-campus neighborhoods; however, it is too early to determine whether the penalties to property owners are sufficient to promote long-term compliance. If patterns of problem properties appear, stronger measures may be needed to promote better property management. One potential resource is State College, PA.</p>	Building & Housing Inspection Police	Ongoing	Staff Time



ACTIONS	WHO	WHEN	RESOURCES
<p>2. Identify strategies to improve enforcement of the Town's restrictions on number of unrelated individuals that can live together.</p> <p>When residents see more than three cars outside single-family houses on a regular basis, they are concerned that occupancy of that home exceeds the restrictions on the number of unrelated individuals that can live in a dwelling unit. However, these vehicles may belong to guests. In addition to windshield surveys, the Town should develop an enforcement plan that includes more proactive strategies such as education of landlords, mailing of reminder notices on restrictions, and development of a list of properties for active monitoring.</p>	Planning	Ongoing	Staff Time
<p>3. Track changes in quantity and location of rental units to determine impact of policy and regulatory changes and identify needed changes to policies and regulations.</p>	Planning PZC	Ongoing	Staff Time

Strategy C | Continue to collaborate with UConn to address quality of life issues in off-campus neighborhoods, including student behavior. *See Goal 5.1, Strategy D for actions related to integrating students into community life.*

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Develop and maintain better data and information on off-campus student housing for both undergraduate and graduate students.</p>	UConn Planning	Ongoing	Staff Time
<p>2. Continue to encourage UConn to house an average of 70% of undergraduates in on-campus housing over each five-year period.</p> <p>Housing and enrollment can vary somewhat from year to year, so an average of 70% of undergraduates over five years could be a way to accommodate small deviations from 70%.</p>	Town Council Town Manager	Ongoing	Staff Time
<p>3. Work with UConn and legislators to support continued development of on-campus housing.</p>	Town Council Town Manager	Ongoing	Staff Time

SHORT TERM = 2015–2019

MEDIUM TERM = 2020–2024

LONG TERM = 2025–2035

ACTIONS	WHO	WHEN	RESOURCES
<p>4. Collaborate with UConn Off-Campus Student Services to educate students on community expectations and address student housing issues in neighborhoods.</p> <p>Approaches should continue to include education of both students and property managers; communication of local laws and ordinances, and how student status can be impacted by violations of local ordinances.</p>	<p>Building & Housing Inspection</p> <p>Police</p> <p>Town Manager</p> <p>Mansfield Community Campus Partnership</p> <p>UConn</p>	Ongoing	Staff Time
<p>5. Work with UConn to encourage student renters in single-family neighborhoods to meet neighboring homeowners at the beginning of the academic year.</p> <p>When people know each other and can talk about their concerns, there is more likelihood that renters will be mindful of the expectations of homeowners.</p>	<p>UConn</p> <p>Mansfield Community Campus Partnership</p>	Ongoing	Staff Time
<p>6. Explore the possibility of requiring students to live on-campus through their sophomore year with UConn.</p>	<p>Town Council</p> <p>Town Manager</p>	Short Term	Staff Time
<p>7. Encourage the development of additional student housing at the UConn Depot Campus.</p> <p>See <i>Goal 6.3, Strategy B, Action 2</i> for other recommendations regarding Depot Campus redevelopment.</p>	<p>PZC</p>	Short Term	Staff time Volunteer Time

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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CHAPTER 7: HOUSING

Goal 7.4

Mansfield's land use regulations support development of a wide range of housing options to meet the needs of residents at all ages of the life cycle, including singles, families, seniors and students.

Measures of Effectiveness:

- Percentage of new housing units developed that meet state affordability criteria
- Decrease in number of single-family homes on rental registry
- Increase in diversity of housing types available (lot and building sizes, building types)

Strategy A | Update regulations to provide housing options for residents of all ages, incomes and physical abilities.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Adopt inclusionary zoning regulations to require that developers provide a minimum number of affordable units as part of new developments.</p> <p>The narrative section of this chapter includes a description of how inclusionary zoning regulations work and the types of standards that should be included.</p>	PZC	Short Term	Staff Time Community Challenge Grant
<p>2. Consider providing incentives such as additional units for development of affordable units in projects that are not subject to inclusionary zoning requirements.</p> <p>These units would need to be subject to deed restrictions (see <i>Strategy 7.1, Strategy A</i>).</p>	PZC	Short Term	Staff Time Community Challenge Grant
<p>3. Consider establishing Incentive Housing Zones (IHZ) in areas with access to public utilities and transit, such as areas in Storrs near the UConn campus, Four Corners and Route 195/Route 6 area.</p> <p>To preserve mixed-income character, the number of affordable units in the zone should be between 20 and 25% to avoid creating a concentration of low income units. The zone should also include design and other standards specific enough for the Town to be comfortable with streamlined permitting (IHZs cannot require special permit processes) while not creating disincentives for use of the zone.</p> <p>The Connecticut Department of Housing provides grants for development of IHZ regulations and financial incentives for both adoption of regulations and issuance of building permits for new housing units in the IHZ. Incentives received can be used for any purpose.</p>	PZC	Short Term	Staff Time Grants

SHORT TERM = 2015-2019

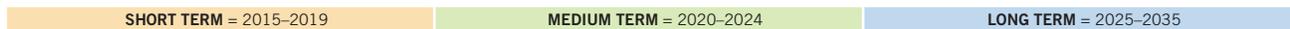
MEDIUM TERM = 2020-2024

LONG TERM = 2025-2035

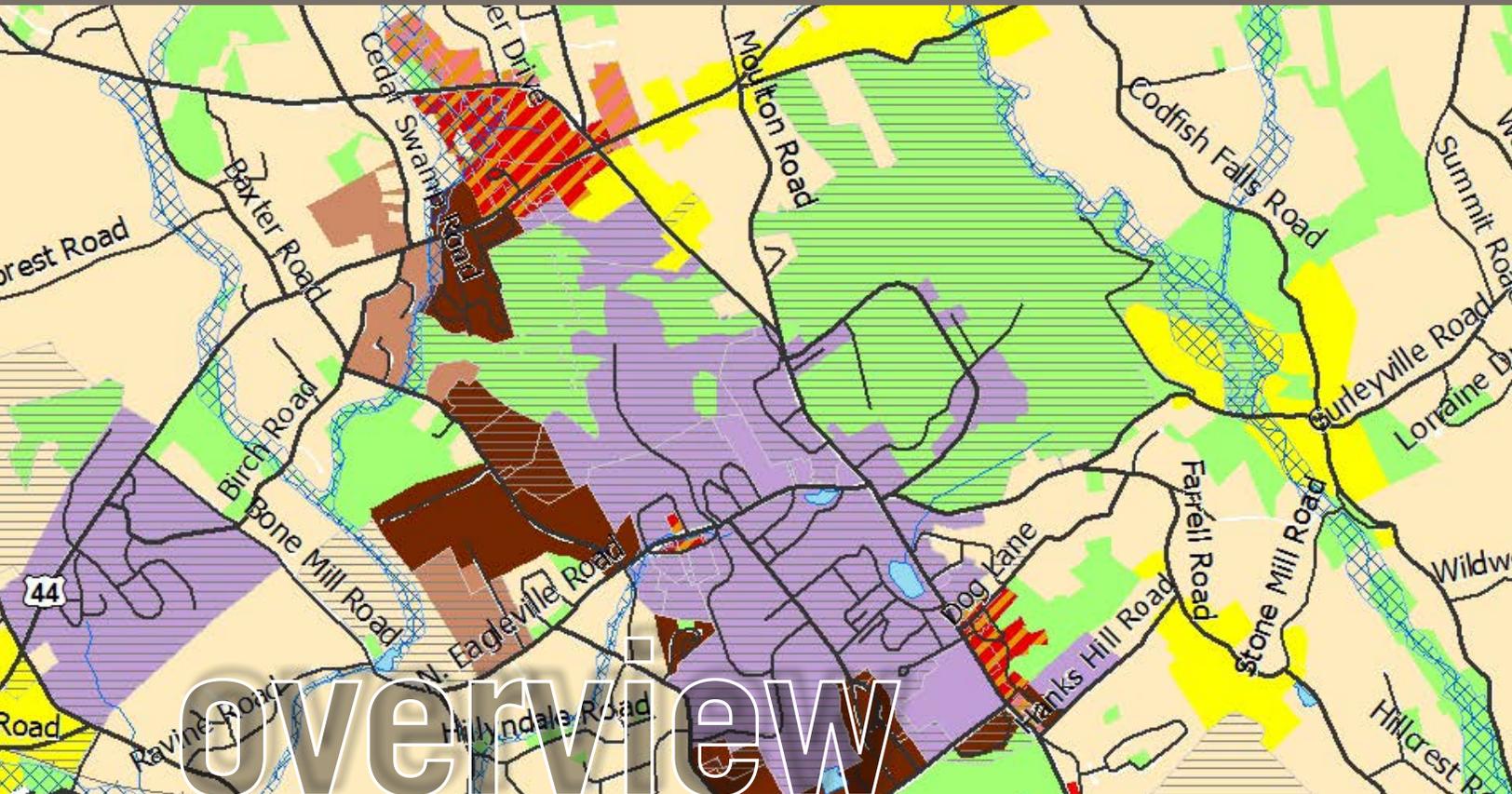
ACTIONS	WHO	WHEN	RESOURCES
4. Update Zoning and Subdivision Regulations to encourage provision of accessible units and features, particularly in residential developments targeted to seniors.	PZC	Short Term	Staff Time Community Challenge Grant
5. Update Zoning Regulations to include provisions for various types of senior housing including assisted living and Continuing Care Retirement Communities (CCRCs).	PZC	Short Term	Staff Time Community Challenge Grant
6. Update Zoning and Subdivision regulations to allow for co-housing and other alternative housing models. Depending on the extent of activities, a co-housing development could require the creation of a Special Design District. The Zoning Regulations should establish a framework for how such a district would be created. Ithaca, NY’s EcoVillage could serve as a model.	PZC	Short Term	Staff Time Community Challenge Grant

Strategy B | Update regulations to encourage development of appropriately designed multi-family housing within designated Mixed Use Centers and Compact Residential Areas. (See related Goals 8.1 and 8.2)

ACTIONS	WHO	WHEN	RESOURCES
1. Update Zoning Regulations to provide design and management standards for multi-family housing.	PZC	Short Term	Staff Time Community Challenge Grant
2. Revise the Definition of Family to allow more than 3 unrelated persons to live in apartments. The current definition of family applies to all dwelling units. Allowing greater flexibility for multi-family residential developments such as apartment complexes will provide additional student housing options in an environment with more structured management. The current restrictions should continue to be applied to condominiums, single-family, two-family, and small multi-family buildings located in neighborhoods.	PZC	Short Term	Staff Time Community Challenge Grant
3. Update regulations to encourage a variety of housing types in new and redeveloped housing based on the community design objectives identified in the applicable future land use designation.	PZC	Short Term	Staff Time Community Challenge Grant



8 FUTURE LAND USE AND COMMUNITY DESIGN



TOPICS IN THIS CHAPTER INCLUDE

- Land Use Trends
- Mansfield's Approach to Future Land Use Planning
- Future Land Use Plan
- Implementing the Plan

This chapter builds on all prior chapters. The goals and recommendations for natural and cultural resources, community amenities and character, economic development and housing must all be integrated and accommodated into a plan for the conservation and development of Mansfield. What are the preferred patterns of land use for the next two decades? What regulatory approaches should be pursued to promote these preferred patterns? How can high-quality design compatible with the best of Mansfield's existing character be assured in new development or redevelopment?

This chapter of the Plan describes the policy framework for the physical development of the town, providing a guide for the Planning and Zoning Commission (PZC) and other decision makers in directing the pattern, distribution, density and intensity of land uses that will, over time, best achieve the Plan's goals.

what the **community** said

FUTURE LAND USE AND COMMUNITY DESIGN

Participants in the Mansfield Tomorrow initiative voiced a strong desire for preservation of open space, agricultural landscapes and the town's rural character. At the same time, many were enthusiastic about opportunities for change within certain parts of the town—for instance, the Four Corners area. Common themes included:

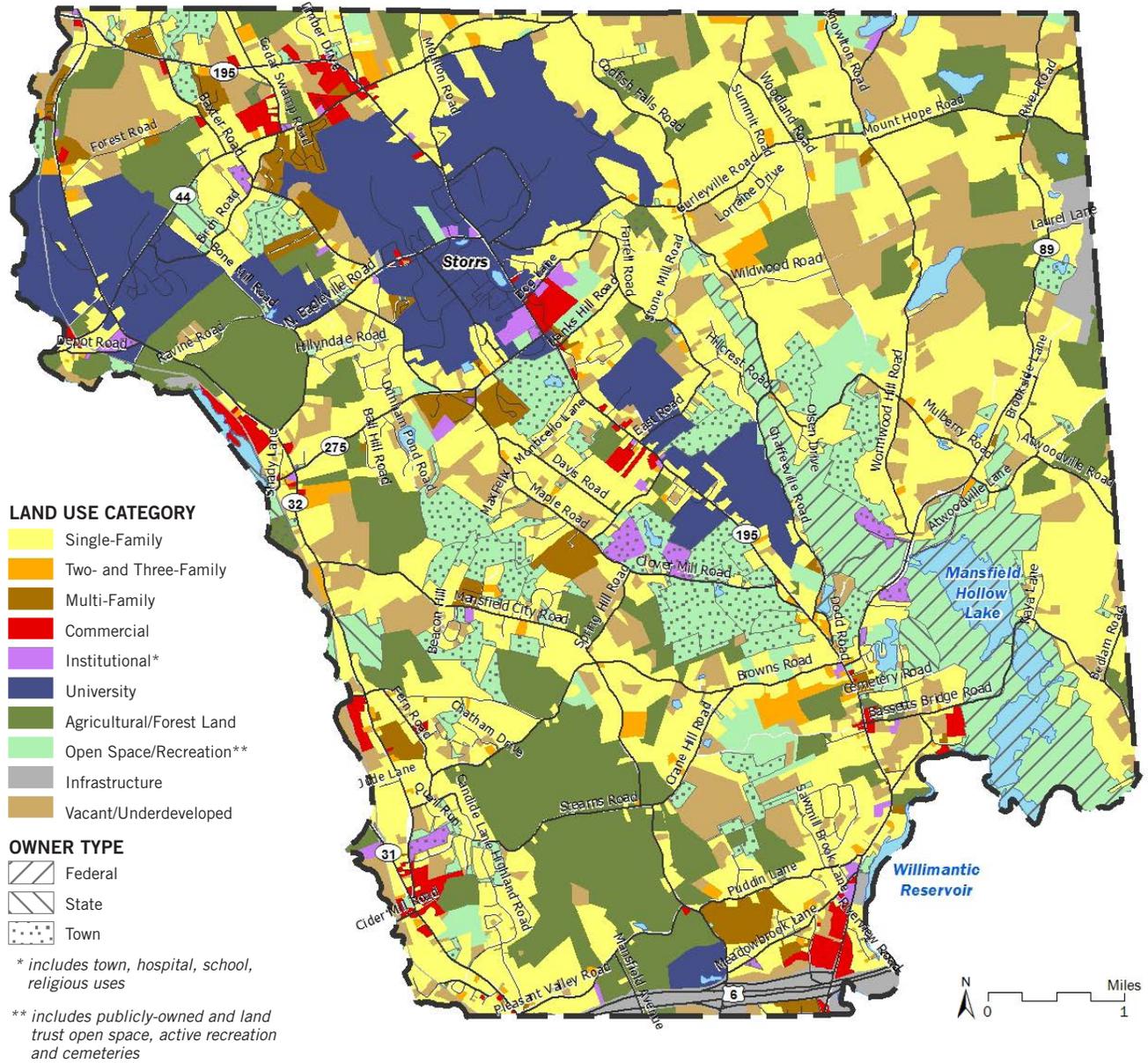
- Desire for strong protections related to preservation of Mansfield's character-defining land uses and features: farms, rivers, forests, historic villages, and scenic views and vistas
- Concern that town regulations might encroach on rights of property owners
- Concerns about the impact of UConn's continued expansion, which could result in unwelcome land use changes
- Concern that continued residential, subdivision, and commercial development could negatively impact town character and result in loss of open space
- Interest in walkable, mixed-use "village-style" neighborhoods with more compact housing, in appropriate locations; interest in having more neighborhood-oriented places to eat and shop
- Hope that new development will feature high-quality, sustainable design
- Desire for more walking, bike and trail connections linking different parts of town

"[I'd like to see] growth of neighborhoods rather continuing to build housing all around town individually on existing roads."

"Concentrate development allowing rural areas to stay rural and villages to remain as villages."

FROM MANSFIELD RESIDENTS

MAP 8.1: EXISTING LAND USE



Source: Town of Mansfield Assessor, 2013

LAND USE PATTERNS AND THE MUNICIPAL LAND USE FRAMEWORK

Land use patterns and decisions in Mansfield are influenced by population, economic growth, environmental constraints such as wetlands and steep slopes, transportation access, and availability of water and sewer infrastructure. The high quality of life, reflected in recreational and cultural amenities and the reputation of the public school system, also play a role. Although quality of life conditions are often considered only in terms of residential development, businesses of all kinds make location decisions based, in part, on where their workers want to live.

While in Mansfield some of these factors are highly dependent on state decisions about the University, many development decisions are made by private property owners and developers. Those decisions occur within a municipal land use framework created by zoning and other development regulations and influenced by public investments, incentives and disincentives; all of which are based on the Town's goals for conservation and development. By balancing these elements in the implementation of this Plan, the Town will promote achievement of its vision and goals.

What kinds of land uses are more likely to stay the same?

Any land use map for the future is based on existing land uses. Some land uses are less susceptible to change once established. For example, single family and lower-density residential neighborhoods tend to stay in place over long periods, with limited change or encroachment from other uses. In contrast, retail, commercial and light industrial land uses are more likely to show more rapid cycles of change. Even with expansion of UConn and after accommodating additional household growth, most of Mansfield will

continue to reflect the low-density residential and rural character that is found in town today.

What kinds of land uses are more likely to change?

Existing underutilized nonresidential properties and public properties no longer needed are the prime candidates for transition to new uses through redevelopment. In Mansfield, "greenfield" sites—agricultural and forest tracts—also can be attractive for conventional single-family subdivisions if market conditions are positive for this kind of development. The Town's actions in preserving agricultural land and the consensus of

participants in the Mansfield Tomorrow process evidence a desire and commitment to direct future development away from greenfield sites in most of the town. Additionally there is a preference that, where possible, new development be redevelopment. A critical dimension to successful new development is making sure that there are design standards in place that create attractive environments within the new development, connect it with the surrounding area, and ensure that the edges of the new development provide appropriate transitions to surrounding character areas.

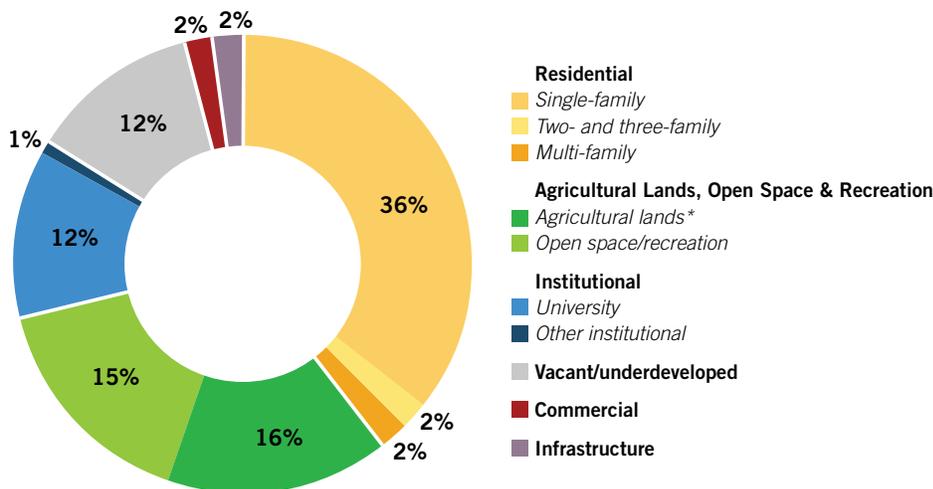
1. Land Use Trends

Existing Land Use. Mansfield occupies approximately 29,000 acres of land, which support a varied mix of land uses including a relatively high proportion of land devoted to agriculture and open space. Approximately 12% of Mansfield’s total land area is owned by the University of Connecticut and Eastern Connecticut State University (ECSU). Figure 8.1 provides a breakdown of existing land uses based on tax assessor classifications and Map 8.1: Existing Land Use depicts the locations of various uses based on tax classifications.

The largest single use within Mansfield is single-family housing, consistent with Mansfield’s role as a residential community. The next largest land use is agriculture, open space and recreation. Parcels identified as vacant or undeveloped are properties that had no buildings and were not designated as agriculture or forestry use for the purposes of property taxes. Vacant and undeveloped properties may also include approved subdivisions where no construction has occurred; see Map 7.1: Approved Residential Subdivisions for locations of subdivisions approved from 2000 to 2012.

Based on tax assessor land use classifications, only 2% of property in Mansfield is developed with commercial uses. Centers of commercial activity include the East Brook Mall area in the southeast corner of the town near the intersection of Route 195 and U.S. 6, and the Storrs Center area along Route 195 near E.O. Smith High School and the UConn

FIGURE 8.1: EXISTING LAND USE IN MANSFIELD (2013)



Note: Data for Agricultural Lands does not align precisely with land coverage data in previous chapters as the info shown above draws from assessor’s data.

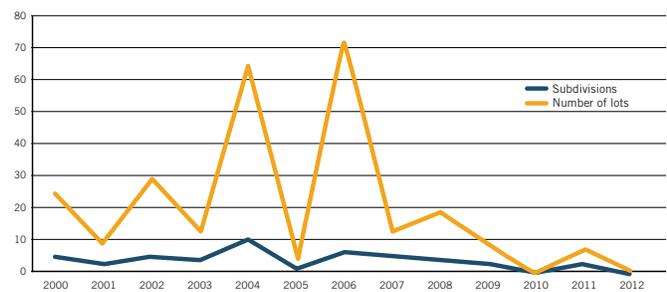
SOURCE: TOWN OF MANSFIELD, TAX ASSESSOR’S LAND USE CODES

campus. Smaller clusters of commercial uses can be found at Four Corners and Perkins Corner. Other commercial land uses are scattered along major roads, primarily along Route 195 and in smaller villages such as Spring Hill, Mansfield Center and Mansfield Depot.

Growth Trends and Development Patterns. As shown in Map 8.1: Existing Land Use, much of Mansfield is rural or low-density residential in character. Between 2000 and the end of 2012, 265 subdivision lots were approved, and new single-family homes were built

on 200 of these lots. As shown in Figure 8.2 much of this development occurred prior to 2007 and the Great Recession. The large drop in 2005-2006 reflects the moratorium placed on development while regulations were being updated. Relative to

FIGURE 8.2: SUBDIVISIONS AND LOTS BY YEAR



SOURCE: TOWN OF MANSFIELD

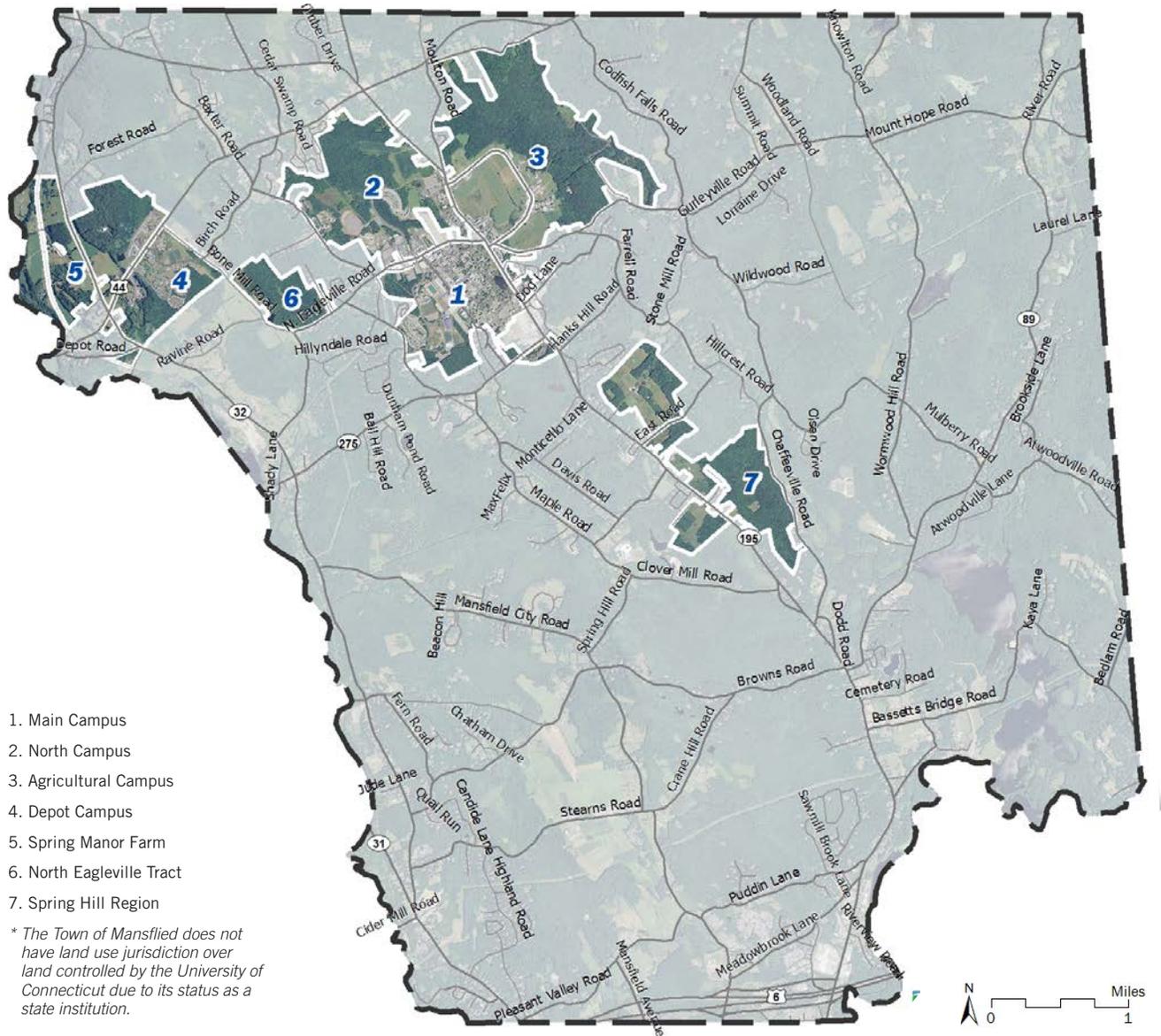
past decades, however, residential development in Mansfield has been modest. Most of the Town’s housing stock was built between 1950 and 1979—and fewer homes have been built since 2000 than in each of the decades between 1950 and 2000.

Most of the recent development in Mansfield has occurred in Storrs. On the UConn campus several decades of facilities investment have resulted in new academic, residential and support facilities. Across from the campus and town hall, the Storrs Center initiative is creating a new town center with higher-density development—including restaurants, stores, parking, and several hundred units of multi-family housing.

Over 400 apartments and 120,000 square feet of commercial space have been completed since construction commenced at Storrs Center; 204 apartments and approximately 48,000 square feet of commercial space are expected to be completed in 2015. Additional development is anticipated both on-campus and at Storrs Center, as well as at the planned UConn Tech Park.

Institutional Growth. Both UConn and ECSU have recently adopted campus master plans. As ECSU only owns one property in Mansfield which is used for recreational purposes, impacts of their expansion on Mansfield will be limited. UConn, however, has a much larger land portfolio as depicted in Figure 8.3. As part of the NextGenCT initiative, UConn is planning to grow significantly over the next ten years; approximately \$1.5 billion in infrastructure improvements, renovations and new construction are planned as part of this initiative in addition to projected increases in faculty and student enrollment. The 2015 Campus Master Plan depicted in Figure 8.4 identifies the potential for an additional 2.8 million square feet of academic, residential, recreation, athletic and cultural

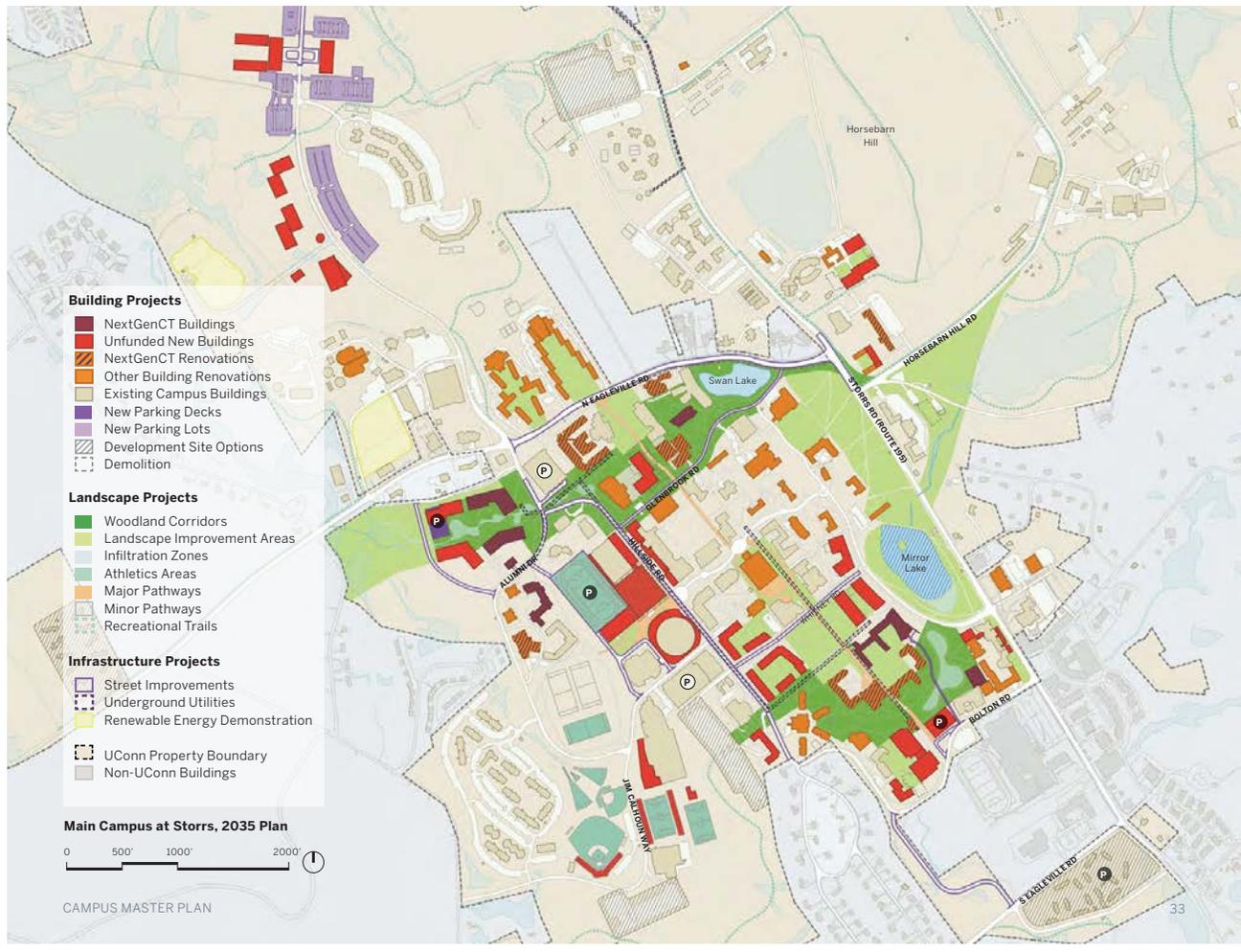
FIGURE 8.3: UCONN LAND



Source: Town of Mansfield, 2015

facilities over the next ten years. Additionally, the plan calls for the development of a “Sustainable Village” at the Depot Campus. To accommodate this growth, the master plan places a heavy emphasis on sustainability and growing within the current developed areas of campus instead of spreading outward. In addition to on-campus growth, it is anticipated that there will be additional demand for off-campus housing and services if UConn’s enrollment grows to include an additional 5,000 undergraduate students.

FIGURE 8.4: UCONN’S CAMPUS MASTER PLAN



Source: University of Connecticut Campus Master Plan, Skidmore, Owings & Merrill LLP, May 2015

It is important to note that the Town does not have planning or zoning jurisdiction over state agencies; as such, the land use designations shown on Map 8.3 are advisory in nature and may not be binding on the universities. However, given UConn’s extensive land holdings and the potential for impact on surrounding neighborhoods as the universities change and expand, identifying the preferred land use and character for university-owned lands was identified as an important tool for communicating Town goals and concerns to both UConn and ECSU.

2. Mansfield’s Approach to Future Land Use Planning

How land uses are located geographically and the relationships between land uses help create locations with greater overall choice and amenities in the community as a whole, improving quality of life and economic prosperity. Land uses arranged so that they have

beneficial impacts on one another help produce communities where the whole is greater than the sum of the parts. A system of well-organized land uses creates the possibility of more choice in transportation, supports businesses, provides diverse residential areas, mitigates adverse impacts, and supports sustainability.

A) FUTURE LAND USE STRATEGY: RURAL PLACES, VILLAGES AND CENTERS

From its first Plan of Development in 1971, Mansfield has focused on preserving the rural character of the community by focusing growth and development in a few limited areas. The *2006 Plan of Conservation and Development* continued that approach, identifying a small number of areas with existing water and sewer service or potential for future service as areas where more intensive development should be located (see Map 8.2: 2006 POCD Planned Development Areas). Policies and regulations also reflect the Town's commitment to preserving historic and rural character through its identification of historic village guidelines and provisions for cluster subdivisions.

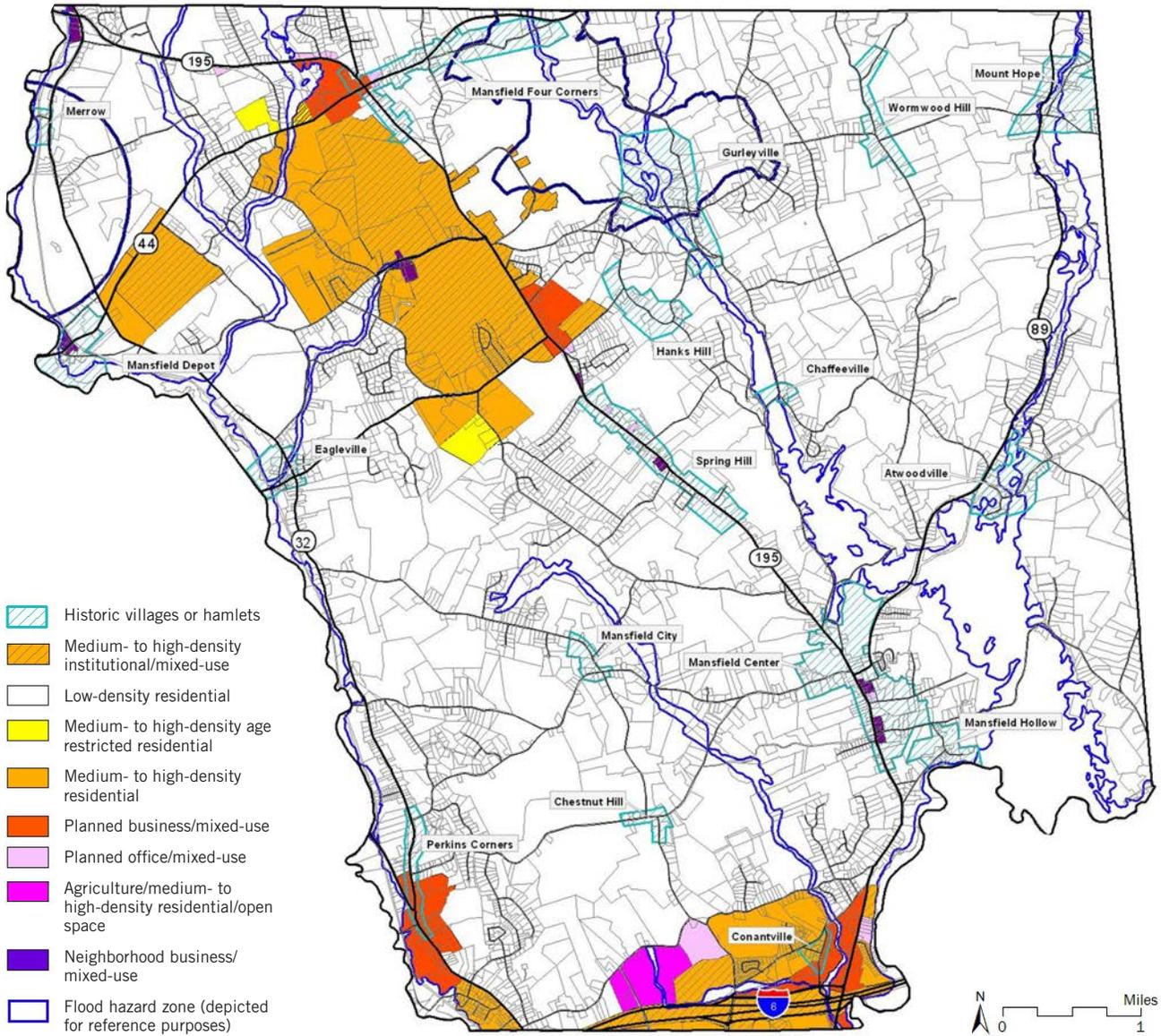
As such, it is not a surprise that throughout the Mansfield Tomorrow process, five common themes have emerged regarding the future physical development of the community:

Common themes	Enhancing preservation and connectivity of natural systems and open space.
	Preserving and enhancing the town's rural character, including agriculture and forestry areas.
	Preserving and enhancing historic rural village character—a distinctive pattern of development as compared to more general rural areas.
	Accommodating growth in limited areas where public water and sewer are or may become available.
	Protection of our groundwater and surface-water supplies, including stratified-drift aquifers.

A future land use strategy based on these themes results in a preferred land use pattern with three types of distinctive places: Rural Places, Villages and Centers. This pattern has been translated into a series of future land use designations to guide future growth and development. Consistent with the above themes, these land use designations fulfill one of two functions:

- Future Land Use Designations whose main purpose is to protect and conserve rural character, including village character, are classified as **Rural Character Conservation**

MAP 8.2: 2006 POCD PLANNED DEVELOPMENT AREAS



Source: Mansfield Plan of Conservation and Development, 2006

Areas. As depicted on Map 8.3: Future Land Use, these designations account for over 88% of Mansfield’s land area.

- Future Land Use Designations whose main purpose is to accommodate future growth are classified as **Smart Growth Development Areas**. These areas account for approximately 12% of Mansfield’s land area, and are concentrated in the Storrs area and in the Route 195/Route 6 area of southern Mansfield.

B) COMMUNITY DESIGN FOR HIGH-QUALITY DEVELOPMENT

While the Future Land Use Map guides the physical growth of a community by establishing guidelines for locations and densities of various uses, how people experience the resulting development is a function of both use and design. Community design standards and guidelines give property owners and developers a clear message about town preferences for the physical character of spaces in three dimensions. Design is not, as sometimes thought, simply about visual or architectural appearance or style. Design affects many aspects of how we experience places, including how the different elements of spaces, such as buildings, sidewalks, roads, parking lots, parks, and landscapes relate to one another; how spaces function in facilitating, directing or obstructing people’s activities; and how spaces express aesthetic values.

Many aspects of this Plan focus on issues that are design-related: preservation of rural character and views; preservation of historic character; compact growth that reflects sense of place and community; improvements in transportation and connectivity, for a more pedestrian- and bicycle-friendly community; and design that uses best practices to advance sustainability. As land use and design are intertwined, the Future Land Use Plan for Mansfield identifies design characteristics and objectives for each future land use designation. These policy statements will guide the development of design standards and guidelines as part of updates to the Zoning and Subdivision Regulations.

In rural and village areas, community design objectives focus on using design to preserve rural character and open space. In areas where infill and redevelopment is anticipated, design standards and guidelines focus on how new development can contribute to achieving the vision of a compact, walkable center of economic and social activity.

COMMUNITY DESIGN PRINCIPLES

The following principles will help guide the development of design standards and guidelines appropriate to the context and character of each area.

Focus on creating human-scaled environments.

Places should be designed primarily at a scale that is comfortable for people, rather than at a scale primarily focused on vehicles.

Focus on streets as three-dimensional shared spaces.

Streets are important public spaces made up of the travel right-of-way (including sidewalks) and the land, landscaping, and buildings that line the travel way. Chapter 9 recommends using context-sensitive and “complete streets” policies when designing and redesigning streets and roads. Ideally, the travel way should be shared and accessible to vehicles, bicyclists and pedestrians. In mixed-use and compact development areas, the vertical elements at the edge of the street—buildings and street trees—should create a sense of enclosure.

Create walkable environments.

Everyone is a pedestrian at some point during every day, even if it is just at the beginning and end of every vehicle trip. Walkable environments—connected, safe, comfortable, appealing—are important in both the public and semipublic realms and have been emphasized throughout this plan. In the public participation process, Mansfield residents made clear their desire for more walking opportunities. Walkability depends on a variety of design choices as well, such as block size and street width. Smaller blocks (under 600 feet) provide more intersections and more opportunities for direct routes to destinations. Narrower streets slow

traffic and reduce the amount of impervious surface and stormwater runoff. Public safety officials, who sometimes worry about access if streets are narrow, should be included in discussions of alternative design standards which can meet these concerns. In mixed-use areas, visual interest, safe crossings, shelter from precipitation and sun (trees, canopies, colonnades, galleries), human-scaled lighting, and other amenities can keep people walking.

Plant trees in mixed-use and compact development areas.

Mansfield is heavily forested, but in the areas designated for development, planting trees along streets and roads and in parking lots is one of the easiest ways to enhance the public realm, create comfortable environments, and reduce heat and stormwater impacts. Trees should be chosen for suitability to these tasks. For example, street trees along sidewalks should be chosen to have canopies sufficiently high and broad to provide shade to pedestrians. Parking lots should be broken into small parking fields shaded by trees. Trees, preferably native species, should be chosen for suitability to these tasks.

Bring buildings to the street edge.

In the mixed-use center and compact development areas, multifamily, commercial and mixed-use buildings should be located at the sidewalk, behind a small landscaped or hardscape setback, or, in a few cases along major arterials, behind limited, single-loaded parking. Locate building entries to promote safe pedestrian movement across streets; to relate to crosswalks and pathways that lead to public transportation stops; and to encourage walking, biking and public transit use, where available.

Put parking to the side, to the rear or in structures, if feasible, with clear signage to direct motorists.

Parking is necessary but should not dominate street frontage. However, rear parking should not result in buildings that turn their backs on the street frontage. Parking structures are likely to be found only in the larger Mixed-Use Centers, such as Downtown Storrs (where one exists) and possibly the East Brook Mall area. They should have active ground-floor uses on the street frontage, or, at a minimum, design elements such as screens and vines to give the ground floor more aesthetic appeal.

Create visual interest in buildings by avoiding blank facades.

Articulated and modulated façades, windows and transparency attract interest by providing a sense of activity within. Screens and vertical plantings also improve facades that otherwise offer little interest.

Design compact development for walkability, diversity, connectivity.

Establish transitions in scale and density from surrounding areas; provide usable open space and appropriate locations for future connections; provide guidelines about building appearance while accommodating a diversity of architectural styles; provide guidelines related to streetscape, signage, utilities, parking, landscape, sustainability, and materials.

Promote sustainability.

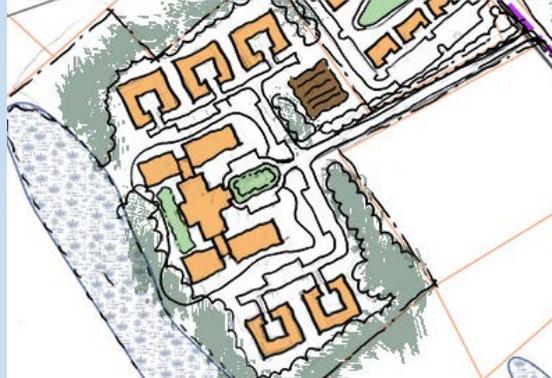
Incorporate building elements that improve energy efficiency, such as green roofs, rain gardens, solar panels, wind turbines, and others wherever possible. These elements should be scaled appropriately and incorporated seamlessly into the overall façade. Incorporate passive heating and cooling mechanisms such as operable windows, sun shades, cross-ventilation, and adequate insulation into the design of buildings whenever possible.

COMMUNITY DESIGN CONCEPTS

Locating parking to the side and rear of buildings



Incorporating multiple building types



Wrapping parking garages with buildings



Providing focal point for units such as a central green



Integrating stormwater as a site amenity



Incorporating natural features of site into design as amenities



3. Future Land Use Plan

The Future Land Use Plan was created based on a review of existing land uses; the 2006 POCD and its mapping of Planned Development Areas (Map 8.2); the Mansfield Tomorrow vision and values; current and potential future availability of public water and sewer infrastructure; the recommendations, goals, and strategies in this Plan of Conservation and Development; current information on UConn plans; community input; and numerous discussions involving staff, committees, and the Advisory Group over the course of the planning process. The Future Land Use Plan was prepared with a 20-year horizon in mind.

The Future Land Use Plan is comprised of two key ingredients: the **Future Land Use Map** (Map 8.3) and the accompanying **Future Land Use Designations**. Future Land Use Designations describe the desired land use approach for each area of town; locations for each Designation are shown on the Future Land Use Map. For each Future Land Use Designation, the following information is provided:

- Purpose
- Description
- Design characteristics
- Use types
- Related goals identified within this Plan of Conservation and Development

Together, the Future Land Use Map and Future Land Use Designations provide a framework for growth and preservation that reflects community values and sound policy, and provides a foundation for update of Mansfield's zoning regulations.

List of Future Land Use Designations

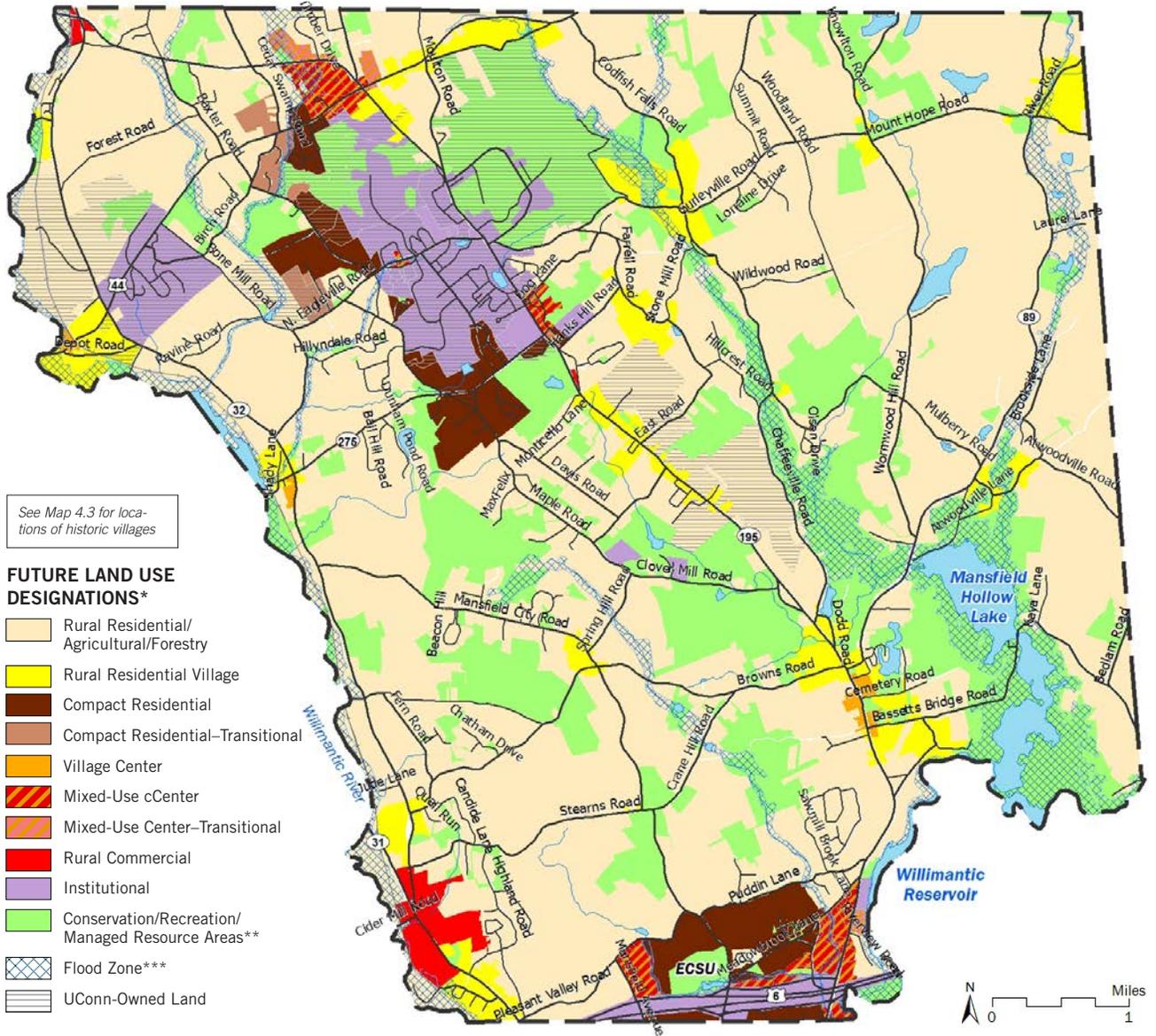
RURAL CHARACTER CONSERVATION AREAS

- Conservation/Recreation
- Flood Zone
- Rural Residential/Agricultural/
Forestry
- Rural Residential Village
- Village Center
- Rural Commercial

SMART GROWTH DEVELOPMENT AREAS

- Compact Residential
- Mixed-Use Center
- Institutional

MAP 8.3: FUTURE LAND USE



See Map 4.3 for locations of historic villages

FUTURE LAND USE DESIGNATIONS*

- Rural Residential/Agricultural/Forestry
- Rural Residential Village
- Compact Residential
- Compact Residential-Transitional
- Village Center
- Mixed-Use cCenter
- Mixed-Use Center-Transitional
- Rural Commercial
- Institutional
- Conservation/Recreation/Managed Resource Areas**
- Flood Zone***
- UConn-Owned Land

NOTES

UConn-Owned Land: The land use designations on this map represent the Town’s preference for use of state land and may not be binding on the state.

UConn Depot Campus. The UConn Master Plan calls for development of a sustainable village at the Depot Campus; such redevelopment could include a mix of uses, including residential, office, commercial, research & development/light industry and recreation. Given its location at the intersection of two state roadways, the Depot Campus is also seen as a potential location for a new multi-purpose arena.

* Future land conservation/recreation projects can occur in any category. Such projects will be reflected in the map as part of periodic updates to the Plan.

** This designation shows the status of this land use as of 2014 and is subject to change as new properties are acquired or protected. If the actual conservation restriction does not apply to the entire property on which it is shown, the Commission shall determine the most appropriate land use designation based on the surrounding context.

*** Flood zone data is from most recent FEMA mapping done in 1980 and is for general reference only.

Source: Town of Mansfield, 2014

About the Future Land Use Map

The Future Land Use Map shows the distribution of general land use categories for desired future development within the town. It is a guidance document—the land use designations on the map are intended to be broad and flexible. The Future Land Use Map balances respect for existing land uses with designations for consolidated land uses and new future land use designations. The consolidated land uses as they appear on the map take two forms: a) consolidation under one category of land uses with similar impacts, for example, a Rural Residential/Agriculture/Forestry designation for the general rural character areas in Mansfield that do not have villages; or b) a consolidation under a predominant use, for example, where an area is predominantly residential but also includes schools, churches, and a few scattered retail, office, or public uses. Note that this Future Land Use Map includes designations for some land owned by the University and other state and federal governmental entities. These designations indicate the Town's preference for use of state land and may not be binding on the state. The Future Land Use Map will be subject

to periodic review to determine if amendments are needed due to changes in conditions.

How does the Future Land Use Map relate to Zoning?

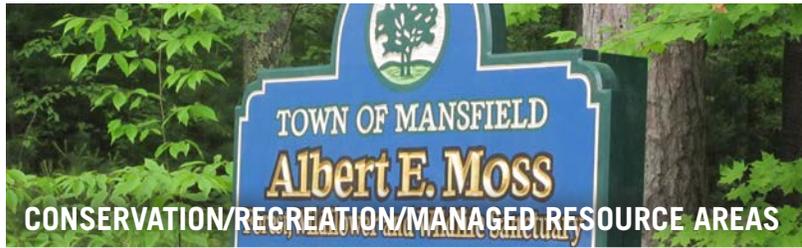
The Future Land Use Map is not a zoning map and its land use categories are not zoning districts. The land use categories in a Future Land Use Map may be reflected by more than one zoning district under a single land use category in zoning regulations; for example, many communities have multiple single-family residential zoning districts to reflect differences in minimum lot sizes.

How will the Future Land Use Map be used?

The map and the accompanying interpretive text will help to guide decisions on new zoning and land use regulations designed to achieve the vision and goals of this Plan. The Planning and Zoning Commission (PZC) will also refer to the Future Land Use Map when considering future decisions on land use and zoning.

Rural Character Conservation Areas

The priority for the majority of land in Mansfield is to preserve its rural character, ensuring that new infill development is compatible with the rural landscape, agricultural heritage and historic context. Future Land Use designations that are designed to achieve this goal include: Conservation/Recreation/Managed Resource Areas; Flood Zone, Rural Residential/Agricultural/Forestry, Rural Residential Village, Village Center and Rural Commercial.



Moss Sanctuary



Eagleville Dam



Mountain Dairy



Old Mill Court



Fitch House, Mansfield Center



Perkins Corner

FUTURE LAND USE DESIGNATION



River Park



Mount Hope Park



Photo credit: James D. Gilligan

Cows at Mountain Dairy

Conservation/Recreation/ Managed Resource Areas

(approximately 6,400 acres; 22% of land area)

The purpose of this designation is to **preserve conservation lands to support sustainability, habitat, rural character, and access to nature and recreation.**

Land that is currently held by a public entity or land trust as a preserve, park or conservation land, including private farm and forest lands protected by easements. Land in this category is not necessarily permanently protected by easement or deed restriction.

This category includes lands owned by the State and University of Connecticut that are actively managed as agricultural and forest lands as well as ECSU's recreation fields.

DESIGN CHARACTERISTICS

These areas are characterized by open, forested, or otherwise undeveloped land. Unless prohibited by an easement or deed restriction, buildings, structures and site improvements are limited to those needed to support agricultural and recreational activities.

Design Objectives: Design new structures and site improvements to promote and be compatible with the rural landscape.

USE TYPES

Nature-based Recreation, Active Recreation, Agriculture, Forestry

RELATED GOALS

2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 6.4

FUTURE LAND USE DESIGNATION



Willimantic River



Eagleville Dam

Flood Zone

(approximately 2,800 acres; 10% of land area)

The purpose of this designation is to **protect flood-prone areas from development that could impact flood storage capacity and result in economic loss.**

Water bodies, water courses and adjacent lands prone to flooding during high water events. The boundaries of these areas are based on FEMA flood mapping done in the 1980s and may not necessarily reflect current conditions in areas where development altered stream courses, such as East Brook Mall.

DESIGN CHARACTERISTICS

These areas are characterized by open spaces and site improvements that do not impede flood waters with the exception of limited locations such as the Thornbush Road area where houses are located within flood zones.

Design Objectives: Retain and improve flood storage capacity by elevating existing structures and continuing to limit construction of new structures.

USE TYPES

Open Space, Nature-based Recreation, Active Recreation, Agriculture, Hydropower, Parking

RELATED GOALS

2.2, 2.5

FUTURE LAND USE DESIGNATION



House on Jonathan Lane



View from Mt. Hope Rd.



View from Bassetts Bridge Rd.

Rural Residential/Agricultural/Forestry

(approximately 17,200 acres; 60% of land area)

The purpose of this designation is to **protect rural character in the majority of town while allowing for growth of agricultural enterprises.**

This designation applies to the majority of land in Mansfield. Priority is on preservation of rural character, agriculture and forestry uses, and conservation of natural resources.

Included in this designation are outlying UConn properties primarily used for agriculture such as Spring Manor Farm, the Agronomy Farm and properties in Spring Hill.

DESIGN CHARACTERISTICS

These areas are characterized by houses on large lots, lack of public water and sewer services, extensive open space and rural enterprises such as farms and forestry operations.

Design Objectives:

- Promote cluster-style development to maximize preservation of natural areas and avoid excessive fragmentation of open space. Examples of cluster-style development can be seen in Appendix D.
- Preserve the rural landscape as seen from the road by clustering houses and separating them from the road with a visual buffer.
- Design non-residential buildings to complement the surrounding rural landscape.
- Where applicable, promote and actively pursue land conservation to preserve rural character and natural resources.

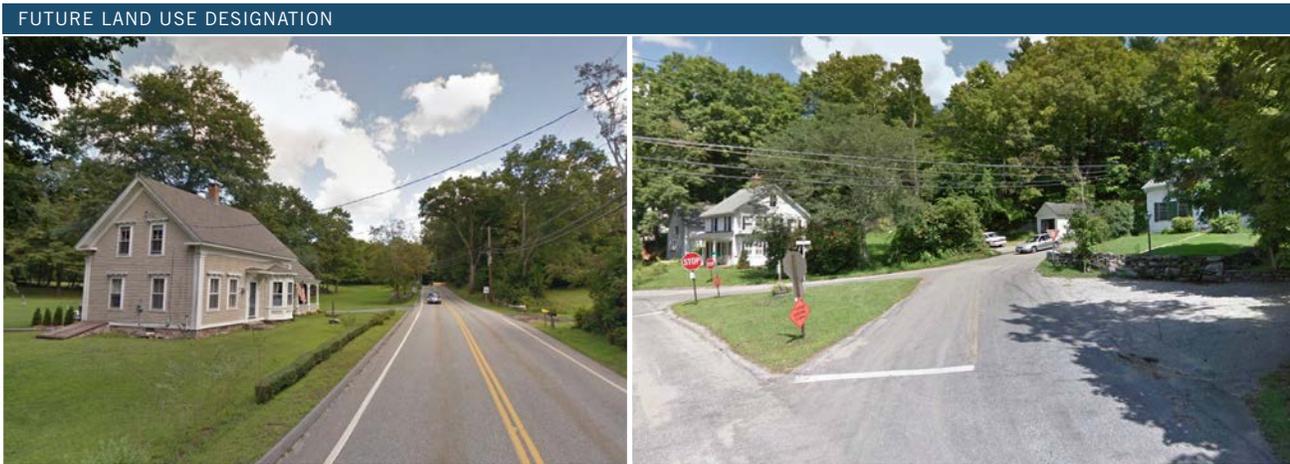
USE TYPES

Low Density Residential, Farm Worker Housing, Agriculture/Forestry, including Agri-business, Religious Facilities, Schools, Municipal Uses, Active and Nature-based Recreation, Adaptive Reuse of Historic Structures*, Open Space, Small Scale Office—Arterial Roads Only.

RELATED GOALS

2.1, 2.3, 2.4, 2.6, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 6.4, 6.5

*For proposed uses not identified as “use types” within this designation, require a special permit process to ensure the project poses no significant negative impacts to the surrounding residential area, or to the historic, environmental, or cultural integrity of the site.



Warrenville Rd.

Gurleyville Rd.

Rural Residential Village

(approximately 1,300 acres; 4.5% of land area)

The purpose of this designation is to **protect and enhance the pattern of development unique to historic villages as distinct from general rural areas.**

This designation applies to former farm and mill villages that are predominantly residential in nature, including: Atwoodville, Chaffeeville, Chestnut Hill, Conantville, Eagleville, portions of Four Corners, Gurleyville, Hanks Hill, portions of Mansfield Center, Mansfield City, Mansfield Hollow, Merrow, Mount Hope, portions of Perkins Corner, Spring Hill and Wormwood Hill. This designation has also been applied to clusters of small residential lots along Routes 31 and 32, north and south of Perkins Corner.

DESIGN CHARACTERISTICS

These areas have been distinguished from general Rural Residential/Agricultural/Forestry areas to reinforce the characteristic cluster of houses generally seen in a village environment. Some villages have houses on fairly small lots (such as Eagleville); others are on narrow, deep lots. While predominantly residential in nature, some villages such as Eagleville, Merrow and Mansfield Hollow have isolated commercial uses located in converted buildings.

Design Objectives:

- Ensure that infill residential development reflects existing village patterns in terms of lot width and building placement. This may be accomplished through mandates for narrow, deep lots to allow for clustering while meeting minimum lot sizes for wells and septic systems.
- Provide a walkable environment on public streets.

USE TYPES

Low Density Residential, Agriculture/Forestry, Religious Facilities, Schools, Municipal Uses, Adaptive Reuse of Historic Structures*

RELATED GOALS

2.6, 3.4, 4.1, 4.2, 6.1

*For proposed uses not identified as “use types” within this designation, require a special permit process to ensure the project poses no significant negative impacts to the surrounding residential area, or to the historic, environmental, or cultural integrity of the site.

FUTURE LAND USE DESIGNATION

*Mansfield Depot**Mansfield Center*

Village Center

(approximately 50 acres; less than 0.5% of land area)

The purpose of this designation is to **protect the character of Mansfield Center and Mansfield Depot while allowing for appropriate small-scale infill development.**

Mansfield Center and Mansfield Depot are small nodes of residential and non-residential development that serve as a focus for rural community activity. They are located in prominent locations on arterial roads and provide services for both surrounding residents and the larger community. The focus in these areas is on small-scale infill development that provides important services while preserving surrounding land and respecting existing historic character.

If passenger rail service is restored to Mansfield, Mansfield Depot could once again become a railroad village. Further evaluation would be needed at that time to determine whether any changes to the future land use strategy are needed for this area.

DESIGN CHARACTERISTICS

These areas are characterized by a mix of historic and newer buildings that are relatively small scale, both in footprint and height. Following the village pattern, buildings are typically located fairly close to the road and are clustered together on lots with narrow frontages as compared to more rural areas of town.

Design Objectives:

- *Ensure that infill development respects the scale and pattern of the historic context. For example, additional housing could be provided in multi-unit large houses that look like single-family houses, clusters of cottages and similar approaches.*
- *Encourage infill commercial development to take design cues from historic structures to complement the residential and rural landscape.*
- *Provide clear guidance in design standards for new structures as well as changes to existing development.*
- *Provide a walkable environment on public streets.*

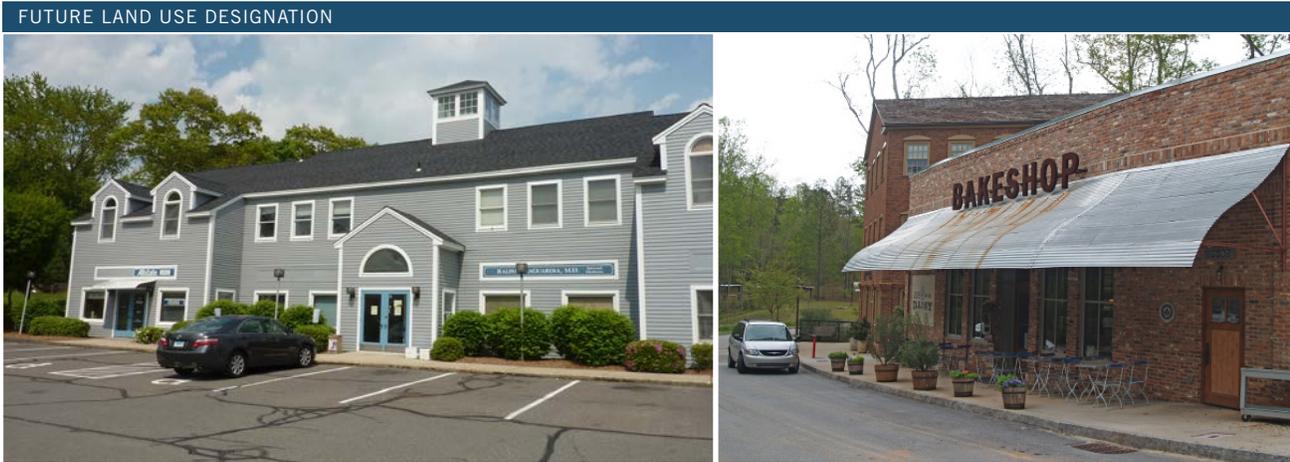
USE TYPES

Low Density Residential, Agriculture/Forestry, Office, Commercial, Religious Facilities, Schools, Municipal Uses, Adaptive Reuse of Historic Structures*

RELATED GOALS

4.1, 4.2

*For proposed uses not identified as "use types" within this designation, require a special permit process to ensure the project poses no significant negative impacts to the surrounding residential area, or to the historic, environmental, or cultural integrity of the site.



Perkins Corner

Example

Rural Commercial

(approximately 200 acres; less than 1% of land area)

The purpose of this designation is to **provide limited locations for auto-oriented commercial development.**

Perkins Corner, the intersection of Routes 195 and 32, and the intersection of Route 195 and Flaherty Road are the only areas within this designation. These areas are currently developed with a mix of fairly small scale commercial uses and do not currently have access to public transportation, sewer, or water infrastructure.

The CWC water main extension to UConn will run through the Route 195/32 intersection; however, this new access to public water shall not be used to justify intensification of uses and development in this area. If the commercial area is expanded to include properties classified in the 2006 POCD as low density residential (see Map 8.2), restrictions on connection to the public water system and limitations on intensity of use will apply.

DESIGN CHARACTERISTICS

These areas are characterized by auto-oriented commercial development, and in the case of Perkins Corner, a variety of recreation and entertainment uses including a driving range, bowling alley and drive-in theater/ flea market. Light industrial uses could potentially be accommodated in the Perkins Corner area depending on the availability of water and sewer. New and infill development should use compact patterns to avoid sprawl into surrounding areas.

Route 195/32 Intersection. Development in this area is expected to be of a smaller scale to complement adjacent commercial and residential areas in Coventry and Willington.

Route 195/Flaherty Road. Development in this areas is expected to be of a smaller scale to be compatible with the adjacent residential neighborhood.

Design Objectives:

- Provide appropriate transitions to adjacent residential areas
- Provide a walkable environment on public streets

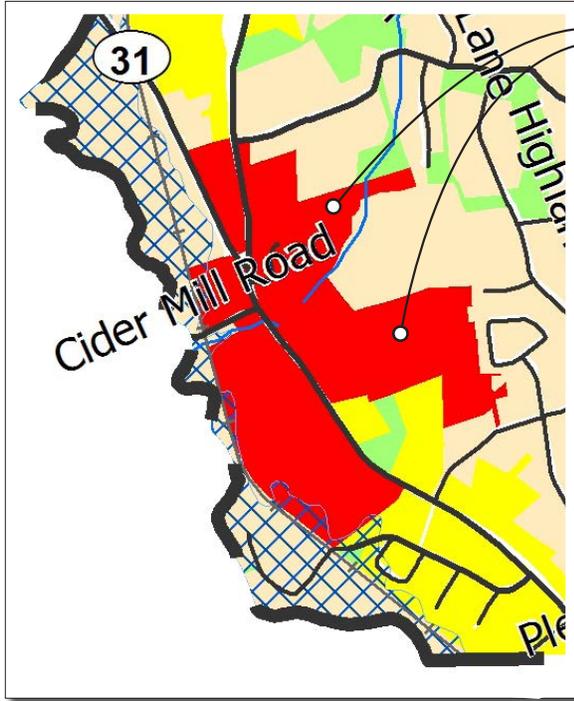
USE TYPES

Office, Commercial, Light Industry, Agriculture/Forestry, Open Space, Recreation, Schools, Municipal Uses

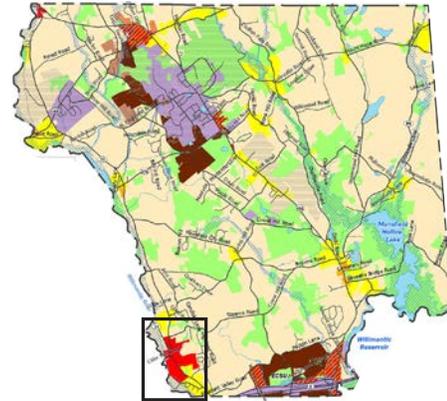
RELATED GOALS

4.2, 6.1, 6.5

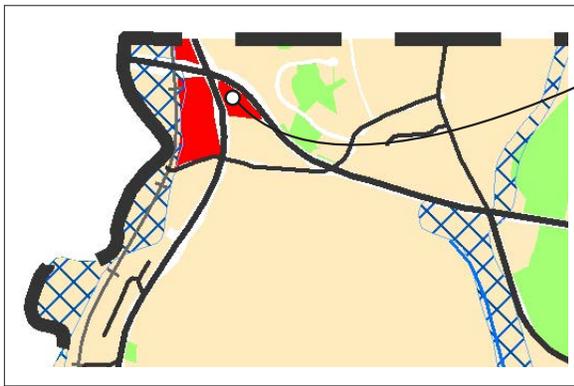
RURAL COMMERCIAL FOCUS AREA: PERKINS CORNER



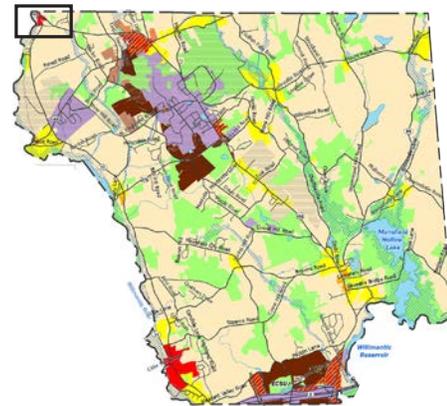
These areas are intended for a lower intensity mixture of uses and pattern of development to provide an appropriate transition to adjacent residential areas.



RURAL COMMERCIAL FOCUS AREA: RT. 195/RT. 32



As this property was designated for low density residential uses in the 2006 *POCD*, restrictions on connection to the public water system and limitations on intensity of use will apply to ensure conformance with CT DEEP conditions of approval for the CWC water diversion permit.



Smart Growth Development Areas

The term ‘Smart Growth’ is shorthand for land use patterns that (1) focus development where housing, jobs and shopping are in close proximity and there are choices in transportation; (2) preserve open space for natural systems and land-based economic activities; and (3) provide a diverse range of housing and jobs for people across the income scale and life cycle.

Consistent with previous plans of conservation and development, new growth to support economic development and housing needs is being directed to limited areas that: (a) are in close proximity to existing employment and commercial centers; (b) have access to public transportation; and (c) are in areas with existing or planned water and sewer service needed to support higher density development. Future Land Use Designations that are designed to meet these goals include: Compact Residential, Mixed-Use Center, and Institutional.



COMPACT RESIDENTIAL

Example



MIXED-USE CENTER

Example



INSTITUTIONAL

UConn Public Safety Building

FUTURE LAND USE DESIGNATION



Example of “farmhouse style settlement”—a type of compact residential development

Compact Residential

(approximately 1,200 acres; 4% of land area)

The purpose of this designation is to **accommodate residential growth in compact, walkable developments accessible to employment, the University and shopping areas.**

The Compact Residential Designation as depicted on Map 8.3 indicates that higher density residential development may be appropriate in these areas based on existing or potential access to public water and sewer infrastructure and proximity to areas of activity such as the UConn campus and commercial centers. Any request for rezoning or development approvals to allow a higher density of development in areas designated Compact Residential needs to adequately address the following issues in accordance with the Sustainability Principles outlined in Chapter 1 of this Plan:

- Minimizing and mitigating impacts to natural systems and resources;
- Minimizing and mitigating impacts to the surrounding neighborhoods, including scale, height, and massing of buildings, buffers, and impacts to community quality of life such as litter, noise, trespass and nuisance behavior;
- Demonstrating the ability of the roadway network to accommodate additional traffic that would be generated by the development and providing alternative means of transportation to reduce traffic impacts on surrounding neighborhoods;
- Identifying improvements to the surrounding transportation network to address capacity issues if the current system is not capable of supporting additional traffic in a manner that is appropriate to the context of the neighborhood;
- Identifying techniques that will be used to promote resource conservation and reuse (energy, water, stormwater, waste, etc.) and minimize impacts from climate change (preservation of tree cover, natural infiltration of stormwater, etc.);
- Identifying practices that will be used to enhance connectivity, both for natural and developed areas;
- Clustering of development to preserve open space; and

- Identifying other sustainable design and green building practices as may be appropriate to the site and development. The Storrs Center Sustainability Design Guidelines provide a resource that could be used to identify additional practices.

Compact residential areas are generally located along the western and southern edges of UConn’s Core and North Campus areas and in southern Mansfield. These areas are intended to promote higher-density living where walkability and access to transit are more available than in the rural parts of town. Sewer and water service is either existing, planned or in close proximity.

The priority in these areas is on compact residential development patterns that allow more residents to be within walking and bicycling distance of destinations such as UConn, Storrs Center, and shopping in the East Brook Mall area.

The Compact Residential–Transitional designation has been applied to areas where new development should be a lower scale and density to serve as a transition between higher density residential uses and low density rural residential neighborhoods. Examples of potential development types include small lot single-family subdivisions, townhouse and cottage clusters and farmhouse settlements.

Portions of properties within the Four Corners Compact Residential areas designated as low-density residential in the 2006 POCD (see Map 8.2), will be subject to restrictions on connections to the public water system and limitations on intensity of use.

DESIGN CHARACTERISTICS

Infill development and redevelopment should be encouraged in the form of compact neighborhoods that include a mix of multi-family, two- and three-family houses, and clustered single-family houses that preserve the natural setting. A variety of residential types should be encouraged, such as cottage clusters, garden apartments, mansion apartments (apartments in buildings that look like large houses), townhouses and clustered ‘farmhouse style’ settlements.

Design Objectives:

- Create human-scaled, walkable environments through standards and guidelines based on the Community Design Principles outlined in this Plan.
- Minimize impacts on nearby low-density neighborhoods through use of design standards that include appropriate transitions.
- Balance new residential development with agriculture in the Pleasant Valley area; retain at least 35% of prime agricultural acreage and provide a buffer for adjacent agricultural land.

USE TYPES

Medium Density Residential, Agriculture/Forestry, Open Space, Recreation, Schools, Municipal Uses

RELATED GOALS

4.2, 7.1, 7.2, 7.3, 7.4



Townhouses (example)

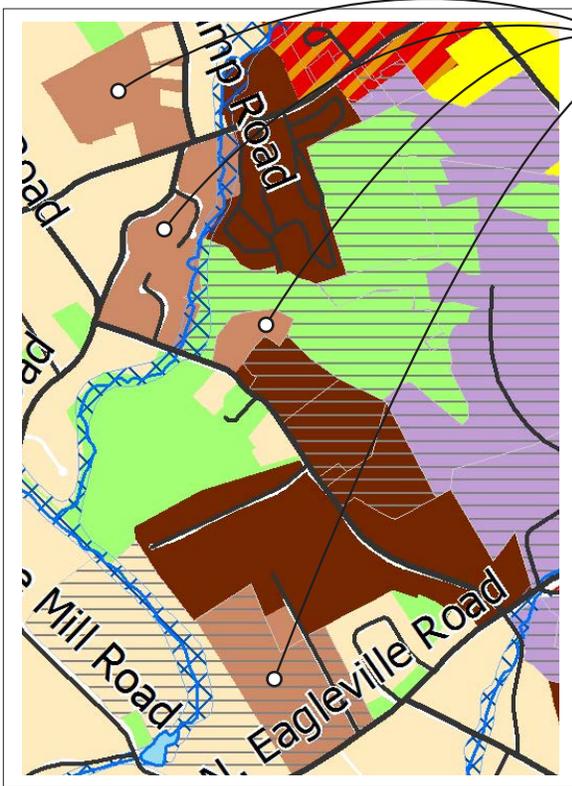


Garden apartment-style housing (example)

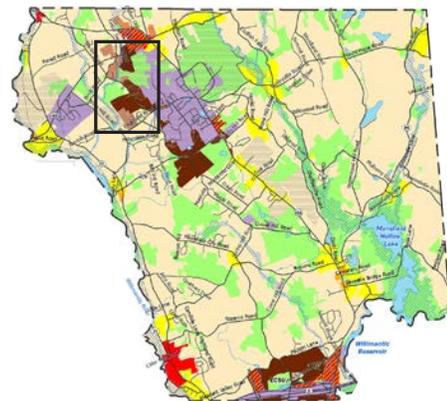


Cottage-style housing (example)

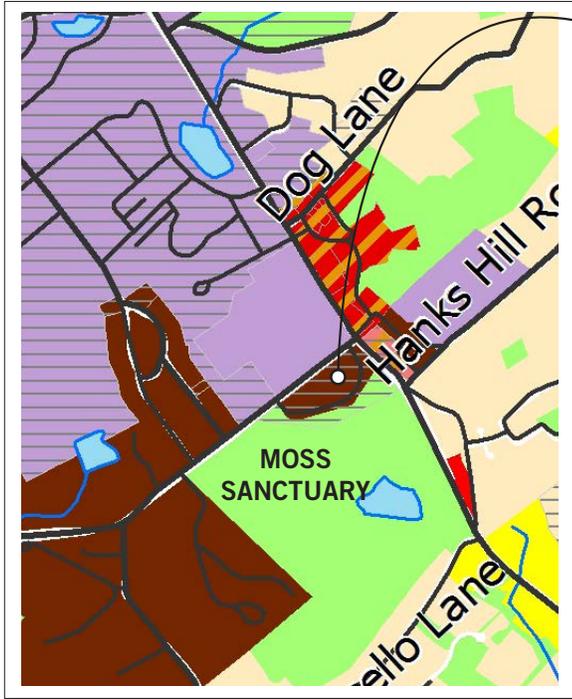
COMPACT RESIDENTIAL FOCUS AREA: NORTH EAGLEVILLE, HUNTING LODGE AND BIRCH ROAD AREAS



These areas are intended to serve as a transition between higher density residential uses and low density rural residential neighborhoods. Development in these areas should reflect that transition through lower densities and design. Examples of potential development types include small lot single-family subdivisions, townhouse and cottage clusters and farmhouse settlements. Additionally, access to the transitional area at Route 44 and Cedar Swamp Road should be taken from Route 44 to minimize impacts on the adjacent single-family neighborhood on Cedar Swamp Road.

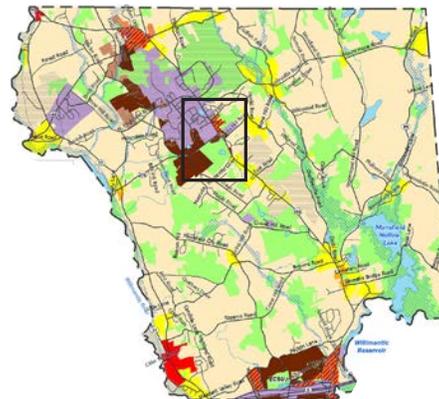


COMPACT RESIDENTIAL FOCUS AREA: MANSFIELD APARTMENTS



This area serves as a transition from the heart of downtown Storrs to adjacent rural neighborhoods. As such, the scale and massing of buildings should be lower than the four to five stories that characterize the bulk of Storrs Center. Uses should also reflect that transition to a lower scale, height, and intensity; as such, a multi-purpose arena is not considered to be an appropriate use for this site. Any redevelopment of the site should address the following design principles to protect Moss Sanctuary from impacts of development:

- Maintaining and promoting clear public access to the Moss Sanctuary from Route 275;
- Managing stormwater runoff through use of Low Impact Development (LID) practices to reduce impacts of runoff on Moss Sanctuary;
- Treating Moss Sanctuary as another primary frontage for building design purposes (in addition to roadway frontages) in a manner compatible with the Sanctuary's entrance and environment; and
- Prohibiting service uses such as loading and waste disposal from fronting onto the Moss Sanctuary.



FUTURE LAND USE DESIGNATION



Example of smaller scale mixed-use development



Storrs Center

Mixed-Use Center

(approximately 450 acres; 1.5% of land area)

The purpose of this designation is to **direct higher density residential uses, commercial and office uses, and small-scale research and light industry uses to a few mixed-use centers.**

Storrs Center, Four Corners, the King Hill Road area, and East Brook Mall (Route 195/Route 6) areas are designated as Mixed-Use Centers based on historic land use patterns, locations on major arterial roads, access to public transportation and availability/potential availability of water and sewer service.

These are intended to be the areas of greatest density and activity in Mansfield, serving as the economic and social hubs for the town. Each Center will have its own distinctive mix of uses, density, scale of development and building character appropriate to the surrounding context; they will not all replicate Storrs Center.

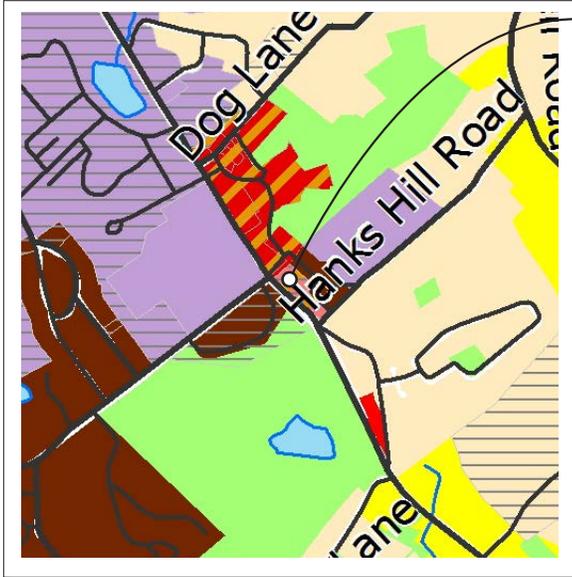
The priority is on infill development and redevelopment of existing properties that support the creation of com-

compact, walkable districts with a mixture of multi-family residential, office, commercial, research and development and light industry uses.

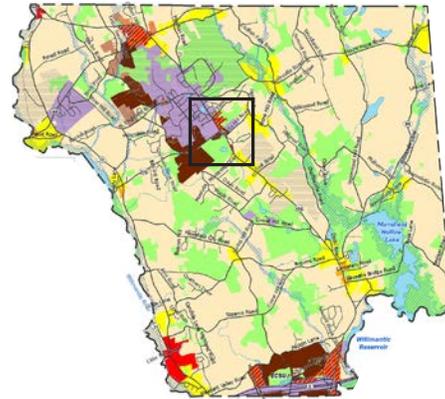
The Mixed-Use Center-Transitional designation has been applied to areas where new development should be a lower scale and intensity to serve as a transition to low density rural residential neighborhoods. Uses in these areas may also be limited to ensure compatibility with adjacent residential neighborhoods.

Portions of properties within the Four Corners Mixed-Use Center designated as low-density residential in the 2006 POCD (see Map 8.2) will be subject to restrictions on connections to the public water system and limitations on types and intensity of use.

MIXED-USE CENTER FOCUS AREA: CHARLES SMITH WAY AND HANKS HILL ROAD



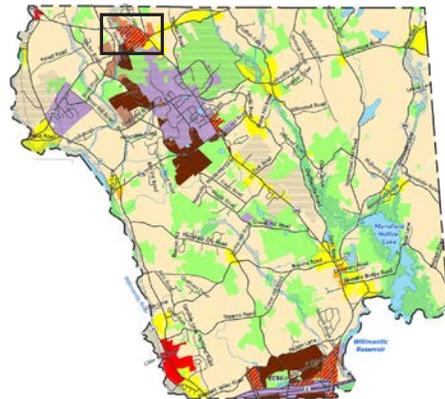
This area serves as a transition from the heart of downtown Storrs to adjacent rural neighborhoods. As such, the scale and massing of buildings should be lower than the four to five stories that characterize the bulk of Storrs Center.



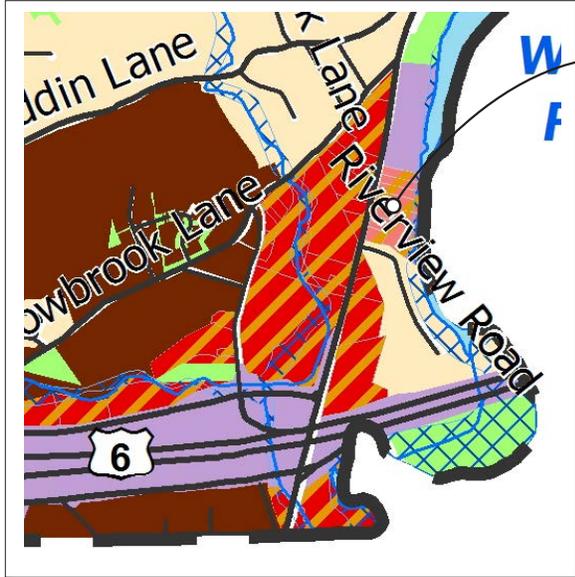
MIXED-USE CENTER-TRANSITIONAL FOCUS AREA: FOUR CORNERS



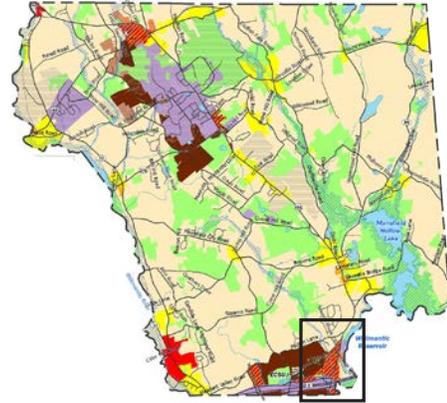
These areas serve as a transition from the higher density commercial and residential uses of the Four Corners to adjacent single-family neighborhoods. As such, these areas are intended for a lower intensity of small scale office and residential uses to provide an appropriate transition. Educational, municipal and religious facilities may also be appropriate depending on the scale of development and specific nature of the use. Portions of these properties that were designated for low density residential uses in the 2006 *POCD* will be subject to additional restrictions on connections to the public water system and limitations on type and intensity of use to comply with CT DEEP conditions of approval for the CWC water diversion permit.



MIXED-USE CENTER FOCUS AREA: ROUTE 195/RIVERVIEW ROAD



This area is intended for a lower intensity mixture of small scale office and residential uses to provide an appropriate transition to the adjacent residential neighborhood.



DESIGN CHARACTERISTICS

As the highest density and most intensive mixed-use areas in Mansfield, Mixed-Use Centers are capable of absorbing a significant number of new housing units within a compact, walkable environment that provides access to jobs, amenities and alternative transportation. The mixture of land uses can be vertical (within one structure) or horizontal (side by side).

The design character of the public realm—the streets, sidewalks, and public spaces—is critical to making diverse uses work together and contributes to a lively place of activity. Providing opportunities for office, research and small-scale light industrial uses in a compact area where employees can walk to restaurants and other services helps to create vibrant places that are attractive to businesses.

Storrs Center. This area functions as Mansfield’s downtown and as such has the densest pattern of development, with buildings up to five stories in height. The character of this area reflects its proximity to UConn’s Core Campus.

Four Corners. This area functions as the northern gateway to Mansfield and has the benefit of being located at the crossroads of two state arterial roads. Plans to extend water and sewer to this area will enable redevelopment with a mixture of residential and commercial uses. Given proximity to the new Technology Park, it is anticipated that this area will be a focal point for research and light industry and may also become a priority housing location for Tech Park workers. The size of the area combined with extensive wetland areas will result in clusters of development along Routes 195 and 44. The preferred scale of development identified through the Mansfield Tomorrow visioning process was between one and three stories.

King Hill Road Area. Surrounded by UConn, this area serves as a transition into campus. New/redevelopment will take its cues from surrounding institutional buildings and the changing topography. This area, particularly the frontage along North Eagleville Road, is expected to continue to be a location for small businesses that support university students and employees; larger parcels may be able to support a mixture of business and residential uses.

East Brook Mall (Route 195/Route 6) Area. Shopping Centers along the southern portion of Route 195 have the potential for redevelopment as mixed-use, pedestrian-oriented lifestyle centers, integrating residential and commercial development. The access to services and transportation available in this area could also make it a focus for increasing senior housing.

Development in the Pleasant Valley area will need to balance the availability of public water and sewer services that support denser development with the existence of prime agricultural soils.

Design Objectives:

- *Create human-scaled, walkable environments through standards and guidelines based on the Community Design Principles outlined in this Plan and the unique context of each area.*
- *Minimize impacts on nearby low-density areas through use of design standards that include appropriate transitions.*
- *Balance new development with agriculture in the Pleasant Valley area; retain at least 35% of prime agricultural acreage and provide a buffer for adjacent agricultural land.*

USE TYPES

Medium-High Density Residential, Office, Commercial, Research & Development, Light Industry, Religious Facilities, Schools, Municipal Uses

RELATED GOALS

6.1, 6.2, 6.3, 6.5, 7.1, 7.2, 7.3, 7.4

FUTURE LAND USE DESIGNATION

*UConn Chemistry Building**Mansfield Community Center*

Institutional

(approximately 2,000 acres; 7% of land area)

The purpose of this designation is to **focus University of Connecticut development in the Core, North, and Depot Campus areas.**

Institutional areas include the University of Connecticut Core Campus, North Campus and Depot Campus areas and the Bergin Correctional Facility, as well as associated state/university property on the north side of Route 44. The recommendations with regard to use and character of UConn and ECSU campus development is advisory in nature as the Town does not have planning or zoning jurisdiction over state agencies.

This classification also includes municipal properties (including Town Hall, Mansfield Community Center, and E.O. Smith High School) as well as a few privately owned parcels on North Eagleville Road that are surrounded by the UConn campus, such as Hillel, Storrs Congregational Church, and St. Thomas Aquinas.

This classification does not include the undeveloped portions of UConn's East Campus (or Agricultural Campus).

UConn Core Campus. Generally located east of Separatist Road and west of Route 195 between Route 275 and North Eagleville Road (aka Route 430). The Core Campus extends south to Bolton Road and includes the Mansfield Apartments on the south side of Route 275, the residence halls and support facilities located on the north side of North Eagleville Road and the residence halls located on the west side of Route 195 south of Moulton Road.

UConn North Campus. Also known as the UConn Technology Park, the North Campus area includes property on both sides of the new North Hillside Road extension between North Eagleville Road and Route 44.

UConn Depot Campus. Former Mansfield Training School property located on the south side of Route 44 between Route 32 and Bone Mill Road.



Photo credit: UConn
Birdseye view of the UConn Campus

DESIGN CHARACTERISTICS

Institutional areas are some of the more densely developed parts of Mansfield, particularly UConn’s Core Campus area. The Core Campus area is characterized by a mix of academic and residential uses in large footprint, multi-story buildings with support facilities, including utilities, surface and structured parking, athletic and theater venues, recreation facilities and supporting commercial activities, including hotel, restaurant and retail. This area has limited vehicular access and a strong pedestrian and bicycle network.

North Campus Area. The North Campus area, home to the university’s new Technology Park, will be characterized by large buildings focused on research & development and light industrial uses grouped in distinct clusters along North Hillside Road. Other uses include the existing Charter Oak apartments, recreational facilities and a site for collection and temporary storage of hazardous materials.

Depot Campus. The Depot Campus area is currently characterized by a mix of historic buildings, former residential cottages, low-scale buildings with larger footprints and recreation uses. The UConn Master Plan calls for development of a sustainable village at the Depot Campus; such redevelopment could include a mix of uses, including residential, office, commercial, research & development/light industry and recreation. Given its location at the intersection of two state roadways, the Depot Campus is also seen as a potential location for a new multi-purpose arena.

- Design Objectives:**
- *Development on campus edges respects and complements surrounding neighborhood context in scale and design.*
 - *Development on campus edges incorporates Community Design Principles outlined in this Plan.*

USE TYPES

Higher Education, Medium-High Density Residential, Office, Commercial, Research & Development, Light Industry, Recreation & Athletic Facilities, Arts & Entertainment, Religious Facilities, Schools, Municipal Uses, Utilities

RELATED GOALS

6.3

4. Implementing the Plan

Zoning and development regulations are one of the primary tools used by communities to achieve the vision and goals identified in a Plan of Conservation and Development, particularly the Future Land Use Plan. A modern zoning code is based on planning goals and principles, is user-friendly and precise about what is and is not permitted, and provides clear standards for high-quality and sustainable development. As a result, modern codes make it possible for many development projects to proceed without lengthy delays and reviews, because developers and communities know what to expect and what is expected. Many communities have opted to create a “unified development code” that gathers into one document zoning, subdivision regulations, thoroughfare regulations, development standards, environmental regulations, sign regulations, historic preservation regulations, and permitting.

A) APPROACHES TO ZONING

Land use zoning first appeared in the United States in 1916. The zoning system that emerged in the early twentieth century is now called conventional or “Euclidean” zoning (after *Euclid v. Ambler*, the 1926 Supreme Court case that validated zoning as a proper exercise of municipal police power). As some of the disadvantages of conventional zoning became evident by the second half of the twentieth century, new zoning approaches emerged, including performance zoning and form-based (also called design-based) zoning. Conventional zoning remains the basis of most zoning systems today, but many jurisdictions, including Mansfield, have added aspects of performance zoning and form-based zoning.

Zoning Approaches

Conventional Zoning. Conventional zoning was originally created to separate industrial and other noxious land uses from residential areas, and particularly to preserve quality of life and property values in single-family home neighborhoods. Conventional zoning separates land uses deemed to be incompatible and is prescriptive. It regulates the uses and dimensions of development, for example, type and mix of land uses; size and dimension of lots; type, size and height of buildings; distance of front, side and rear setbacks; width and length of streets and sidewalks; amount and size of off-street parking. This focus on dimensions makes it easy to implement both by governments and by property owners because there are no

judgment calls when the zoning says, for example, that a building must be ten feet from the front lot line.

One of the main drawbacks to conventional zoning is that it focuses on what is not allowed rather than articulating what is actually desired, both in terms of use and design. Conventional zoning provides some certainty about development outcomes and, because it is long-established, it is familiar to everyone. However, it is inflexible and inhibits design creativity. It is one, though not the only, source of the “Anywhere, USA” sprawl landscape that has produced a modern built environment lacking in distinctiveness.

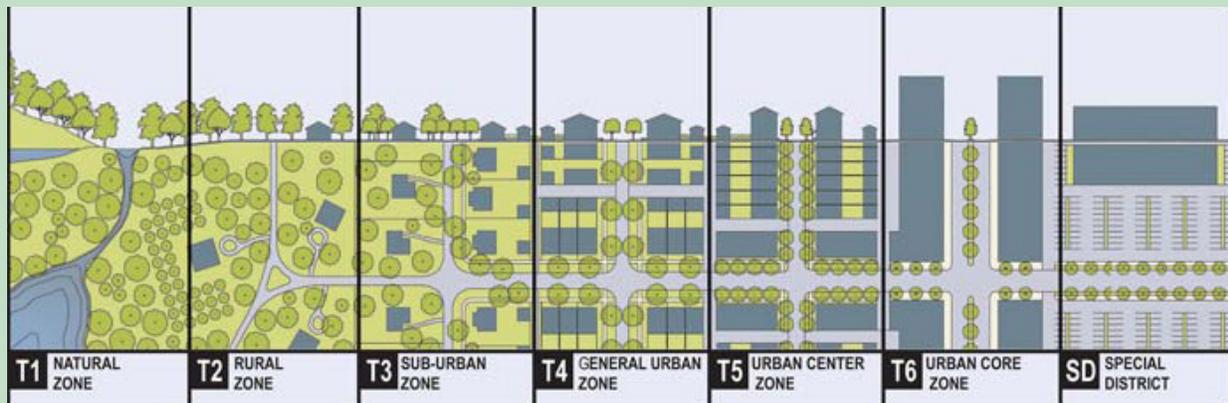
The homogenizing and inflexible outcomes of conventional zoning have led to the establishment of an array of strategies to get around that inflexibility. Variances, conditional uses, special exceptions, bonuses and incentives, planned unit developments, design review, and similar devices are intended to allow development to be more closely tailored to particular conditions and desired results. These approaches can also have drawbacks. For example, design review processes are sometimes criticized as too unpredictable and capricious. In Connecticut, recent case law has also raised questions about the ability of communities to incorporate flexibility in zoning regulations.

Performance Zoning. Performance zoning has its origins in industrial performance standards that identified limits on measurable industrial impacts such as noise, vibration, light, dust, smells, and so on, and that were incorporated into zoning codes for industrial land uses. This idea was expanded in performance zoning to regulation of the impacts and effects of the built environment. Unlike conventional zoning, which assumes certain uses are incompatible and separates them, pure performance zoning assumes virtually any uses can be made compatible if impacts are properly managed. Because it can provide flexibility to developers and designers to present their own solutions to mitigate impacts for administrative review, the specific outcomes are not always predictable. Generally speaking, performance zoning requires highly

trained administrators who have the confidence of residents, property owners, and developers. There are few places with a pure performance zoning system, but some aspects of performance zoning are incorporated into many communities' zoning codes.

Form-Based Zoning. Form-based zoning focuses more on building form—the physical character of the building and how it addresses the public realm—than on land uses. Form-based codes are based on the concept of a transition from low densities at the periphery to high densities at the center (called a “transect”)—of a town, a district or a neighborhood. These codes are a reaction to conventional zoning’s separation of land uses, which made it impossible to build mixed-use neighborhoods and districts, and its neglect of the public realm, which resulted in visually- and functionally-impooverished environments that are often unattractive and functional for only one type of user. Form-based codes are very detailed and prescriptive about certain aspects of design and use many visuals to give a positive vision of what is desired, rather than focusing on what should be excluded. They require a design-focused community process in advance of writing the zoning.

Hybrid Zoning. Conventional, performance, and form based zoning codes all have advantages and disadvantages. Because of its familiarity and long institutional history, conventional zoning is likely to remain the



The Rural to Urban Transect, as illustrated by Duany, Plater-Zyberk & Company.

foundation of most zoning codes. However, performance standards and form-based elements are valuable to increase the flexibility of conventional zoning. For example, conventional zoning is organized in separate-use districts on a town wide basis and is not effective in mediating impacts at the edges of districts—which is precisely the strong point of performance zoning. Form-based codes are organized around the street and the neighborhood and are particularly good for mixing uses and about conveying

what is desired in terms of the relationship between private buildings and the public street. A type of hybrid zoning known as “place-based” zoning focuses on the desired characteristics of types of places, such as residential areas, walkable mixed-use centers, or industrial areas. In this type of zoning, many design standards are included in the zoning district requirements.

B) MANSFIELD'S ZONING AND SUBDIVISION REGULATIONS

Zoning and development regulations need reorganizing and updating from time to time. Incremental amendments can introduce inconsistencies, ambiguity, and confusion—and produce disappointing outcomes. As communities change, so do land use goals. Unanticipated consequences of previous decisions need to be corrected.

Mansfield's regulations were first adopted in 1959 and have been incrementally updated over time to reflect new approaches in zoning. However, the structure of the regulations has remained largely the same since initial adoption, resulting in a document that is difficult to use. As part of the Mansfield Tomorrow project, Mansfield has an unprecedented opportunity to prepare a thorough update to its zoning and subdivision regulations using the best combination of approaches that will help the community achieve its goals. New regulations will be more user-friendly in organization and include more charts and illustrations to provide visual guidance to users.

Integrating Design Standards into Zoning Regulations. As previously noted, design standards are an essential component of the regulatory framework. Regulations should give clear direction to project proponents about the type of design approach desired. Form based zoning is one way to integrate desired design elements. Another is to provide a set of desired outcomes and guidelines and give project proponents the flexibility to choose design solutions. Project proponents must explain how their solutions meet the letter and spirit of the desired design outcomes.

Sustainable Development. As part of the Mansfield Tomorrow project, the consultant team evaluated the existing Zoning and Subdivision Regulations for effectiveness in promoting sustainable development principles with specific emphasis on the following three themes that reflect the community's vision and goals:

- Preservation of the environmental and historic community character of the town as expressed in a series of villages among farms, forests, wetlands, streams, and hills

- Reduction of greenhouse gas emissions as part of efforts to reduce the effects of climate change
- Limiting of conventional, auto-dependent, sprawling suburban development that does not respect ecological boundaries or rural character.

The assessment found that the Town had addressed these sustainability issues in some way, either within the development regulations or by the creation of a committee or commission focused on the topic, such as sustainability, historic preservation, agriculture, or conservation. One deficiency identified in the assessment was that while many issues are mentioned in the development regulations, in many cases this is limited to soft intent statements with no specific, enforceable requirements to back up the intent.

The assessment included key strategies for strengthening land use regulations, particularly in areas where new growth will be directed and accommodated; these strategies formed the basis for changes recommended in each chapter of the Plan. The assessment also included a detailed audit of existing regulations; this audit will be used to help guide specific changes to the regulations following adoption of the Plan.

Table 8.1 Regulatory Strategies for Sustainability

TOPIC AREA	KEY STRATEGIES
Buildings and Neighborhood Form	Focus development in appropriate areas Require appropriate density for each area Encourage walkability with street connectivity and walkable block sizes Minimize pedestrian-vehicle conflicts Provide a mix of scales and types of open space Provide a variety of housing types
Land Uses	Permit mixed-use in all commercial districts. Make daily uses accessible with a mix of uses. Permit home occupations. Require active ground floor commercial uses on edges of parking garages.
Complete Streets*	Ensure new streets in new developments are complete. Accommodate multiple modes of transportation on each street. Create continuous, comfortable sidewalks for all users.
Parking	Limiting requirements for off-street parking Reducing the off-street parking footprint Parking credits for parking reductions

TOPIC AREA	KEY STRATEGIES
Heat Island	<ul style="list-style-type: none"> Require reflective pavement/hardscape surfaces as appropriate Encourage reflective surfaces on roofs or vegetated roofs as appropriate Limit impervious surface footprint
Energy	<ul style="list-style-type: none"> Permitting and encouraging renewable energy production as either permitted uses or with a renewable energy ordinance Ensuring building energy codes are current
Outdoor Lighting	<ul style="list-style-type: none"> Establish lighting zones within each compact development area Set standards based on each of these areas
Tree Canopy	<ul style="list-style-type: none"> Establish tree protection regulations that limit tree removal and begin a replanting program Requiring new trees as an element of new development Providing an environment that fosters healthy trees, including the selection of native species
Stormwater	<ul style="list-style-type: none"> Requiring a percentage of stormwater infiltration on site Requiring parking lot landscape requirements Encouraging stormwater reuse for irrigation and other non-potable uses
Water	<ul style="list-style-type: none"> Encourage use of native landscape plants and materials or xeriscape plants Permit graywater systems for non-potable building and outdoor uses
Waste	<ul style="list-style-type: none"> De-couple demolition and building permits. Require reuse/recycling of demolition materials
Food Production	<ul style="list-style-type: none"> Permit the raising of animals Permit beekeeping Permit community gardens Permit roadside produce stands and farmer's markets.

**See Chapter 9 for more information.*

Development Review Process. The process through which proposed developments, both large and small, are reviewed can either help or hinder a community's ability to achieve its broader goals. For example, a community can encourage certain uses to locate in specific areas by providing a streamlined review process in those zones and requiring a more extensive process (such as a Special Permit approval) in other zones. On the flip side, the development review process can also serve as a disincentive for desired uses. For example, the timeframe, cost and unpredictability of the Special Permit process can discourage small businesses from opening in a community.

Mansfield's Development Review Process

The development renew process should provide for:

- Clear information on how the permitting process works, including steps, required information, time-frames and fees for each application/permit type.
- Consolidation of application forms to reduce redundancy where multiple approvals/permits are needed.
- Clarity in zoning and subdivision regulations.
- Enforcement of deadlines to submit comments/complete reviews of application materials.
- Communication and coordination between the various staff and agencies involved in the permitting process.
- A single point-of-contact that can facilitate interactions between applicants, staff, boards and commissions.
- Reduction in the number of uses that require Special Permit approval.
- Clear explanations when applications are denied.

As part this planning process, the consultant team conducted an assessment of the current development review process, including approvals needed from various land use regulatory agencies such as the Planning and Zoning Commission, Inland Wetlands Agency, Zoning Board of Appeals and Historic District Commission, as well as the process of obtaining a building permit. A variety of stakeholders including residents, business owners, builders, the Planning and Zoning Commission, members of Town Advisory Committees and staff involved in the permitting process were interviewed for their perspectives on how the process currently functions.

General Recommendations for Regulatory and Process Improvements. Basic principles to guide updates to the Mansfield Zoning and Subdivision Regulations include:

- Ensuring development standards reflect desired pattern and scale of development;
- Making clear connections between the land use policies of the Plan, the text of the zoning regulations and the zoning map;
- Making regulations clear and concise;
- Simplifying the review process for routine matters; and
- Including design and other standards to make the regulations consistent and predictable.

Updates to regulations should incorporate best practices of modern zoning, such as:

- **User-friendliness and clarity in organization and expression:** Clear organization and language, tables for rapid understanding of regulations, and illustrations (drawings and photographs) that show what is and what is not permitted.
- **A limited number of zoning districts and grouping of land uses.** As a general rule of thumb, the fewer the zoning districts in an ordinance, the easier the regulations will be to understand and administer. Many codes now group land uses, providing defini-

tions for those groups, and often further create land use categories based on common characteristics such as type of products, site conditions and impacts, amount of activity, and so on. The table of uses allows a rapid review of which use categories are allowed by right or by special permit in which zoning districts. The advantage of this system is that it eliminates the “laundry list” approach to uses and the need to amend the zoning code as land use types change over time.

- **Robust Development Standards.** More robust development standards attached to by-right zoning can provide confidence to project proponents and the community that quality development will result and simplify development approvals for smaller projects, while allowing Town staff and the PZC to concentrate on more complex development approvals and area planning projects. Zoning that reflects the Plan’s Future Land Use Map should also be less subject to rezoning, particularly changes in use. This will reassure residents, who will be able to count on stability in land use designations.
- **Incentives for desired outcomes.** Many communities allow greater density or other types of regulatory relief in return for provision of public benefits, such as affordable housing or open space, by the developer—as long as certain criteria are met. Such mechanisms are usually confined to particular zoning districts, types of development, and geographic areas. Examples of other incentives include streamlined development review for infill and redevelopment sites as compared to greenfield sites.
- **Design standards that reflect the community’s vision.** The zoning regulations should communicate a community design vision for the different character areas. Development standards should also incorporate and encourage sustainable development practices—for example, allowing for natural drainage systems, pervious pavement, green roofs and solar panels.
- **Subdivision design characteristics that promote connectivity, multimodal travel, access to open space, and sustainability.** Issues that need consideration in updating subdivision regulations include:
 - > Review of street and right-of-way widths to avoid overcapacity and excessive impervious surfaces, to provide flexibility in subdivision design.
 - > Review of maximum block size, cul-de-sac length and similar measures with an eye toward promoting pedestrian friendliness and future road network connections.

ACTION PLAN

Each chapter within this Plan includes an action plan: a set of suggestions for how to put the Plan to work and begin transforming ideas into action. Each action plan identifies some of the **entities that are expected to have a key role in** achieving specific action items (town departments, committees/ commissions, outside organizations, etc.); a target timeframe to complete each action; and the types of resources that we anticipate may be needed for implementation (staff time, volunteer time, operating budget, capital improvement program, grants, etc.).

Action plans include:

- **Goals** that describe the outcomes our community hopes to achieve;
- **Strategies** for advancing each goal; and
- **Actions**—specific steps our community can take over the short term (before end of 2019), medium term (between 2020 and 2024) and long term (between 2025 and 2035) in support of each strategy.

Action plans are tools for focusing efforts and resources on the issues our community cares about most. The action plans will:

- Guide town officials as they continue to shape policies and allocate resources in the years to come;
- Refocus the efforts of town staff and committees as they work to advance community goals;
- Provide a foundation for developing annual budgets and workplans; and
- Evolve over time in response to new opportunities and circumstances.

Action plans set the agenda for our community’s many officials, volunteers, committee members and staff for the years ahead, and align their work with the community’s vision **but do not provide a guarantee that resources will be available to advance each action.** While these action plans are comprehensive in nature, they are not intended to preclude the Town from pursuing other actions as opportunities arise. **As additional actions and initiatives are contemplated, they should be evaluated with regard to how the action will help to advance the vision and goals** contained in the overall Plan.

Key of Abbreviations	
TOWN DEPARTMENTS & SERVICES	
Building & Housing Inspection	Town of Mansfield Department of Building & Housing Inspection
DPW	Town of Mansfield Department of Public Works
Facilities	Town of Mansfield Facilities Management Department
Finance	Town of Mansfield Finance Department
Fire	Division of Fire & Emergency Services / Office of the Fire Marshal
Fire Marshal	Office of the Fire Marshal
Human Services	Town of Mansfield Department of Human Services
Information Technology	Town of Mansfield Information Technology Department
Library	Town of Mansfield Public Library
Parks & Rec	Town of Mansfield Parks & Recreation Department
Planning	Town of Mansfield Planning & Zoning Office
Police	Mansfield Resident State Trooper’s Office
OTHER ABBREVIATIONS	
CT DEEP	State of Connecticut Department of Energy and Environmental Protection
CT DPH	State of Connecticut Department of Public Health
EHHD	Eastern Highlands Health District
Emergency Management	Emergency Management Advisory Council
IWA	Inland Wetland Agency
PZC	Planning & Zoning Commission
Town/Gown	Town/University Relations Committee

CHAPTER 8: FUTURE LAND USE AND COMMUNITY DESIGN

Goal 8.1

Mansfield has maintained the low-density, rural character of the majority of town while accommodating growth in walkable Mixed-Use Centers, Compact Residential and Institutional areas.

Measures of Effectiveness:

- 80% of new housing units developed are located in Mixed-Use Centers, Compact Residential and Institutional areas
- Total acres of land redeveloped exceeds total acres of greenfield land developed
- Increase in percentage of land preserved as part of new subdivisions
- Number of businesses in Mixed-Use Centers

Strategy A | Use the Future Land Use Map along with the goals identified in this Plan to guide land use decisions.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Consult the Future Land Use Map when considering changes to zoning regulations, zoning map amendments or other land use changes.</p> <p>Consider both the letter and the spirit of the maps and accompanying descriptions of future land use designations as they reflect the values, goals and policies of this Plan as a whole.</p>	PZC	Ongoing	Staff Time Volunteer Time
<p>2. Consider the goals of this Plan when making land use decisions.</p>	PZC	Ongoing	Staff Time Volunteer Time
<p>3. Consider how proposed changes in zoning designations and significant development projects requiring Special Permit approval are consistent with the Sustainability Principles identified in Chapter 1 of this Plan.</p>	PZC Planning	Ongoing	Staff Time Volunteer Time
<p>4. Periodically update the Future Land Use Map to reflect changed conditions.</p>	<i>See related actions under Goal 10.1, Strategy B</i>		

Strategy B | Protect rural character in the majority of Mansfield. *For additional recommendations in support of this strategy, please refer to the action plans in Chapters 2, 3 and 4.*

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Protect rural areas from impacts of water and sewer line extensions.</p>	<i>See related strategies and action under Goals 4.2, 9.2 and 9.5.</i>		

SHORT TERM = 2015–2019

MEDIUM TERM = 2020–2024

LONG TERM = 2025–2035

ACTIONS	WHO	WHEN	RESOURCES
<p>2. Ensure that appropriate transitions are provided between rural residential areas, villages and higher density Mixed-Use Centers and Compact Residential areas.</p> <p>Development standards should include design and review criteria to address development along the edges of Mixed-Use Centers to ensure appropriate buffers and transitions to adjacent rural areas. This is particularly true for properties that due to size extend further into lower density areas than adjacent properties in the Mixed-Use Center or Compact Residential area. See Section 3 of Chapter 8 for examples.</p>	<p>PZC Planning</p>	<p>Short Term</p>	<p>Staff Time Community Challenge Grant</p>

Strategy C | Direct medium to high density residential development to appropriate areas.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Encourage redevelopment of existing multi-family residential properties in Mixed-Use Centers and Compact Residential areas.</p> <p>Many of these properties were developed prior to availability of water and sewer services, are outdated and in need of improvements. Redevelopment could allow for a wider variety of housing types as well as accommodate additional units in close proximity to the university and shopping areas. Redevelopment of these properties will need to carefully address potential impacts on traffic, roadways, natural resources and nearby lower-density neighborhoods. Increasing the availability of high-quality multi-family residential units in close proximity to the campus may help to reduce student demand for single-family rental housing.</p>	<p>PZC</p>	<p>Ongoing</p>	<p>Staff Time</p>
<p>2. Focus efforts to expand off-campus undergraduate student housing in Mixed-Use Centers and locations in Compact Residential areas that are close to UConn's core campus to reduce impacts on nearby established neighborhoods.</p> <p>Undergraduate student housing can have greater impacts on neighborhoods than rental housing occupied by families or graduate students and as such should be discouraged in areas where impacts on nearby single-family homes will be more pronounced.</p>	<p>PZC Planning</p>	<p>Ongoing</p>	<p>Staff Time</p>

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>3. Work with UConn to strengthen collaboration in guiding development of key University properties that intersect with the Town.</p> <p>Locations include, but are not limited to: South Campus, Mansfield Apartments, Four Corners, Mansfield Depot, King Hill Road, and Northwood Apartments.</p>	<p>PZC Planning</p>	Ongoing	<p>Staff Time Volunteer Time</p>
<p>4. Consider creation of Special Design Districts in mixed-use centers and compact residential areas to encourage collaboration on redevelopment efforts.</p> <p>Property owners should be encouraged to approach redevelopment in a coordinated fashion to allow the PZC to evaluate the cumulative impacts of redevelopment and identify shared mitigation measures instead of a piecemeal approach. Potential areas include the Route 195/Route 6 area and Hunting Lodge Road.</p>	<p>PZC Planning Town Manager</p>	Short-Medium	Staff Time

Strategy D | Accommodate University growth while maintaining the town’s rural character and minimizing impacts on adjacent neighborhoods.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Encourage UConn to focus development and non-agricultural activities in the Core Campus, North Campus and Depot Campus areas.</p> <p>Infill and redevelopment of existing campus areas is preferable to greenfield development. See Institutional Designation for additional information on these areas.</p>	PZC	Ongoing	Staff Time
<p>2. Encourage new university development along campus edges to respect community context in scale and design.</p>	PZC	Ongoing	Staff Time
<p>3. Encourage UConn to locate the proposed multi-purpose arena in an area other than the Mansfield Apartments site to reduce impacts to nearby neighborhoods.</p> <p>Potential alternative sites that should be considered include next to the existing Freitas Arena, Hillside Road, Bolton Road near the Fine Arts building, Depot Campus and North Campus.</p>	<p>PZC Town Council</p>	Ongoing	<p>Staff Time Volunteer Time</p>



ACTIONS	WHO	WHEN	RESOURCES
<p>4. Discourage the construction of the Bolton Road/Route 275 connector.</p> <p>This roadway has the potential to significantly impact adjacent single-family homes on Eastwood Road. If the need for roadway is established as part of a comprehensive traffic analysis, the design should include a significant buffer between the roadway and adjacent houses. Consideration should also be given to limiting access to the road to minimize noise and air pollution impacts.</p>	<p>PZC Town Council</p>	Ongoing	<p>Staff Time Volunteer Time</p>
<p>5. Encourage UConn to limit laboratories to those with a Biosafety Level rating of 1, 2 and 3.</p>	<p>PZC Town Council</p>	Ongoing	<p>Staff Time Volunteer Time</p>
<p>6. Encourage UConn to continue to involve Town staff and representatives in planning processes for university expansion.</p>	<p>Town Manager Town Council</p>	Ongoing	Staff Time
<p>7. Encourage UConn to formally identify areas to be designated for conservation and/or preservation as part of its planning process.</p> <p>UConn's 2004 East Campus Master Plan identified significant portions of the eastern agricultural campus as areas for conservation or preservation. Similar designations should be applied as part of a formal master planning process to other remote land holdings such as Spring Manor Farm and the agricultural properties in the Spring Hill area. <i>See related actions in Goal 3.1, Strategy B.</i></p>	<p>Town Council PZC</p>	Short Term	Staff Time

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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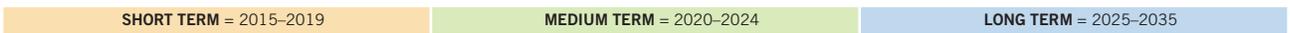
CHAPTER 8: FUTURE LAND USE AND COMMUNITY DESIGN

Goal 8.2

Mansfield’s land use regulations and development review procedures help to achieve the vision and goals identified in this Plan and promote high-quality design appropriate to the area context.

Strategy A | Rewrite the Zoning and Subdivision Regulations to be consistent with the Mansfield Tomorrow Plan. See related strategies and actions under Goals 2.6, 3.4, 4.2, 5.6, 6.5, 7.4 and 9.5.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Use best practices for modern zoning codes when re-writing the zoning regulations.</p> <p><i>See Section 8.B of this chapter for a description of recommended practices.</i></p>	PZC	Short Term	Staff Time Community Challenge Grant
<p>2. Apply form-based and place-based zoning to appropriate locations in Mixed-Use Centers, Compact Residential areas, Village Centers and Rural Residential Villages.</p> <p>Form-based zoning focuses on the physical characteristics of buildings and development rather than uses and is most suitable for defined districts where a variety and mixture of land uses is desired. Form-based zoning may be most appropriate for Mixed-Use Center and Compact Residential designations. “Place-based” or “Context-based” zoning establishes design standards within zoning districts that are intended to create developments that are compatible with the existing or desired character of particular areas. This kind of zoning is not as prescriptive as form-based zoning but still provides site and building standards based on design principles for the zoning district. This zoning approach may be most appropriate for Village Center and Rural Residential Village designations.</p>	PZC	Short Term	Staff Time Community Challenge Grant
<p>3. Incorporate measures to promote energy and resource conservation and general sustainability practices.</p> <p><i>See Section 8.3 in narrative for a description of key strategies identified as part of the sustainability assessment of current regulations and specific recommendations in each chapter.</i></p>	PZC	Short Term	Staff Time Community Challenge Grant



Strategy B | Revise and streamline development permitting processes consistent with goals for high-quality development.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Streamline the process by which applications are received and acted upon.</p> <p>While Connecticut General Statutes (C.G.S.) establish the formal process for receipt of applications, there are things that can be done to streamline the process for simple applications, including authorizing staff to submit advertisements for public hearing dates in advance of official receipt; holding two IWA meetings each month on the same nights as PZC meetings, and having staff prepare draft motions for consideration the same night as the hearing for straight-forward applications.</p>	<p>PZC IWA</p>	Ongoing	Staff Time
<p>2. Use permit software to streamline the review process and allow for on-line applications.</p> <p>This project was underway at the time of the writing of this Plan and is expected to be complete in 2015.</p>	<p>Planning Building & Housing Inspection Fire Information Technology</p>	Short Term	<p>CIP Operating Budget</p>
<p>3. Create a development permitting road map and associated flow charts to help applicants understand the entire process from the beginning.</p> <p>At minimum, flowcharts should be developed for the following application types: Subdivision, Special permit, Site plan, Inland Wetlands license, Zoning Permit, Certificate of Zoning Compliance, and Certificate of Appropriateness. Each flowchart should include an estimate of the time necessary to complete each step or phase of the process.</p>	<p>Planning</p>	Short Term	Staff Time
<p>4. Develop and publish a permitting process guidebook with tutorial texts and checklists.</p> <p>This should include information describing each permit and related process, checklists of information and materials required for submission, and a schedule of fees for each permit. The guidebook should be available on-line, at various offices involved in the permitting process and distributed to applicants at pre-application consultations with staff.</p>	<p>Planning Building and Housing Inspection Fire EHHD</p>	Short Term	<p>Staff Time Operating Budget</p>

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>5. Create consistency in publishing information on permit processes and fees.</p> <p>This would involve reviewing all media from different departments involved in the permitting process to create a consistent format for publishing information and fees. A single listing of fees from all departments should also be considered.</p>	Planning	Short Term	Staff Time
<p>6. Consider consolidating applications where possible to streamline the process and reduce redundancy in information collection.</p> <p>Examples include joint zoning/building permit applications where both approvals are needed and special permits or subdivisions where an Inland Wetlands License is also needed. This may be able to be partially addressed with the introduction of on-line applications as information will populate a common database.</p>	Planning	Short Term	Staff Time
<p>7. Establish one point of entry into the permitting process.</p> <p>For projects that need approvals from multiple departments or agencies, one department should be identified as the gateway for entry and coordination of permitting for each project to ensure an efficient review process. The Department of Planning and Development may fill this function for projects that need zoning approval; Building and Housing Inspection would be the logical choice for projects that do not require zoning approval.</p>	Planning Building & Housing Inspection	Short Term	Staff Time
<p>8. Include review by advisory committees early in the design process.</p> <p>Applicants should be encouraged to meet with advisory committees before their pre-application meeting with Planning staff. Advisory committees should forward any recommendations to the Planning Department.</p>	Conservation Commission Open Space Preservation Committee Sustainability Transportation Advisory Committee Agriculture Committee	Short Term	Staff Time Volunteer Time
<p>9. Establish clear and stringent deadlines for return of review comments and documents.</p> <p>Deadlines for comments and recommendations to permitting authorities, town staff and applicants should be established and enforced.</p>	Planning Building & Housing Inspection	Short Term	Staff Time

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>10. Improve communications among the various development review bodies.</p> <p>For complex applications, a working committee of representatives from each department should be convened to identify potential issues and identify responsibilities for communicating and coordinating review between the different departments and the applicant. This will help to avoid difficulties that arise when applicants change plans to address one department's issues and those changes ultimately impact the review and approval process for another department.</p>	<p>Planning Building & Housing Inspection Fire EHHD</p>	Short Term	Staff Time
<p>11. Designate a staff member to lead applicants through the permitting process.</p> <p>The Town should designate one staff member to be responsible for assisting applicants in understanding the permitting process, serve as a source of information and a point of contact with the Town for the applicant, and help facilitate the interaction between Town staff, boards and commissions and the applicant.</p>	Town Manager	Short Term	Staff Time
<p>12. Improve each commission's collective knowledge through additional education.</p> <p>The permitting guidebook previously referenced would help keep commissioners up-to-date on the different permitting processes and their role. Commissioners should continue to be encouraged to participate in regional events and workshops related to land use issues and regulation.</p>	<p>Planning PZC IWA Conservation Commission Zoning Board of Appeals Historic District Commission</p>	Short Term	<p>Staff Time Volunteer Time Operating Budget</p>

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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9 INFRASTRUCTURE



TOPICS IN THIS CHAPTER INCLUDE

- Transportation
- Water, Wastewater and Stormwater
- Energy
- Resource Efficiency, Solid Waste, and Recycling
- Communications

This chapter addresses the physical infrastructure needed to support the vision of a sustainable, resilient community, including transportation, water and wastewater facilities, energy systems and waste management. The type and location of available infrastructure influences how and where new development happens. By targeting new infrastructure investments to key areas and limiting infrastructure expansion in others, Mansfield can proactively work toward its goal of preserving rural character while accommodating the economic growth needed to support the community services desired by residents. This chapter also builds on themes of resource conservation identified in previous chapters with the introduction of ‘Reduce, Re-use, Recycle’ principles. By focusing first on reducing consumption, then on reusing materials and lastly on recycling, Mansfield can reduce its environmental footprint and preserve our natural resources for future generations.

what the **community** said

INFRASTRUCTURE

Access to multiple modes of transportation are highly valued by Mansfield residents; something that was emphasized by participants in the Mansfield Tomorrow process. As has been stated in previous chapters, residents also voiced a strong desire to preserve the rural and natural character of the Town, something that is inextricably linked to the type and location of infrastructure. The concept of sustainability also found strong support, though there were disagreements in the details.

Themes in the comments on transportation, infrastructure and sustainability included:

- Support for expanded public transit services, bike paths and pedestrian facilities
- Concern with impacts of UConn's growth on Town transportation infrastructure
- Support for concentrating growth in a few areas
- Concern about importing water to support growth at UConn and in the Storrs area
- Desire for greater Town influence with regard to impacts of UConn's growth and use of water resources
- Concern with impact of expanded public and water and sewer service areas on the rural character of the community
- Impact of continued development on water quality and availability
- Need for greater efforts related to water conservation and reuse
- Need for better collaboration with UConn on efforts to improve sustainability, both through application of sustainable development principles to campus growth as well as support for Town efforts
- Need to reduce use of fossil fuels
- Concerns with cost to taxpayers and limitations on personal choice

“[I would like to see] continued development of sidewalks; expansion of areas served by public water and sewers; improved public transportation.”

“I would like Mansfield to become more environmentally sustainable. Water availability and energy are particular issues.”

“I think one of the most important changes I'd like to see is accessibility to Storrs and UConn for walkers and bikers from more rural parts of Mansfield. Sidewalks, bike lanes, and public transportation are essential for this...[and] it would allow people easier access to more activities and businesses without hurting the rural feel of Mansfield Center and other areas.”

FROM MANSFIELD RESIDENTS

MANSFIELD'S INFRASTRUCTURE TODAY



Gurleyville

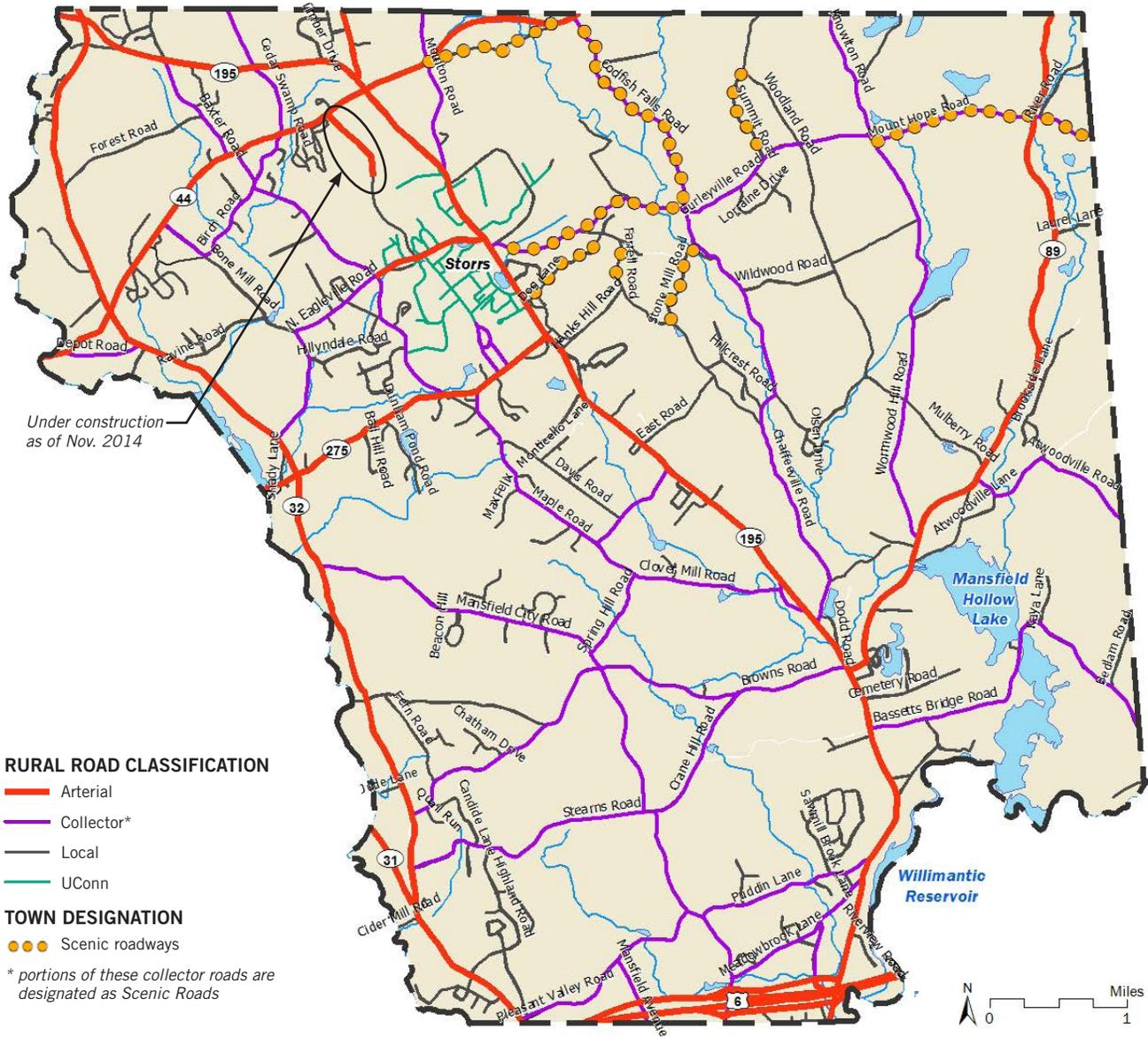
1. Transportation

A) ROADS

A network of state, municipal and private roadways comprises Mansfield's primary transportation infrastructure. As of 2014, the Town network included approximately 100 miles of paved roads and 7.5 miles of unpaved roads; roadways owned and maintained by the State and UConn account for an additional 46 miles of roadway. These roadways provide the principal means of transportation to, from and within the town. The only limited access, divided highway is the US Route 6 Willimantic Bypass in southern Mansfield. This highway segment has frontage roads and was planned in the 1960s to be part of a continuation of I-84 that would connect to Providence, Rhode Island. Disagreement between federal agencies and state/local officials about the best route resulted in withdrawal of funding by 2003. In 2005, the Capitol Region Council of Governments and CTDOT removed the Route 6 bypass from planning, abandoning further study. The resulting road is an over-capacity transportation facility that takes up more land than needed to serve traffic volumes in an area served by public water and sewer.

Roadway Classifications. The town uses a simplified classification system of three tiers (arterial, collector and local streets) based on existing land uses, roadway locations and traffic flows, as well as anticipated area of development and resulting transportation demand. These classifications provide a long-term guide for the design and review of public transit and road improvement projects. This classification system is different from that used by the Connecticut Department of Transportation (CTDOT).

MAP 9.1: ROAD SYSTEMS



Source: Town of Mansfield, 2014

MANSFIELD'S ROADWAY CLASSIFICATIONS

- **Arterial Roads.** Arterial roads serve as the primary inter-municipal and interregional transportation links. They carry the highest volumes and provide direct access to the town's major employment and commercial areas. All of the arterial roads are owned by the State of Connecticut.
- **Collector Roads.** Collector streets complete the major transportation linkages between various sections of the community and between Mansfield and other towns. In general, collector streets connect residential neighborhoods to the arterial street system and to community centers not served by the arterials. Although collectors have less traffic than arterials, they handle significant volumes of through traffic and therefore must be designed and constructed to stringent safety standards.
- **Local Roads.** Local streets primarily provide access to residential units. Local streets usually carry the lowest volume of traffic, and roadway standards are oriented toward lower vehicular speeds and maintenance of residential character. All roads not designated as arterial or collector roads are considered local roads.

Scenic Roads. Eight roads in town have been designated as scenic roads, including all or a portion of three collector roads identified in the above table. Proposed alterations or improvements on scenic roads require Town Council approval. (See Chapter 4 for a listing of scenic roads and related strategies and actions.)

Roadway Improvements. Other than safety and bicycle/pedestrian improvements described later in this section, the only major roadway improvements being contemplated at this time are related to university expansion:

- The extension of North Hillside Road, a university road, to Route 44 is under construction and is expected to be complete in 2015, adding a new arterial road to the network.
- A new roadway connection between Route 275 and Bolton Road has been included in UConn's 20-year campus master plan. This roadway could significantly impact abutting single-family homeowners; as such, the Town requested during consideration of the master plan that this roadway connection be eliminated. If it is constructed, it should be designed to be located as far as possible from the abutting homes and include a significant landscape buffer. Consideration should also be given to limiting use of the roadway.
- The Environmental Impact Statement (EIS) for the UConn Technology Park identifies the following improvements to mitigate the traffic impacts of the project on the existing network:
 - > Route 195 at Route 44: widen southbound approach to provide exclusive right turn lane with channelized movement; widen eastbound approach to provide second exclusive right turn lane; revise signal phasing to provide protected only left turns on the eastbound and westbound approaches

- > Route 195 at North Eagleville Road and Gurleyville Road: widen eastbound approach to provide a second left turn lane; optimize signal timing for updated roadway configuration

Table 9.1: Arterial and Collector Roads

Arterial Roads	
Route 31-Higgins Highway	Route 320-Willington Hill Road
Route 32-Stafford Road	Route 632-North Frontage Road
Route 44-Middle Turnpike	Route 633-South Frontage Road
Route 89 Warrenville Road	Route 430-North Eagleville Road between Route 195 and Hunting Lodge Road
Route 195-Storrs Road	North Hillside Road-between Routes 430 and 44
Route 275-South Eagleville Road	Planned connection between Route 275 and Bolton Road (on UConn Campus)
Collector Roads	
Ash Street	Hillside Circle
Atwoodville Road	Hunting Lodge Road
Bassetts Bridge Road	Knowlton Hill Road (Wormwood Hill Road to Ashford Town Line)
Baxter Road (Route 44 to Route 195)	Mansfield Avenue
Birch Road	Mansfield City Road
Bone Mill Road (Route 44 to Birch Road)	Maple Road
Browns Road	Meadowbrook Lane
Cedar Swamp Road	Moulton Road
Chaffeeville Road	Mount Hope Road*
Clover Mill Road	North Eagleville Road (Route 32 to Hunting Lodge Road)
Codfish Falls Road*	Pleasant Valley Road
Crane Hill Road	Puddin Lane
Conantville Road	Separatist Road (South Eagleville Road to Hunting Lodge Road)
Daleville Road	Spring Hill Road
Depot Road	Stearns Road
Eastwood Road	Westwood Road
Gurleyville Road*	Wormwood Hill Road (Warrenville Road to Knowlton Hill Road)

*Scenic Roads

- > North Eagleville Road at Hillside Road: widen westbound approach to provide an exclusive right turn lane; revise signal phasing to provide a right turn overlap phase with the southbound left turn phase
- > South Eagleville Road at Separatist Road: install a new traffic signal
- > North Eagleville Road at Hunting Lodge Road: conduct a warrant analysis to determine whether a roundabout or traffic signal is needed at full build-out of the Technology Park
- The Capital Region Council of Governments (CRCOG) will be preparing a corridor study of major roadways leading to UConn, including Route 195 from I-84 in Tolland to Route 66 in Windham and Route 44 from I-384 in Bolton to Route 195. The corridor study will identify both safety and multi-modal improvements.
- It is expected that the traffic study being prepared in conjunction with the UConn master plan will also identify mitigation measures to address impacts of expansion on the surrounding state and local roadway network.
- Coordination of signals is one approach that could help mitigate traffic impacts on major arterials. One area that could benefit from this practice is Route 195 from North Eagleville Road to South Eagleville Road.

The Town's most recent hazard mitigation plan has also identified the need for improvements to Bassets Bridge Road west of the Naubasetuck Lake Bridge; this section of road frequently washes out in high water events.

As development occurs, additional roadway improvements may be identified through the PZC development review process or through recommendations of the Town's Traffic Authority or Transportation Advisory Committee.

Roadway Improvement Design Criteria. All roadway improvements, including safety improvements, should be based on a comprehensive analysis that includes opportunities for public input. Proposed improvements to local roads and bridges must take into account potential impacts on historic, natural resource and aesthetic factors as well as the potential for the project to meet Complete Streets objectives. In particular, the following elements should be considered when planning and designing roadway improvements, particularly character-changing widening and realignment work: signage, sightline and shoulder work, pavement markings, pedestrian and bicycle lanes, drainage, differential pavement strips, speed humps, and speed reduction and enforcement. The Federal Highway Administration's Context Sensitive Solutions (CSS) Primer provides guidance on how to engage the community in roadway design projects and incorporate broader community livability objectives as part of the planning process.

Pavement Condition. Many of the roads owned and maintained by the Town are in need of resurfacing. Given existing conditions and the number of roads in need of work, this is expected to be a lengthy, extensive and costly process. As a first step, the Town needs to

Complete Streets

"Complete Streets are streets for everyone. They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities." Smart Growth America (www.smartgrowthamerica.org)

Textured pavement alerts drivers and pedestrians to a crosswalk in Storrs Center.



Photo credit: Don Couture

update its pavement management system and develop a priority list for resurfacing. In the interim the miles of roadway resurfaced each year should be increased.

Bridge Improvements. The Town owns and maintains 25 bridges. The Town completed bridge improvements on Laurel Lane, Dodd Road and Stone Mill Road bridges since the completion of the 2006 *POCD*. Two bridge projects that have not yet been completed are the reconstruction of the Shady Lane Bridge over Eagleville Brook and the Atwoodville Bridge over the Mount Hope River. Several other bridges need to be regularly monitored to identify needed repairs and improvements, including the Old Turnpike Road and Gurleyville Road bridges over the Fenton River and the Coventry Road/Depot Road and Plains/Brigham Road Bridges over the Willimantic River.

B) TRAFFIC CALMING

Mansfield has had a traffic calming program since the 1990s and has installed speed humps, diverters, textured pavements, signs, road markings, and visual speed displays to remind drivers of their current speed. Current policies limit traffic calming improvements to local roads. To qualify for consideration, the road must have Average Daily Traffic (ADT) between 400 and 3,000 vehicles; speeds of at least 15 mph over the 85% percentile speed limit of the road; be used for cut-through and not local traffic; not be used as a major bus or truck route and be capable of providing access for emergency vehicles after implementation of traffic calming measures. While collector roads are generally not eligible for traffic calming, consideration should be given to development of measures to help slow speeds and improve pedestrian/bicycle safety on collectors where speed issues have been documented.

C) BICYCLE AND PEDESTRIAN NETWORK

Bicycle and pedestrian transportation modes are also known as “active transportation.” As a rural town, much of Mansfield has very few off-road facilities for pedestrians and bicyclists, although these facilities have gradually expanded since the mid 1990s and

demand continues to increase. The completion of the Storrs Road streetscape project and new Storrs Center roadway system in 2013 added 1.2 miles of sidewalk to the Town's inventory. With the completion of projects on Flaherty Road and North Eagleville Road, the Town will have 6.7 miles of off-road sidewalks/bikeways, in addition to approximately 21 miles of designated on-road bicycle routes. In addition to walkways and bikeways, Mansfield has an extensive trail system that is an integral component of the active transportation network; future expansions of this network should consider how to improve linkages between trails, walkways and bikeways.

The new Nash-Zimmer Transportation Center at Storrs Center includes bicycle storage and shower facilities for bicycle commuters. Employees at Town Hall have access to bicycle lockers and two bicycles for work use. UConn also operates a bike-sharing program, UConn Cycles, for students, faculty and staff.

Bicycle and Pedestrian Planning. As demand continues to increase for pedestrian and bicycle facilities, the Town needs to prepare a Bicycle and Pedestrian Master Plan to guide future infrastructure investments. The plan should include identification of key north/south and east/west routes, preferably on roads that have not been designated as scenic to reduce barriers to improving bicycle and pedestrian access. The bicycle and pedestrian master plan should also include criteria for expanding the Town's designated bike route system as needs dictate.

PRIORITY WALKWAY/BIKEWAY PROJECTS

- Route 275—Route 195 to the Town Hall Entrance Driveway
- Route 195—UConn Greek Village to Route 44 at Four Corners, connecting to the existing sidewalk on Route 44
- Route 275—Separatist Road to Maple Road
- Westwood Road—Route 275 to Hillside Road (including a part of Hillside Circle)
- Meadowbrook Lane—Conantville Road to Mansfield City Road (portion from 73 Meadowbrook to Sunny Acres Park to be constructed by developer of new multi-family residential project)
- Eastwood Road—Terminus of existing sidewalk to Route 275
- Hunting Lodge Road—Birch Road to Goodwin School
- Route 195 –Route 320 (terminus of existing sidewalks) to Timber Drive and Holiday Mall
- Pleasant Valley Road—Mansfield City Road to Mansfield Avenue
- Mansfield Avenue—Pleasant Valley Road to the Windham Town Line
- Route 89 –Route 195 to Southeast School
- Conantville—Pollack to East Brook Mall rear entrance

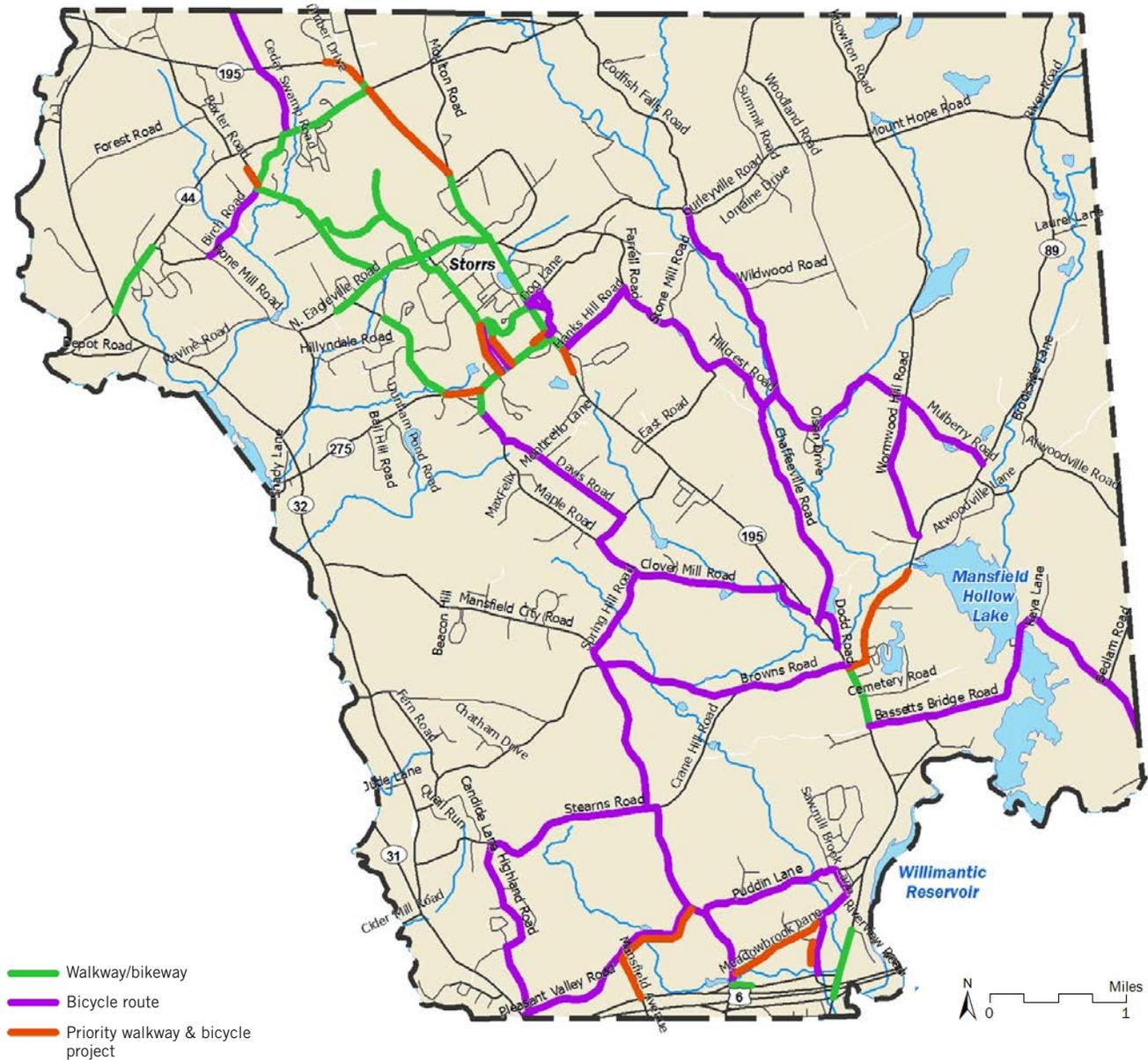
CRITERIA FOR SIDEWALK AND BIKEWAY PROJECTS

Until a formal bicycle and pedestrian master plan is completed, the following criteria should be used by the Transportation Advisory Committee to review and rank requests for new sidewalk and bikeway projects.

- Land Use/Zoning Designation.** The proposed project is in an area planned or zoned for mixed-use development and/or higher densities. This criterion provides a direct link between the Town's future land use plan (see Chapter 8) and infrastructure improvements.
- Pedestrian & Bicycle Use (Existing or Potential).** The proposed project is in an area with high pedestrian/bicycle use, or in an area with a potential for high pedestrian/bicycle use if a safe, off-road facility were available. The purpose of this criterion is to recognize existing patterns of pedestrian and bicycle use. Where there is not high pedestrian/bicycle use existing, data must be provided to demonstrate the potential for high use such as survey results or accident data to receive credit.
- Connectivity.** The proposed project will provide a connection between existing systems. This criterion emphasizes the importance of building connections to create an overall network as opposed to disjointed pieces that serve only a limited area.
- Community Facilities.** The proposed project will provide access to state and municipal facilities. This criterion also emphasizes connectivity; in this case the focus is on community facilities such as Town Hall, the Community Center, Senior Center, Library, schools and parks, as well as state facilities such as the University.
- Transit.** The proposed project will provide a connection to transit facilities. Walkways and bikeways are an important component of a multi-modal system, enhancing the ability of residents and visitors to move around town without a personal vehicle.
- Constructability and Cost.** This criterion recognizes that some projects will be cheaper and easier to build than others due to physical constraints such as wetlands and slopes. Projects with minimal constraints and lower costs would receive credit in this category.
- Exceptions.** Projects that have lower rankings or are not listed may be eligible for construction sooner than higher ranked projects if funds are available to construct that project and those funds could not be used to fund another project on the priority list.

Map 9.2: Walkways and Bicycle Facilities identifies the Town’s existing network of bicycle and pedestrian facilities as well as priority projects that have been identified based on the criteria for Sidewalk and Bikeway Projects, ranked in order of priority based on the scores achieved (see Priority Walkway/Bikeway Projects on page 9.9).

MAP 9.2: WALKWAYS AND BICYCLE FACILITIES



Source: Town of Mansfield, 2014

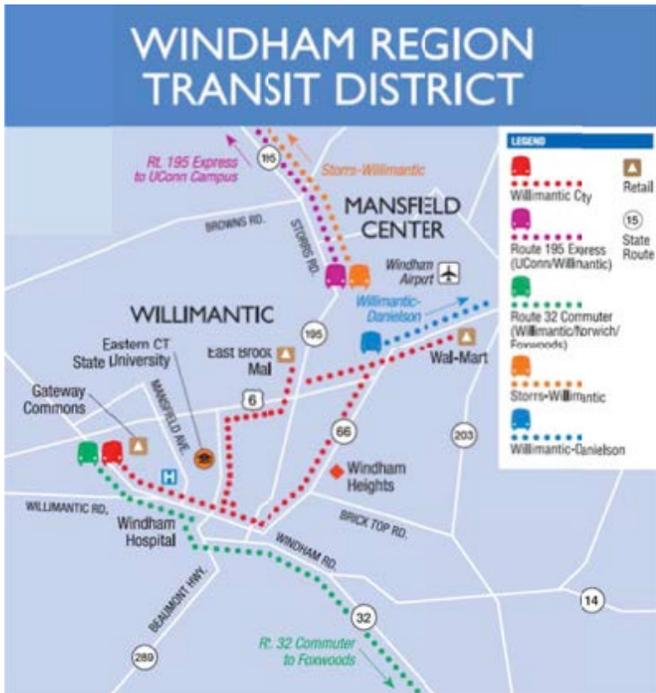
D) PUBLIC TRANSPORTATION

Bus Service. Public transportation opportunities are limited and located in the more urbanized areas of Storrs and southern Mansfield as there is insufficient density to support traditional public transportation in other parts of the town:

- The Windham Region Transit District (WRTD) provides bus service between Storrs and Willimantic along the Route 195 corridor Monday through Saturday. An evening express service operates along the same corridor with most stops limited to drop-offs only. WRTD does not operate any bus service in Mansfield on Sundays. The

Willimantic Route is heavily used, with over 110,000 boardings in FY2014. Buses are also equipped with Intelligent Transportation System (ITS) technology to provide real-time information on locations. As is the case for many public transit agencies, availability of funding presents challenges that may impact future operations and levels of service.

- UConn operates 6 shuttle routes on weekdays that serve campus and adjacent neighborhoods. A smart-phone app is available at www.my.uconn.edu with schedules and real-time information on buses.



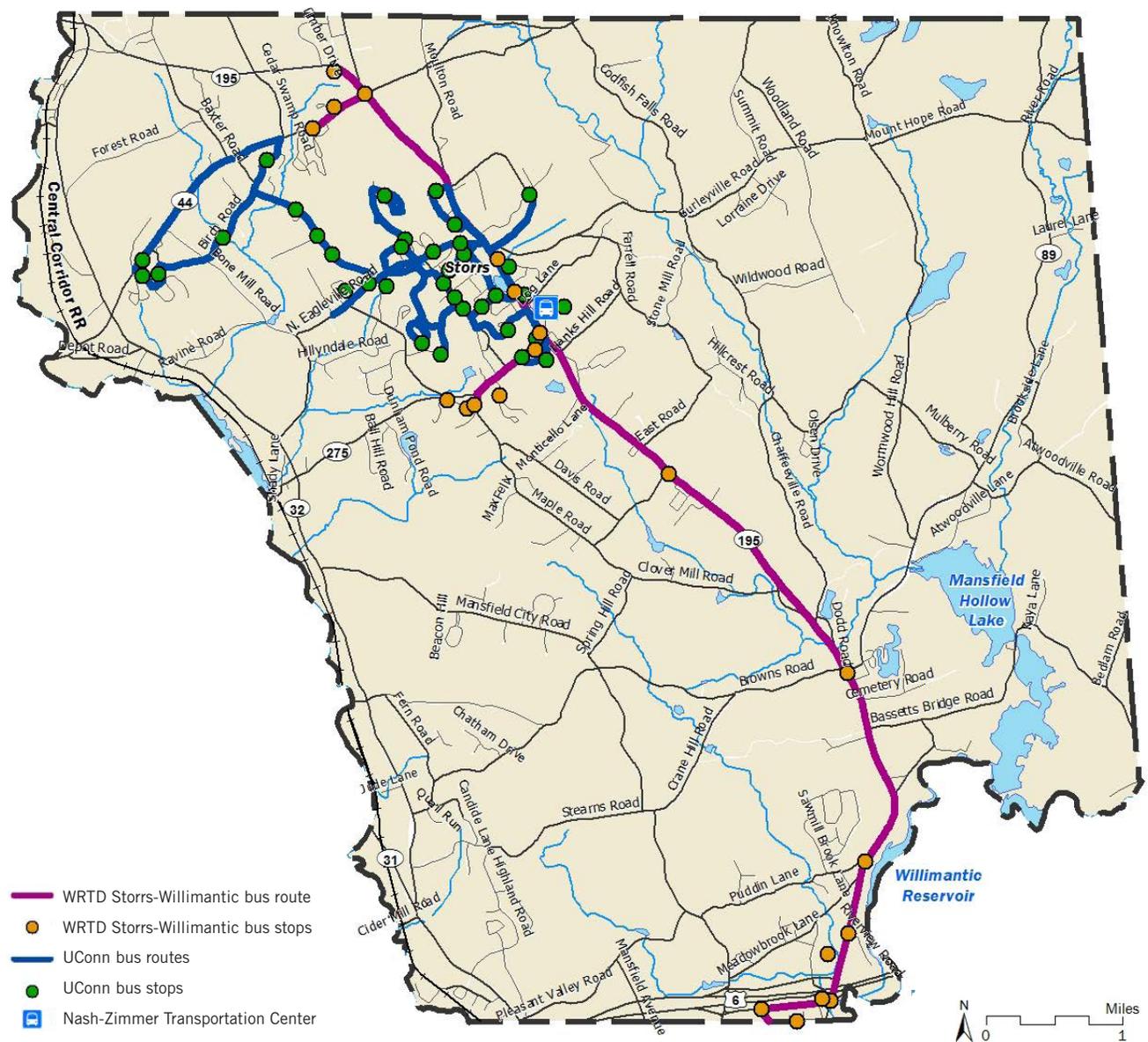
Mansfield residents may ride both WRTD and UConn buses free of charge with a town bus pass. In 2014, the Nash-Zimmer Transportation Center opened in Storrs Center, providing a central location for bus transfers between the WRTD and UConn systems, information on estimated bus arrival times, and bicycle commuting services.

On Demand Transit. WRTD offers Dial-A-Ride and ADA paratransit demand-response for rides to anywhere within the ten-town Windham Region (Ashford, Chaplin, Columbia, Coventry, Hampton, Lebanon, Mansfield, Scotland, Willington and Windham). Persons 60 years or older and disabled persons have priority, as do trips for medical appointments. The service can also be used for shopping, personal business, nutrition sites, Senior Center activities, social and recreational activities, and work. The Mansfield Senior Center also has a volunteer driver program to assist older residents in getting to medical appointments out of the district.

Inter-City and Interstate Public Transportation. CT Transit operates weekday express service to Hartford serving the residents of Windham, Mansfield, Columbia, Andover, Coventry and Bolton. The most convenient stops for Mansfield residents are the South Frontage Road park-and-ride lot and the 2nd Congregational Church on Route 44 in Coventry. CT Transit also operates the Vernon Express route, which now extends to the

I-84/Route 195 interchange in Tolland. Connecticut DOT, through *CTrides.com*, offers free services to commuters to promote carpooling and vanpooling. Expanded connections between the WRTD and UConn shuttle systems and CT Transit would help to increase commuting options to Hartford, and reduce automobile traffic congestion on Route 195 and other major arterial roads in the Storrs area. Peter Pan’s interstate buses currently stop at the Nash-Zimmer Transportation Center; it is hoped that service at the transportation center will eventually expand to include other interstate bus services, such as Megabus and other commuter bus services.

MAP 9.3: BUS ROUTES



Source: Town of Mansfield, 2014

E) FREIGHT & PASSENGER RAIL SERVICE

The New England Central Railroad (NECR) runs along the town's western boundary, connecting the Port of New London to the Vermont/Quebec border. A USDOT TIGER grant was awarded in 2014 to upgrade the freight capacity of the railroad in Connecticut; linking the corridor to the national freight rail network and providing the only north/south freight connection in the state. The upgrades are also a needed as the region looks to restore passenger rail service to the corridor.

A group of municipalities and other stakeholders has been actively working since 2011 to restore passenger rail service between New London and Brattleboro, Vermont on the Central Corridor railroad, which would link the flagship state university campuses of Connecticut and Massachusetts. Mansfield has joined seven municipalities and three regional organizations in these three states in signing a Memorandum of Agreement that pledged support for upgrading the Central Corridor to restore passenger rail, including pursuit of funding to prepare a passenger rail service feasibility study, creation of a business plan, and preparation of any permit applications required under the National Environmental Policy Act (NEPA).

F) AIR SERVICE

The Windham-Willimantic Airport is located on the southeast side of Mansfield Hollow in the Town of Windham. Previously owned and operated by the Connecticut Department of Transportation, the airport was transferred in 2011 to the newly formed Connecticut Aviation Authority. The airport consists of approximately 280 acres, most of which is currently open space, and two runways that are used by small- to-medium-size general aviation aircraft, including one runway over 4,200 feet in length. Windham is considered a full-service general aviation airport; services are focused on recreational, flight training and corporate/business aviation and include maintenance, fuel, aircraft storage and support facilities. An average of five aircraft per day landed at Windham in 2010.¹ A master planning effort for the airport commenced in Fall 2013.

G) TRANSPORTATION PLANNING

Transportation infrastructure is managed and maintained by the Public Works Department with policy direction from the Town Council, Mansfield Traffic Authority and Transportation Advisory Committee. The Mansfield Traffic Authority committee is a staff committee comprised of the Public Works Director, Assistant Town Engineer, Fire Marshal, Resident Trooper, Director of Planning and Development and Town Manager. The role of this committee is to provide technical guidance to the Town Manager—who is the Legal Traffic Authority for the Town—in making regulatory decisions related to traffic, such as setting speed limits, installation of warning signs, and traffic calming.

¹ Source: Connecticut Airport Authority (*ctairports.org*)

The Transportation Advisory Committee is a citizen advisory group that provides policy guidance to the Town Council on transportation matters, including expansions of the bicycle and pedestrian networks and recommendations related to public transportation.

2. Water, Wastewater and Stormwater

A) POTABLE WATER

Most of the town's residents rely on onsite wells for potable water, both individual private wells and community well systems that serve larger properties and/or neighborhoods. There are nineteen community well systems.

There are two major public water supply systems in town: one owned and operated by the University of Connecticut serving the Storrs area surrounding campus, and the other owned and operated by the Town of Windham, serving southern Mansfield. Upon completion in 2016, the Connecticut Water Company will own and operate a third supply serving the University of Connecticut and some areas near campus, as well as northern Mansfield. The location and capacity of public water systems are key factors in determining how and where a community grows. Building on themes established in previous plans, the *2006 POCD* recognized that targeted extensions of water and sewer service to certain areas could reduce development pressure in areas designated for low-density residential development, helping to maintain the town's rural character. Map 8.3 Future Land Use identifies a series of land use classifications that reflect the goal of directing higher density residential and commercial development to compact areas that have the potential for sewer and water service.

UConn Water System. The University of Connecticut water system is supplied by well-fields along the Willimantic River (west of Route 32 between Route 44 and Merrow Road) and along the Fenton River (north of Gurleyville Road). Since 2006, the contract operator for the UConn water system has been the Connecticut Water Company through its subsidiary, New England Water Utility Services (NEWUS).

The University has worked extensively over the last several years to address concerns regarding management of its water supply, including:

- A study of the impact of water withdrawals on the Fenton River completed in 2006, which was subsequent to the draining of a section of the river in the summer of 2005 due to low river flows and university groundwater withdrawals
- A Drought Response Plan prepared in 2008 to incorporate the recommendations of the 2006 Fenton River study by adopting procedures for pumping reductions and implementing water use restrictions during drought periods
- A study of the impact of water withdrawals on the Willimantic River completed in 2010
- An update to the Water Supply Plan in 2011

- A Water Conservation Plan in 2011
- A Wellfield Management Plan in 2011 to formalize management recommendations from the 2006 and 2010 Fenton River and Willimantic River studies

According to the 2011 Water Supply Plan, average daily demand was 1.29 MGD, and peak demand was 2.23 MGD in March 2010. Approximately 16% of the University's water supply is used by non-University customers located in close proximity to the campus. The plan noted that water consumption levels in 2010 were lower than in the 1980s and 1990s due to water conservation efforts and facility upgrades.

The Willimantic River wellfield has a registered diversion permit of 2.3077 MGD and the Fenton River wellfield has a registered diversion of 0.844 MGD. However, in adhering to the recommendations of the Fenton River Study, the withdrawals for the Fenton wellfields are significantly lower than the registered diversion amounts when river levels drop. It is not unusual for the Fenton River wells to be shut down in the summer months due to stream flow-based protocols requiring that all water be supplied from the Willimantic River wellfield during that period. Further, because of the configuration of the wells in the Willimantic Wellfield, that wellfield can sustain withdrawals of 1.97 MGD, which is also less than its registered diversion. Additional water use restrictions are activated when the Willimantic River has a low flow according to its stream-flow based protocols.

Through active management of the wellfields and water storage (the system has a total of 7.6GM of tank storage), the UConn water system has been able to meet all its consumer demands. However, due in part to the wellfield restrictions, the UConn water system cannot demonstrate on a year-round basis that it can maintain the Margin of Public Safety that the CT Department of Health recommends to all public water systems—that each system have 15% more capacity above its respective expected demand. As a result, non-University initiatives such as revitalization of the Four Corners area have been unable to proceed due to the lack of sufficient water supply. More information on the Town's water needs and planned improvements can be found on the next page.

Windham Water Supply System. The Windham Water Works manages a water supply system that serves over 20,000 persons, including Mansfield residents and businesses in the areas shown on Map 9.4: Water and Sewer Service. This system relies on the Willimantic Reservoir as its source of water. The Reservoir, which is 80 acres in size, is located on the Mansfield/Windham town line, east of Route 195 in southern Mansfield. Approximately 23 square miles, or about one-half of Mansfield's land area, is situated within the Reservoir watershed (see Map 2.2: Hydrology). As such, development within the watershed is of significant concern. In accordance with Public Act 06-53, applicants for any projects located in the watershed that need approval from the Planning and Zoning Commission, Inland Wetlands Agency or Zoning Board of Appeals are required to notify Windham Water Works and the Department of Public Health.

WATER NEEDS

The Town has been actively working to address water needs over the last fifteen years, both independently and in partnership with UConn. The following is a summary of water supply planning efforts; details can be found in the referenced documents:

- **2002 Water Supply Plan (Town).** This plan included a comprehensive analysis of existing water supply services in Mansfield and potential water supply needs to address uncertainty related to the continued supply from the UConn water system. The plan identified three areas of town that would be better served by a public water supply system: northern Mansfield (including the Four Corners area and areas adjacent to the University), northwest Mansfield (including the Merrow area and the Route 195 corridor), and southern Mansfield (including Perkins Corner, Conantville and East Brook Mall areas). Two other areas were identified as having water quality concerns: Mansfield Middle School and the Spring Hill area.
- **2007 Water and Wastewater Master Plan (UConn).** Prepared in collaboration with the Town, this plan estimated future demands for off-campus water supply (508,800 GPD) as well as potential governance options for a combined system that would serve both UConn and the Town.
- **2011 Water Source Study for the Four Corners Area (Town).** This study, commissioned by the Town in 2010, identified potential water needs and groundwater supply sources to serve the Four Corners area.
- **2011 Water Supply Environmental Impact Evaluation (UConn).** UConn, working in collaboration with the Town, evaluated several different water supply sources to meet the needs of both the university and town. After an extensive process, an interconnection with the Connecticut Water Company (CWC) system in Tolland was identified as the preferred alternative in 2013.

This new water supply will provide between 1.3 and 2.2 MGD for University and Town needs over a 50-year planning horizon. As part of agreements executed between CWC and the Town and university in 2014, CWC will take over all off-campus water service upon completion of the connection. To address concerns related to land use and governance, the CWC has also created a Water System Advisory Committee to advise the company on a variety of issues, including connection and extension requests and water conservation efforts. The new water supply will be used to supplement, not replace, the university's wellfields.

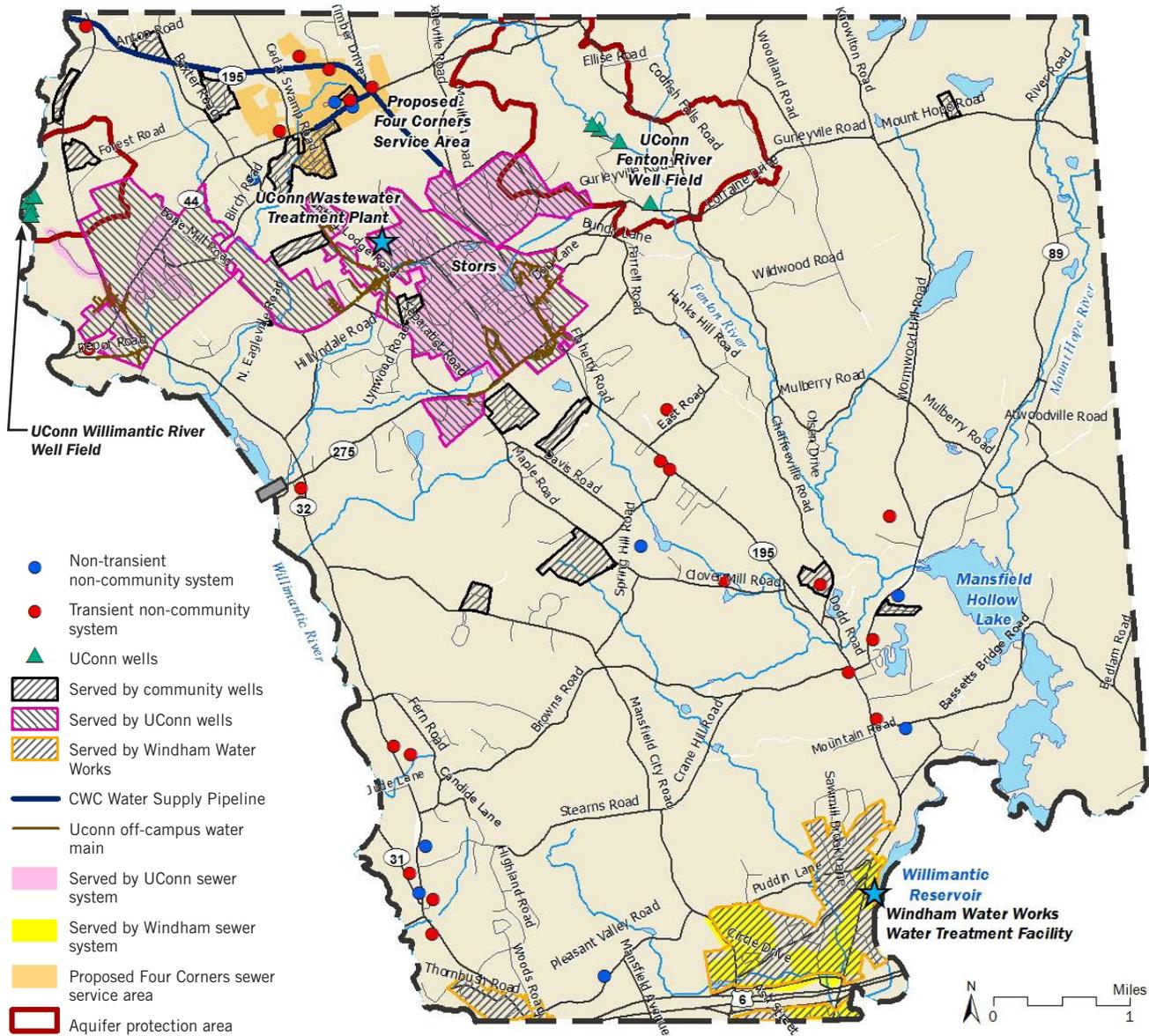
In 2011, an updated Water Supply Plan for the Windham system was completed and approved by the Connecticut Department of Public Health. This plan documents recently completed and anticipated system upgrades and a potential system capacity that exceeds anticipated demands within the currently-planned service area.

Town Water Systems. The Town owns and operates a number of community well systems associated with schools and other public buildings, and it is responsible for maintaining portions of the University of Connecticut system that serve the town's Senior Center and elderly housing units located near the intersection of Maple and South Eagleville Roads, the town's childcare center on Depot Road, and new infrastructure to support Storrs Center. While the Town will continue to own the community well systems serv-

ing various facilities, ownership and maintenance of the public water infrastructure connected to the UConn system will transition to the CWC under the 2014 agreement referenced earlier.

Water Conservation and Reuse. With the transition from the UConn water system to CWC, off-campus properties will no longer be subject to UConn’s water conservation policies that restrict water usage during low streamflow events in the Fenton and Willi-

MAP 9.4: **WATER AND SEWER SERVICE**



Source: Town of Mansfield, 2013; The Connecticut Water Company (CWC), 2014

TYPES OF PUBLIC DRINKING WATER SYSTEMS SHOWN IN MAP 9.4:

- “Community Water Systems” which serve at least 25 residents throughout the year.
- “Non-transient, Non-Community Systems” which are not community systems and regularly serve at least 25 of the same people over six months of the year at places like schools and office buildings.
- “Transient Non-Community Systems” which do not meet the definition of a non-transient, non-community water system (such as restaurants, parks, etc).

mantic Rivers. The 2014 Agreement between the Town and Connecticut Water Company includes several best management practices designed to promote water conservation including encouraging customers to reduce water usage during non-emergency phases of the CWC Emergency Contingency Plan, CWC support for efforts to employ water conservation practices such as water flow reducers and aerators, shutoff valves, leak detection systems, water reuse and reclamation and other practices. The Town should consider adoption of independent water conservation policies to ensure conservation remains a priority. With regard to water reuse, the Town is currently exploring the potential of a rainwater harvesting system to collect, filter and store rainwater from building roof areas at the Community Center to reduce overall water consumption at the building.

B) WASTEWATER

Although the Town of Mansfield does not own or operate a sewage treatment facility, sewer service is provided to a number of Mansfield residents and commercial uses through systems operated by the University of Connecticut and the Town of Windham as shown in Map 9.4: Water and Sewer Service. Most of Mansfield’s households and a significant number of commercial properties are served by individual septic tank/leaching field systems.

Wastewater Pollution Control. Mansfield has worked with the Connecticut Department of Energy and Environmental Protection (CT DEEP) to identify and study land uses with existing or potential sanitary waste disposal problems. All of the town’s commercial, multi-family housing and municipal buildings with onsite septic systems, and numerous areas with higher concentrations of housing units with onsite systems, such as Eagleville and Gurleyville villages and the Highland Road areas, were studied. A 1985 Facilities Plan Report concluded that potential sanitary waste disposal issues could be addressed with onsite solutions in all but two areas of town. The report specified that the noted exceptions, Knollwood Acres apartments, on South Eagleville Road, and Orchard Acres apartments, on Cheney Drive, would likely need to be connected to the University of Connecticut sewer system. Since that time, Knollwood Acres has connect-

ed to the sewer system. The 1985 Facilities Plan also included a sewer collection system for the Four Corners area as an alternative.

Since that 1985 study, a wastewater disposal problem has been identified at the White Oak Condominiums on Mansfield City Road. In 2008, the Town authorized the use of adjacent open space for a new septic leach field to help address the problem. Due to financing issues, the condominium association has been unable to move forward with construction of the new system and continues to pump tanks frequently to prevent discharges. The situation is being monitored by both Eastern Highlands Health District and CT DEEP. If the situation worsens and the association fails to meet its responsibilities, CT DEEP can issue a pollution abatement order to the Town, which would then be responsible for solving the problem.

In 2008, the Town completed a Wastewater Facilities Plan for the Four Corners area to address groundwater contamination concerns that had existed since the 1960s, including contamination caused by failing septic systems and leaks from gasoline stations. The report identified the construction of a sewer system as the best approach to providing safe sewage disposal. The proposed sewer service area would serve 60 parcels and encompass approximately 500 acres. Sewage generated by these properties would be treated at the University's wastewater treatment plant. The Town established the Four Corners Sewer Advisory Committee in 2008 to assist in moving the sewer project forward; in 2009 the committee was changed to the Four Corners Sewer and Water Advisory Committee to include provision of water service in the Four Corners area. The collection system and pump station were being designed as of the preparation of this report. Mansfield voters authorized the issuance of bonds to construct the Four Corners Sanitary Sewer System in November 2014. Construction is expected to be completed by 2016.

While this Plan anticipates that most areas of town will continue to rely on onsite septic systems, some limited expansions of the existing sewer service systems are considered appropriate to address town needs, particularly those associated with commercial and industrial land use and higher-density housing in targeted areas, including Four Corners (See Chapter 8 for more details). Extensions of existing sewer systems must be approved by the Town Council acting as the Water Pollution Control Authority (WPCA).

UConn Water Pollution Control Facility. The University of Connecticut owns and operates a sewage treatment system that serves the Storrs and Depot campus areas, the Bergin Correctional Facility, E.O. Smith High School, Storrs Center, Mansfield's municipal building, community center and senior center and a number of private commercial and residential properties proximate to campus areas.

UConn's treatment plant, which is located off LeDoyt Road in the northwestern portion of the Storrs campus area, was upgraded in 1995 and has a design capacity of 7 Million Gallons Per Day (MGPD), but it is currently permitted by DEEP for an average daily flow of 3 MGPD. According to the University's 2007 Water and Wastewater

Master Plan, the University's treatment facility had an average daily flow of about 1.21 MGD from 2004 to 2006, which is approximately 41 percent of currently permitted capacity. The system discharges treated effluent into the Willimantic River immediately below the Eagleville Dam.

In 2013, the University completed a reclaimed water facility adjacent to the wastewater treatment plant. This facility can process up to 1 MGD for uses that do not require potable water, such as landscape irrigation, cooling the turbines in the cogeneration power plant, and flushing toilets, thereby reducing the use of potable water for these functions. Use of reclaimed water will be expanded through implementation in future construction projects.

Windham Water Pollution Control Facility. The Town of Windham owns and operates an extensive sewage system that primarily serves the Willimantic section of Windham, but also includes service areas in southern Mansfield. In 2013, 363 customers in Mansfield were served by the Windham system.² Sewage effluent from Mansfield properties is transported through Town-owned pipes to facilities operated by the Town of Windham. Mansfield is assessed treatment costs which, in turn, are charged to users of the system. Through a contracted agreement with Windham, Mansfield can transport 500,000 GPD from the Mansfield portion of the system. Currently, Mansfield's sewage flows into the Windham system are about 200,000 GPD. As a user of the system, the Town participates in treatment plant improvements. Mansfield streets now served by this system include: Storrs Road (Route 195) from the Willimantic town line to Puddin Lane, Conantville Road from Pollack Road south to Frontage Road, Mansfield City Road from Meadowbrook Lane to the Freedom Green condominium project, Meadowbrook Lane from Mansfield City Road to Circle Drive, and Circle Drive.

Town Wastewater Facilities. Mansfield owns and maintains a pump station on South Eagleville Road and sewer lines that serve the Senior Center, adjacent elderly housing developments and the Mansfield Nursing and Rehabilitation Center. The Town also owns the sewer lines in the area served by Windham; per agreement the pipes are maintained by Windham Water Pollution Control.

C) STORMWATER

The town currently maintains over 15 miles of stormwater pipes and over 1,000 catch basins for stormwater runoff from town roads and facilities. Stormwater management for private properties is addressed at the time of development in accordance with state guidelines and regulations. Due to the inter-relationship between stormwater systems, the natural environment, climate change and hazard mitigation, stormwater management techniques and planning efforts are addressed in Chapter 2, Natural Systems.

² The use of the word customer here refers to the number of accounts. Of the 363 customer accounts at the time of this Plan, 63 belonged to single-family homes. The remaining 300 accounts include condominiums, commercial and government uses.

3. Energy

A) PUBLIC UTILITIES

Electrical Service. Electrical service to town residents and businesses is provided by Connecticut Light and Power (CL&P) through the Card Street substation in Willimantic, which is connected to a 345kV transmission line that runs through the southern portion of town from east to west. Construction of a second 345kV transmission line in this corridor is expected to be completed in 2015. UConn provides its own electrical power through the co-generation facility located at UConn's Central Utility Plant (CUP).

Reliability of electrical service has become a significant issue statewide due to extensive power outages experienced during severe storms in 2011 and 2012. For more information on hazard mitigation planning and strategies related to increasing electrical liability, see Chapter 2.

Natural Gas. Natural gas is available in limited areas of town. Connecticut Natural Gas Corporation provides natural gas to the following areas:

- *Storrs.* Areas served include Storrs Road in the vicinity of Storrs Center, the Hunting Lodge Road, Eastwood/Westwood Roads, and North Eagleville Road and areas. Facilities served include Goodwin School, E.O. Smith High School, Town Hall and the Mansfield Community Center.
- *Maple Road, Davis Road and Spring Hill Road to the Mansfield Middle School.* Facilities served include the Mansfield Middle School, Mansfield Senior Center, the Mansfield Nursing and Rehabilitation Center and Juniper Hill apartments.

Yankee Gas Inc. provides natural gas in Southern Mansfield in the vicinity of the Eastbrook Mall commercial area and Eastbrook Heights condominiums.

B) ENERGY CONSERVATION INITIATIVES

Consistent with the theme of 'Reduce, Reuse, Recycle,' Mansfield is actively engaged in efforts to reduce energy usage, both at the municipal level and through participation in programs that encourage private energy conservation.

- Through a Department of Energy Grant, the Town participated in a Neighbor to Neighbor Energy Challenge along with 13 other Connecticut towns and earned an LED streetlight.
- The Community Center was built with energy efficiency and conservation features that include a cogeneration facility, passive solar heating and lighting, a heat recovery system for the pool and a pool cover.
- The Town hired Seimens Corp. in 2006 and 2013 to conduct energy audits on municipal buildings; energy efficient equipment is phased in as old equipment wears out.

LIHI: A POTENTIAL APPROACH FOR HYDROPOWER CERTIFICATION

The Low Impact Hydropower Institute (LIHI) is a nonprofit organization that provides certifications to projects that avoid or reduce their environmental impacts.¹ The voluntary certification program requires that the project meet (LIHI) criteria in the following areas:

1. River flows
2. Water quality
3. Fish passage and protection
4. Watershed protection
5. Threatened and endangered species protection
6. Cultural resource protection
7. Recreation
8. Facilities recommended for removal

There are two LIHI certified hydropower producers in Connecticut, the Greenville Project in Norwich, and the Occum Project in New London County. A number of projects have been certified in Massachusetts, Vermont, and other New England states.

¹ www.lowimpacthydro.org

Improvements with short payback periods of 2-3 years were implemented based on the initial audit.

- The Town adopted a Clean Energy Communities Municipal Pledge in 2013 that includes a goal of reducing municipal energy consumption by 20% by 2018; creation of a Municipal Action Plan to achieve this goal; and commitment to purchasing 20% of municipal building electricity from clean sources. Achievement of these goals will make the town eligible to receive incentive rewards from the Connecticut Clean Energy Finance and Investment Authority (CEFIA).
- In 2013, Mansfield opted into the Connecticut Property Assessed Clean Energy (C-Pace) program, which allows commercial, industrial and multi-family property owners to finance energy efficiency and clean energy improvement through voluntary assessments on their property tax bill. Improvements are paid for over time through the additional charge on the property taxes, and the assessment is automatically transferred to the next owner if the property is sold.

Electric Vehicles. In recent years, the Town has significantly increased efforts to facilitate use of electric vehicles. Mansfield has seven electric vehicle charging stations: four

Dan Esty, right, Commissioner of the Connecticut Department of Energy and Environmental Protection, plugs in his electric car at the Storrs Center parking garage on April 16, 2013. At left is Daniel Shanahan of Control Modules of Enfield.



Photo credit: Peter Morenus/UCConn

in the Storrs Center parking garage, one at the Mansfield Community Center and two at the Price Chopper grocery store in Storrs Center.

- The Town added a hybrid electric vehicle to its fleet through a Connecticut Department of Transportation alternative/clean fuel vehicle grant.
- An electric vehicle is available in the car-sharing program (Hertz On Demand) in the Mansfield parking garage.

C) RENEWABLE ENERGY INITIATIVES

Municipal Renewable Energy. In 2005, the Mansfield Town Council adopted a clean energy resolution with a commitment to purchase clean, renewable energy to offset 20% of the municipality’s electrical use by 2010. For its success, Mansfield has been recognized as a “Connecticut Clean Energy Community” by the Connecticut Clean Energy Fund, now known as CEFIA. Included in the Town’s efforts to increase use of renewable energy were the installation of an 83-kilowatt solar array on the roof of the Community Center in 2008, which supplies one-third of the electricity used by the building, and the installation of small solar installations at the library, senior center and two fire stations, which combined generate 21,000 kWh of electricity each year. The Town is continuing to explore locations for additional solar installations, including the roof of the Storrs Center parking garage.

Private Renewable Energy Use. Since 2005 over 400 Mansfield households, small businesses or organizations have selected clean energy through the CTCleanEnergyOptions program, earning the Town seven kilowatts of photovoltaic panels from the Connecticut Clean Energy Fund. The panels were placed on E.O. Smith High School, with a monitor-

ing system whose data is used in 9th grade solar energy education. In 2013, the Solarize Connecticut initiative resulted in 88 installations at private homes and businesses.

Private Renewable Energy Projects. A new hydropower facility on the Natchaug River at Mansfield Hollow was completed in 2014 and is expected to generate up to 2.3 million kWh of electricity annually that will be fed into the local distribution system operated by Connecticut Light & Power. This facility will be the first of its kind using turbine technology developed by a Mansfield business, and will serve as a model for future installations. Another hydropower company has expressed interest in developing a small hydro facility at the Eagleville Dam on the Willimantic River, using Archimedes Screw Turbine technology that would generate up to 570,000 kWh of electricity annually.

Hydropower is highly regulated by the Federal Regulatory Energy Commission (FERC), with state environmental authorities, the US Fish and Wildlife Service, and state wildlife management agencies also playing an important role. CT DEEP must issue a water quality certification under the federal Clean Water Act.³ At present, the Town does not have specific regulations for hydropower; third-party environmental certification may be an alternative approach.

4. Resource Efficiency, Solid Waste, and Recycling

Mansfield has been using a ‘pay as you throw’ model for trash collection to encourage recycling and composting since 1991. Residents have the option of sign up for curb side collection service of trash and recyclables through a Town-contracted hauler or transporting their trash, recycling and bulky waste to the Town’s transfer station. In October 2013, the Town switched to an automated collection system, which offers residents a choice in the size of wheeled carts; every home that uses the automated service receives a 64 gallon wheeled cart for single-stream recycling.

The number of single-family households using the trash service offered by the Town has steadily increased from just over 1,800 households in 2000 to over 2,300 in 2014; multi-family households using the service remained steady until 2012 when the number of multi-family units began increasing with the Storrs Center development. In FY2013, the Town collected approximately 2,500 tons of residential refuse and 990 tons of recycling through the collection service.

Municipal Transfer Station. While residential pickup service is the most popular option for Mansfield residents, the Transfer Station on Warrenville Road continues to be heavily used. Over 370 tons of residential refuse was deposited at the transfer station in FY2013. This 26.7 acre site was formerly used as a landfill; however, the landfill use

³ Mark Barnett, “Run-of-River Hydropower in Connecticut: Opportunities and Challenges for Developers, and Recommendations for CCEF Support,” Connecticut Clean Energy Fund, 2007, [http://www.ctcleanenergy.com/Portals/0/Hydropower_Report_revised%20\(10-9-07\).pdf](http://www.ctcleanenergy.com/Portals/0/Hydropower_Report_revised%20(10-9-07).pdf)

REUSE OF MATERIALS

In addition to being a temporary depository for residential waste, the Transfer Station also serves as a central location for material reuse and specialty recycling programs:

- Leaves are composted on-site; compost is available for residential use free of charge.
- Brush is chipped and made available for resident use free of charge.
- A 'Swap Shop' run by volunteers encourages reuse of functional materials and products.
- Electronics and paint recycling; both are available for resident use.
- The following products can be brought to the Transfer Station for recycling: single-stream recyclables such as cans, bottles, plastic containers, mixed paper and cardboard, scrap metal, electronics, paint, fluorescent bulbs, nickel-cadmium batteries, lead acid batteries, refrigerant-bearing appliances, plastic bags, vegetable oil, mattresses, styrofoam peanuts, and PCB-containing ballasts.

ceased in October 2002. Four wells are monitored for potential contamination from the landfill in addition to both up-and-downstream water samples from the Fenton River; to date there have been no issues identified through monitoring.

Recycling. As the number of residential trash and recycling accounts continues to rise, the average pounds of recyclables per household has decreased over the years, mostly due to the low recycling rates for multi-family residential units; the increasing share of multifamily and rental units using the service; and the change in composition of the recycling system (fewer newspapers and lighter containers). In FY2013, approximately 33% of all residential waste was recycled. However, the recycling rate for single-family collections was 37% whereas the recycling rate for multi-family residences was 13%. The transfer station recycling rate has remained steady at 48%.

Commercial property owners are responsible for contracting independently for trash and recycling pickup. As a result, there is no data available on total tonnage of commercial waste or recycling percentages.

Hazardous Waste Disposal. Mansfield accepts certain hazardous waste at the Transfer Station, such as paint, fluorescent bulbs, batteries and engine oil; residents must bring all other household hazardous waste to the mid-NEROC Chemical Waste Drop-off facility in Willington, which is open fourteen times per year.

Town of Mansfield Recycling

You can place all **acceptable** recyclables in this cart



The Town of Mansfield encourages recycling and composting. The number of single-family households participating in Mansfield's recycling programs has continued to grow.



**For questions call
Town of Mansfield
860-429-3333**

PROHIBITED ITEMS

Plastic Bags

Trash / Food Waste / Garbage

Unacceptable Paper – Wax paper, soiled paper, soiled napkins & paper, pet food bags & dryer sheets, shredded paper in plastic bags

Unacceptable Plastics – Plastic grocery bags, garden hoses, trash & zip lock bags, cereal box bags, bubble wrap, clear plastic wrap, potato chip bags, single cheese wrappers, soiled plastic bottles, Styrofoam, coolers, straws, silverware



Plastic Bags



Styrofoam & Coolers



Electronics



Food Waste & Trash

Unacceptable Aluminum – Soiled aluminum foil, soiled tin cans

Unacceptable Cardboard – Soiled pizza boxes & soiled cardboard (Examples: Grease, mold, paint)

Unacceptable Glass – Windowpane glass, plated glass, windshield glass, ceramics, candle glass

Unacceptable Items Miscellaneous – Pillows, clothing items, furniture, sheet rock, wood, yard trimmings, grass, leaves

5. Communications

Frontier Communications provides wired telephone service, and several providers offer wireless telecommunications. Wireless communication towers are located in the following areas:

- North of North Eagleville Road on the UConn campus
- Stafford Road north of Storrs Road (town property)
- Clover Mill Road (town property)
- Middle Turnpike (two locations on private property)

Modifications to existing wireless facilities and installation of new facilities fall under the jurisdiction of the Connecticut Siting Council. Cable telecommunications service is provided by Charter cable, including digital telephone service.

ACTION PLAN

Each chapter within this Plan includes an action plan: a set of suggestions for how to put the Plan to work and begin transforming ideas into action. Each action plan identifies some of the **entities that are expected to have a key role in** achieving specific action items (town departments, committees/ commissions, outside organizations, etc.); a target timeframe to complete each action; and the types of resources that we anticipate may be needed for implementation (staff time, volunteer time, operating budget, capital improvement program, grants, etc.).

Action plans include:

- **Goals** that describe the outcomes our community hopes to achieve;
- **Strategies** for advancing each goal; and
- **Actions**—specific steps our community can take over the short term (before end of 2019), medium term (between 2020 and 2024) and long term (between 2025 and 2035) in support of each strategy.

Action plans are tools for focusing efforts and resources on the issues our community cares about most. The action plans will:

- Guide town officials as they continue to shape policies and allocate resources in the years to come;
- Refocus the efforts of town staff and committees as they work to advance community goals;
- Provide a foundation for developing annual budgets and work-plans; and
- Evolve over time in response to new opportunities and circumstances.

Action plans set the agenda for our community’s many officials, volunteers, committee members and staff for the years ahead, and align their work with the community’s vision **but do not provide a guarantee that resources will be available to advance each action.** While these action plans are comprehensive in nature, they are not intended to preclude the Town from pursuing other actions as opportunities arise. **As additional actions and initiatives are contemplated, they should be evaluated with regard to how the action will help to advance the vision and goals** contained in the overall Plan.

Key of Abbreviations	
TOWN DEPARTMENTS & SERVICES	
Building & Housing Inspection	Town of Mansfield Department of Building & Housing Inspection
DPW	Town of Mansfield Department of Public Works
Facilities	Town of Mansfield Facilities Management Department
Finance	Town of Mansfield Finance Department
Fire	Division of Fire & Emergency Services / Office of the Fire Marshal
Fire Marshal	Office of the Fire Marshal
Human Services	Town of Mansfield Department of Human Services
Information Technology	Town of Mansfield Information Technology Department
Library	Town of Mansfield Public Library
Parks & Rec	Town of Mansfield Parks & Recreation Department
Planning	Town of Mansfield Planning & Zoning Office
Police	Mansfield Resident State Trooper’s Office
OTHER ABBREVIATIONS	
CT DEEP	State of Connecticut Department of Energy and Environmental Protection
CT DPH	State of Connecticut Department of Public Health
EHHD	Eastern Highlands Health District
Emergency Management	Emergency Management Advisory Council
IWA	Inland Wetland Agency
PZC	Planning & Zoning Commission
Town/Gown	Town/University Relations Committee

CHAPTER 9: TRANSPORTATION AND INFRASTRUCTURE

Goal 9.1

Mansfield has a balanced, integrated transportation system that provides residents with viable options in getting from one place to another.

Measures of Effectiveness:

- Number of sidewalk/bikeway miles increases 20% by 2018
- Increase in miles of designated bicycle routes
- Town is designated as a Bicycle Friendly Community
- Bus routes have expanded to include the library
- Innovative transportation options have been developed to expand intra-town options
- New development includes Complete Streets
- Increase in lane miles of roadways in good condition
- Increased UConn and WRTD transit ridership
- Reduction in traffic congestion on Route 195 and other major arterials

Strategy A | Ensure that transportation improvements reflect community character and enhance quality of life.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Implement traffic calming improvements to reduce vehicular speed and discourage non-local traffic.</p> <p>Priority areas include villages and local roads in the areas of UConn and Storrs Center. Consideration should be given to developing traffic calming techniques for collector roads to reduce traffic speeds.</p>	<p>DPW Transportation Advisory Committee Traffic Authority</p>	Ongoing	<p>Staff Time CIP</p>
<p>2. Update the Pavement Management System and develop a priority list of paving projects for implementation.</p> <p>Priorities should focus on preventative maintenance to keep roads in good condition. Substantial financial investment may be needed to address both preventative maintenance and significant repairs to roads that have already deteriorated beyond preventative measures.</p>	<p>DPW</p>	Ongoing	<p>Staff Time Operating Budget CIP Bonds</p>
<p>3. Periodically assess the Town's transportation needs.</p> <p>Transportation needs and priorities should be assessed every three to five years to address changes in development patterns and available resources. Priority projects identified in this Plan and through periodic reassessment should be incorporated into the Capital Improvement Program.</p>	<p>Transportation Advisory Committee PZC Town Council</p>	Ongoing	<p>Staff Time Volunteer Time CIP</p>

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>4. Coordinate transportation improvements with utility projects.</p> <p>As improvements are made to various utilities such as installation of new water or sewer lines, explore possibility of including transportation enhancements such as walkways and bikeways as part of the project or in conjunction with the project.</p>	<p>DPW Planning Transportation Advisory Committee</p>	Ongoing	<p>Staff Time Volunteer Time</p>
<p>5. Consider installation of roundabouts in place of traffic signals at major intersections that require upgrades.</p> <p>Examples of potential locations include the intersections of Route 275 and Separatist Road; Routes 195 and 275; Route 195 and North Eagleville Road; and North Eagleville Road and Hunting Lodge Road.</p>	<p>DPW Traffic Authority Transportation Advisory Committee</p>	Ongoing	<p>Staff Time CIP Grants</p>
<p>6. Consider the needs of users of all ages and abilities, including pedestrians, bicyclists, motorists, and transit riders, when planning, constructing and maintaining transportation improvements through the adoption of a ‘Complete Streets’ policy.</p> <p>Embedding the concept that streets are for everyone into the Town’s policies and regulations for design and maintenance of infrastructure will provide opportunities for incremental improvements as part of both major and minor projects. Guidance on developing a formal ‘Complete Streets’ policy is available at www.smartgrowthamerica.org.</p>	<p>Planning DPW Transportation Advisory Committee Traffic Authority PZC Sustainability Committee Town Council</p>	Short Term	<p>Staff Time Volunteer Time</p>
<p>7. Update Town’s Engineering Standards and Specifications to reflect local context and Complete Streets considerations.</p> <p>Roadway design standards and engineering specifications should be tailored to the character of the area in which they will be constructed. Examples include development of typical roadway sections that identify minimum/maximum pavement widths, pedestrian/bicycle facilities, stormwater facilities, etc.</p> <p><i>See Goal 2.4, Strategy B and Goal 2.6, Strategies B and C for additional actions related to updating Engineering Standards and Specifications.</i></p>	<p>Planning DPW Transportation Advisory Committee PZC Traffic Authority Town Council</p>	Short Term	<p>Staff Time Operating Budget CIP</p>

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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ACTIONS	WHO	WHEN	RESOURCES
8. Evaluate and update roadway classification system.	DPW Planning Transportation Advisory Committee PZC	Medium Term	Staff Time Volunteer Time
9. Monitor advancements in transportation technology such as personal flying vehicles and address through updates to policies and regulations.	Planning DPW PZC Town Council	Medium–Long Term	Staff Time

Strategy B | Develop an integrated network of sidewalks, bikeways and trails that connect residents with key community facilities and services.

ACTIONS	WHO	WHEN	RESOURCES
1. Use the criteria identified in this chapter to prioritize bicycle and walkway improvements until the Bicycle and Pedestrian Master Plan is completed.	PZC Transportation Advisory Committee Town Council	Ongoing	Operating Budget CIP Grants
2. Seek state and federal grant funding to support multi-modal enhancements to the transportation network. In addition to traditional grant funds, the Town should advocate for additional state and/or university funds to assist in meeting off-campus transportation demands related to expansion of UConn and ECSU.	Planning Transportation Advisory Committee PZC UConn Eastern Connecticut State University Town Council	Ongoing	Staff Time

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>3. Prepare and implement a Bicycle and Pedestrian Master Plan.</p> <p>The plan should be developed with extensive community input and adopted by both the PZC and Town Council. Recommended components include:</p> <ul style="list-style-type: none"> • <i>Identification of primary north/south and east/west routes</i> • <i>Connections to surrounding communities</i> • <i>Strategies to allow for pedestrian and bicycle improvements to scenic roads</i> • <i>Connections to and expansions of the network of local and regional trails (see Goal 3.3, Strategy B for more information)</i> • <i>Use of sharrows</i> • <i>Education and enforcement strategies to improve safety for pedestrians and bicyclists on roads without off-road walkways/bikeways</i> • <i>Community education campaign on the benefits of walking and biking</i> • <i>Criteria and process to evaluate proposed improvements and update the priority list identified in this Plan</i> 	<p>Planning Transportation Advisory Committee Sustainability Committee PZC Town Council</p>	<p>Short Term</p>	<p>Staff Time Volunteer Time CIP Grants</p>
<p>4. Pursue designation as a Bicycle Friendly Community from the League of American Bicyclists.</p>	<p>Transportation Advisory Committee Sustainability Committee DPW Planning</p>	<p>Medium Term</p>	<p>Staff Time Volunteer Time</p>

Strategy C | Expand availability of alternative transportation options.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Explore options to maintain and expand coverage of the WRTD and UConn bus systems.</p> <p>Initial priorities for expansion of bus service should include adding the library to the Storrs-Willimantic Route and extending the Route 32 route to loop through the Pleasant Valley/Mansfield Avenue area. Encourage neighboring communities and off-campus student housing owners/ developers to provide alternate transportation to UConn.</p>	<p>Transportation Advisory Committee Windham Region Transit District UConn Town Council</p>	<p>Ongoing</p>	<p>Staff Time Volunteer Time Operating Budget</p>

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>2. Promote greater interconnection of existing transit systems, particularly better connections to CT Transit Routes to Hartford.</p>	Transportation Advisory Committee Windham Region Transit District UConn CT Transit Capitol Region Council of Governments	Ongoing	Staff Time Volunteer Time
<p>3. Explore alternatives to traditional public transit to expand transportation to areas not served by UConn and WRTD.</p> <p>Alternatives such as ride sharing apps and volunteer drivers should be explored as ways to increase mobility options for residents without access to personal vehicles or access to bus service. Potential obstacles include insurance liability/costs and competition from transportation businesses.</p>	Transportation Advisory Committee Human Services Town Council	Ongoing	Staff Time Operating Budget
<p>4. Coordinate closely with UConn and regional transit systems on transportation for high capacity events.</p>	Traffic Authority Resident Trooper Emergency Management	Ongoing	Staff Time Operating Budget

Strategy D | Participate in initiatives to improve the regional transportation network.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Support regional efforts to address traffic impacts associated with UConn's expansion.</p> <p>The upcoming CRCOG/CTDOT corridor study of Routes 44 and 195 is one example of how Mansfield can work with surrounding communities to address traffic impacts using a multi-modal approach.</p>	Planning Transportation Advisory Committee PZC Town Council UConn Capitol Region Council of Governments	Ongoing	Staff Time Volunteer Time



ACTIONS	WHO	WHEN	RESOURCES
<p>2. Support regional and interstate efforts to improve freight rail capacity and restore passenger rail service along the Central Corridor.</p> <p>If passenger rail service were to be reinstated, transportation plans would need to be updated to make connections between Mansfield Depot and key destinations, such as UConn and Storrs Center. Land use plans would also need to be reviewed and updated based on preferred uses and development patterns.</p>	<p>PZC Town Council</p>	<p>Ongoing</p>	<p>Staff Time</p>
<p>3. Support efforts to improve Windham Regional Airport based on the recommendations of the Airport Master Plan.</p> <p>An updated master plan for the airport was completed in 2014.</p>	<p>PZC Town Council</p>	<p>Ongoing</p>	<p>Staff Time</p>



CHAPTER 9: TRANSPORTATION AND INFRASTRUCTURE

Goal 9.2

Water and wastewater infrastructure improvements conserve natural resources and support smart growth patterns to help preserve rural character.

Measures of Effectiveness:

- Water and sewer service is available to Four Corners area by 2020
- Installation of water and wastewater improvements remediates existing environmental conditions
- Town facilities have reduced potable water consumption
- New development is focused in areas with water and sewer infrastructure

Strategy A | Support water and wastewater infrastructure practices that protect the town’s rural character and direct development to appropriate areas. *See related Goal 6.1, Strategy B and Goal 8.1, Strategy B.*

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Limit expansion of water and wastewater infrastructure to areas designated as Mixed Use Centers, Compact Residential, and Institutional on Map 8.3 and areas with environmental contamination affecting water quality and/or posing a hazard to human health.</p> <p>While the commercial area at Routes 195 and 32 will have access to public water as part of the CWC water line extension, there are no sewer facilities in close proximity to that area. This action statement does not contemplate or endorse the extension of sewer service to that area. See <i>Goal 4.2, Strategy A</i> for more details.</p>	<p>PZC Town Council Four Corners Sewer and Water Advisory Committee</p>	Ongoing	<p>CIP Grants Bonds</p>
<p>2. Seek state and federal funding to defray costs associated with water and wastewater infrastructure improvements.</p> <p>Potential funding sources include grants and the CT DEEP Clean Water loan program. Grant programs may require local matching funds, which can be public or private.</p>	<p>Town Council Four Corners Sewer and Water Advisory Committee</p>	Ongoing	<p>Staff Time CIP Private funding</p>
<p>3. Identify appropriate local financing options for water and wastewater projects, such as property owner assessments and impact fees to reduce financial impact on general taxpayers.</p>	<p>Finance Town Council Four Corners Sewer and Water Advisory Committee</p>	Ongoing	<p>Staff Time</p>



ACTIONS	WHO	WHEN	RESOURCES
<p>4. Encourage UConn to define water and sewer service areas as part of the campus master plan and discourage service extensions to outlying university-owned parcels.</p> <p>UConn has extensive agricultural and forested land holdings, some of which are fairly isolated from the core campus area. Extension of water and sewer to these outlying properties, such as Spring Hill or the Agronomy Farm, could induce increased university development in areas that should remain rural.</p>	<p>PZC Town Council</p>	<p>Short Term</p>	<p>Staff Time</p>

Strategy B | Expand water conservation efforts.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Encourage water utilities to offer rebates on water efficient fixtures.</p>	<p>Sustainability Committee Town Council</p>	<p>Ongoing</p>	<p>Staff Time Volunteer Time</p>
<p>2. Encourage water reclamation and reuse through use of greywater and water harvesting systems for irrigation and explore options for large projects to connect to UConn's reclaimed water facility.</p>	<p>Sustainability Committee PZC</p>	<p>Ongoing</p>	<p>Staff Time Volunteer time</p>
<p>3. Develop and implement strategies to reduce potable water use in municipal facilities.</p> <p>Identification of baseline water use and establishment of conservation goals should be a first step. In addition to water-saving fixtures, other measures such as rain barrels, cisterns, and water harvesting should be considered where appropriate. Involve Region 19 and the Mansfield Board of Education (MBOE).</p>	<p>Sustainability Committee Facilities Mansfield Board of Education Region 19 Board of Education</p>	<p>Short Term</p>	<p>Staff Time Volunteer Time CIP Grants</p>
<p>4. Consider adopting water use restrictions during drought periods based on stream flow conditions.</p> <p>UConn currently restricts water use based on stream flow in both the Willimantic and Fenton Rivers. These threshold triggers could be used as a basis for implementing voluntary and mandatory conservation measures for public water supply customers of other water supply systems as well. Residents served by private and community wells should be encouraged to implement similar conservation measures.</p>	<p>Sustainability Committee Conservation Commission Town Council</p>	<p>Short Term</p>	<p>Staff Time Volunteer Time</p>

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>5. Collaborate with local conservation organizations and water utilities to develop an education campaign on the benefits of water conservation.</p> <p>The campaign could include existing tools/resources to reduce water consumption including efficient fixtures, cisterns and rain barrels; use of low-water use/drought resistant and native plants; apps to calculate a ‘water budget’ (http://waterbudget.sustainablesources.com) and voluntary water conservation pledges.</p>	Sustainability Committee	Medium Term	Staff Time Volunteer Time

Strategy C | Participate in state and regional initiatives related to water and wastewater facilities planning.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Work with other municipalities and regional planning organizations to advocate for a streamlined permitting process for community septic systems and other innovative wastewater treatment techniques.</p> <p>State environmental regulations and review processes favor installation of individual septic systems for new residential units on the same lot as the unit. While community septic systems and other innovative treatment systems can be permitted, the time and expense associated with the permit process is a disincentive for developers when compared to the process for permitting individual septic systems. This approach limits the ability of communities to effectively cluster development on smaller lots and preserve greater amounts of open space. As this is a statewide issue, the Town should work with other municipalities and regional planning agencies to effect change. Other innovative approaches include individual septic systems that are deeded to homeowners, but located beneath a common open space.</p>	Planning PZC Town Council	Ongoing	Staff Time
<p>2. Participate in state and regional water planning efforts.</p> <p>Public Act 14-163 requires the Water Planning Council to prepare a statewide water plan by July 1, 2017 for review. The Town should actively participate in this initiative as well as any Water Utility Coordinating Committee (WUCC) meetings convened for this region through the creation of an ongoing forum for various stakeholders, including customers.</p>	Town Manager Town Council	Short Term	Staff Time

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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CHAPTER 9: TRANSPORTATION AND INFRASTRUCTURE

Goal 9.3

Mansfield is working toward carbon neutrality and reducing reliance on the grid by conserving energy and increasing use of renewable energy sources.

Measures of Effectiveness:

- 20% reduction in municipal energy consumption by 2018
- Reduction in greenhouse gas emissions
- Increase in percentage of municipal energy consumption from renewable sources
- Increase in number of Town fleet vehicles using hybrid, electric, LNG, or other alternative fuels
- 10% reduction in fuel used by municipal fleet
- Increase in number of private renewable energy installations

Strategy A | Reduce municipal energy consumption and expand use of clean and renewable energy sources.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Update policies and procedures for facilities and employees to reduce energy and fossil fuel usage.</p> <p>Examples include a municipal fleet no-idle policy, encouraging employees to carpool to reduce vehicle miles travelled by combining errands and by carpooling to meetings/events; and adopting a purchasing protocol that uses product energy consumption as a criteria to determine if the product should be purchased.</p>	<p>Town Manager Mansfield Board of Education Region 19 Board of Education Town Council</p>	Ongoing	Staff Time
<p>2. Use green building standards (LEED or similar) for renovation and new construction of municipal and school buildings.</p> <p>Design buildings to maximize energy efficiency through attention to ventilation, windows, site orientation, use of trees on the south and west sides of buildings for shading, green roof construction where feasible, reflective roofs and other energy-efficient construction practices. Strive for zero net energy buildings for renovation and new construction of municipal and school buildings.</p>	<p>Facilities DPW Mansfield Board of Education Region 19 Board of Education Town Council</p>	Ongoing	<p>Operating Budget CIP Bonds Grants</p>
<p>3. Use dark sky compliant, energy efficient lighting for public infrastructure improvements.</p>	<p>Facilities DPW</p>	Ongoing	<p>Operating Budget CIP</p>

SHORT TERM = 2015–2019

MEDIUM TERM = 2020–2024

LONG TERM = 2025–2035

ACTIONS	WHO	WHEN	RESOURCES
<p>4. Expand use of renewable energy at Town facilities and schools.</p> <p>Efforts to expand reliance on renewable energy sources should continue as funds allow, including exploration of alternatives such as wind and geothermal energy. Expansion of renewable energy sources may also include purchasing a greater percentage of energy from renewable sources.</p>	Facilities Town Council	Ongoing	Operating Budget Grants CIP
<p>5. Replace municipal fleet vehicles with higher-efficiency and alternative fuel models (hybrid, electric, biodiesel, etc.).</p>	DPW	Ongoing	CIP Grants
<p>6. Maximize energy efficiency in town schools and buildings through development and implementation of a municipal energy action plan.</p> <p>This plan should identify policies, programs and projects that the Town can implement to reduce municipal energy consumption. The plan should contain baseline data on current and past energy usage and identify targets for reduction.</p>	Town Manager Sustainability Committee Finance	Short Term	Staff Time Volunteer Time
<p>7. Perform periodic energy audits to identify and implement facility improvements that would reduce energy consumption.</p> <p>Audit recommendations should be prioritized and implemented based on cost/benefit analysis. The Town should take full advantage of State resources and incentives provided through Energize Connecticut to implement energy reductions.</p>	Facilities	Medium Term	Staff Time CIP

Strategy B | Promote energy conservation and use of renewable energy by residents and business owners.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Participate in programs that provide incentives for reducing energy consumption and installing renewable energy features.</p> <p>Examples include the Clean Energy Community, Neighbor to Neighbor Energy Challenge, Solarize Connecticut and C-PACE programs.</p>	Sustainability Committee Town Council	Ongoing	Staff Time Operating Budget
<p>2. Encourage new developments to incorporate renewable energy sources such as geothermal, solar and wind.</p>	Sustainability Committee PZC	Ongoing	Staff Time Volunteer Time

SHORT TERM = 2015-2019 MEDIUM TERM = 2020-2024 LONG TERM = 2025-2035

ACTIONS	WHO	WHEN	RESOURCES
3. Work with utility providers to expand public awareness of existing financial incentive programs for energy efficiency improvements.	Sustainability Committee	Medium Term	Staff Time Volunteer Time

Strategy C | Increase community resiliency by reducing reliance on the main power grid and minimizing power disruptions. See Goal 2.5, Strategy B for additional actions related to minimizing power disruptions.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Support the creation of microgrids.</p> <p>As alternative energy sources are developed in Town, consider creating microgrids that can be disconnected from the main power grid. Priority consideration should be given to use of renewable energy sources and development of a microgrid that serves Town Hall, the Community Center and E.O. Smith High School, as these facilities are the center of storm recovery and shelter operations.</p>	<p>Facilities</p> <p>Emergency Management</p> <p>Sustainability Committee</p> <p>Town Council</p>	Long Term	<p>Staff Time</p> <p>Volunteer Time</p> <p>Grants</p> <p>CIP</p>

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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CHAPTER 9: TRANSPORTATION AND INFRASTRUCTURE

Goal 9.4

Mansfield promotes waste reduction and resource conservation.

Measures of Effectiveness:

- Multifamily residential recycling rates increase to 30% by 2035
- Decline in volume of waste per household/per capita
- Reduction in municipal waste tonnage

Strategy A | Reduce municipal waste.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Continue to establish and implement policies and programs that reduce municipal waste, promote reuse of materials and increase recycling.</p> <p>Examples include reducing paper usage through use of technology and adoption of an environmentally-preferable product purchasing policy.</p>	<p>Town Manager Solid Waste Advisory Committee</p>	Ongoing	<p>Staff Time Operating Budget</p>
<p>2. Expand composting at municipal facilities and events.</p> <p>The three elementary schools, middle school and Town Hall currently compost food waste on-site.</p>	<p>DPW Mansfield Board of Education Region 19 Board of Education</p>	Ongoing	Staff Time
<p>3. Adopt a zero-waste resolution.</p> <p>According to CT DEEP, “the zero waste approach seeks to maximize recycling, minimize waste, reduce consumption and ensure that products are made to be reused, repaired or recycled back into nature or the marketplace” (www.ct.gov/deep/cwp/view.asp?a=2714&q=43870). The CT DEEP website includes links to several model policies, including Middletown, CT.</p>	<p>Town Council Town Manager Mansfield Board of Education Region 19 Board of Education</p>	Short Term	Staff Time

SHORT TERM = 2015-2019 MEDIUM TERM = 2020-2024 LONG TERM = 2025-2035

Strategy B | Promote reduction of private waste through application of ‘Reduce, Reuse, Recycle’ principles.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Work with campus organizations, managers of multi-family residential properties and waste contractors to increase recycling rates for multi-family properties.</p> <p>Possible resources include student government organizations at UConn and ECSU for promotion of recycling programs. Model programs in other communities and states should also be reviewed.</p>	<p>DPW Mansfield Community Campus Partnership UConn</p>	Ongoing	Staff Time
<p>2. Support state legislation that institutes product stewardship programs.</p> <p>Connecticut has passed three product stewardship laws that place responsibility for end-of-product-life management with the manufacturer. Electronics and paint recycling laws are currently in effect; mattress recycling will go into effect in 2015. These laws help to facilitate efficient product design and recycling.</p>	DPW	Ongoing	Staff Time Volunteer Time
<p>3. Research and implement innovative practices to reduce waste and increase recycling by residents and businesses.</p>	<p>DPW Solid Waste Advisory Committee</p>	Ongoing	Staff Time Volunteer Time
<p>4. Identify and implement programs that encourage reuse of materials to prevent waste.</p> <p>Potential programs/activities include:</p> <ul style="list-style-type: none"> • Food waste prevention programs in local schools, including donations of excess food and food for animals • A “repair clinic” where people are matched with someone who can fix items in need of repair. • Expanding UConn’s Give and Go move-out program to off-campus apartments • Implementation of pilot project for food-scrap composting at the transfer station in partnership with the Connecticut Recyclers Coalition and CT DEEP as a first step in removing regulatory barriers to small composting operations • Recognition programs for businesses/multi-family properties that are leaders in waste reduction/recycling 	<p>Solid Waste Advisory Committee DPW</p>	Short Term	Staff Time Volunteer Time Solid Waste Enterprise Fund
<p>5. Increase residential composting through a combination of educational workshops and sale of composting bins.</p>	<p>Solid Waste Advisory Committee DPW</p>	Short Term	Staff Time Volunteer Time Solid Waste Enterprise Fund

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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CHAPTER 9: TRANSPORTATION AND INFRASTRUCTURE

Goal 9.5

Mansfield’s land use policies and regulations ensure that infrastructure systems support smart growth, protect rural character and promote resource conservation.

Measures of Effectiveness:

- Number of sidewalk/bikeway miles increases 20% by 2020
- New development includes Complete Streets
- Increase in number of renewable energy systems installed
- Increase in amount of open space preserved as part of new development

Strategy A | Strengthen land use regulations to promote multiple transportation modes.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Focus development in Mixed Use Centers and Compact Residential Areas to create densities that support transit.</p> <p>See Chapter 8 for locations of these areas. New multi-family development should be directed to areas with existing transit access.</p>	PZC	Short Term	Staff Time Community Challenge Grant
<p>2. Update parking regulations to promote alternative transportation.</p> <p>Potential revisions include:</p> <ul style="list-style-type: none"> • <i>Revisions to minimum parking requirements based on current research</i> • <i>Providing for alternative standards based on parking demand studies</i> • <i>Establishing maximum parking ratios in Mixed Use Centers and Compact Residential areas with transit service</i> • <i>Bicycle parking requirements, including minimum number and location</i> • <i>Requiring location of parking areas to the side and rear of buildings</i> 	PZC	Short Term	Staff Time Community Challenge Grant
<p>3. Strengthen requirements for installation of sidewalks and bikeways as part of new and redevelopment projects.</p> <p>Revisions to Zoning and Subdivision Regulations should include specific criteria for when sidewalks and bikeways are required.</p>	PZC	Short Term	Staff Time Community Challenge Grant

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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Strategy B | Strengthen land use regulations to prevent sprawl and support development consistent with the Future Land Use Strategy and Community Design Goals. *See Goals 4.2 and 8.1 for related strategies and actions.*

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Update regulations to protect low-density residential areas from inappropriate development along water and sewer mains.</p> <p>Extensions of water and sewer mains to designated service areas may traverse areas designated on Map 8.3: Future Land Use as Rural Residential/Agricultural/Forestry, Rural Residential Village and Village Center. The presence of water and sewer mains should not be used as justification for higher density development in these areas. Regulations should be updated to maintain rural character and densities and limit the number of service connections to water and sewer infrastructure in these areas. Regulations should address the extent to which water and sewer infrastructure could be used to support cluster developments that preserve larger amounts of open space while maintaining low residential densities, such as Natural Resource Protection Zoning.</p>	PZC	Short Term	Staff Time Community Challenge Grant
<p>2. Consider providing incentives such as density bonuses for subdivisions that preserve larger amounts of open space through use of community wells and innovative wastewater treatment approaches.</p> <p>Use of community systems and other innovative approaches increases design flexibility and allows for smaller lots and preservation of more open space. However, these systems require permits from state agencies. The permitting process currently acts as a disincentive for use of such systems. Providing a density bonus in exchange for preserving larger amounts of open space could help to offset the increased permitting costs.</p>	PZC	Short Term	Staff Time Community Challenge Grant
<p>3. Strengthen open space dedication requirements for new developments and redevelopment to encourage the creation of networks of public space for recreation, habitat connectivity, water quality, and active transportation.</p> <p>The character and nature of spaces to be created will depend on the context of the development area. For example, the Town Square at Storrs Center represents a potential model for how to incorporate public open space in the more urbanized areas of town. <i>See Goal 3.4, Strategy B, Actions 2 and 3 for related actions.</i></p>	PZC	Short Term	Staff Time Community Challenge Grant

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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Strategy C | Strengthen regulations to support resource conservation, reuse and recycling efforts.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Update Zoning and Subdivision Regulations to incorporate requirements and incentives for water conservation into site design and development.</p> <p>Examples of possible regulations include: individual meters for multi-family developments; use of native plants; using stormwater for irrigation; and allowing cisterns and rain barrels as accessory structures in side and rear yard, and possibly in front yards with appropriate screening.</p>	PZC	Short Term	Staff Time Volunteer Time Community Challenge Grant
<p>2. Update Zoning Regulations to include requirements for recycling.</p> <p>In addition to requiring sufficient space for recycling dumpsters/containers, consideration should be given to requiring new multi-family residential developments to establish a recycling program as part of the permitting process.</p>	PZC	Short Term	Staff Time Volunteer Time Community Challenge Grant
<p>3. Work with state and local environmental regulatory agencies to develop standards for development of private greywater systems to facilitate reuse of wastewater from sinks, showers, dishwashers and washing machines for irrigation and non-potable uses within buildings.</p>	Sustainability Committee Planning PZC	Medium Term	Staff Time Volunteer Time

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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Strategy D | Update Zoning and Subdivision regulations to promote use of renewable energy systems and reduce reliance on the grid.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Include specific provisions related to development of solar, geothermal, wind and hydropower systems in Zoning and Subdivision Regulations.</p> <p>Factors to consider include:</p> <ul style="list-style-type: none"> • <i>Types of certifications that may be desired for various facilities such as certification from the Low Impact Hydropower Institute</i> • <i>Allowable locations for pole mounted solar panels</i> • <i>Maximum angles of roof mounted solar panel and solar thermal collector systems based on visibility from street</i> • <i>Prohibitions on shading of solar panels/collectors by new trees</i> • <i>Protection of solar access</i> • <i>Height and setbacks for wind turbines</i> • <i>Impact of solar, geothermal, wind and hydropower systems on existing farmland, particularly areas with prime agricultural soils.</i> <p>While aesthetics may be a consideration in developing standards for renewable energy systems, it should not be the overriding consideration.</p>	PZC	Short Term	Staff Time Volunteer Time Community Challenge Grant
<p>2. Consider use of district energy systems for new subdivisions and compact development projects.</p> <p>District energy systems produce steam, hot water or chilled water at a central plant, which can be a geothermal system. The steam or water is then piped underground to individual buildings for space heating, domestic hot water heating and air conditioning. Regulations could establish thresholds based on the size of the proposed development that trigger consideration of a district energy system.</p>	PZC	Short Term	Staff Time Volunteer Time Community Challenge Grant

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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10 STEWARDSHIP AND IMPLEMENTATION



TOPICS IN THIS CHAPTER INCLUDE

Plan Implementation and Mansfield's Fiscal Condition

Implementation Tools

As a 20-year plan, this Plan includes many recommendations and strategies, some of which can be implemented quickly and others that may require new levels of organization, collaboration, and funding. This chapter discusses overall stewardship of the Plan to keep it useful and current and the specific activities that are needed to implement the vision and goals. It includes methods to incorporate the Plan into day-to-day decision making, assess progress, and make needed revisions so that the Plan remains relevant.

what the **community** said

STEWARDSHIP AND IMPLEMENTATION

While Mansfield residents generally support a wide variety of goals as described in previous chapters, there were also consistent concerns voiced regarding the ability of the community to pay for various initiatives without placing undue financial burden on taxpayers. Residents also identified the relationship between the Town and University as a key element in achieving the community's goals, both from the positive (UConn as a community asset) and the negative (desire for more say in university expansion plans). Many residents also expressed a desire for more responsive, transparent government including improved communications regarding town initiatives and ability for two-way dialogue in addition to the traditional public hearing process.

“The secret to getting ahead is getting started. The secret of getting started is breaking your complex, overwhelming tasks into small manageable tasks, and then starting on the first one.”

MARK TWAIN

THE PURPOSE OF PLANNING IS TO ACT

This Plan updates and combines the PZC’s Plan of Conservation and Development and the Town Council’s 2008 Strategic Vision into a single, unified document. With this Plan, Town leaders in these two elected bodies, as well as the Town’s other citizen commissions and committees and Town staff, will all be working together to achieve the community’s vision for Mansfield as described in Chapter 1. This vision emphasizes a desire to preserve the rural character and lifestyle that characterizes the majority of town while accommodating growth in compact, designated areas. Achieving this vision will require partnerships with residents, UConn, other institutions and the business community.

The Plan expresses the values and aspirations of Mansfield residents for quality of life, sustainability, and prosperity over the next twenty years. The intensive community dialogue in surveys, public meetings, and online discussion resulted in a vision for the future to guide decision making. Moreover, the Plan’s community participation process brings great legitimacy to the consensus on goals and policies. Representatives of diverse interests aligned around the same message can have a powerful effect in bringing local concerns into decisions by the state and federal governments. Effective monitoring and implementation of the Plan will also help Mansfield attract public and private investment and financing to achieve the vision and goals of the Mansfield Tomorrow Plan.

Successful implementation will require communication, collaboration and coordinated activity from elected leaders, Town staff, partners in the private and nonprofit sectors, and, not least—from the many citizen volunteers who are the backbone of municipal government in Connecticut’s small towns. Individuals move in and out of government and the day-to-day demands on the attention of elected officials and staff can push the plan into the background as a decision-making tool. It is important to create systems and procedures to make sure that the plan is used to guide decision-making, that it is evaluated regularly to see if strategies are working and if it continues to reflect community goals. For example, a formal policy could be developed requiring consideration of how proposed changes to Town policies and regulations would impact the ability to achieve the community’s vision as described in the first chapter of this Plan.

1. Plan Implementation and Mansfield’s Fiscal Condition

There have been significant changes in the overall financial position of the Town over the last 10 years due to the recession and other changes at the state level. The principal source of revenue for most communities in Connecticut is property tax. As discussed in Chapter 6, the presence of UConn and other state land holdings makes Mansfield much more reliant on state aid than similarly sized communities. All of the principal sources of intergovernmental revenues have declined in recent years because of state budget

difficulties and the economic recession. As statewide economic conditions force reductions in state grants, the Town will need to identify other revenue sources to make up for the loss of funds.

A) STATE TRANSFER PAYMENTS

Intergovernmental revenue to Mansfield has decreased from 43% of overall Operating Budget revenue in 2007 to 36% of Operating Budget revenue in 2014; this decrease is due primarily to changes in the following recurring state grants:

- PILOT funds—Payment in Lieu of Taxes—to offset the impact of State property that does not pay property tax—are supposed to equal 45% of the property value but the PILOT program has not been fully funded since 2002.
- The Mashantucket Pequot/Mohegan Fund Grant, which provides an annual grant to every Connecticut municipality, based on a formula, has declined from over \$2.5 million in 2000 to \$205,985 in 2014 because of reduced casino earnings.
- Education Cost Sharing (ECS) payments have remained virtually flat since 2009.

B) PROPERTY TAXES

Increases to the grand list (total taxable property value) will be needed to offset potential service reductions and property tax increases. Mansfield has been fortunate to have slow but steady growth in the Town's grand list, despite the economic recession. Growth in certain sectors is more desirable than others. Single family residential properties typically use more in services than they pay in taxes, while multifamily, commercial, industrial, agricultural and open space properties typically pay more in taxes than they use in services. Increases to the commercial and industrial tax base as well as continued open space preservation efforts can help to reduce the impact of decreasing state revenues on the town budget. The tax performance of Storrs Center demonstrates the fiscal benefit of commercial and multifamily property, even with a seven-year property tax abatement in place for the first phase. In FY14, the Town collected over \$450,000 in taxes from Storrs Center after the abatement was deducted. When the abatement ends in 2021, the tax revenue is expected to exceed \$2.3 million annually.

C) EXPENDITURES

The Town has worked hard to limit increases in expenditures as state revenues have fallen. Since FY09, Town expenditures have increased a total of 5%. Public safety costs continue to increase due both to higher demand for police services and escalating benefit costs for state police services, which are currently equivalent to 92% of salary.

D) CAPITAL IMPROVEMENT PROGRAM

The decrease in the Pequot/Mohegan grant has significantly affected the Town's Capital Improvement Program (CIP). In FY07, the Pequot/Mohegan grant provided 58% of the

funding for the Town's CIP; in FY13, the grant provided approximately 15% of funding for the CIP.

Starting in FY12, the Town adopted a pay-as-you-go policy to finance regular, recurring capital projects and initiatives, such as replacement of heavy equipment and vehicles. Significant construction projects and initiatives will continue to require issuance of debt through general obligation bonds unless other revenue sources are identified. The pay-as-you-go model requires that the Town build a base CIP budget that gradually increases over time and adheres to a replacement schedule for expensive items. Under this approach, the Town will increase the general fund contributions over the five-year CIP period. By moving to this model for recurring expenses, the Town will have a stable funding source for capital needs and be able to replace equipment and infrastructure on a more timely basis. This model will also allow the town to better manage its debt service and potentially improve its bond rating, resulting in long-term savings.

Economic Stability and Resilience. One of the major indicators of fiscal stability for an organization is its bond rating. Since 2004, the Town's bond rating from Moody's has improved from Aa3 to Aa2 and notes regarding negative outlook have been removed. Key factors influencing bond ratings are the percentage of the amount of financial reserves (fund balance) and growth of the Town's grand list. The town has been working to increase fund balance over the last several years, and as a result of its efforts has seen fund balance increase from 4.6% of total expenditures in 2007 to 6.2% of expenditures in 2013. Combined with continued growth in the Town's grand list as described above, the Town's bond rating should remain stable or improve in the coming years. Another key indicator of financial stability is the amount of debt service as a percentage of expenditures. In 2013, the Town's debt ratio was 1.47%; Standard and Poor's rates anything below 8% as low.

2. Implementation tools

A) IMPLEMENTATION TOOLS

The most important implementation tool that a municipal government has is the ability to decide where and how to make public investments—in infrastructure, in programs, and in development assistance. The Town's role in the Mansfield Downtown Partnership, for example in obtaining grants for key infrastructure elements, is evidence of Mansfield's experience in using public investment to help achieve a community goal. Having a community-based comprehensive plan is a competitive advantage for winning discretionary and competitive grants, because it sends a message that the community knows what it wants and has developed a strategy to get there. A representative list of regulatory, financial and incentive-based types of tools includes:

Zoning and Development Regulations. Most people think of zoning as the preeminent implementation tool for a land use plan, and it is certainly one of the foundations for

IMPLEMENTATION PRINCIPLES

Mansfield’s Sustainability Committee identified four **implementation principles** to ensure that future actions move us toward achievement of our goals:

1

PRACTICE SUSTAINABLE RESOURCE MANAGEMENT.

Given limited financial resources, town programs should emphasize sustainable management of natural resources in addition to preservation/protection efforts. Policies should promote active, productive, sustainable use of land, including multi-functional landscapes and human interaction with the landscape. Examples of possible initiatives include education programs to promote forest stewardship, management and sustainable maintenance practices by private property owners.

2

BE FLEXIBLE AND INNOVATIVE.

As research and best practices are constantly evolving, programs and policies should be flexible enough to adapt and allow for innovation.

3

USE INCENTIVES TO PROMOTE SUSTAINABLE ACTIONS AND PRACTICES.

While incentives are commonly found as part of a regulatory framework, there are other ways in which incentives can be used to promote sustainability. An example of an existing incentive-based program is the town’s “pay as you throw” residential trash collection program, which charges based on the amount of waste generated and provides single-stream recycling containers free of charge.

4

RAISE COMMUNITY AWARENESS AND KNOWLEDGE ABOUT SUSTAINABILITY.

In addition to policy and regulatory strategies, this Plan emphasizes strategies to boost public education and awareness of sustainability concepts and ways in which individuals can help achieve the vision.

effective implementation of a plan. Recommendations for zoning changes have been included in each of the previous chapters. Adoption of the Plan will be immediately followed by preparation of new zoning and subdivision regulations to reflect the Plan as part of the Mansfield Tomorrow project.

Community Design Strategies and Design Review. Better design of public and semi-public places, as well as the way that private property meets public spaces, is critical to accommodating growth in the mixed-use, compact development, and other areas designated to accommodate walkable compact growth as called for in the Plan. As appropriate, the zoning rewrite will include design guidance.

Capital Improvement Plan (CIP). Capital Improvement Plans (CIP) play an essential role in implementation of a community’s comprehensive plan. The Government Finance Officers Association (GFOA) provides guidance documents and best practices on how to prepare multi-year capital plans and incorporate those plans into a capital improvement budget.¹ This Plan’s goals, principles and recommended actions should be consulted in development and implementation of the CIP.

Federal and State Transportation Funds. Decision-making for Mansfield transportation needs within the federal transportation planning system should be coordinated to achieve the Plan’s vision and goals.

General Obligation Bonds. Choices for bond financing should be coordinated with the CIP and the Mansfield Tomorrow Plan.

Grant Programs. Many of the actions recommended in this Plan identify grant funding as a potential resource for implementation. Mansfield has been very successful at obtaining both federal and state grants to implement goals contained in previous plans. For example, the Storrs Center project alone has received over \$25 million in grant funding. The alignment of goals contained in this Plan with the federal livability principles identified in Chapter 1 further enhances the potential for future awards from participating agencies to support implementation. The goals, strategies and actions contained in this Plan will provide support for future grant applications as Mansfield will be able to demonstrate that these individual projects are part of a comprehensive plan for the community.

Private and Nonprofit Funds. Mansfield already works with some nonprofits, such as Joshua’s Trust, to achieve mutually desired goals. Grant opportunities from other foundations should be explored by the Town and local nongovernmental groups.

Tax abatements and Tax Increment Financing. Property tax abatements can be granted as an incentive for desired projects, as was the case for Storrs Center, where the development agreement includes tax abatements for seven years. A similar tool, used more often in larger communities, is to create a TIF (Tax Increment Financing) district to underwrite infrastructure or other improvements to encourage desired development or redevelopment. Private developers make investments, as an incentive the municipality provides needed infrastructure (such as structured parking, for example) and the increase in tax revenues above pre-investment taxable value is directed to pay for the cost of the public improvements.

1 GFOA, “Best Practice: Preparing and Adopting Multi-Year Capital Planning (2006),” www.gfoa.org; GFOA, “Best Practice: Incorporating a Capital Project Budget in the Budget Process (2007),” www.gfoa.org

Land Assembly/Land Banking. An area with many small parcels and multiple landowners can be challenging to redevelop. Facilitating land assembly by consolidating ownership is one way that government can assist in creating the conditions for desired development.

B) PAYING FOR PLAN IMPLEMENTATION: FISCAL SUSTAINABILITY AND REVENUE STRATEGIES

Operating and capital shortfalls present unique challenges for a jurisdiction. It is often easier to find funds for capital improvements than to find new revenue sources for operating expenses. There are often more types of revenue to fund capital improvements (such as fees and grant funding) than are available for ongoing operating expenditures.

To cover operating shortfalls, many localities first decrease levels of service—through layoffs, furloughs, closing of non-essential facilities, and other actions. Municipalities are also exploring alternative revenue sources and strategies. The most common responses for enhancing local coffers are increases in user fees and implementation of

GUIDING FISCAL DECISIONS

While this Plan identifies numerous actions to help achieve the community's goals, implementation of those actions will be dependent on the Town's ability to fund various projects and programs from year to year based on budget constraints established by the Town Council. Key to those budgetary decisions is the desire to maintain and enhance the Town's long-term financial stability. To further strengthen the Town's ability to respond to unanticipated changes in revenues and expenditures, the Town Council should consider establishing a series of principles to guide future financial decisions. Examples of possible principles include:

- **Fiscal neutrality—new growth should help pay its way.** New growth should be fiscally neutral, i.e., it should pay its way and not be subsidized by existing development (for example, through extension of infrastructure) unless limited-term subsidy is designed to support achievement of a community goal.
- **Fees, rather than general tax revenues, should support measurable services that primarily benefit individuals or individual households.** Fees can be appropriate for types of services that primarily benefit the individual, for example, adult recreation classes and team sports. The

Community Center fee system is an example of an appropriate use of fees.

- **Fee structures should be established to recover the costs of providing services and include provision for access to important services by low-income households.** Fees are typically established to recover costs; profit is not an objective. However, fees that support the costs of services that otherwise would be paid for by general fund taxes will free up those tax funds for other purposes. In many communities, as is the case in Mansfield, scholarships or sliding scales for certain fee-based activities ensure that low-income households can have the opportunity to participate.
- **Capital Improvement Plans should reflect Plan goals and identify future operating impacts.** Capital investments should reinforce the goals of this Plan with policies and strategies to support fiscal sustainability. Future capital improvement planning should identify those projects that are new construction, expansions, and/or provide additional capacity, which will assist in implementing fiscal neutrality. Operating impacts of new capital projects should also be identified.

new user fees. Mansfield has taken a conservative approach and has made efforts to live within its means.

Possible Financing Strategies

As previously noted, the Town's primary revenue sources are state grants and property taxes. Increases in the taxable grand list from future development can help to offset additional service costs and potentially provide funding for actions recommended in this Plan that are of an operational nature. Grants may provide funding for specific projects, but do not usually provide funding for ongoing operations. Other common revenue sources that could be used to implement Plan recommendations include:

- **Issuance of Bonds.** Using debt to build infrastructure and make other necessary capital improvements is standard practice and an integral part of municipal fiscal sustainability. This is particularly the case when the assets will be used by both current and future residents and businesses. That is, those paying for the improvements will enjoy and benefit from the capital improvements. Repayment of bonds can be financed either through the general fund (all taxpayers), or in certain circumstances such as the construction of water or sewer lines, through assessments to property owners receiving direct benefits.
- **Tax Increment Financing.** See description on page 10.7.
- **Lease Purchase Financing.** Tax exempt municipal leases provide an alternative to bonding for acquisition of equipment. At the end of the lease, the town owns the equipment. No issuance of long-term debt is needed; funds are appropriated annually through the operating budget.
- **Establishing New and/or Increased Fees.** Comprehensive user fee programs can be developed with a long-term perspective where an agency establishes policy goals for the user fee program, including the appropriate direct and indirect costs to be recovered through the fees and the level of cost recovery for each department or division. The combination of a user fee system and a cost allocation plan can be used to recover all or a portion of the operating and capital costs of providing a public service that directly benefits the fee payer.

Prior to undertaking future fee revisions, the Town Council should identify principles to guide the establishment or increase of fees, such as the following:

- > Establish fees at a level that permits lower-income groups to participate in services that they might not otherwise be able to afford.
- > Consider community-wide benefit versus specific benefit for certain services such as recreation programs, Town facility rental use, and senior activities. Set fees according to this benefit trade-off.
- > Determine who is the service recipient and who is the service driver. For example, code enforcement benefits the community as a whole, but the service is driven by an individual or single business owner violating Town regulations.

- > Consider elasticity of demand in pricing certain Town services. Increasing the price of some services results in a reduction of demand for those services, and vice versa. For example, most youth and senior programs are extremely price-sensitive, and significant increases in current fees will likely result in a significant reduction in demand for those programs.
- > Price services to encourage or discourage certain behaviors. For example, establishing a low fee for a water heater permit to encourage homeowners to ensure their water heater is properly installed and functioning. In contrast, setting false-alarm response fees on an incrementally higher scale would discourage multiple false alarms and a costly Town response.
- > Establish a formal review process of fee schedules. By adopting review intervals, Town staff can monitor and adjust fees to changes in service delivery functions, resources and costs, thus avoiding the potential for significant fee spikes.
- > Consider future tracking of all fee-generating services to determine work-flow patterns and compare revenue generation at current fee levels versus future or proposed fee levels.

ACTION PLAN

Each chapter within this Plan includes an action plan: a set of suggestions for how to put the Plan to work and begin transforming ideas into action. Each action plan identifies some of the **entities that are expected to have a key role in** achieving specific action items (town departments, committees/ commissions, outside organizations, etc.); a target timeframe to complete each action; and the types of resources that we anticipate may be needed for implementation (staff time, volunteer time, operating budget, capital improvement program, grants, etc.).

Action plans include:

- **Goals** that describe the outcomes our community hopes to achieve;
- **Strategies** for advancing each goal; and
- **Actions**—specific steps our community can take over the short term (before end of 2019), medium term (between 2020 and 2024) and long term (between 2025 and 2035) in support of each strategy.

Action plans are tools for focusing efforts and resources on the issues our community cares about most. The action plans will:

- Guide town officials as they continue to shape policies and allocate resources in the years to come;
- Refocus the efforts of town staff and committees as they work to advance community goals;
- Provide a foundation for developing annual budgets and work-plans; and
- Evolve over time in response to new opportunities and circumstances.

Action plans set the agenda for our community’s many officials, volunteers, committee members and staff for the years ahead, and align their work with the community’s vision **but do not provide a guarantee that resources will be available to advance each action.** While these action plans are comprehensive in nature, they are not intended to preclude the Town from pursuing other actions as opportunities arise. **As additional actions and initiatives are contemplated, they should be evaluated with regard to how the action will help to advance the vision and goals** contained in the overall Plan.

Key of Abbreviations	
TOWN DEPARTMENTS & SERVICES	
Building & Housing Inspection	Town of Mansfield Department of Building & Housing Inspection
DPW	Town of Mansfield Department of Public Works
Facilities	Town of Mansfield Facilities Management Department
Finance	Town of Mansfield Finance Department
Fire	Division of Fire & Emergency Services / Office of the Fire Marshal
Fire Marshal	Office of the Fire Marshal
Human Services	Town of Mansfield Department of Human Services
Information Technology	Town of Mansfield Information Technology Department
Library	Town of Mansfield Public Library
Parks & Rec	Town of Mansfield Parks & Recreation Department
Planning	Town of Mansfield Planning & Zoning Office
Police	Mansfield Resident State Trooper's Office
OTHER ABBREVIATIONS	
CT DEEP	State of Connecticut Department of Energy and Environmental Protection
CT DPH	State of Connecticut Department of Public Health
EHHD	Eastern Highlands Health District
Emergency Management	Emergency Management Advisory Council
IWA	Inland Wetland Agency
PZC	Planning & Zoning Commission
Town/Gown	Town/University Relations Committee

CHAPTER 10: STEWARDSHIP AND IMPLEMENTATION

Goal 10.1

The Mansfield Plan of Conservation and Development is periodically reviewed and updated to address changing conditions and trends.

Measures of Effectiveness:

- Number of residents participating in periodic updates.

Strategy A | Progress in implementing the recommendations of this plan is continually monitored and reviewed.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Review implementation progress in an annual public meeting.</p> <p>The public meeting should review how the Plan is being used, the way the vision and goals have shaped decision making, successes and obstacles to implementation, new circumstances that may affect the Plan's goals and strategies and provide an opportunity for public comment. This meeting will provide an annual forum for identification of issues that need additional study and potential changes.</p>	<p>PZC Town Council</p>	Ongoing	Staff Time
<p>2. Identify Plan-related actions on agendas of the Town Council and Planning and Zoning Commission.</p> <p>An icon or identifying note in agendas of decision-making bodies is a systematic way to show how the Town is implementing the Plan.</p>	<p>Town Manager Planning</p>	Ongoing	Staff Time
<p>3. Publicize actions and activities that implement the Plan.</p> <p>Actions by the Town and by others that implement the Plan should be publicized as such, giving credibility to the planning process and the community's commitment to implement and use the Plan.</p>	<p>Town Manager Planning</p>	Ongoing	Staff Time
<p>4. Use the Town's Annual Report as a tool to report on implementation progress.</p> <p>Restructure the existing report to focus on how annual activities and accomplishments are helping to achieve Plan goals.</p>	<p>Town Manager Planning</p>	Short Term	Staff Time



Strategy B | Periodically update the Plan to ensure that it continues to reflect the community’s vision, aspirations and needs.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Schedule a public process every five years to confirm or revise the Vision and Goals and review progress on implementation.</p> <p>This Plan must reflect the needs and aspirations of community residents over time. It must be a flexible document that can change according to circumstances. Every five years, the Town should host a series of public meetings in conjunction with public surveys and/ or web-based opportunity for public input. The process should include a summary of progress made on implementing the plan and unforeseen circumstances—both opportunities and obstacles—that affect implementation. The public should be asked to confirm, revise, remove or add to the Plan’s vision and goals, which will guide changes to the strategies and actions.</p>	PZC	Short Term	Staff Time Volunteer Time Operating Budget
<p>2. Update the Plan every ten years as required by State Statute.</p> <p>C.G.S. Section 8-23 requires that the Town update its POCD at least every 10 years. The five-year review process recommended in the previous action can serve as the foundation for this update. This update should also address consistency of the Plan with state and regional plans. If there are significant changes in conditions or to the community’s vision and goals, a more thorough update such as that described in the following action may be needed.</p>	PZC	Medium Term	Staff Time Volunteer Time Operating Budget
<p>3. Conduct a thorough update of the Plan every 20 years.</p> <p>At least every twenty years, the Town should undertake a thorough update of the Plan that includes a major public participation process and detailed attention to every Plan element.</p>	PZC	Long Term	Staff Time Volunteer Time Operating Budget CIP

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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CHAPTER 10: STEWARDSHIP AND IMPLEMENTATION

Goal 10.2

The Mansfield Plan of Conservation and Development is integrated into decision making at multiple levels.

Decision makers should consider the impact of proposed policy and regulatory changes on the town’s rural character and lifestyle prior to adoption and implementation.

Measures of Effectiveness:

- Number of recommended actions completed

Strategy A | Develop and deploy staff, resources and training to support implementation of this Plan.

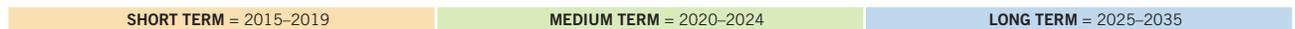
ACTIONS	WHO	WHEN	RESOURCES
<p>1. Use the Plan to set priorities through the preparation and approval of annual departmental work plans, operational budgets and capital improvement plans.</p> <p>A brief statement of how the workplan or budget reflects the priorities of the Plan should be required. Departments preparing preliminary capital improvement program requests should prepare a narrative explanation of how the project is consistent with the Plan as part of a general discussion of why a project is needed.</p>	Town Council All Departments	Ongoing	Staff Time
<p>2. Use the Plan to set priorities for staffing levels, training and professional development opportunities for all levels of staff.</p> <p>Economic development, planning, public safety and public works are some of the key areas that will need additional resources to implement the goals and strategies outlined in the Plan. The Town should also develop HR and organizational development capacity to promote professional development, performance measurement, program evaluation and succession planning. Developing this capacity more fully will better enable the Town to provide its residents and taxpayers with an excellent return on their tax dollars and other investments. Customer service, innovation and prudent financial management are key to this effort.</p>	Town Manager	Ongoing	Staff Time Operating Budget
<p>3. Use the Plan in preparing grant proposals and similar documents.</p> <p>The Mansfield Tomorrow planning process and the Plan itself will support grant proposals to fund implementation activities.</p>	All Departments	Ongoing	Staff Time

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>4. Work with CRCOG and other state/regional organizations to implement regional natural hazard mitigation, transportation and planning initiatives identified in the Plan.</p> <p>Federal and state funding for a variety of initiatives is available through regional and state level planning processes and can help achieve the goals of this Plan.</p>	Planning	Ongoing	Staff Time

Strategy B | Create systems to integrate implementation of the Plan into the work of Town volunteer commissions and committees.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Convene regular meetings of commission/committee chairs to discuss plan implementation.</p> <p>This group could meet two times each year, once to identify implementation actions and responsibilities for the coming year and once in advance of the annual public meeting on implementation progress. This would assist the planning office in preparing the annual progress report as well as promote communication and interaction among the committees.</p>	Town Manager	Ongoing	Staff Time Volunteer Time



CHAPTER 10: STEWARDSHIP AND IMPLEMENTATION

Goal 10.3

Mansfield’s long-term financial stability underlies implementation of this Plan.

Measures of Effectiveness:

- Bond rating increases to Aa1 or better
- Fund balance increases annually
- Increase in taxable grand list
- Stable or increasing intergovernmental revenues

Strategy A | Fiscal planning and budgeting activities are guided by clear principles and policies.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Update planning and budgeting procedures based on practices recommended by the Government Finance Officers Association (GFOA).</p>	Finance Town Manager	Ongoing	Staff Time
<p>2. Update the adopted series of principles that guide fiscal policies and decisions.</p> <p>The narrative section of this Chapter provides preliminary suggestions to guide development of these principles.</p>	Town Council	Short Term	Staff Time
<p>3. Identify criteria to be used in identifying the appropriate revenue sources for specific projects and overall Plan implementation.</p> <p>Examples include the potential revenue that could be raised through a specific source, ease of administration (impact on staff/operating costs), whether the source is proportional to the activity to be funded, and the likely level of public acceptance.</p>	Town Manager Finance Town Council	Short Term	Staff Time
<p>4. Establish principles and policies to guide changes to existing fee structures.</p> <p>The narrative section of this Chapter provides preliminary suggestions as to what should be considered when establishing/reviewing fee structures.</p>	Town Manager Finance Town Council	Short Term	Staff Time

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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Strategy B | Improve Mansfield’s bond rating to reduce cost of debt issuance.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Achieve a fund balance of 10% to 15% of annual expenditures.</p> <p>In addition to annual budgeting efforts, explore possibilities for a revenue stream that could be dedicated to fund balance.</p>	<p>Town Manager Finance Town Council</p>	Ongoing	<p>Staff Time Operating Budget</p>
<p>2. Implement pay-as-you-go model for recurring capital expenses.</p> <p>As with efforts to increase fund balance, identification of a dedicated revenue stream would help achieve this objective.</p>	<p>Town Manager Finance Town Council</p>	Ongoing	<p>Staff Time Operating Budget CIP</p>
<p>3. Support efforts to increase commercial tax base in appropriate areas as identified in this Plan.</p> <p>Any financial incentives for commercial development such as tax incentives or fee reductions should only be considered if a fiscal impact analysis demonstrates the long-term benefit to the community of the short-term reductions in revenue.</p>	<p>Town Manager Finance Town Council</p>	Ongoing	<p>Staff Time Operating Budget</p>
<p>4. Support land conservation efforts to control cost of community services.</p> <p>As with commercial and industrial uses, open space and agricultural lands require far less in community services than they pay for in taxes, resulting in net benefit to the community. Support of land conservation efforts consistent with the priorities outlined in Chapters 2 and 3 of this Plan will help to control growth of community service costs by limiting potential for large new single-family developments that cost more in services than are contributed in taxes.</p>	<p>PZC Town Council Open Space Preservation Committee</p>	Ongoing	<p>Staff Time CIP Open Space Bonds Grants</p>

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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Strategy C | Work with UConn to address fiscal impacts of university expansion.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Conduct a fiscal impact analysis of NextGenCT initiative.</p>	Town Manager UConn	Short Term	Staff Time CIP
<p>2. Advocate for state financial assistance to offset impacts of UConn growth.</p> <p>While state aid to municipalities has been steadily declining over the last ten years, the legislature continues to invest in the future growth of UConn, particularly at the Storrs campus. As this expansion will have impacts on Town services, additional advocacy for sufficient state funding to offset costs is needed.</p>	Town Manager Town Council UConn State Senator State Representatives	Short Term	Staff Time Volunteer Time

Strategy D | Identify the reasonable amount of debt that the community is willing and able to pay to support community services.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Conduct fiscal impact analysis for projects requiring significant issuance of debt.</p> <p>While the Town has a very low level of debt (1.47%), it is anticipated that there will be significant projects in the coming years that will require issuance of debt. A fiscal impact analysis should be required for each significant public project that requires issuance of bonds to evaluate the impact of such a project on property taxes as well as any long-term cost savings or revenue generation.</p>	Town Manager Finance	Ongoing	Staff Time Operating Budget
<p>2. Consider alternative financing mechanisms to reduce Town capital debt expenditures.</p> <p>Examples include CT DEEP’s Lead by Example Program, which provides alternative financing for energy efficiency improvements to public facilities, and lease-purchase agreements.</p>	Town Manager Finance Town Council	Ongoing	Staff Time
<p>3. Consider financing strategies that reduce impact of projects on the general taxpayer.</p> <p>Examples include Tax Increment Financing (TIF), which uses the additional property tax revenue generated in a specific area to pay for improvements in that area. For example, the increase in property tax revenues generated from an infrastructure project would be used to pay the debt service on bonds issued to fund that project instead of distributing those costs across the entire tax base.</p>	Town Manager Finance Town Council	Short Term	Staff Time

SHORT TERM = 2015–2019	MEDIUM TERM = 2020–2024	LONG TERM = 2025–2035
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Strategy E | Use technology to improve efficiency and manage personnel costs.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Expand availability of on-line services. Expanding residents' ability to conduct basic business on-line such as additional categories of bill payment, permitting, and reporting problems both improves customer service and provides a more efficient way of tracking information. Software upgrades may be necessary to allow on-line service for various functions.</p>	Information Technology	Ongoing	Staff Time Operating Budget CIP
<p>2. Provide access to on-line services at community facilities. While the Library and Community Center have computers that can be used by residents, most Town offices do not. Installation of computers for use by the public to complete on-line application forms will eliminate the need for staff to enter data from forms completed by hand.</p>	Information Technology	Ongoing	Staff Time CIP

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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CHAPTER 10: STEWARDSHIP AND IMPLEMENTATION

Goal 10.4

Mansfield advances Town sustainability objectives through Plan implementation, public education, and partnerships.

Measures of Effectiveness:

- Participation in sustainability efforts and practices has increased
- Mansfield is recognized as a sustainable community
- Ongoing collaborations between UConn and the Town have produced results

Strategy A | Create a “Sustainable Mansfield” or “Eco-Mansfield” identity brand (similar to “Eco-Husky”) that consolidates and improves Town sustainability awareness of initiatives and programs.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Systematically review current sustainability-related practices, awareness and education methods, throughout the Town’s web site, at the library, in Town department offices, and in Town communications to residents to evaluate effectiveness and needs and recommend improvements.</p> <p>The review should look at public awareness efforts on an array of sustainability topics such as landscape management (native plants, pesticides, herbicides, fertilizers, vegetative buffers to water), forest management, recycling, water conservation, energy-efficiency, and so on.</p>	Sustainability Committee	Ongoing	Staff Time Volunteer Time
<p>2. Collect existing and identify new resources such as websites, pamphlets, posters, etc., that can be used to promote individual and household sustainable practices.</p> <p>These practices could include use of the hazardous waste collection site in Willington, landscape practices, alternatives to toxic household products, and so on.</p>	Sustainability Committee Planning DPW	Ongoing	Staff Time Volunteer Time
<p>3. Educate the community, parents and students on sustainable actions that can be achieved at home, in the schools and in the community. These sustainable actions could include energy conservation, recycling, community involvement and volunteerism.</p>	Sustainability Committee Mansfield Board of Education Region 19 Board of Education	Ongoing	Staff Time Volunteer Time

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>4. Create a Sustainable Mansfield brand and logo that can be used to reinforce the many aspects of sustainability.</p> <p>A logo and brand that identifies Mansfield as a sustainable community is a way to help identify and consolidate public awareness campaigns and Town government actions that promote sustainability.</p>	Sustainability Committee	Short Term	Staff Time Volunteer Time Operating Budget
<p>5. Create a web page for sustainable resources and a monthly sustainability tip for publication in the Town's monthly newsletter.</p>	Sustainability Committee	Short Term	Staff Time Volunteer Time

Strategy B | Work with UConn to develop a multi-faceted sustainability collaboration.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Develop a program with UConn to use faculty and student expertise to provide Mansfield with data for sustainability efforts.</p> <p>Approach UConn faculty and student groups to gauge interest and capacity in assisting with potential Town sustainability projects, such as measurement and reduction of greenhouse gas emissions, forestry management technical assistance for town forests and private forest owners, monitoring climate change in Mansfield, and similar projects.</p>	Sustainability Committee Planning UConn	Ongoing	Staff Time Volunteer Time Operating Budget
<p>2. Craft an agreement with UConn about advancing town and university sustainability goals.</p> <p>The Town and UConn have been collaborating on various sustainability projects, such as the Eagleville Brook project, as they arise. A broader agreement that encourages each party to include and work with the other on sustainability initiatives has the potential to improve communication about opportunities and accelerate sustainability successes.</p>	Town Manager UConn	Short Term	Staff Time
<p>3. Work with UConn to develop collaborative approaches to implementing the sustainability goals outlined in the Mansfield Tomorrow Plan of Conservation and Development and the UConn Campus Master Plan.</p> <p>The Mansfield Downtown Partnership is an example of an existing model that should be considered.</p>	Town Manager Sustainability Committee	Short Term	Staff Time Volunteer Time

SHORT TERM = 2015–2019

MEDIUM TERM = 2020–2024

LONG TERM = 2025–2035

CHAPTER 10: STEWARDSHIP AND IMPLEMENTATION

Goal 10.5

Mansfield is a model of inclusive, transparent government.

Measures of Effectiveness:

- Number of subscribers to social media feeds increases
- Diversity (racial, ethnic, age, geographic locations, etc.) of residents serving on Town advisory committees increases

Strategy A | Continue to improve how the Town shares information with residents and other stakeholders.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Expand use of social media.</p> <p>The use of social media by government agencies has greatly expanded as a way to communicate with residents. To be successful, there will need to be staff dedicated to keeping these feeds updated with regular information.</p>	Town Manager Library Information Technology	Ongoing	Staff Time
<p>2. Broaden distribution of the Mansfield Minute Newsletter.</p> <p>Distribution is primarily electronic, with limited copies available at the Library and Town Hall. To ensure that residents who are not as connected electronically have the same access to information, efforts should be made to broaden printing and distribution.</p>	Town Manager Library	Ongoing	Operating Budget
<p>3. Expand use of Public Access TV.</p> <p>Current use of the Town’s public access cable channel is limited to airing of Town Council meetings and static information slides. Consideration should be given to broadcasting other meetings and development of informational programming on Town initiatives and events.</p>	Town Manager	Ongoing	Staff Time Operating Budget
<p>4. Require community engagement plans for significant Town projects.</p> <p>To ensure that major projects include significant opportunities for public input, the Council should adopt a policy of requiring project managers to develop and implement a community engagement strategy that meets specific criteria.</p>	Town Council Boards of Education	Ongoing	Staff Time Operating Budget

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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ACTIONS	WHO	WHEN	RESOURCES
<p>5. Expand opportunities for dialogue and informal interaction with Town officials.</p> <p>While opportunity for public comment is provided at meetings of elected bodies, the meeting format only allows for one-way communication and can be intimidating for residents who are uncomfortable with public speaking. Events such as open houses, informational meetings and community gatherings can help residents become more familiar with town government and encourage greater participation.</p>	Town Manager Town Council	Ongoing	Staff Time Volunteer Time
<p>6. Establish an annual meeting to report on Town-Gown activities.</p> <p>Although Town staff officials and staff are regularly involved in meetings with the University, many residents feel that they do not know about university plans and activities. To enhance communication between UConn and town residents, the Town could host an annual meeting at which UConn could make a presentation on recent activities and plans for the next five years and residents could ask questions.</p>	Town/ University Relations Committee	Ongoing	Staff Time
<p>7. Increase public awareness of proposed land development projects through electronic and print media.</p> <p>As the Town expands its use of electronic and print media to inform residents of services and activities, consideration should be given to including information on pending development projects to broaden public awareness.</p>	Planning Information Technology	Short Term	Staff Time
<p>8. Continue to expand user-friendly features on the Town's website, including making it mobile-enabled.</p> <p>The Town has added many user-friendly features to the website over the last few years. However, as the site is organized from the perspective of Town departments rather than an outside user, it can be difficult to find information if you are unfamiliar with the organization. The Town should continue to update the structure and organization of the site with input from residents that are not familiar with Town organization. Making the site mobile-enabled will improve service to those accessing the site through smart phones.</p> <p><i>See related actions in Goal 2.1 Strategy A, Goal 3.3 Strategy C, Goal 5.1 Strategies B and C, Goal 6.1 Strategy D, Goal 6.2 Strategies B and D, Goal 8.2 Strategy B, and Goal 10.4 Strategy A.</i></p>	IT All Departments	Short Term	Staff Time Volunteer Time CIP

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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Strategy B | Improve effectiveness of Town commissions and committees.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Periodically evaluate and reorganize committees to reflect current need.</p> <p>The Town currently has over twenty advisory committees, some of which meet more regularly than others. Committees should provide an annual report on recent activities and the focus for the following year for review by the Town Council. Committees could be disbanded or put on hiatus if no longer needed or if their activities could be merged with another committee.</p>	Town Council	Ongoing	Staff Time Volunteer Time
<p>2. Expand and broaden recruitment for Town committees.</p> <p>Many residents currently serve on multiple committees and some committees have difficulty filling vacancies. Additionally, membership on many committees does not reflect the diversity Mansfield’s population in terms of age, race, ethnicity, and income. Efforts should be made to expand recruitment efforts to those populations that are typically under-represented through outreach materials and existing community organizations.</p>	Town Council Town Clerk	Ongoing	Staff Time Volunteer Time

SHORT TERM = 2015-2019	MEDIUM TERM = 2020-2024	LONG TERM = 2025-2035
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CHAPTER 10: STEWARDSHIP AND IMPLEMENTATION

Goal 10.6

Mansfield collaborates with area communities and UConn to achieve common goals and develop regional service sharing models for mutual benefit.**Measures of Effectiveness:**

- Number of grant applications filed jointly with other communities
- Cost savings resulting from new service sharing agreements

Strategy A | Strengthen relationships with surrounding communities.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Encourage Town staff, commissions and committees to establish joint meetings with counterparts in nearby communities.</p> <p>Many of the goals and challenges identified in this plan are not unique to Mansfield. Working with surrounding communities can help to increase the political support needed for change at the state level and identify opportunities for sharing resources.</p>	Town Manager	Ongoing	Staff Time Volunteer Time
<p>2. Identify opportunities for joint grant applications.</p> <p>Joint applications can increase the chances of funding due to increased leverage and broader implementation possibilities. As grant opportunities arise, staff should reach out to potential partners.</p>	Town Manager All Departments	Ongoing	Staff Time Volunteer Time

Strategy B | Continue to explore opportunities for sharing of regional services.

ACTIONS	WHO	WHEN	RESOURCES
<p>1. Identify opportunities for shared services and analyze service options for both fiscal and service impacts.</p> <p>Work with UConn, CRCOG and surrounding communities to identify services that could potentially be shared based on industry and community trends. Any proposal for shared services should include an analysis of how various options would change how a service is provided in participating communities and the short and long-term fiscal impacts of each option. Need for new facilities to support regional services should be included in this analysis.</p>	Town Manager Finance UConn Town Council	Ongoing	Staff Time Volunteer Time

SHORT TERM = 2015–2019

MEDIUM TERM = 2020–2024

LONG TERM = 2025–2035

ACTIONS	WHO	WHEN	RESOURCES
<p>2. Engage the community in regional service sharing discussions.</p> <p>While the concept of regional service sharing is appealing to many residents, there are also significant concerns that regionalization would result in a lower level of service. Decisions on regionalization of services should include ample opportunities for discussion with residents as to the advantages and disadvantages to the Mansfield community, including long-term costs.</p>	<p>Town Manager Town Council</p>	<p>Ongoing</p>	<p>Staff Time Operating Budget</p>



APPENDIX A:

Demographic Summary: Mansfield's Residents and Households Today

A NOTE ON THE DATA

Data for the Mansfield Tomorrow plan was gathered from public and private sources. Census 2010 data is used when available. Some data is from the American Community Survey (ACS). The US Census Bureau no longer collects housing and economic data in census years through a census long form survey. Instead, the Census Bureau conducts surveys every year and releases data based on rolling three- years averages through the ACS.

For communities like Mansfield, which has a relatively small population, nearly half of which lives in campus housing, surveys of this type introduce a large margin of error in many data sets, making census enumerations preferable when available. The plan also used proprietary databases such as ESRI Business Analyst and EMSI when data from public sources was unavailable. Mansfield's unusual demographic profile should be taken into account in comparisons with other Connecticut communities, which are often based on analyses of town-wide data. The town's high percentage of university students has implications for many demographic markers such as age, income, household characteristics, and so on, making it quite different from towns where the overwhelming majority of the population lives in households.

Population Trends

Population. As home to the main campus of the state's flagship university, demographic statistics for Mansfield cannot be taken at face value. Of the 26,543 residents identified in the 2010 census, it is estimated that approximately 14,300 residents included in the town's population were students at the university. Additionally, over 1,100 residents were living in other transient housing such as the now closed state prison and nursing homes. When these transient populations are deducted, it is estimated that the town's year-round permanent population is closer to 11,100.

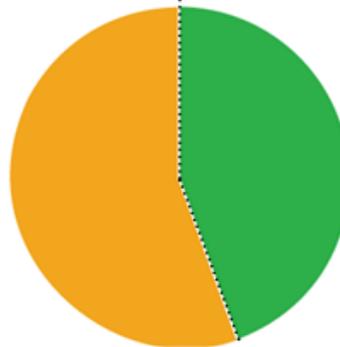
The following population profile summaries attempt to distinguish between the transient student population and the permanent resident population to the extent possible given the way in which census data is collected and reported. However, as it is not possible to completely extract the student population from census data, the statistics must still be viewed with an acknowledgement that numbers may be skewed based on the unique characteristics of Mansfield's population.

Population and Household Growth. While Mansfield's total population grew from 20,720 in 2000 to 26,543 in 2010, much of this growth can be attributed to growth in the student population. For example,

FIGURE 1.1: TOWN OF MANSFIELD POPULATION 2010

TOTAL POPULATION: 26,543

Student/transient population estimate: 15,400	Year-round residents estimate: 11,100
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SOURCE: US CENSUS BUREAU, TOWN ESTIMATES

the population housed in college dormitories grew by 4,293 from 2000 to 2010. This change alone accounts for 74% of the total population increase during that time period.

Examining changes in household growth during the same time period provides a clearer picture of how the permanent population of Mansfield has changed during the same time period. Table 1.1 depicts the change in households by type from 2000-2010.

Table 1.1. Change in Households by Type

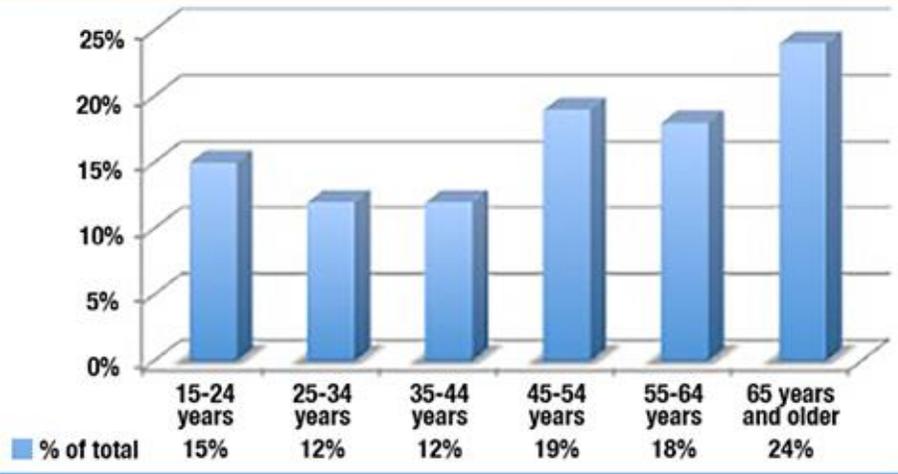
	2000		2010		% Change 2000- 2010
	Number of Households	% of Total Households	Number of Households	% of Total Households	
Total Households	5,291	100%	5,586	100%	5.5%
With children under 18	1,543	29.2%	1,446	25.9%	-6.3%
With individuals 65 years and older	1,289	24.4%	1,448	25.9%	12.3%
Total Family Households*	3,123	59%	3,138	56.2%	0.005%
With Children under 18	1,485	28%	1,349	24%	-9%
Married Couple Families	2,562	48.4%	2,486	44.5%	-3%
Total Non-Family Households	2,168	41%	2,448	43.8%	12.9%
Single Person Households	1,428	27%	1,426	25.5%	-0.001%
Single Person Household over 65 years	545	10.3%	606	10.8%	11.2%
*Family Household=People related by blood, marriage or adoption.					

Source: US Census Bureau: 2000 and 2010 Census Data

The increase in non-family households provides further evidence that the growth in total population between 2000 and 2010 was not due to a significant increase in the number of year-round residents. With the number of single-person households remaining constant, the increase in non-family households is due to an increase in the number of households with multiple unrelated individuals, circumstances often associated with students. The number of families remained constant during this time period, and more significantly, the number of households (both family and non-family) with children under 18 decreased. In contrast, the number of households with individuals over 65 years of age increased significantly, including an 11.2% increase in the number of single person households where the householder is over 65 years in age.

Age Composition. Age of residents is another demographic statistic that is significantly skewed by the student population. When looking at age distribution for the total population, the largest age groups are 15-19 years (23%) and 20-24 years (34%), resulting in a median age of 21.5. To get a better representation of the age composition of year-round residents, Figure 1.3 provides a breakdown by age of householders. In contrast to the total population, only 850 (15%) of householders are between the ages of 15 and 24. Similarly, while residents 65 years of age and older represent only 8% of the total population, they account for 24% of householders.

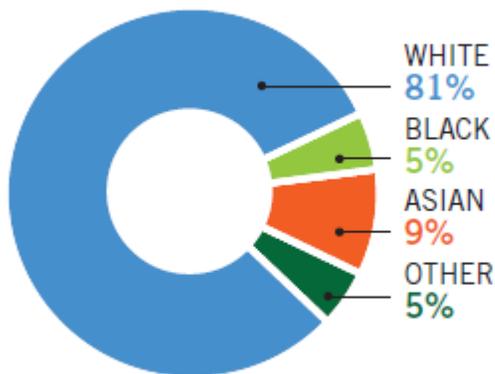
FIGURE 1.3: AGE OF HOUSEHOLDS AS % OF TOTAL HOUSEHOLDERS



SOURCE: US CENSUS BUREAU

Racial and Ethnic Composition. According to the 2010 Census, over 80% of Mansfield residents identify themselves as White, 9% Asian, 5% Black or African-American. Six percent (6%) of residents are of Hispanic origin. As with other demographics, the overall percentages are influenced by the student population; however, racial and ethnic composition for family households breaks down along similar lines, with 88% of families having a White householder, 7.6% Asian, and 1.9% Black or African-American.

FIGURE 1.2



SOURCE: US CENSUS BUREAU

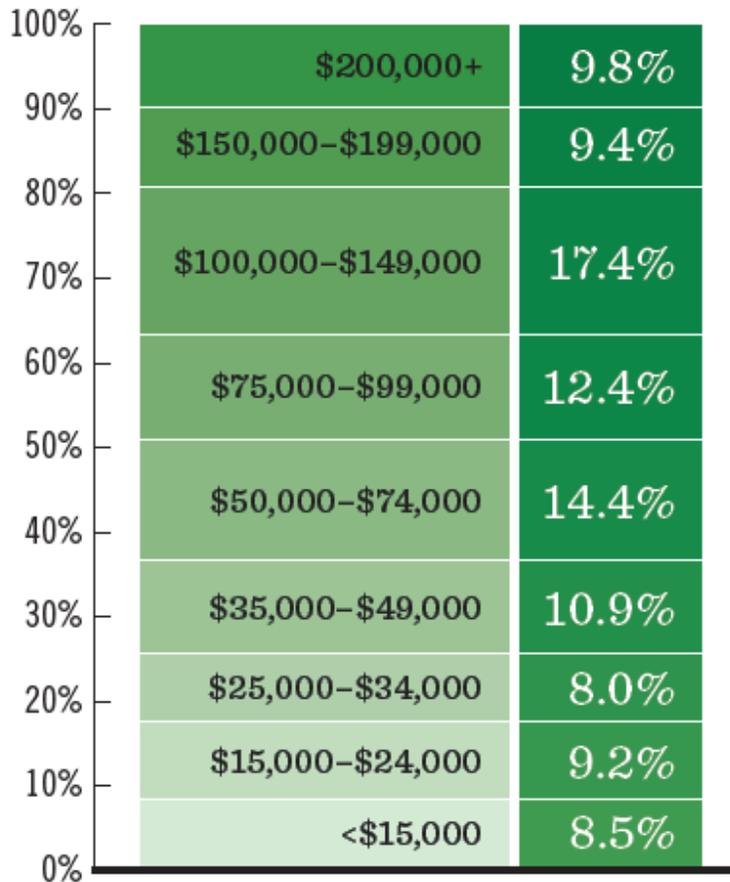
Educational Attainment. Educational attainment in Mansfield is high, as might be expected in a university town. As of the 2010 Census, over 50% of residents over age 25 hold a Bachelor’s degree or higher and over 10% of residents hold doctorate degrees.

Income Profiles and Poverty Data. In 2012, the median household income for Mansfield was \$67,615, which is lower than both Tolland County (\$80,887) and the state (\$69,519) but higher than Windham County (\$58,489).¹ Figure 1.4 provides a breakdown of household incomes in 2012. The lower ranges of

¹ CERC 2014 Mansfield Town Profile

household income likely include undergraduate and graduate students with no or little income, contributing to a median household income that is artificially much lower than the median for Tolland County.

FIGURE 1.4: 2012 HOUSEHOLD INCOME



A better indicator of the number of year-round residents at the lower end of the income scale are statistics that focus on families and children. The 2013 American Community Survey estimated that 14.1% of families in Mansfield had incomes below the poverty level in previous 12 months. The non-profit organization End Hunger Connecticut! Reported that in 2013 there was a monthly average of 646 food stamp recipients in Mansfield and 23% of public students were eligible for free or reduced lunch. These statistics were based on data from the Connecticut Department of Social Services, the Connecticut State Department of Education and the Connecticut Department of Labor.²

² "CT Hunger Map: Table of Data." End Hunger Connecticut! Retrieved October 8, 2013 from www.endhungerct.org

APPENDIX B:

Community Engagement Summary

The Mansfield Tomorrow Plan – Mansfield’s 2015 Plan of Conservation and Development – benefitted from a conscious commitment to extensive public outreach and citizen engagement that provided all members of the Mansfield community with an opportunity to share their hopes and aspirations for Mansfield’s future.

The Plan distills many hours of community activity and the contributions of hundreds of Mansfield residents and stakeholders who participated in a town-wide Community Visioning Workshop, attended community open houses, provided personal vision statements, participated in an online vision survey, contributed comments via email or the Mansfield Tomorrow MindMixer site (ideas.mansfieldtomorrow.com), and provided feedback at three Information Hubs. The Plan also reflects thoughtful discussion and feedback from the Mansfield Tomorrow advisory and focus groups and from other Town committees, whose members carefully reviewed community input and draft materials, and who offered guidance on development of the Plan.

1. OVERVIEW OF COMMUNITY ENGAGEMENT ACTIVITIES

Community outreach for the Mansfield Tomorrow Plan incorporated a variety of tools and activities, allowing residents and other stakeholders to participate in ways that worked best for them. Each step in the Plan’s development included multiple ways for community members to follow the planning process and to share comments and ideas. The goal was to offer a variety of ways for residents to participate so that the planning team would receive input from a broad cross section of the Mansfield community. The community engagement process included:

- **Guidance by Town groups and committees**, including the Mansfield Tomorrow Advisory Group, three Mansfield Tomorrow Focus Groups, and a range of Town committees
- **Interviews** with over 70 town residents, business owners, workers, elected officials, municipal staff, committee members and others
- **E-Engagement**, offering opportunities for participation via computer, cell phone or tablet, including:
 - Project website - www.MansfieldTomorrow.com
 - Online idea and comment forum - ideas.MansfieldTomorrow.com
 - E-mail blasts – email updates reaching over 3,000 people
 - Online survey – eliciting over 330 responses
 - Textizen survey – through which over 80 people used their cell phones to text responses to survey questions
 - Interactive mapping tool – through which residents discussed their priorities for preservation and “smart growth” development
- **Public meetings and open houses** which drew hundreds of people from across the community and included the following events:
 - Kick-Off Event
 - Community Visioning Forum

- Community Open House
- **Information Hubs** located at the Library, Community Center, and Senior Center, providing the latest information and opportunities to share comments
- **Other activities** aimed at raising public awareness and engaging community members, including:
 - Distribution of 400 Mansfield Tomorrow magnets and 1,200 Mansfield Tomorrow bookmarks at the Mansfield Public Library
 - Visits by Town staff to local organizations (e.g., volunteer fire fighters, PTO, library events, farmers markets, faith communities)
 - Presence at the Town’s 2012 and 2013 Festival on the Green, including coloring sheets for kids
 - Using town news and information sources to spread word about the planning effort and upcoming events



Mansfield Tomorrow bookmark

The planning team used the community’s feedback and guidance to shape all aspects of the Plan, from creating the Vision and Principles, to developing the strategies and actions needed to achieve that vision.

2. GUIDANCE FROM CITIZEN COMMITTEES AND GROUPS

Citizen groups made up of knowledgeable people from the public, private and non-profit sectors worked with the planning team to provide guidance throughout the planning process. Members were appointed by Mansfield’s Planning and Zoning Commission (PZC) at the outset of the planning process, beginning in fall of 2012, following an open invitation to all interested Town residents, business owners, and other potential stakeholders. The PZC also asked Town committees, local organizations, the University, and other major stakeholders to appoint a representative to the Mansfield Tomorrow working groups relevant to their areas of focus.

The Mansfield Tomorrow Advisory Group was composed of 36 residents, business owners, UConn representatives, and others with a stake in the future of the town. Advisory Group members were representative of different geographic areas, backgrounds, experience, and interests. The Advisory Group served as a community “sounding board,” raising thoughtful comments and questions that helped guide development of the Mansfield Tomorrow Plan. The Advisory Group played a key role in each facet of the Plan, including outreach; development of the Mansfield Tomorrow Vision; review of Planned Development Area concepts; and review of the initial draft POCD document. The Group met approximately once a month between January and November of 2013.

Three Focus Groups worked closely with the planning team to develop specific strategies related to the following topic areas:

- Agriculture
- Economic Development
- Housing

The agriculture, economic development and housing Focus Groups met up to four times each, and each included 25 – 35 members. Focus Groups members brought interest and expertise related to the topic for which they provided guidance. Members of the Agriculture, Economic Development, and Housing Focus Groups played in active role in the development of strategy reports prepared on each topic, as well as the goals, strategies, and actions that are the core of the Mansfield Tomorrow Plan. Key to the development of the Agriculture Strategy Report was a Forum on Growing Farms in Mansfield, a workshop that brought together over 50 individuals involved in Mansfield’s agricultural sector to identify priorities and potential strategies for strengthening agriculture within the town.

Standing town committees and commissions also helped guide development of the Mansfield Tomorrow plan, including:

- Agricultural Committee
- Conservation Commission
- Economic Development Commission¹
- Historic District Commission
- Open Space Preservation Committee
- Sustainability Committee

3. STAKEHOLDER INTERVIEWS

The Mansfield Tomorrow initiative began with a series of interviews. To better understand the issues and opportunities confronting Mansfield, members of the planning team conducted over 70 interviews with town residents, business owners, workers, elected officials, municipal staff, committee members and others. Interviews focused on a range of issues, including agriculture, open space, economic development, zoning, housing, public safety, community facilities, the University, current and recent planning initiatives, and sustainability efforts. Information and insights from the interviews provided an important foundation for the planning effort, and helped shape the strategy reports prepared for agriculture, housing, economic development components of the Mansfield Tomorrow Plan.

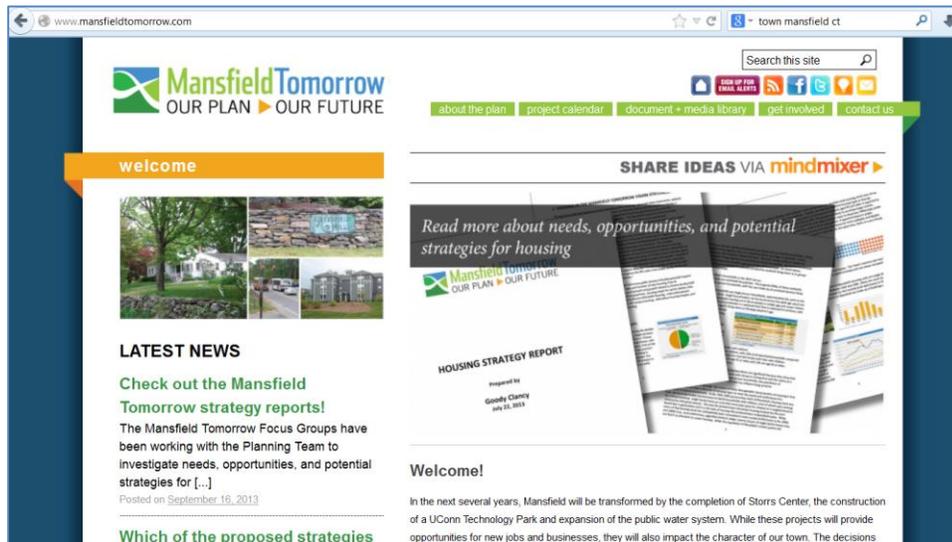
4. E-ENGAGEMENT

Digital outreach and community participation via computer, cell phone or electronic tablet were important components of the Mansfield Tomorrow planning process, reaching several thousand Mansfield residents, workers, and others. Email blasts, the MindMixer site, online and Textizen (responses sent via text using cell phones) surveys, an online mapping tool and the website all offered opportunities for people to follow the process and voice their perspective at any time of day and from any location. The Mansfield Public Library served as an important resource for those without internet access, or who had difficulty accessing the digital participation tools. For Mansfield, a community with a busy and highly educated population, digital outreach proved to be the most popular way to participate in the planning effort.

¹ The Economic Development Commission formed the core of the Mansfield Tomorrow Economic Development Focus Group.

a) Mansfield Tomorrow Website

The Mansfield Tomorrow project website (www.mansfieldtomorrow.com) served as a virtual information hub throughout the planning effort, providing a unified place for community members to find information about the plan; sign up for email blasts; find news on upcoming events and other opportunities to get involved; contact information for the planning team; and access project materials, including draft documents, maps and diagrams, meeting presentations and summaries, and background information.



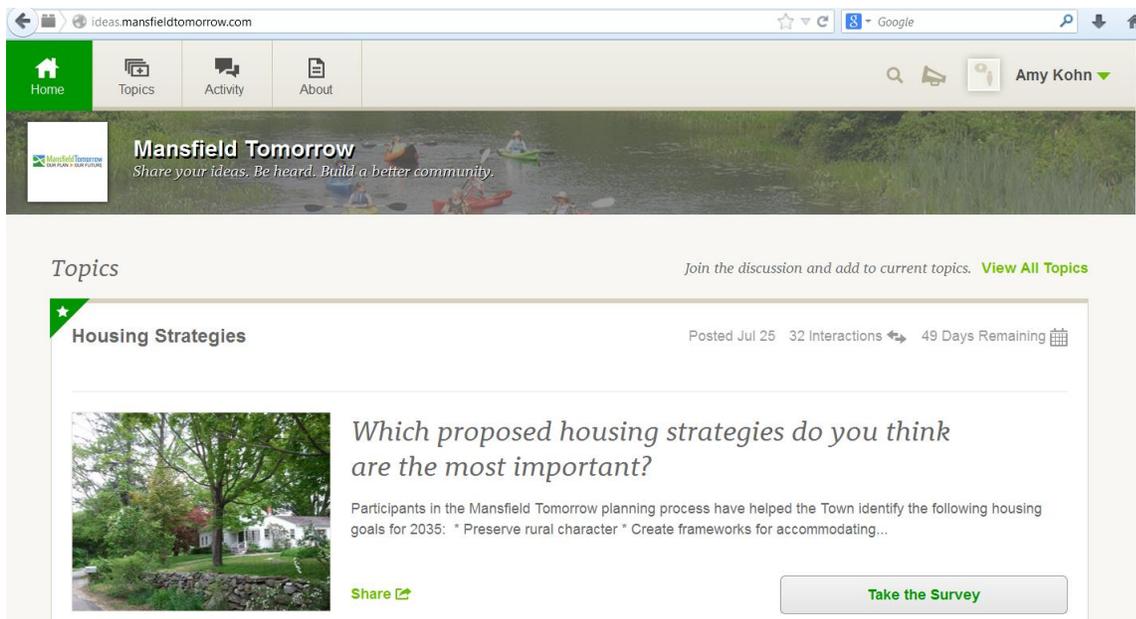
Mansfield Tomorrow website

b) Mansfield Tomorrow MindMixer Site

The Mansfield Tomorrow MindMixer site (ideas.MansfieldTomorrow.com) provided an online idea and comment forum – a virtual town hall meeting where community members could provide input on key questions and respond to others' input at any time throughout the planning process. Via the MindMixer site, community members weighed in on a broad range of topics, including their aspirations for the Town's future; thoughts on what's best about living in Mansfield; ideas for increasing Town revenues; likes and dislikes related to initial scenarios for the Planned Development Areas; and priorities among a range of housing, agriculture, economic development, and open space and conservation strategies. New questions were introduced periodically throughout the process. The MindMixer site received over 650 visits and 7,500 page views.

Questions discussed included:

- What's the best thing about living in Mansfield?
- If you could change one thing about Mansfield, what would it be?
- What is your vision for a greener Mansfield?
- How can Mansfield grow and expand, while protecting the character of each of our neighborhoods?
- What type of economic development is right for Mansfield and will help the Town pay its bills?



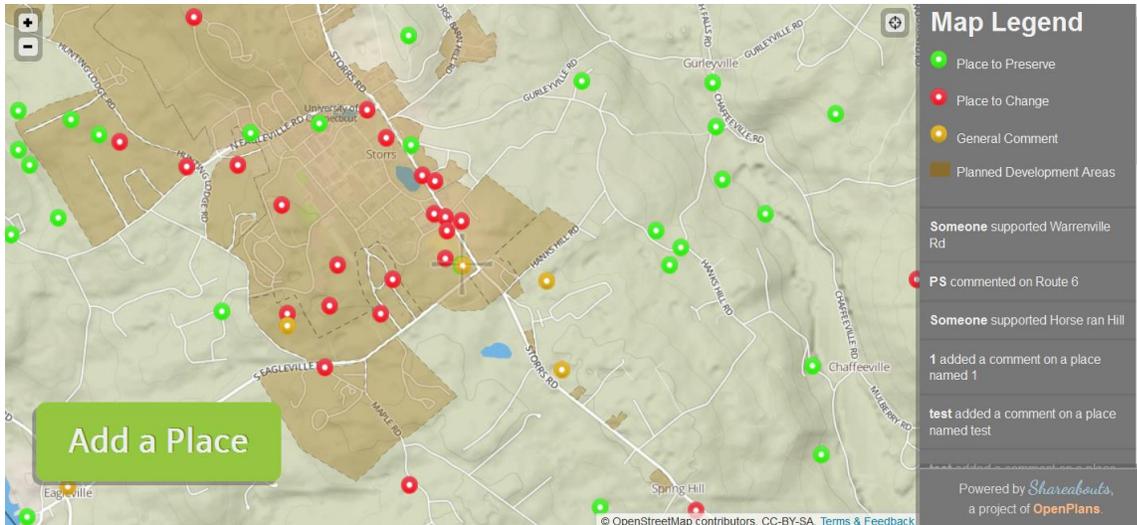
MindMixer Site: An online idea and comment forum

c) Email Blasts

Email blasts provided another way for community members to keep up-to-date on the Mansfield Tomorrow process, and to learn about new opportunities to provide input into the plan as it took shape. Many signed up for email blasts via the project website, while others were added to the email distribution list after participating in a Mansfield Tomorrow event. Recipients of email blasts received news on upcoming Mansfield Tomorrow events, additions the website, and online surveys. Over 3,200 people received Mansfield Tomorrow email blasts.

d) Online Survey, Interactive Mapping, Mansfield Patch Blog Series

Online surveys and an interactive mapping tool provided easy ways for community members to provide input at key points in the Mansfield Tomorrow process. An online survey focused on topics such as vision elements, preferred development types, and what worked well or could have been improved about recent meetings. Online survey for vision elements and preferred development types received over 300 responses. Several press releases helped to broaden awareness of Mansfield Tomorrow.



Community members used computer-based mapping tools to provide input on what places in Mansfield should be preserved or changed, as well to provide general comments on places of importance within Mansfield. The interactive map at <http://map.mansfieldtomorrow.com> incorporated comments from the Community Visioning Forum Open House, where attendees used “touchtables” to provide and map their comments, as well as comments added by individual community members who reached the online mapping tool via the Mansfield Tomorrow website link.

e) Textizen Survey

Textizen provided another vehicle for community input into the process – a survey tool that enabled respondents to quickly text their answers to questions posed by the Mansfield Tomorrow team. Posters were placed in locations across town, including the mall, the Community Center, medical offices, and retail establishments in Storrs Center and in other parts of town. The posters announced an initial question and provided a number to text a response. Those who responded to the initial question received follow-up questions via text. The questions focused on biking and walking facilities, to further explore community opinions on a topic that generated a high level of interest on the MindMixer site and at public meetings. Over 80 people participated in the Mansfield Tomorrow Textizen survey.



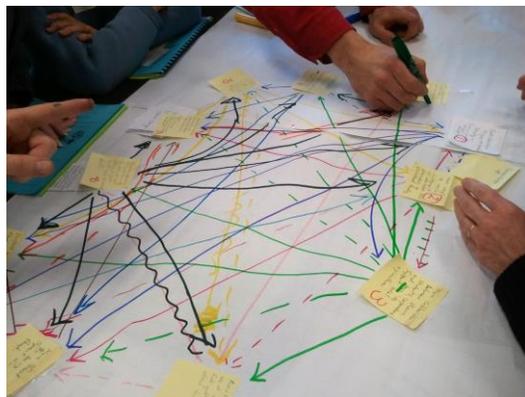
Textizen survey

- 90% of respondents indicated that they would walk to destinations in Mansfield if Route 195 had sidewalks.
- 78% of respondents indicated that they would be more likely to get around town on a bike if Route 195 and other major roads had bike lanes.
- Respondents reported infrequent use of bikes as a way to reach the Library, Community Center or Town Hall.

5. PUBLIC MEETINGS AND EVENTS

a) Mansfield Tomorrow Meetings and Events

Public meetings and events were held throughout the master plan process, offering community members the opportunity to share their hopes and aspirations for Mansfield's future, to learn more about the process and emerging findings, to provide feedback that would help shape the plan. There were four public meetings related to the Plan:



Mansfield Tomorrow public meetings and events

- a) **Kick-Off Event (January 30, 2013 | Mansfield Public Library - Buchanan Auditorium):** Held at the outset of the Mansfield Tomorrow process, this event drew approximately 90 people from across the community. Attendees were introduced to the Mansfield Tomorrow effort and the planning team, and then worked in small groups to provide input on questions such as: What

kinds of topics and questions should we ask people to discuss through the Mansfield Tomorrow process? Who should participate? Attendees emphasized the importance of a very inclusive process, open to all residents, employees, business owners, consumers of community services, etc. Community input from the Kick-Off Event helped shape Mansfield Tomorrow outreach efforts.

b) Community Visioning Forum: Workshop & Open House (March 9, 2013 | E.O. Smith High School): The town-wide Community Visioning Workshop and the Open House that followed drew over 90 members of the Mansfield community. The purpose of this event was to begin a discussion about the future of Mansfield in an interactive setting, specifically considering the twenty year vision for the Town. The event also provided a forum for exploring alternatives to conventional development in the Planned Development Areas (PDAs) identified within the 2006 Plan of Conservation and Development (POCD). At both the workshop and the open house, community members expressed a strong desire for:

- Preservation of Mansfield’s rural character and historic villages
- Continued presence of viable agriculture enterprises
- Support for development that’s appropriately located and consistent with the character of the Town (e.g., village-style and conservation-style development)
- A sense of community with more places to interact and more events to bring residents together
- An improved Town-Gown relationship that balances the interests of both parties
- More transportation options such as biking, walking and trails

Community input from this event shaped the Mansfield Tomorrow Plan Vision and provided an important foundation for development of the Plan.

c) Community Open House (June 18, 2013 | Mansfield Public Library - Buchanan Auditorium): Approximately 50 people participated in the June open house, which provided an opportunity for community members to review emerging strategies for housing, economic development, agriculture, and open space, as well as to see initial concepts for how smart growth development could occur within in several of the Planned Development Areas (PDAs) identified in the 2006 Plan of Conservation and Development (POCD). This event was an essential step in crafting concepts for the Planned Development Areas and in shaping the goals, strategies and actions documented within this Plan.

d) Forum on Growing Farms in Mansfield (February 2, 2013 | Mansfield Public Library - Buchanan Auditorium): In February of 2013, approximately 50 Mansfield farmers and other local and regional agriculture stakeholders gathered for a daylong workshop led by Yellow Wood Associates. This event served as the town’s annual Farmers’ Forum and focused on what could be done to help create and sustain viable agricultural enterprises in Mansfield. Workshop outcomes provided a foundation for the agriculture-focused goals, strategies and actions within the Mansfield Tomorrow Plan.



6. INFORMATION HUBS

Three Information Hubs - featuring information about Mansfield Tomorrow, stations for review and comment on emerging plan strategies, and draft documents – were located at the Library, Community Center, and Senior Center throughout the Mansfield Tomorrow planning effort. Information Hubs provided an easily accessible, in-person way for community members to follow the planning process and provide input.

7. OTHER OUTREACH ACTIVITIES

Throughout the process, the planning team used a variety of additional strategies to raise awareness about Mansfield Tomorrow. Those strategies include:

- **Visits to local civic organizations:** At the outset of the Mansfield Tomorrow planning process, Town staff visited the Volunteer Fire Fighters group, as well as school open houses and the Parent Teacher Organizations (PTOs) affiliated with Mansfield’s schools to introduce the initiative and speak with members of these groups about their aspirations for the Town. Staff also set up a booth at the Storrs Farmers Market on various occasions and met with representatives of local faith communities.
- **Presence at town events:** Town staff provided a Mansfield Tomorrow presence at the town’s 2012 and 2013 Festival on the Green. Staff provided information on the initiative to Festival attendees, responded to community questions, and provided a coloring sheet for kids. At the 2012 Festival on the Green, community members offered comments on what they like best about Mansfield. These comments were included on the MindMixer site. Staff also attended events at the Mansfield Public Library such as the kick-off of the 2013 summer reading program.
- **Distribution of magnets and bookmarks:** 400 Mansfield Tomorrow magnets and 1,200 Mansfield Tomorrow bookmarks were distributed to community members at locations such as the Mansfield Public Library.
- **Town news and information sources:** Opportunities for participation in the Mansfield Tomorrow process were noted within the Mansfield Minute, the town’s monthly public events calendar. The Mansfield Tomorrow initiative was featured on the Wayne Norman Show, a popular local radio program. Mansfield’s Deputy Mayor, Planning & Zoning Chair, Director of Planning and Development, and Natural Resources and Sustainability Coordinator / Mansfield Tomorrow Project Manager participated in the broadcast.

APPENDIX C: Open Space Evaluation Criteria

Whether an open space property is preserved by acquisition, conservation easement, donation, or a dedication resulting from the regulatory process, all open space preservation decisions are based on a comprehensive review of specific site characteristics. The Town uses the criteria outlined below to evaluate whether or not to preserve an open space property. These criteria are not weighted to help establish priorities. However, sites that address multiple primary categories or that would address a goal or objective of the Town's Plan of Conservation and Development have a higher priority. Land availability, acquisition costs and budgetary priorities also influence open space acquisition decisions. These criteria may be updated from time to time and adopted by the Town Council with input from the Open Space Preservation Committee and the Planning and Zoning Commission.

Planning: Identified as a potential resource in a government planning document.

- Identified or specifically referenced as a potential conservation, preservation or recreational resource in planning documents such as Mansfield's Plan of Conservation and Development, the CRCOG Regional Land Use Plan or the Connecticut Conservation and Development Policies Plan, or other local, state, or federal planning document

Historic: Conserves or preserves historic or archaeological resources.

- Site is located within or adjacent to a historic village or district.
- Site contains historic structures, sites or features, such as a mill site, cemetery, foundations, or stone wall
- Site contains archaeological resources

Habitat: Conserves, preserves or protects wildlife habitats and/or plant communities

- Site includes species listed by State or Federal agencies as endangered, threatened or of special concern, or classified as a critical habitat by CT DEEP
- Site is identified as a critical habitat by CTDEEP
- Site contains or helps protect notable plant or animal habitats, such as vernal pools, marshes, cedar swamps, or grasslands
- Site is within a large contiguous interior forest area
- Site includes a diversity of habitats

Water resource: Conserves, preserves or protects surface or groundwater resources

- Site is located within or proximate to a State-designated wellfield aquifer area, potential stratified drift wellfield area or existing public water supply well
- Site is proximate to the Willimantic Reservoir or tributary watercourses and waterbodies
- Site contains or impacts water resources, such as wetlands or watercourses
- Site contains a flood hazard area

Agriculture and forestry: Conserves, preserves or protects agricultural or forestry land.

- Site contains prime farmland soils, statewide or locally important farmland soils.
- Site is located within an existing agricultural area
- Site is within a large contiguous interior forest or within a site implementing a long-term forest management plan
- Site buffers an existing agricultural use

Scenic: Conserves, preserves or protects scenic resources

- Site contains an area or view of scenic importance, such as an overlook, ridgeline, open field, meadow, river valley
- Site contains significant roadside features, such as specimen trees and noteworthy stone walls
- Site abuts or is visible from a Town-designated Scenic Road
- Site is visible from existing roadways, trails and/or readily accessible public spaces
- Site contributes to the scenic quality of one of Mansfield's commercial areas, compact residential areas, mixed use center, or village center.

Connectivity: Creates or enhances connections

- Site is located along a state designated greenway, such as the Willimantic River, Mt Hope, Fenton, Natchaug, the Nipmuck Trail, or a potential town-wide or multi-town greenway or trail system
- Site expands an existing park or open space property, contributes to a continuous area of open space, protects a wildlife corridor, and/or provides a new trail access between open space properties or from existing roads or subdivisions to open space properties)
- Site links an existing or proposed residential neighborhood to an open space property/park area, school or commercial area
- Site buffers existing trails

Recreation: Creates or enhances recreational opportunity

- Site is physically suitable for active recreational use
- Site abuts an existing school, playground or active recreational site
- Site provides boating or fishing access to watercourses or waterbodies
- Site abuts or is within the watershed of existing outdoor public swimming site, such as Bicentennial Pond in Schoolhouse Brook Park
- Site is located within or proximate to existing areas of higher-density residential development

APPENDIX D: Natural Resources Protection Zoning (NRPZ)

About NRPZ

The next step in the evolution of conservation zoning is NRPZ, which can take a number of forms, but the essence is to combine low underlying densities with compact patterns of development so that significant areas of land are left permanently undeveloped and available for agriculture, forestry, recreation, watershed, carbon sequestration, and wildlife habitat.”¹ NRPZ does not have a defined lot size or density but instead uses a formula to calculate the amount of developable land and undeveloped land, and the number of units.

While similar to conservation subdivision zoning in many respects, NRPZ regulations provide a number of different approaches to establishing subdivision design that protects and preserves critical natural and environmental features on development sites. In fact, one of the more important steps in enacting NRPZ regulations is to make the use of the regulations in subdivision design mandatory. When cluster and open space subdivision regulations are optional or require extensive public review and special permits, most developers are not likely to use them. A system that allows these development approaches by right (without a special permit), but that provides sufficient guidance to produce desired outcomes, is more likely to be successful.

It is important in designing NRPZ that serious consideration be given to how the regulations are structured in terms of the formulas that determine the lot yield (the number of housing lots created) under the NRPZ regulations versus the lot yield of a



¹ Jeffrey R. Lacy, AICP, Robert W. Ritchie, Esq., and Joel S. Russell, Esq., “Natural Resource Protection Zoning: The Green Side of Smart Growth,” December 2010, http://www.mass.gov/envir/smart_growth_toolkit/bylaws/green_side_smart_growth_nprz.pdf

conventional subdivision, which is typically based on underlying zoning. Because NRPZ is a new concept, public discussion about how this tool works and how it might best be tailored to Mansfield will be important in shaping and implementing regulations. Discussion might consider:

- Areas of town where NRPZ could help advance community goals—and areas where other regulatory tools would be more appropriate
- Existing density patterns and resources
- Potential impacts on individual property rights (actual or perceived)

In addition, communities without public water or public sewer systems in rural areas, like Mansfield, will need to work with state and regional health district development policies and regulations to make NRPZ development work. While NRPZ has not been adopted as yet by any Connecticut municipality, there appears to be no legal impediment to its use.

Ultimately, NRPZ is a tool Mansfield can use to preserve natural resources and important features of the land while encouraging development of neighborhoods, rather than simply new streets and housing lots. This appendix provides examples of how NRPZ formulas employed by various communities can be used to cluster housing and preserve a greater amount of open space by applying the formulas to a recently subdivided parcel in Mansfield. Any formula developed for use in Mansfield will need to be tailored to our community to achieve the vision and goals identified in this plan. NRPZ regulations will also need to include standards to prevent forest fragmentation and address current concerns with use of common driveways (See Goal 3.4, Strategy A, Action 4 for more information).

NRPZ development needs to be supported by either water and sewer infrastructure or community systems. In Mansfield today, a conservation subdivision will still result in individual lots of at least one acre, because each house is required to have a private well and a septic field on its own lot. Without defined lot sizes and densities, NRPZ provides more flexibility to preserve resources, but reduced lot sizes would require community septic systems. While the Eastern Highlands Health District regulates systems with a design flow of less than 5,000 gallons per day, community systems and alternative treatment systems are regulated by the state Department of Energy & Environmental Protection (CT DEEP) Subsurface Sewage Disposal Program.² For Mansfield, a more complex and potentially time-consuming approval process for community systems is in a context where subdivisions tend to be relatively small and there is no incentive to use community systems. If the Town pursues NRPZ, it will need to take a more proactive role in encouraging community septic systems.

² The state has issued a Draft Guidance Document for Design of Large-Scale On-Site Wastewater Renovation Systems, http://www.ct.gov/deep/lib/deep/water_regulating_and_discharges/subsurface/2006designmanual/designmanual2006.pdf

How does NRPZ work?

The purpose of NRPZ regulations is to preserve open space and water resources by encouraging compact development patterns and more creative site design than typically allowed by traditional subdivision regulations.

Traditional subdivision regulations simply indicate the allowable number of housing units regardless of site-specific features and provide no guidance about where homes should be located on the site. NRPZ calculations tailor development to each site, ensuring conservation of natural features and minimizing the development footprint. The allowable number of housing units, required conservation area, and developable area for a site are determined using a straightforward calculation. Conservation site analysis determines the areas of the site that are most important to protect (wetlands and steep slopes especially).

The calculations towns that have adopted NRPZ vary slightly but generally follow the same pattern.

- First, the site areas that are most important to conserve are deducted from the *total* site area to produce the *net* site area.
- The net site area is then divided by certain factor (in these examples, 3 or 5) to calculate the number of allowable housing units.
- Additional housing units can be earned by meeting specified requirements such as providing affordable housing units, sustainable site features, or preserving additional open space.

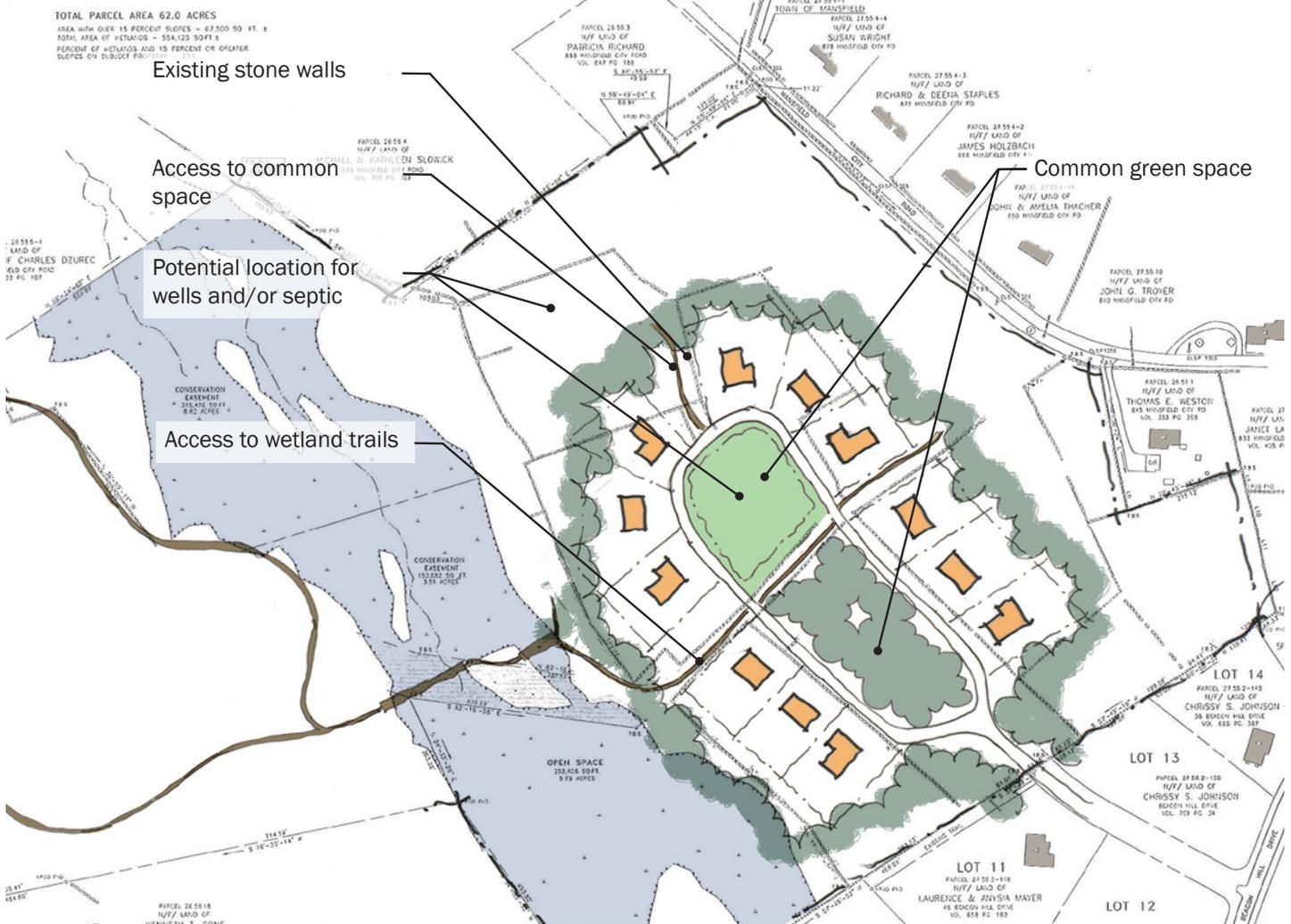
In some cases, the minimum required open space is calculated separately by multiplying the net acreage by a percentage (in these examples, 65% or 80%). The result is an allowable number of units that must be located within a determined development envelope.

If Mansfield decides to adopt this approach, the key variables that must be discussed and established in the regulations include:

- Divisor or “factor” used to determine allowable housing units (lower density better for conservation)
- Extent to deduct constrained land (wetlands and steep slopes)
- Minimum required open space (higher percentage better for conservation)
- Density bonus criteria (affordable housing, sustainable design, public trail access, etc.)
- Approach to water and sewage

In the pages that follow are a few examples of how NRPZ can be used to create neighborhood-oriented subdivisions that conserve natural resources and other important features of a site. The illustrations demonstrate examples of how housing can be clustered; they are not intended to be used as examples of site planning/layout for an entire parcel, particularly with regard to location of development in relation to natural and cultural resources.

Potential Development Concept: Natural Resource Protection Zoning (NRPZ)



Site area: 62 acres
 Preserved area: 51 acres
 Developed area: 11 acres

Summary:

- Create 12 half-acre lots organized around a central shared green space
- Shared driveways reduce curb cuts
- Shared green space used for community garden, recreation space, and stormwater absorption
- Shared or community wells and septic fields located on periphery of parcels or under central green space

Potential Development Concept: Natural Resource Protection Zoning (NRPZ)



Site area: 62 acres
Preserved area: 55.5 acres
Developed area: 6.5 acres

Summary:

- Create 12 quarter-acre lots organized around a central shared green spaces
- Shared driveways reduce curb cuts
- Shared green spaces used for community gardens, recreation, and stormwater absorption
- Shared or community wells and septic fields located on periphery of parcels or under central green spaces

Potential Development Concept: Natural Resource Protection Zoning (NRPZ)



Site area: 62 acres
 Preserved area: 47 acres
 Developed area: 15 acres

Summary:

- Create 20 half-acre lots organized around a central shared green spaces
- Shared driveways reduce curb cuts
- Shared green spaces used for community gardens, recreation, and stormwater absorption
- Shared or community wells and septic fields located on periphery of parcels or under central green spaces