



# **Agriculture and Farmland Protection Plan**

**Town of Hartford, New York**

2012



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# 1. EXECUTIVE SUMMARY

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Agriculture is the foundation of Hartford's economy, rural character and way of life. The local economy relies on our farmland and other natural resources being used wisely for agricultural production and related agricultural businesses. Hartford residents value the rural lifestyle and scenic surroundings offered by our small, agricultural community. The community supports this plan for the long-term viability of agriculture to ensure the industry can remain a significant contributor to the economic and social well-being of the town.

The successful future of Hartford's agricultural industry will depend on several factors, but perhaps the most important is to ensure that a substantial portion of our land base remains dedicated to productive agriculture and available to be farmed by future generations. The planning process for the development of this Agriculture and Farmland Protection Plan resulted in the following long-term vision for the future of agriculture in Hartford:

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We will optimize the use of our land base to sustain a viable agricultural economy and way of life in Hartford. Our community will be proactive in fostering a strong and progressive agricultural economy by supporting:

- Farmers and business owners through careful consideration of the impact of all municipal actions and policies on agriculture and agricultural business with the intent of simplifying the process of starting, operating and expanding agriculture and agricultural businesses.
  - Fair and equitable taxation that encourages landowners to keep productive land in agriculture, including farms operated on small acreages or as a secondary income source.
  - Land use policies that encourage diversification of the town's tax base, that minimize the amount of productive agricultural land converted and fragmented to accommodate non-farm uses, and that favor development that would not demand municipal and educational services in excess of the tax revenues it would generate.
  - Organizations and programs that assist farmers, business owners and residents with maintaining a healthy, prosperous and sustainable agricultural economy.
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With this vision as a guide, we have developed an Agriculture and Farmland Protection Plan for the Town of Hartford that consists of recommendations related to the future of the town's farmland and agricultural economy. Detailed discussion on the important agricultural issues facing Hartford, as well as related policies and recommendations for future decision-making, is found throughout this plan. Central to this plan is a discussion in Chapter 4 of a strategy for the long-term viability of agriculture and related businesses in Hartford.



## 2. INTRODUCTION

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### 2A. Authority

In 1992, New York State adopted the Agricultural Protection Act to help sustain the farm economy and promote local initiatives to protect agriculture and farmland. The act authorized the development of county farmland protection plans and county Agriculture and Farmland Protection Boards.

The state modified its agricultural protection programs (Article 25-aaa) in 2006 to authorize local towns to develop agriculture and farmland protection plans (Section 324-a). The law requires that local plans include identification of land areas proposed to be protected, analysis of those lands related to their value to the agricultural economy, open space value, consequences of possible conversion, and level of conversion pressure, and a description of actions the town intends to use to promote continued agricultural use.

### 2B. Purpose

The Town of Hartford Comprehensive Plan establishes agriculture as the town's primary land use and industry. Our farm community faces ongoing economic challenges, which threaten the ability of landowners to keep their land in productive agricultural use. Hartford has extensive agricultural resources that have created the rural character we value. This plan provides a toolbox of ideas and actions that can be implemented over time to improve the economic viability of agriculture in Hartford and conserve our base of productive farmland. This plan builds on and is more specific than the Comprehensive Plan.

Overall, the Agriculture and Farmland Protection Plan will:

- Recognize agriculture as Hartford's primary land use and industry.
- Provide a framework for the promotion of agriculture in Hartford.
- Promote opportunities for new farm operations and diversification of Hartford's agricultural economy.
- Promote agricultural activities that produce and encourage consumption of healthy and local food.
- Provide additional leverage and success in receiving future state funding.
- Assist Hartford landowners who wish to participate in state or federal purchase of development rights and conservation programs.
- Recommend guidelines that the Planning Board can use during project review to maintain the viability of agriculture and conservation of farmland to the maximum extent practical.

### 2C. Process

Hartford adopted a revised Comprehensive Plan in 2010, which sets forth a long-term vision and goals for our community. Preservation of our agricultural economy, rural character and small-town way of life are the primary themes of the Comprehensive Plan.

As the first step in implementing the Comprehensive Plan, the Town of Hartford initiated an agriculture and farmland protection planning process by submitting a grant proposal to the New York State Department of Agriculture and Markets for funding to develop this plan. This funding was awarded in 2010.

Planning activities began in the fall of 2010 and included the following steps:

- Research and analysis of the current conditions of farms and farmland in Hartford.
- Outreach to the farm community to understand their concerns about and attitudes toward the future of agriculture in Hartford.
- Identification of the challenges and issues facing agriculture in Hartford and regionally.
- Identification of the resources and opportunities available in Hartford and regionally to support agriculture.
- Drafting of a vision statement for agriculture in Hartford.
- Development of specific strategies for the protection of agriculture and farmland in Hartford.
- Development of a priority ranking system to identify areas that are critical to continuing agriculture in Hartford.
- Drafting and adoption of a complete plan that meets the statutory requirements of Section 324-a of Article 25aaa of the New York State Agriculture and Markets Law.

This plan was developed through an open process that provided a variety of opportunities for public input including:

- Working with a steering committee composed primarily of farmers.
- Conducting a survey of farmer operators and farmland owners.
- Meeting with stakeholders to explore strengths, weaknesses, and opportunities related to agriculture.
- Meeting with representatives of a variety of agriculturally-oriented groups and agencies.
- Conducting public meetings to present the plan and take comments from the farm community and general public.

## 2D. Definitions

Agriculture is defined and interpreted in a variety of ways depending on context and purpose. Defining agriculture to determine what operations or locations in Hartford may be eligible for incentives, funding or programs is an important function of this plan. Hartford has developed the following definitions of agriculture and agricultural businesses.

**Agriculture.** Agriculture in Hartford is defined as an activity that produces food, fiber, animal products, forest products and/or other renewable goods and services from the land, and includes:

- The practices, buildings, facilities and equipment associated with the production, preparation, processing and/or sale of crops, plants, biomass and forest products.

- The practices, buildings, facilities and equipment associated with the raising and keeping of livestock, and the processing and/or sale of the livestock raised on the farm and/or their by-products.
- The practices, buildings, facilities and equipment associated with managing and processing agricultural or silvicultural waste generated on-site to produce fertilizer, compost, fuel or similar products.

Agriculture does not include the commercial extraction of non-renewable earth resources (soils, rock, ore, gas, etc.), the commercial extraction of surface or ground water, or utility-scale power generation.

The Town of Hartford also recognizes agriculture occurring at a variety of scales, whether operated as an income-generating business, or whether operated for subsistence or enjoyment. All types of agricultural operations maintain our productive land base, rural character and contribute to the ongoing viability of the town's agricultural economy.

Agriculture relies upon and supports a range of other businesses, which this plan acknowledges as vital to the future viability of our agricultural economy including:

**Agricultural Enterprises.** Farm-based businesses that have expanded into commercial or industrial enterprises that process, manufacture, package, and/or sell value-added products derived from raw agricultural products produced both on the farm and imported from other farms.

**Agri-Tourism.** Farm-based businesses that provide accommodations and/or activities for visitors for the purpose of enjoyment, education, and/or hands-on involvement in the operation of the farm.

**Ag-Support Businesses.** Off-farm businesses that provide goods and services necessary to carry on an agricultural operation such as sales of farm equipment and supplies, farm machinery repair, transporting and processing of agricultural products/livestock, veterinarians, etc.



## 3. BACKGROUND

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### 3A. History

Upon arrival to the land that would become the Town of Hartford in the 18th century, colonial settlers began to clear the forest and make the land suitable for farming. At first, farms were primarily subsistence operations. Agriculture developed rapidly, however, as farmers began to produce a variety of products for sale.

The 19<sup>th</sup> century saw several significant transitions in agriculture as the town's farmers adapted to changing markets and technology. Raising sheep for wool was the primary agricultural enterprise in town during the first half of the 1800s (the 1840 Census counted more than 210,000 sheep in Washington County). In the mid-1800s, hops was the most widely grown field crop. At the end of the 19th century Hartford's principal agricultural products were potatoes and corn, and dairying was becoming increasingly important with several cheese factories operating in town.

William Stone's 1904 book, *Washington County New York: It's History to the Close of the Nineteenth Century*, stated, "*Dairy farming supplemented by market gardening it seems probable will be the notable agricultural enterprises in the future of Washington County.*" This prediction proved to be true throughout the 20<sup>th</sup> century, as dairying became the town's primary industry.

In the early 21<sup>st</sup> century, agriculture in Hartford is again facing a period of transition and perhaps some lessons in adaptation can be learned from those who farmed this land two centuries ago.

### 3B. Physical Setting

The Town of Hartford is centrally located in Washington County, New York. Hartford is a rural town with a land area of 43.5 square miles and a population of 2,269 people (2010 Census). Bordering towns include Fort Ann (north), Granville (east), Hebron (southeast), Argyle (south) and Kingsbury (west). Two of the region's main east-west highways, Route 149 and Route 196 intersect with Route 40 (a north-south highway) in Hartford. The town is approximately 20 miles east of Interstate 87 and less than 10 miles west of Vermont.

Hartford's climate is characterized by a wide temperature range, heavy winter snowfall and a moderately heavy annual precipitation total. While there has not been any long-term collection of climate data in Hartford, measurements taken at weather stations in Whitehall and Glens Falls provide a general picture of the region's climate. Average annual precipitation is in the 36 to 40 inch-range, while the average annual snowfall is about 66 inches. Precipitation is fairly evenly distributed through the year. Average monthly temperatures range from around 20° F in January to 70° F in July. The growing season averages 155 days, with the last killing frost typically occurring around the first week of May and the first killing frost occurring around the first week of October.

Hartford sits on the border between the Hudson Valley and the Taconic foothills, a fact that is clearly evident on the ground. West of Route 40, the terrain is relatively level in-

terspersed with gentle, rolling hills. A sharp ridgeline rises east of Route 40 with steeper hills beyond - the western foothills of the Taconic Range. Most of the town's farmland is found in the valley west of Route 40, with smaller areas remaining in productive use in the town's uplands.

### 3C. Land Base

- ⦿ Agriculture is the predominate land use in Hartford. 40% of the town's land area is cleared land (approximately 11,000 acres) and more than half of the town's land area is part of a farm.
- ⦿ Hartford's agricultural land base has not been fragmented by development. 90% of the town's land area remains part of a parcel 10 acres or more in size; 70% remains part of a parcel 50 acres or more in size.
- ⦿ Hartford has high quality agricultural soils. There are 1,290 acres of land in Hartford with prime agricultural soils as defined by the NRCS and 8,670 acres with soils classified as important farmland soils.
- ⦿ Approximately 21,600 acres of land in Hartford have been designated by Washington County as an Agricultural District (78% of the town's land area).
- ⦿ More than 13,000 acres of land in Hartford received an Agricultural Assessment in 2010.

### 3D. Farm Operations and Agri-Businesses

- ⦿ Hartford has approximately 90 farms currently being farmed by 65 operators (includes land receiving an agricultural exemption and additional land identified as a farm by its owner).
- ⦿ Hartford has 23 dairy farms, 9 beef farms, 8 hay farms, 6 maple producers and 4 sheep farms.
- ⦿ Other agricultural operations include farms that raise pigs, alpacas and bees, that produce eggs, and that grow vegetables, apples, horticultural plants, field crops, and hops.
- ⦿ Hartford has 24 farms smaller than 50 acres, 16 farms with 50 to 99 acres, 23 farms with 100 to 249 acres, 24 farms with 250 to 499 acres, and 3 farms with 500 or more acres.
- ⦿ The federal Agricultural Census provides the following statistics about agriculture in the region (*The 5 Zip Code Area includes all land in the Hartford, Fort Ann, Granville, Argyle and Salem zip codes not just the land within the Town of Hartford in those zip codes.*):

**Figure 1. Total Number of Farms**

	1987	1992	1997	2002	2007
5 Zip Code Area	n/a	n/a	278	327	295
Washington County	861	745	738	887	843
New York State	37,743	32,306	31,757	37,255	36,352

**Figure 2. Farms Smaller than 50 Acres** (% of Total Farms)

	1987	1992	1997	2002	2007
5 Zip Code Area	n/a	n/a	15%	24%	33%
Washington County	14%	14%	18%	24%	30%
New York State	23%	23%	24%	30%	32%

**Figure 3. Farm Operators Whose Primary Occupation is Farming** (% of Total Farms)

	1987	1992	1997	2002	2007
5 Zip Code Area	n/a	n/a	67%	62%	54%
Washington County	68%	69%	65%	62%	50%
New York State	61%	62%	58%	61%	54%

### 3E. Location and Transportation

- Hartford is around a four-hour drive from three major metropolitan areas – New York City (180 miles, population of 22.2 million), Boston (140 miles, 4.5 million) and Montreal (150 miles, 3.6 million). Hartford is around a one-hour drive from New York's Capital District. All of these metropolitan areas have well-developed systems of farmers' markets.
- More than 3 million people live within 100 miles and more than 38 million people live within 200 miles of Hartford.
- Hartford is located in the geographic center of Washington County on Route 149, which is used by many traveling between New York and New England.
- Hartford is less than 20 miles from Exits 17 and 19 on Interstate 87.
- A rail line travels through Hartford, with the nearest access for passengers and freight in Fort Edward.
- The Champlain Canal passes through Hartford with an access point just across the town line. A long-range plan to build a trail network alongside the canal systems across the state has recently been developed and is beginning to be implemented. The trail system, when completed, is anticipated to bring more tourists to the region.

### 3F. Regional Context

- There are approximately 850 farms in Washington County.
- Washington County ranks 8 out of New York State's 62 counties in total acreage in agriculture (200,800 acres).
- 37% of the county's land is in agricultural use.
- Washington County farms spent \$93 million on farm production expenses and sold \$112 million worth of agricultural products in 2007. The multiplier effect (dollars circulated within the local economy) of agriculture in Washington County is around \$300 million per year making it the business sector with the greatest impact on the local economy.

### 3G. Farm Operator Survey

Hartford sent surveys out to 83 surveys to farm operators and owners of farmland within the town in December 2010 to gather input at the beginning of this planning process; 25 surveys were returned. The complete survey results are included as Appendix C to this plan and a summary is provided below:

- The majority of survey respondents own large amounts of farmland. Survey respondents own most of the land they farm. Most of the tillable land survey respondents own is currently being cropped.
- Farmland ownership in Hartford has been largely stable during the past decade. This suggests that Hartford's farmers are facing little pressure/demand to sell their land for development. It may also suggest, however, that new farmers are not starting operations in town.
- A substantial amount of farmland in Hartford is rented to area farmers by owners who have stopped or scaled back their farming operations (many due to age). This farmland is more at risk of being converted to other uses or left fallow in future years than land owned and actively used by a farm operator.
- Survey respondents who farm full time reported working nearly twice as many hours as would typically be considered "full-time" for other types of employment. Nearly all the survey respondents who reported that they had off-farm employment also identified themselves as part-time farmers. Combining the hours these respondents work on and off the farm indicates that these farmers also work more than full time.
- A majority of those who responded to the survey have family members working with them on the farm. A relatively small percentage have non-family employees.
- Hartford's farmland is primarily being used to grow animal feed crops (alfalfa, hay and corn silage).
- A number of survey responses from part-time farmers and owners of land rented to other farmers, indicate that haying is the only agricultural activity occurring on their property. This suggests that there is a substantial amount of cultivated land that is being maintained through haying, but that is no longer associated with an active farm.
- Milk is Hartford's primary agricultural product. Many of Hartford's farmers rely primarily on milk sales for their income. Most respondents that reported producing products other than milk reported producing multiple products.
- Most respondents who reported raising dairy cows also raised replacement heifers and calves, but few of them reported raising other types of livestock.
- Most respondents rely primarily on a single mechanism for selling their products. No respondents reported selling products through farmers markets, pick-your-own or CSAs. This relates to the heavy focus on dairy production in Hartford.
- Around one-third of survey respondents reported being interested in expanding or diversifying. Most respondents do not envision scaling back their farm operation in the next five years. This suggests that most respondents may be planning to continue operating their farm largely as they are doing now.
- Survey respondents indicate that they are more likely to expand, diversify or improve their farm operation over the next five years than they are to scale their operation back. No respondents reported that they anticipate selling their farm, starting to work an off-farm job or employing fewer workers.

- More of the survey respondents who have wanted to increase the profitability of their farms over the past decade have chosen to produce more of the same crops or livestock, as compared to diversifying their products.
- Survey respondents indicated that farm income, taxes, equipment, capital and age are the factors that are having the greatest negative affects on their ability to continue farming. Labor, development pressure, traffic and neighbors were reported as the factors with the least negative impacts on farming in Hartford.
- Survey respondents reported that tax abatements for new business ventures and assistance negotiating lower utility rates would be the two most helpful measures. Also considered helpful were the town's agriculture and farmland protection plan, increased availability of credit, loans and grants, assistance with estate planning and forming a business alliance. The least helpful measures were attracting additional farmers to Hartford, additional processing services and assistance with labor management issues.

### 3H. Panel Discussion and Roundtable

The Town of Hartford Agriculture and Farmland Protection Plan Committee hosted a panel discussion and roundtable, "Increased Farm Profitability – Opportunities and Challenges: The Experience of Washington County Agricultural Entrepreneurs," in March 2011. The panel included the owners of Argyle Cheese Farmer, Flying Pigs Farm and Gardenworks, as well as representatives from the Agricultural Stewardship Association and Washington County Cornell Cooperative Extension. The complete notes from that meeting are included as Appendix D to this plan and a summary is provided below:

- Marge Randles, Argyle Cheese Farmer.** The Randles are the fourth generation working the land in Argyle that has been in the family since 1860. She saw the trend towards a loss of medium-sized dairies and the future did not look bright. Marge realized that if they did not do something there wouldn't be a fifth generation on the farm. It was Sandy Buxton at Cooperative Extension that suggested cheese. It took three years to get training and get the business started. Making the transition was difficult and expensive. Marge recognizes why few existing dairy farmers enter into a new business like cheesemaking: (1) it costs a lot to start up; (2) farmers don't have time to learn a new business while keeping their existing operation afloat; (3) dairy farmers aren't accustomed to marketing their products – they are used to a business model where a truck shows up each day and takes away their milk; and (4) you have to deal with different licensing and regulatory requirements.

Getting started, Marge had to figure out how to sell her cheese. She started selling through farmers markets, primarily in the Capital District. Now, she is trying to move more into selling through CSAs. She is connecting with farms that operate as CSAs to provide yogurt and cheese to their members as part of the share. The cheese business is a growing niche in Washington County now. Marge says it hasn't made her family rich, but they haven't had to go to the bank yet.

- Meg Southerland, Gardenworks.** Meg Southerland grew up on her family's farm in Washington County. She went to college and majored in horticulture. She ultimately ended up in Kentucky working for Cooperative Extension at a time when farmers there were facing a major transition as the market for their tobacco was in decline. She saw some farms that converted from growing tobacco to growing flowers – and she began to think about doing something similar back on her family farm in New York. Meg and her family moved back to Washington County and she began to help her parents on the farm. She started to extend the farm's seasons. She began with a greenhouse in the spring, flowers

for cutting and drying in the summer, some vegetables, fall squashes and pumpkins, and Christmas trees and a Christmas shop. The business now crams 4 seasons in between April and December.

In the beginning, Meg took every opportunity to get out and spread the word and she slowly built the business. She works closely with everything else going on in the community. The former dairy barn on her farm has been converted to a retail marketplace, which now offers products from a number of producers in the area. She realized at some point that she didn't need to grow everything herself, she could coordinate retail with other farms and become a marketplace for the community.

- **Jen Small, Flying Pigs Farm.** Jen described herself as a first generation farmer. She grew up in the suburbs out of state, but her father had grown up on a farm in Washington County and she spent summers here. An opportunity arose when the land next door to that farm was being sold to a developer – before she knew it, she had become the owner of that farm and had kept it from being developed. She and her husband had no idea what they were doing and started the first year by raising three pigs. The business has grown quickly over the last several years and now they plan on raising 800 pigs this year in addition to chickens. They employ 5 people full time and 3 people part time.

The demand is enormous. They sell their meat and eggs primarily in the New York City market either at farmers markets or direct to restaurants. They went to the city to sell their product because they wanted to sell a volume of product quickly – their first time to the market they took the meat from 14 pigs and they sold out within a couple of hours. The city markets are also a way to get a premium price for your product – she said eggs are selling for \$10 or more a dozen and they are able to sell their bacon for \$15/pound. Jen emphasized that one of Washington County's strengths is access to urban markets – NYC, Boston, Montreal – within a few hours drive. Washington County has good soils, good water, has the infrastructure in place to support agriculture, still has its land base, and has people who know how to work hard. We are in a good position to meet that future demand to produce more food.

- **Brian Gilchrist, Cooperative Extension.** Brian Gilchrist provided an overview of how Cooperative Extension can assist farmers interested in researching and starting up new businesses. He agreed that all segments of the population are becoming increasingly interested in local food and agriculture. He noted that one of Washington County's strengths is diversity – there is diversity in the types of farms and in the land base. While Cooperative Extension will continue to be an important resource for the county's dairy farmers, they are also getting more programs going to assist farmers in other sectors. They have been providing assistance with business planning and marketing. Brian noted that marketing is a key issue – farmers need to figure out who their customer is and what is the best way to get their product to their customer. Agriculture and food systems are regional. Regions – like the Finger Lakes for their wineries – become a destination not through the farmers competing with each other but by complementing each other. Could Washington County become known for its cheese or some other product?

- **Chris Khraling, Agricultural Stewardship Association.** Chris opened with an overview of the ASA, which was started in 1990 by a group of farmers who recognized the need to protect the land base for future generations. He described what a conservation easement is and how they are used to restrict future development. Since ASA's formation, \$4.9 million of state money and \$1 million in matching federal funding has come into Washington County for the purchase of development rights. This money has allowed farmers to retire and pass the farm on to the next generation, supported expansion and improvements to farm operations, and the starting of new farm businesses. Protecting an adequate land base for farming is critical – right now the acreage in production in New York can only feed 30% of the state's population.

## 4. STRATEGY

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### 4A. Vision Statement

We will optimize the use of our land base to sustain a viable agricultural economy and way of life in Hartford. Our community will be proactive in fostering a strong and progressive agricultural economy by supporting:

- ❉ Farmers and business owners through careful consideration of the impact of all municipal actions and policies on agriculture and agricultural business with the intent of simplifying the process of starting, operating and expanding agriculture and agricultural businesses.
- ❉ Fair and equitable taxation that encourages landowners to keep productive land in agriculture, including farms operated on small acreages or as a secondary income source.
- ❉ Land use policies that encourage diversification of the town's tax base, that minimize the amount of productive agricultural land converted and fragmented to accommodate non-farm uses, and that favor development that would not demand municipal and educational services in excess of the tax revenues it would generate.
- ❉ Organizations and programs that assist farmers, business owners and residents with maintaining a healthy, prosperous and sustainable agricultural economy.

## 4B. Agri-Tourism

Agri-tourism is a farm-based business that provides accommodations and/or activities for visitors for the purpose of enjoyment, education, and/or hands-on involvement in the operation of the farm. Agri-tourism could provide a supplemental income source for Hartford's farm operators.

### SWOT Analysis

Within Hartford	<b>Strengths</b> <ol style="list-style-type: none"> <li>1. Scenic landscape</li> <li>2. Intact rural character</li> <li>3. Proximity to urban areas</li> <li>4. Proximity to major transportation routes</li> <li>5. Town funding available for promoting local events</li> </ol>	<b>Weaknesses</b> <ol style="list-style-type: none"> <li>1. Limited visitor services and accommodations in Hartford</li> <li>2. Lack of knowledge about how to start, market and operate an agri-tourism business among Hartford farmers</li> <li>3. Limited knowledge of and connections to agri-tourism occurring in southern Washington County among Hartford farmers</li> <li>4. Limited ability to manage future growth and development in order to protect scenic landscape features, rural character and productive farmland</li> </ol>
	<b>Opportunities</b> <ol style="list-style-type: none"> <li>1. Successful agri-tourism businesses in southern part of county</li> <li>2. Successful agri-tourism programs operating in the region (<i>Cheese Tour, Fiber Tour, Maple Weekend, HarvestFest, County Fair</i>)</li> <li>3. Nearby tourist destinations that draw visitors into region or bring travelers through town (<i>Lake George, Adirondacks, Vermont, Saratoga Springs</i>)</li> <li>4. Websites, email and social networking that make it easier to attract and communicate with visitors</li> </ol>	<b>Threats</b> <ol style="list-style-type: none"> <li>1. Insurance and regulatory requirements can discourage farmers from starting an agri-tourism business</li> <li>2. Reduced state/county funding for tourism promotion in Washington County</li> </ol>

## Recommended Actions

**B-1. Promote Hartford as an Agri-Tourism Destination.** To overcome the challenge individual farmers face trying to market their farm for agri-tourism, all the town's agri-tourism opportunities could be promoted collectively. The town has already begun this effort by providing lists of farms and other businesses on its municipal website. As envisioned, this project could be carried out by youth participating in an existing organization or class. The project could consist of:

- ☼ Identifying all agri-tourism opportunities in town (ex. farms open for tours, farm product sales, corn mazes, sugarhouses, u-pick operations, etc.) willing to participate in a town-wide effort to promote Hartford as an agri-tourism destination.
- ☼ Collecting information from each participant about his or her agri-tourism opportunity (what, when, where, etc.).
- ☼ Putting together a summary of each agri-tourism opportunity (text description, season/hours, contact info, location, photo, etc.) suitable for posting to various website and submitting to organizations that promote agri-tourism.
- ☼ Identifying the various websites and organizations that provide agri-tourism information, as well as existing agri-tourism businesses/programs that Hartford could connect with, and contacting each to submit the information about agri-tourism opportunities in Hartford.
- ☼ Establishing a mechanism for keeping information up-to-date and adding new information as needed.

**B-2. Expand Farm Information on Town Website.** The Hartford town website already provides basic information about many of the town's farms. The information available about each farm could be expanded to include agri-tourism opportunities, products for sale, location, hours/season, historic facts/buildings, etc.

**B-3. Improve Signage for Visitors.** Many travelers pass through Hartford on the main highways. These corridors provide an opportunity to inform and educate travelers about the town's agricultural heritage, current farming activities and local agri-tourism businesses. Gateway signs at each of the main entrances to town would help create a Hartford identity/brand. Pull-offs at scenic locations/overlooks would encourage travelers to stop, and informational/educational signs could be located at those locations. Signs could also be used to encourage travelers to explore the town's back roads by directing traffic to agri-tourism businesses, scenic views, etc.

A set of standard signs could be designed and produced for individual farms that would identify the farm name, allow for advertising of on-site sales or other agri-tourism opportunities, and/or commemorate the town's agricultural heritage (farms that have been in the same family for many generations, historic buildings, etc.). This effort could be coordinated with information provided to visitors about touring Hartford's farms.

## 4C. Direct Marketing

Direct-to-consumer sales is a way for Hartford's farmers to get higher prices for their products. Direct marketing opportunities include farm stands, farmers market, CSA (community supported agriculture), pick-your-own, and direct sales to restaurants, stores or institutions.

### SWOT Analysis

Within Hartford	Strengths	Weaknesses
	<ol style="list-style-type: none"> <li>1. Proximity to urban areas</li> <li>2. Proximity to major transportation routes</li> <li>3. Plans to operate a farmers' market in town</li> </ol>	<ol style="list-style-type: none"> <li>1. Farm operators' lack of knowledge about or experience with marketing their products direct to consumers</li> <li>2. Most Hartford farms primarily produce milk, which is more challenging to sell directly (<i>raw milk can only be sold direct to consumers after obtaining a special permit from the NYS Department of Agriculture</i>)</li> <li>3. A relatively small number of the town's farms are located on a main/heavily traveled road</li> </ol>
Outside Hartford	Opportunities	Threats
	<ol style="list-style-type: none"> <li>1. Increased consumer interest in local food</li> <li>2. Healthy direct-to-consumer businesses in southern part of county, including CSAs that purchase products directly from other farmers to provide a wider array of products to their subscribers</li> <li>3. Successful farm tour programs operating in the region (<i>Cheese Tour, Fiber Tour, Maple Weekend</i>)</li> <li>4. Nearby tourist destinations that draw visitors into region or bring travelers through town (<i>Lake George, Adirondacks, Vermont, Saratoga Springs, Hudson Valley</i>)</li> <li>5. Websites, email and social networking that make it easier to attract and communicate with customers</li> </ol>	<ol style="list-style-type: none"> <li>1. Insurance and regulatory requirements can discourage farmers from starting a direct marketing business</li> <li>2. Direct-to-consumer sales require significant time commitment from the farmer</li> </ol>

## Recommended Actions

- C-1. **Start a Farmers' Market in Hartford.** Planning is underway for a Hartford Farmers' Market. In 2011, the market was unable to open due to a lack of participating vendors. Market organizers should reach out to Hartford farmers and encourage their participation for the 2012 season. Given competition from established markets in larger communities, the Hartford Farmers' Market should explore alternative scheduling to avoid conflicting dates and increase vendor participation. Opportunities to combine the market with other community events could help generate more customer traffic. The market could also be opened up to craft or similar non-farm vendors.
- The market's goal should be to slowly build up both the number of participating vendors and the customer base. If that effort is successful, the market may be able to eventually transition from a weekly event to a seasonal "store" where Hartford farmers could collectively sell their products direct to customers. This would require less time commitment for individual farmers, and particularly benefit producers that are not located on the main highways.
- C-2. **Assist Hartford Farmers with Marketing.** Direct marketing of agricultural products to consumers requires a set of skills that are new to many Hartford farmers, particularly for farmers who want direct sales to become a major portion of their business. Chambers of Commerce or similar economic development organizations often offer training to local retailers on topics like shop window design, marketing campaigns and customer service. Our farm community needs access to similar training opportunities geared towards agricultural businesses.
- C-3. **Expand Hartford's Role in Regional Efforts.** Direct marketing and agri-tourism are more developed in the southern part of Washington County. Hartford farmers could learn from the experience of farmers in nearby communities. Additionally, the existing programs and organizations operating primarily in the southern part of Washington County need to be made more aware of Hartford and the opportunities our town and farm community offer.
- C-4. **Seek Opportunities to Sell Products Directly to Local Institutions.** Local institutions that provide meals (schools, colleges, hospitals, nursing homes, etc.) are potential customers of local products. There are efforts underway regionally to increase the amount of local food served by these institutions.

## 4D. Dairy

Agri-tourism and direct marketing are economic development strategies with limited benefits for dairy farmers. Most of Hartford's farms are dairies and few have diversified into other agricultural sectors. The primary concern for our dairies is to find a way to increase the profitability of milk. Options that could be explored include value-added products (cheese, butter, yogurt, ice cream), organic milk and milk products, local milk co-operatives or a creamery. As dairy farmers cannot control the price of their product, they can look for ways to reduce production costs (ex. energy efficiency or using/providing contract work) to increase profitability.

### SWOT Analysis

Within Hartford	Strengths	Weaknesses
	<ol style="list-style-type: none"> <li>1. Farm operators are familiar with dairying</li> <li>2. Farms are set up and equipped for dairying</li> <li>3. The high number of dairy farms that remain in operation in Hartford</li> <li>4. Hartford's right-to-farm law</li> </ol>	<ol style="list-style-type: none"> <li>1. Dairy farmers lack time and capital to explore alternatives to their current business model</li> <li>2. Many of the town's dairy farmers are dependent on the availability of leased land to sustain their operation</li> <li>3. Average age of dairy farmers in Hartford is increasing</li> </ol>
Outside Hartford	Opportunities	Threats
	<ol style="list-style-type: none"> <li>1. Businesses in the region provide the services dairy farms need</li> <li>2. Alternative dairy businesses operating successfully elsewhere in the county (cheese, bottled milk, ice cream)</li> <li>3. Washington County becoming known as an area that produces cheese and cheesemaking is being promoted (ex. Cheese Tour)</li> </ol>	<ol style="list-style-type: none"> <li>1. Milk prices are volatile and farmers have no control over the price they receive for their product</li> <li>2. Start-up costs are prohibitive for a young person wanting to get into dairy farming</li> <li>3. Rising energy costs</li> <li>4. Declining number of dairy farms in the region with fewer small and mid-sized dairy farms</li> <li>5. Limited ability to manage future growth and development in order to conserve productive farmland, minimize encroachment of incompatible land uses and limit increased demand for public services that would increase property taxes</li> </ol>

### Recommended Actions

- D-1. Alternative Markets.** Hartford should encourage organizations, like Cornell Cooperative Extension, to offer more educational programs aimed at helping dairy farmers explore alternative milk products or markets. Youth organizations, like FFA and 4-H, should also providing training and education related to alternative dairy businesses.

## 4E. Meat Processing

Beef cattle and similar large livestock offer an alternative to dairying that has a lot of the same needs for land, structures and equipment, which makes it a more feasible alternative than moving into an agricultural sector less similar to dairy. Keeping larger livestock on Hartford's farms also maintains the demand for feed and the cultivated land on which the hay and other feed crops are grown.

If agriculture in Hartford and the larger region is going to diversify in a substantial way out of dairy production and into more food production, greater capacity will be needed to process meat animals. The current facilities in the region are operating at or close to capacity. This could become a limiting factor particularly for farmers interested in raising large livestock.

### SWOT Analysis

Within Hartford	<b>Strengths</b> <ol style="list-style-type: none"><li>1. Potential sites available suitable for a meat processing business</li><li>2. Proximity to major transportation routes</li><li>3. Central location in Washington County</li></ol>	<b>Weaknesses</b> <ol style="list-style-type: none"><li>1. Lack of public infrastructure (water, sewer)</li><li>2. Potential for resistance from neighbors to a slaughterhouse</li></ol>
	<b>Opportunities</b> <ol style="list-style-type: none"><li>1. Need for additional USDA-certified processing capacity in the region</li><li>2. Increased consumer interest in local food</li><li>3. Growing number of beef operations in town/region</li></ol>	<b>Threats</b> <ol style="list-style-type: none"><li>1. High start-up costs and regulatory requirements</li><li>2. More cost effective to expand existing processing facilities than to build new facilities</li><li>3. The supply of animals to be processed and therefore demand for processing capacity varies throughout the year</li></ol>

### Recommended Actions

- E-1. Attract a Meat Processing Business to Locate in Hartford.** Hartford should market the potential sites available in town for a meat processing business. Many communities do not welcome meat processing businesses and actively seek to prevent them from locating in their area. Hartford's willingness to host a responsible and properly run processing business gives the town the competitive advantage that it often lacks when trying to attract new businesses. Such a business locating in Hartford would benefit farmers, but would also have broader economic development benefits for the town.

## 4F. Forestry

While much of the focus of this plan has been on farmland, there is also a significant amount of woodland in Hartford being actively managed for timber and/or maple production. Most of our farms include some woodland and there are also larger forested tracts in the upland areas of town. Maple syrup and wood harvested from timber stands provides an important supplemental income source for a number of Hartford farmers. Hartford's woodlands have experienced greater development pressure than cultivated land.

### SWOT Analysis

Within Hartford	Strengths	Weaknesses
	<ol style="list-style-type: none"><li>1. Good soils for maple, oak and other northern hardwoods in the town's uplands</li><li>2. Abandoned or marginal cropland could be planted with trees, including biomass crops like willow</li></ol>	<ol style="list-style-type: none"><li>1. Hartford's wooded upland areas are desirable locations for new homes with views over the valley</li><li>2. Limited ability to manage future growth and development in order to conserve productive forestland and access for timber harvesting</li></ol>
Outside Hartford	Opportunities	Threats
	<ol style="list-style-type: none"><li>1. Demand for wood and other forest products remains strong in the region</li></ol>	<ol style="list-style-type: none"><li>1. Smaller woodlots (&lt;50 acres) are not eligible for the state's land use tax programs</li><li>2. Requirements for participation in the state's land use tax programs can be difficult to meet, particularly for smaller tracts of forestland</li></ol>

### Recommended Actions

- F-1. **Revise Hartford's Subdivision Law.** Hartford's subdivision law should ensure that access is retained to woodlands when new lots are being created and development roads constructed so that timber can continue to be harvested from adjoining woodlands.

## 4G. Agricultural Taskforce

Agriculture in Hartford and the larger region is often not recognized as the foundation of the local economy. Economic development efforts typically focus on other sectors, and are often directed towards bringing new firms to the area rather than supporting existing businesses. Hartford farmers could benefit from a local organization, with ties to other similar groups in the region, focused on agricultural economic development.

### SWOT Analysis

Within Hartford	<b>Strengths</b> <ol style="list-style-type: none"> <li>1. Town government support for agriculture and economic development</li> <li>2. Existing town boards/committees with agricultural representatives</li> </ol>	<b>Weaknesses</b> <ol style="list-style-type: none"> <li>1. Farmers lack time to participate</li> <li>2. Farmers are independent and each makes individual business decisions</li> </ol>
	<b>Opportunities</b> <ol style="list-style-type: none"> <li>1. Existing partner organizations in the region (Washington County Agricultural Board, Washington County Cooperative Extension, Agricultural Stewardship Association, Washington County Natural Resources Conservation Service)</li> <li>2. Increased ability to communicate and share information through email, websites, social networking, etc.</li> </ol>	<b>Threats</b> <ol style="list-style-type: none"> <li>1. Perception that agriculture is not economically viable and cannot create quality jobs</li> </ol>

### Recommended Actions

- G-1. Form the Hartford Agricultural Taskforce.** To implement the recommendations of this plan and achieve the town's vision for a viable agricultural economy, the town should form an Agricultural Taskforce.
- G-2. Direct Resources to the Agricultural Sector.** Many existing economic programs and resources operating in the county and state could be targeted to improving the economic viability of farming by:
- Allocating a percentage of the resources offered by town, county, state and federal economic development programs to the agricultural sector including low interest loans, loan guarantees, grants, and grant matching funds.
  - Allocating a percentage of small business development assistance to agriculturally based businesses, including assistance in business plan development, marketing, and financial management.
  - Using existing authorities and programs such as tax stabilization programs, PILOTs, historic tax credits, energy efficiency subsidies, etc., to provide financial assistance to farmers renovating or upgrading their agricultural buildings.

- ⦿ Restructuring existing economic development programs to better meet the needs of the agricultural economy, and start-up or small-scale businesses.

**G-3. Build Partnerships.** Hartford, acting alone, has limited ability and resources to promote agricultural economic development. However, there are many opportunities at the county and regional level to build partnerships with other units of government and organizations to improve our agricultural economy and connect Hartford farmers with assistance and resources.

- ⦿ Seek representation of the agricultural sector on town, county and regional economic development committees/boards.
- ⦿ Ask Washington County and/or other partners to establish an agricultural incubator program (similar to incubator programs for industrial businesses) to assist in providing farmers with the facilities and expertise to develop value-added products and similar new enterprises.

**G-4. Share Information with Farm Community.** Hartford's farmers work long hours and have less time available for the professional development activities typical of other business sectors (ex. participating in organizations, attending training sessions, networking, etc.). The Hartford Agricultural Taskforce could help our farm community identify resources and opportunities available. A resource library was developed during the development of this plan, which the Agricultural Taskforce could build upon and share with the town's farm community.

**G-5. Engage Hartford Youth in Agriculture.** For agriculture to continue, new generations of farmers will be needed. The Agricultural Taskforce should partner with existing youth organizations (4-H, FFA, etc.) and the Hartford Central School to engage youth in the effort to strengthen the town's agricultural economy and make farming a viable career option.

**G-6. Update the Plan.** This Agriculture and Farmland Protection Plan is intended to be adopted as an appendix to Hartford's Comprehensive Plan. Like the Comprehensive Plan, this plan should be periodically review and updated. The Hartford Agricultural Taskforce could be responsible for that review and for recommending updates to this plan, as well as to the Comprehensive Plan and town laws, to the town board.

## 4H. Land Use

The economic viability of agriculture is dependent on the continued availability of quality farmland. Agricultural land is a non-renewable resource that once developed is unlikely to ever again be available for farming.

Hartford's 2010 Comprehensive Plan included a series of recommendations with regard to how the town could manage future growth and development to maintain agricultural land and rural character. The overall concept was to maintain a low density of non-farm land uses in the town's agricultural areas and encourage non-farm uses to locate off the most productive land.

### SWOT Analysis

Within Hartford	<b>Strengths</b> <ol style="list-style-type: none"> <li>Hartford has adopted a comprehensive plan, and site plan review, subdivision and right-to-farm laws</li> <li>Current demand for building lots is very low and Hartford's farms face little development pressure</li> <li>Most of Hartford's farmland does not front on a main road and is therefore less desirable for conversion to commercial use</li> <li>Most new residential development has occurred in upland areas of town rather than on the most productive farmland</li> <li>Hartford has not adopted "large lot" rural zoning which can result in fragmentation of farmland</li> <li>Hartford has not provided public water or sewer service to rural areas, which would promote conversion of farmland to non-agricultural uses</li> </ol>	<b>Weaknesses</b> <ol style="list-style-type: none"> <li>Hartford's current site plan review and subdivision laws could be improved to better protect farmland</li> <li>Hartford has not adopted a zoning law and therefore cannot protect farmland by controlling the density of new development on productive farmland</li> <li>A significant percentage of Hartford's agricultural land base is currently being leased by a farmer, and this land is more vulnerable to conversion to a non-farm use or abandonment</li> <li>Hartford does not have public water or sewer infrastructure in its village and hamlet areas that could support more compact development and provide an alternative to scattered, low-density growth in outlying areas</li> </ol>
	<b>Opportunities</b> <ol style="list-style-type: none"> <li>There are now more effective tools for managing land use to protect farmland available to rural communities like conservation subdivisions, cluster development, transfer of development rights, purchase of development rights, etc.</li> </ol>	<b>Threats</b> <ol style="list-style-type: none"> <li>Changes in the regional economy, over which Hartford has no control, could result in greater development pressure, particularly new home construction</li> <li>Growing budgets or changes to the state's existing tax programs for farm and forest land that would lead to higher property tax burdens for owners of farm or forest land</li> </ol>

## Recommended Actions

- H-1. **Implement Hartford's Right-to-Farm Law.** Hartford's right-to-farm law should remain in place and be actively implemented, particularly with regard to informing those moving into town and unfamiliar with agriculture about what they should expect when living in a farm community. The right-to-farm law should be updated as needed in order to best protect the interests of the town's farm operators.
- H-2. **Revise Hartford's Subdivision Law.** Hartford's subdivision law should promote conservation subdivisions. Conservation subdivisions provide an opportunity to develop rural land with minimal loss of productive farmland and rural character. Lots in a conservation subdivision can usually be sold for a higher price than in a conventional subdivision because buyers know that there will always be undeveloped open space near their home. Recommended provisions are included in Appendix B of this plan.
- H-3. **Support Land Use Tax Programs.** The tax programs that value farm and forest land at its productive rather than development value are essential to protecting the town's agricultural land base. Without these tax policies and programs, agriculture would not be economically viable for most farmers. These policies and programs should not be viewed as a subsidy to farmers, but as the equivalent of commercial properties being valued based on their potential to generate income. Town government and officials should advocate for these tax policies and programs at the state and county level.
- H-4. **Support Landowners Seeking to Conserve Farmland.** Hartford should actively support landowners seeking to conserve farmland in town. By adopting this plan, the town can sponsor applications to the state's purchase of development rights program when funding is available through that program. The town can also advocate for local landowners with regional organizations that have a role in land conservation efforts. (See the Land Base section of this chapter for more information regarding farmland conservation).
- H-5. **Explore the Feasibility of a Town Lease of Development Rights Program.** While Hartford cannot afford to implement a local conservation fund to directly purchase development rights on farmland, a lease of development rights (LDR) program may be feasible. Under such a program, landowners would be paid by the town to not develop their land for a specified period (usually at least 20 years). Ideally, the lease payments would be equivalent to the taxes paid, thus effectively eliminating the municipal taxes on the land. This would raise the burden of paying for town government on all the taxpayers not in the program. Given fiscal constraints, LDR program would have to be limited in the amount of funding available. The prioritization system discussed in the Land Base section of this chapter could be used to target available funding most effectively.
- H-6. **Consider Agriculture when Planning Public Facilities or Infrastructure.** Government decisions with regard to the siting and provision of public facilities or infrastructure in Hartford should take into account impacts on agriculture. Public water and sewer service generally should not be provided to agricultural land unless there is a significant environmental or public health concern that must be addressed. Washington County owns a large parcel of farmland in Hartford. The future use of that land should be compatible with surrounding agricultural uses.

## 4I. Land Base

The town's Agriculture and Farmland Protection Planning Committee worked to identify all the farmland and agricultural operations in Hartford. This inventory was necessary in order to prioritize farmlands for state and/or local farmland protection programs. Knowing that resources are limited, a ranking system is needed to ensure that any farmland to be conserved will have the most positive impact in maintaining a viable agricultural economy in Hartford for future generations.

In July 2011, Hartford's farm operators were asked about their interest in land conservation. Sixteen farmers responded that they were interested in having their land (more than 4,000 acres in total) included on the list of high priority farmland for conservation in this plan and a number of others wanted to learn more about land conservation before making a decision.

The committee discussed the town's priority farmlands and recommends that in addition to the factors considered by the state (listed below), the following additional factors, listed in order of importance, should be used to prioritize farmland for conservation in Hartford:

- ⊙ Whether the owner is interested in participating in a purchase or lease of development rights program.
- ⊙ Whether the operator derives their primary income from the farm.
- ⊙ Whether land conservation will facilitate transferring the farm to the next generation (either within a family or to a newly starting up farmer).
- ⊙ Whether land conservation will facilitate diversifying the farm operation, starting an agricultural enterprise, and/or investing in improvements to the farm that will enhance its economic viability.
- ⊙ Whether the farmer has a business or management plan.

Priority is given for funding under the state's purchase of development rights program when:

- ⊙ Viable agricultural land is preserved (viable is defined as 'land highly suitable for agricultural production and which will continue to be economically feasible for such use if real property taxes, farm use restrictions, and speculative activities are limited to levels approximating those in commercial agricultural areas not influenced by the proximity of non-agricultural development'. Viability also addresses other factors principally about the property such as quality of soil resources, percent of total farm available for agricultural production, number of acres to be protected, level of demonstrated farm management, etc.);
- ⊙ Locations that are facing significant development pressure; and
- ⊙ Locations that serve as a buffer for a significant natural public resource containing important ecosystem or habitat characteristics.

Consideration is also given to:

- ⊙ The number of acres that will be protected;
- ⊙ The quality of the soil resources involved;

- ⦿ The percentage of the total farm acreage available for agricultural production;
- ⦿ The extent to which the property is bordered by or proximity to other farms which are already protected by a conservation easement or which might reasonably be expected to enter into a farmland preservation agreement in the future;
- ⦿ The level of farm management that is demonstrated by the current landowner;
- ⦿ The likelihood of the property's succession as a farm if the present ownership changes;
- ⦿ Proximity to markets and processors;
- ⦿ Proximity to vendors providing supplies and services available;
- ⦿ The level of local partners' (both public and private) commitment to farmland protection (e.g., these and other activities would be relevant: implementation of actions contained in local farmland protection plans; total local public and private expenditures on purchase of development rights projects; number and acreage of permanent conservation easements on local viable agricultural land; all agricultural districts have been reviewed on or before their respective anniversary date, etc.).

**In order to be eligible for federal funding for conservation easements, the property must have:**

- ⦿ Prime, unique, statewide, or locally important soil or contain historical or archaeological resources. Farms must contain at least 50% of prime, unique, statewide, or locally important soils. Eligible historical or archaeological parcels must be on a farm listed on the National Register of Historic Places, or formally determined eligible for listing by the State Historic Preservation Officer, or formally designated by the State Historic Preservation Officer.
- ⦿ Cropland, grassland, pasture land, and incidental forestland and wetlands that are part of an agricultural operation. Farms must be in compliance with federal wetland conservation and highly erodible land provisions.

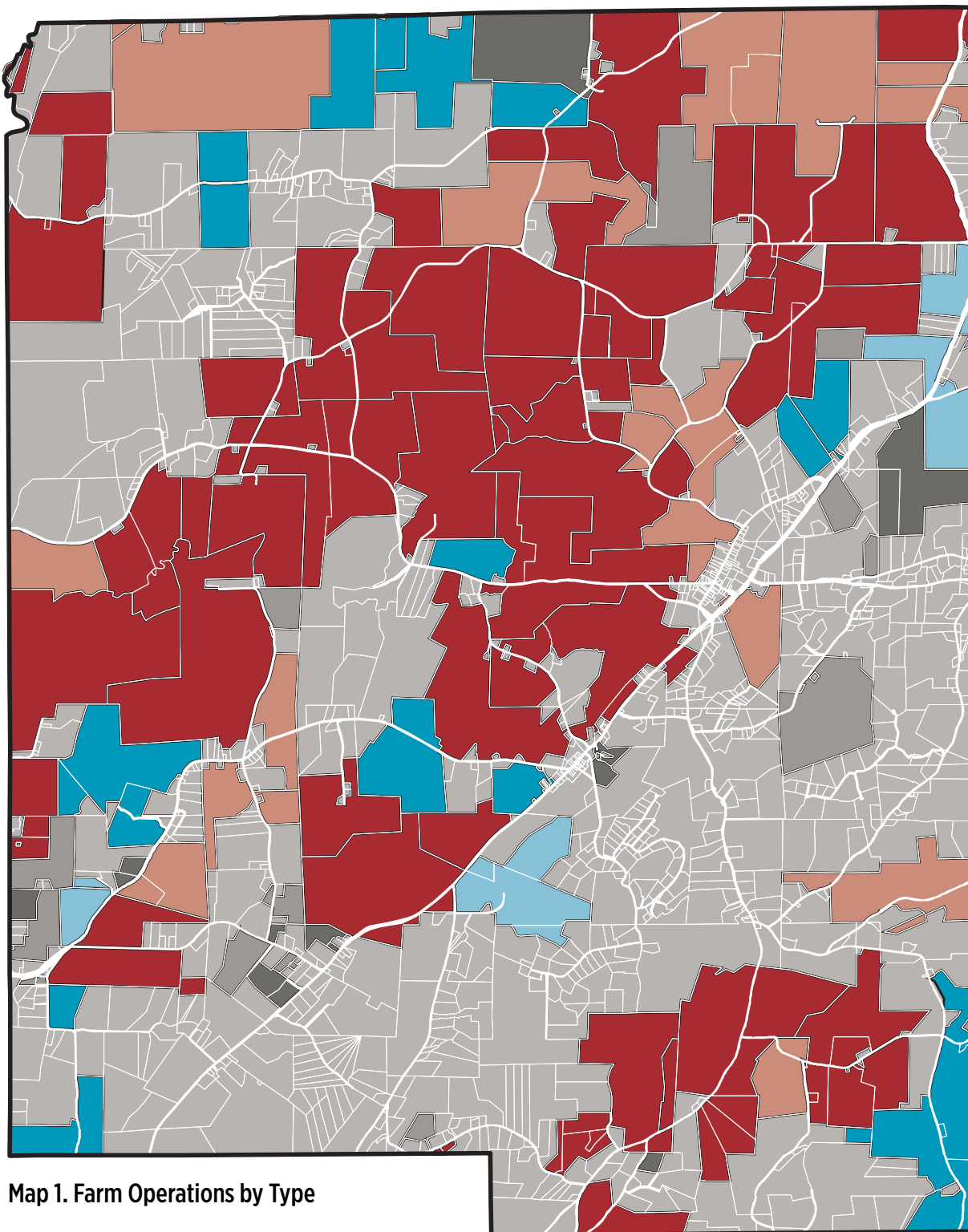
## 5. APPENDICES

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### 5A. Maps

A series of maps was created to provide a better understanding of the location, amount, characteristics and use farmland in Hartford. These maps are a supplement to the maps included in the Comprehensive Plan.

- Map 1. Farm Operations by Type
- Map 2. Primary Agricultural Soils
- Map 3. Farmland Tenure
- Map 4. Interest in Farmland Conservation



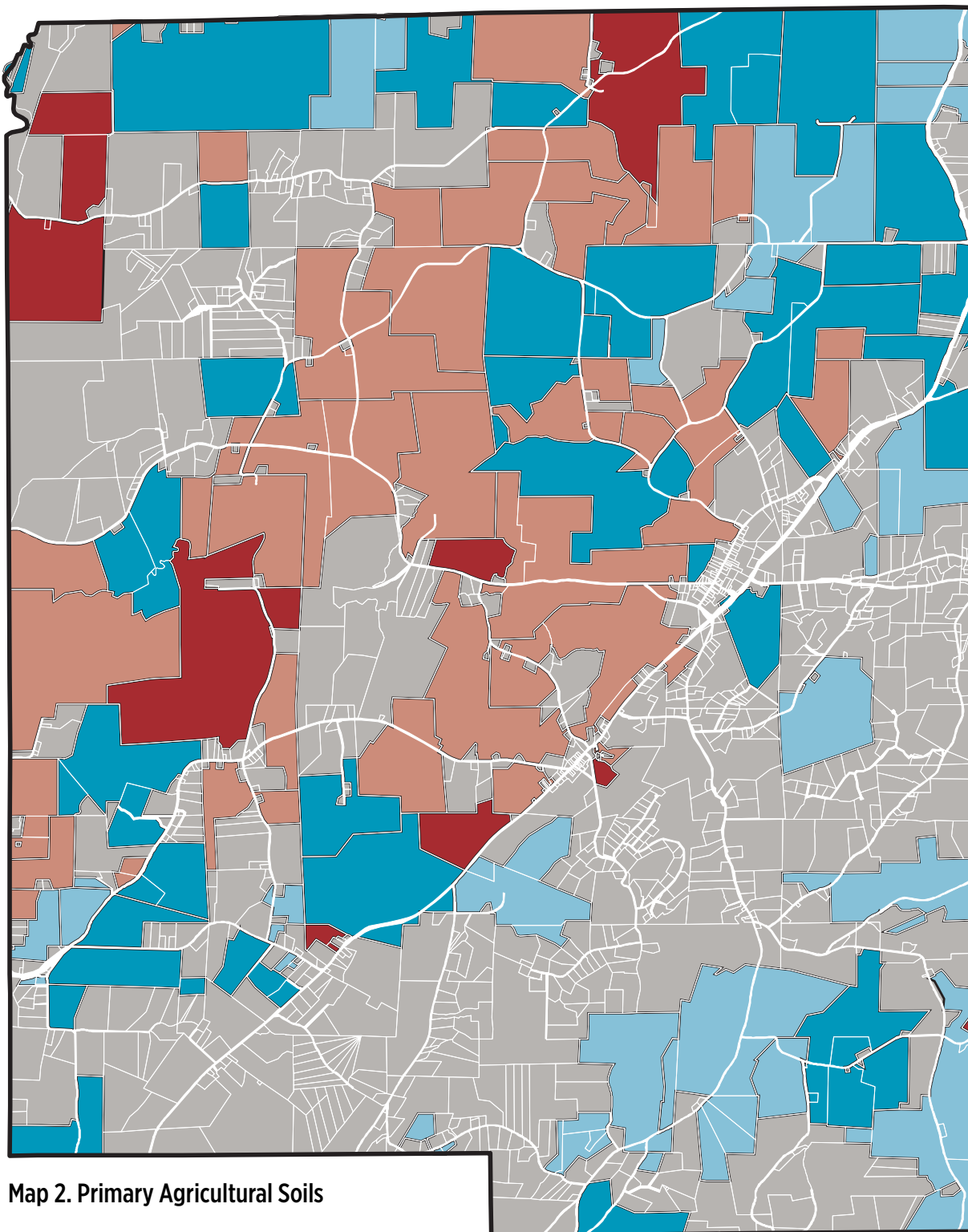
**Map 1. Farm Operations by Type**

- |  |   |
|--|---|
| <span style="color: darkred;">■</span> Dairy   | <span style="color: lightblue;">■</span> Maple/Forestry |
| <span style="color: lightcoral;">■</span> Beef | <span style="color: darkgrey;">■</span> Other           |
| <span style="color: blue;">■</span> Hay        | <span style="color: lightgrey;">■</span> Unknown        |



**1.0 MILES**

Prepared by PlaceSense  
7 Dec 2011



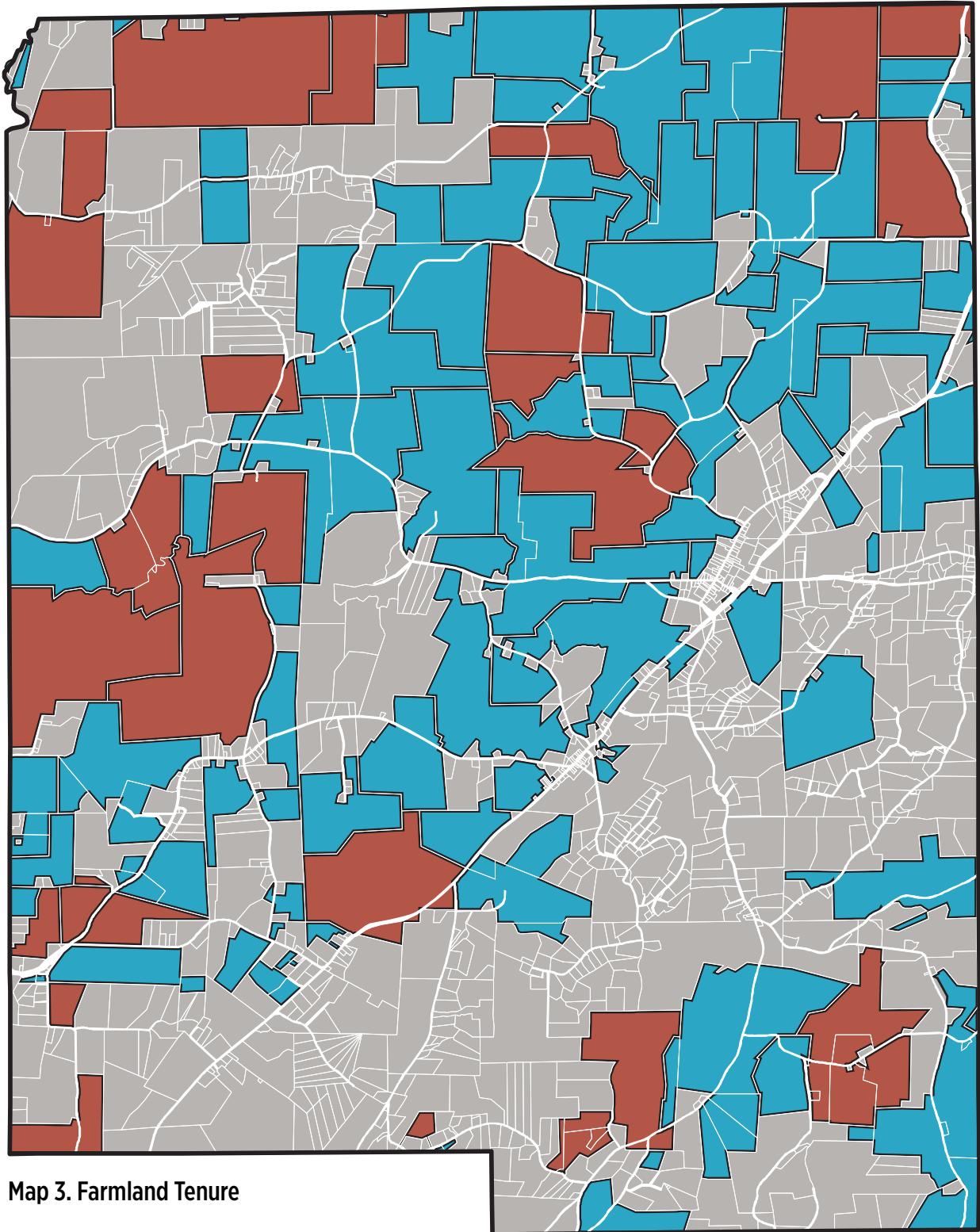
**Map 2. Primary Agricultural Soils**

- >75% primary agricultural soils
- 50%-75% primary agricultural soils
- 25%-50% primary agricultural soils
- <25% primary agricultural soils



**1.0 MILES**

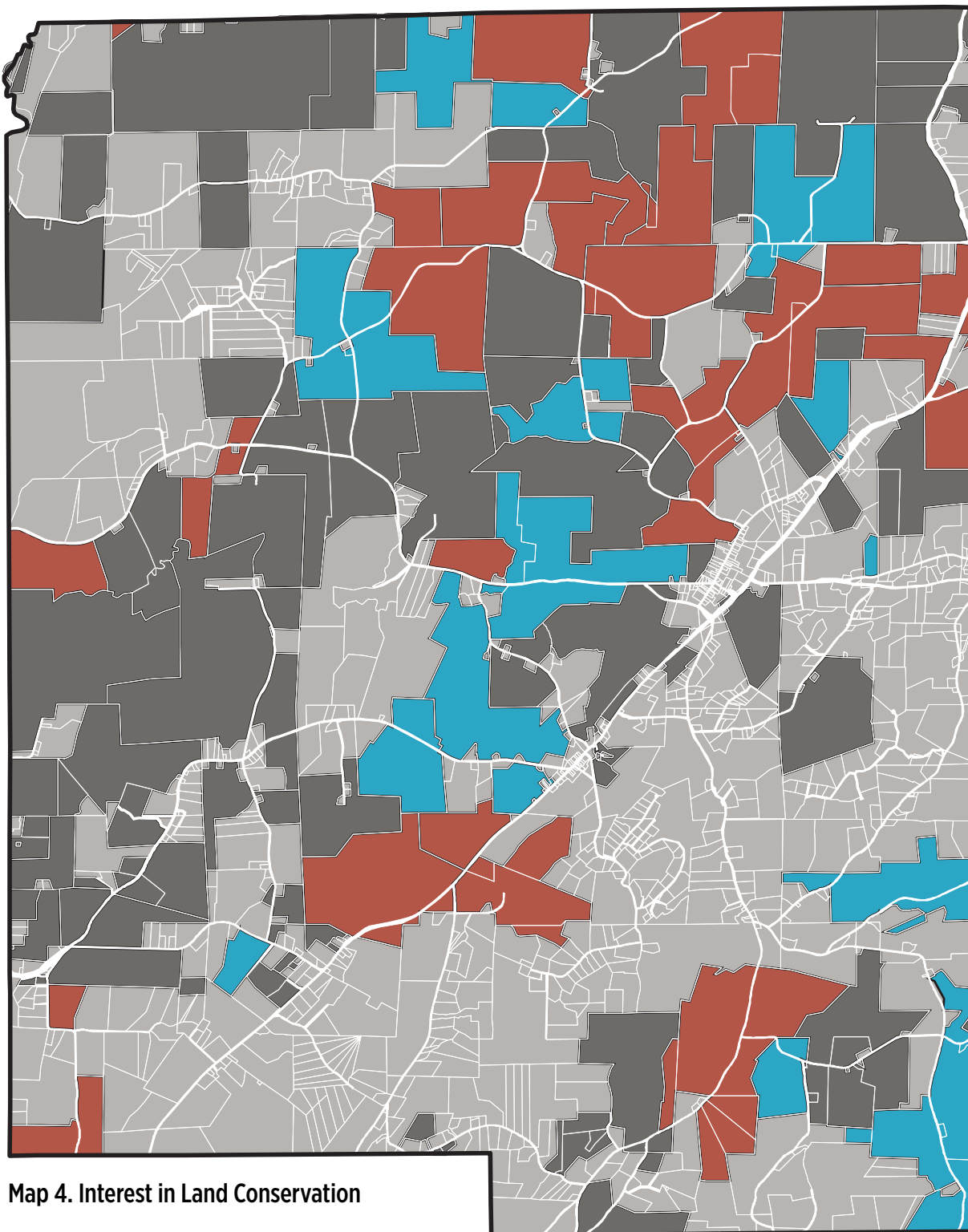
Prepared by PlaceSense  
7 Dec 2011



**Map 3. Farmland Tenure**

- Land Owned by Farmer
- Land Leased by Farmer

1.0 MILES  
Prepared by PlaceSense  
7 Dec 2011



## 5B. Implementation Tools

The Town of Hartford has adopted a subdivision law and a site plan review law. The Planning Board's authority to review and approve proposed subdivision and development of land, established in these laws, is one of the most direct ways that town government can influence the future of agriculture and farmland in Hartford.

While both laws currently offer some protection to agriculture and farmland, there are opportunities for them to become more effective in guiding growth and development in Hartford so that the agricultural economy, productive farmland and rural character valued by today's residents will remain important elements of the community for future generations.

A review of Hartford's subdivision law was completed with recommendations for revisions that, if adopted, would encourage future residential development to be of an appropriate scale and design for their rural setting, and would encourage the retention of "open space" - the farmland, forests and other undeveloped lands that create rural character. The recommendations are just that - suggestions and options to be considered as the town continues its dialogue about how best to manage and guide future development - and would only become law after specific action by the Planning Board and Town Board to adopt a revised subdivision law.

A set of rural design guidelines was also prepared, which the Planning Board could choose to incorporate into their subdivision and site plan review process, to illustrate and communicate how subdivisions and development can be planned and designed to fit into its surroundings, creating a more valuable asset for the owner, and improving the character of the neighborhood and community as a whole.

## Subdivision Law

The Town of Hartford should consider revising the town's subdivision law as recommended below to more effectively implement the strategies of this Agriculture and Farmland Protection Plan and the related policies of the Comprehensive Plan.

Article I: Declaration of Policy		
Hartford's subdivision law begins by setting forth the policy reasons for, and the purposes to be achieved through, the law. The current law's declaration of purpose is generic and more appropriate to a suburban rather than a rural community. The recommended revisions focus on incorporating the key concepts outlined in Hartford's Comprehensive Plan and Agriculture and Farmland Protection Plan - maintaining the town's rural character and way of life, and protecting farm and forest land - into the declared policies and objectives of the law.		
Adopted Language	Recommended Language	
By the authority of the resolution of the Town Board of the Town of Hartford adopted on July 14, 1997, pursuant to Article 16 of Town Law of the State of New York and the Municipal Home Rule Law, the Planning Board of the Town of Hartford is re-established, reauthorized and empowered to approve Plats showing lots, blocks or sites with or without streets or highways, and to conditionally approve preliminary plats within the Town of Hartford.	<p><b>Authority.</b> The Planning Board of the Town of Hartford is empowered to approve or disapprove plats for the subdivision of land within the Town of Hartford and to assume all other powers and duties as prescribed by Article 16 of the New York State Town Law by the authority of the resolution of the Town Board of the Town of Hartford adopted on July 14, 1997, pursuant to Article 16 of Town Law of the State of New York and the Municipal Home Rule Law.</p>	
It is declared to be the policy of the Town of Hartford to consider land Subdivision Plans as part of a plan for the orderly, efficient and economical development of the Town. This means, among other things, that land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health, or peril from fire, flood or other menace; that proper provisions shall be made for drainage, water supply, sewerage and other needed improvements; that all proposed lots shall be so laid out and of such size as to be in harmony with the development pattern of the neighboring properties; that the proposed streets shall compose a convenient system conforming to the Official Map, if such exists, and shall be properly related to the proposals shown on the Master Plan, if such exists, and shall be of such width, grade and location as to accommodate the prospective traffic, to facilitate fire protection and to provide access of fire fighting equipment; and that proper provision shall be made for open spaces for parks and playgrounds.	<p><b>Policy.</b> It is the policy of the Town of Hartford to consider subdivision plats as part of a plan for the orderly, economic, aesthetic, environmentally sound and efficient development of the town consistent with its rural character and way of life. The Town of Hartford recognizes the need to maintain an adequate base of quality farm and forest land in order to support the ongoing viability of the town's primary industry, agriculture. The Town of Hartford also recognizes the need to accommodate growth and development, and preserve the rights of property owners. These subdivision regulations have been carefully designed to achieve an appropriate balance between these goals.</p> <p><b>Objectives.</b> The following objectives shall guide decisions made by the Planning Board concerning all proposed subdivisions:</p> <ol style="list-style-type: none"> <li>1. Land to be subdivided shall be of such character that it can be used safely for its intended purpose without danger to the public health, safety or welfare.</li> <li>2. Subdivisions shall be designed to fit harmoniously into the surrounding natural and built environment.</li> <li>3. Land shall be subdivided in a way that protects the agricultural, ecological and scenic resources of the area in which it is located.</li> <li>4. Subdivisions shall include proper provisions for water supply, drainage, sewage and other needed improvements and utilities.</li> </ol>	

Adopted Language	Recommended Language
	<ol style="list-style-type: none"> <li>5. Any proposed streets shall be designed and constructed to accommodate anticipated traffic while minimizing impacts on the environment. Rural road standards and shared access will be promoted for development within rural areas.</li> <li>6. Subdivisions shall be designed to facilitate adequate fire and emergency protection, and provide adequate access for emergency response and service vehicles.</li> <li>7. Subdividers shall be expected to bear a fair share of any capital costs to the town for public improvements necessary to serve planned development.</li> <li>8. Subdivisions shall include proper provisions for access to and views of open spaces and natural areas necessary to sustain the town's rural character and way of life.</li> <li>9. Subdivisions shall be in conformance with the Town of Hartford Comprehensive Plan, and any additional plans or studies duly incorporated into the Comprehensive Plan.</li> <li>10. All review under these regulations shall be coordinated, to the extent practicable, with involved agencies at the county and state level to ensure efficient, consistent and well-informed decision-making.</li> </ol>
<p>In order that land subdivisions may be in accordance with this policy, this Local Law is enacted and shall be known as, and which may be cited as, the "Town of Hartford Land Subdivision Regulations". The Town of Hartford shall, by prior Local Law, invoke appellate review.</p>	<p><b>Title.</b> This local law shall be known and cited as the <i>Town of Hartford Land Subdivision Regulations</i>.</p>
	<p><b>[TO BE ADDED] Interpretation.</b> In their interpretation and application, the provisions of these regulations shall be held to be minimum requirements. The Planning Board may require more stringent provisions if deemed necessary to protect public health, safety and welfare.</p>
<p><b>Article VII: Separability</b> Should any section or provision of the regulations contained herein or as amended hereafter be declared by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of the regulation as a whole or any part thereof other than the part so declared to be invalid.</p>	<p><b>Separability.</b> Should any provision of these regulations be declared invalid by a court of competent jurisdiction, such decision shall not affect the validity of the regulations as a whole or any provision of these regulations other than the provision declared invalid.</p>

Article IV: General Requirements and Design Standards		
<p>This article sets forth the standards that subdivisions must meet to be approved by the Planning Board. The recommended revisions are intended to provide standards appropriate for the rural residential subdivisions that are occurring in Hartford. With the recommended language, there would be more attention paid to how the subdivision would impact ecological, agricultural, historic and scenic resources, and the town's rural character. Two additional tools - building envelopes and an open space requirement - are recommended to be added to the town's current subdivision law.</p> <p>By establishing building envelopes on new lots, there can be greater certainty about how those lots could be developed in the future even if that development would not require any further Planning Board review when it occurs. A building envelope is particularly useful in rural subdivisions when the lots being created are often 5 or more acres in size. The building envelope specifies where buildings will be located on a large lot and they are typically not more than 1 to 2 acres in size. It is established at the time a new lot is created and is shown on the subdivision plat. This tool can be used to ensure that building sites will be located along the edges of, rather than in the center of, open fields, for example. The law could be written to give the Planning Board discretion about whether/what size building envelopes would be appropriate for a specific subdivision and would not necessarily have to be applied in all circumstances.</p> <p>Frontage and infrastructure requirements significantly affect the scale and design of proposed subdivision, often in ways that are not anticipated. The recommended language creates an incentive for small subdivisions to cluster lots to be accessed by a shared driveway, and eliminates requirements not generally appropriate or applicable to rural residential subdivisions in Hartford (street lights, curbed streets, fire hydrants, sidewalks, etc.). One of the purposes of these recommendations is to provide an option to the common rural practice of subdividing lots along existing road frontage, which over time can lead to the loss of rural character as the view from public roads becomes primarily of homes rather than farm and forest lands. There needs to be careful consideration of what level of infrastructure is needed to safely accommodate new development, what type of infrastructure is appropriate and expected in a rural setting, and whether the cost of installing the required infrastructure is spurring developers to propose larger subdivisions than they might otherwise have in order to spread the infrastructure costs out over more buyers.</p> <p>The recommended language includes a mandatory open space requirement for larger subdivisions. Without a town zoning law, Hartford is limited in its ability to prevent large residential subdivisions. The number of residential lot/homes is limited solely by demand and the capacity of the land (ex. ability to install wells and septic systems) and the result could be 100 or more acres of land being subdivided with a home on each acre. While at the present time there is not the demand for housing in Hartford to spur such subdivisions, this may not always be the case. The mandatory open space requirement for larger subdivisions is intended to achieve two purposes: (1) reduce the overall number of potential homes that could be built and discourage subdivisions that are out of scale for Hartford, and (2) conserve viable tracts of productive farm or forest land for future generations. The town could establish the number of lots that would constitute a large subdivision and what percentage of land needs to be conserved at whatever levels are deemed appropriate. The "open space" created through such a subdivision would remain privately owned and taxable; it could be owned by a homeowners' association, one of the homeowners within the subdivision, or a third-party owner such as a nearby farmer. The "open space" just would not be able to be built on in the future. The lots within the open space subdivision, and even neighboring properties, would likely increase in value due to the fact that owners would be guaranteed that no building would occur on the conserved land.</p>		
Adopted Language	Recommended Language	
In considering applications for the subdivision of land, the Planning Board shall be guided by the standards sets forth hereinafter. The said standards shall be considered to be minimum requirements and shall be waived by the Board only under circumstances set forth in Article VI herein.	Subdivisions shall be designed in conformance with the set forth in this article. These standards shall be considered minimum requirements. The Planning Board may only modify or waive these standards in accordance with the provisions of Article VI of these regulations. In addition to these standards, Appendix _ of these regulations contains illustrated guidelines that should be consulted to aid in design of subdivisions that will be compatible with the town's rural character.	

Adopted Language	Recommended Language
<p><b>SECTION 1: GENERAL REQUIREMENTS</b></p> <p><b>A. Character of the Land.</b> Land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, flood or other menace.</p>	<p><b>SECTION 1: GENERAL REQUIREMENTS</b></p> <p><b>A. Character of the Land.</b> The subdivider shall demonstrate to the satisfaction of the Planning Board that the land to be subdivided can be safely developed for its intended use without danger to public health, safety or welfare, and with a minimum of detrimental effects on Hartford's natural environment, agricultural economy and rural character.</p>
<p><b>SECTION 7: RECREATIONAL AREAS, ASSOCIATED FEES, AND NATURAL FEATURES</b></p> <p><b>B. Preservation of Natural Features.</b> The Planning Board shall, wherever possible, establish the preservation of all natural features which add value to residential developments and to the community, such as large trees or groves, water courses and falls, beaches, historic spots, vistas and similar irreplaceable assets.</p>	<p><b>[TO BE ADDED] B. Land Disturbance.</b> The subdivider shall demonstrate to the satisfaction of the Planning Board that any proposed land disturbance (re-grading, removal of soil, filling) is the minimum necessary to provide adequate access to and building sites on the lots being created. Disturbance of steep slopes (&gt;20% grade) shall be expressly prohibited.</p>
<p><b>SECTION 7: RECREATIONAL AREAS, ASSOCIATED FEES, AND NATURAL FEATURES</b></p> <p><b>B. Preservation of Natural Features.</b> The Planning Board shall, wherever possible, establish the preservation of all natural features which add value to residential developments and to the community, such as large trees or groves, water courses and falls, beaches, historic spots, vistas and similar irreplaceable assets.</p>	<p><b>C. Preservation of Existing Features.</b> The subdivider shall demonstrate to the satisfaction of the Planning Board that reasonable efforts have been made to design the subdivision in a manner that preserves existing natural, cultural, scenic, historic and agricultural features on the site in accordance with the following:</p> <ol style="list-style-type: none"> <li>(1) All subdivisions shall be prepared with a process that first identifies existing natural, cultural, scenic, historic and agricultural features and then lays out the subdivision to preserve the identified resources to the greatest extent feasible.</li> <li>(2) Where sites include natural, cultural, scenic, historic and agricultural features, the subdivision design shall work around, conserve or utilize those as appropriate to minimize new impacts and preserve desirable elements. Lot lines, infrastructure and road, driveway and utility corridors shall be located to avoid and minimize the parcelization, fragmentation, or destruction of existing features and to preserve rural character.</li> <li>(3) Recognizing that the subdivision process will often require consideration of multiple features and site constraints, the Planning Board shall work with applicants to balance development and preservation of existing natural, cultural, scenic, historic and agricultural features on a site-specific basis.</li> </ol>
<p><b>SECTION 1: GENERAL REQUIREMENTS</b></p> <p><b>B. Conformity to Official Map and Master Plan.</b> Subdivisions shall conform to the Official map of the Town and shall be in harmony with the Master Plan, if either the Official map or Master Plan exist.</p>	<p><b>D. Conformity with the Official Map and Comprehensive Plan.</b> The subdivider shall demonstrate to the satisfaction of the Planning Board that the subdivision conforms to any Official Map and/or Comprehensive Plan duly adopted by the Town of Hartford.</p>

Adopted Language	Recommended Language
<p><b>C. Specifications for Required Improvements.</b> All required improvements shall be constructed or installed to conform to the Town specifications, which may be obtained from the Town Engineer. All new roads shall conform to the Town of Hartford Street and Highway Specifications subject to Section 1 (D).</p>	<p><b>E. Specifications for Required Improvements.</b> The subdivider shall demonstrate to the satisfaction of the Planning Board that all required improvements will be constructed or installed to conform to any Public Works Specifications duly adopted by the Town of Hartford, or, if such specifications have not been adopted, as reviewed and approved by the Town Engineer. Any new streets shall also conform to the requirements of Section 5 of these regulations.</p>
<p><b>SECTION 5: LOTS</b></p> <p><b>A. Lots to be Buildable.</b> The lot arrangement shall be such that in construction of a building, there will be no foreseeable difficulties for reasons of topography or other natural conditions. Lots should not be of such depth as to encourage the later creation of a second building lot at the front or rear.</p>	<p><b>SECTION 2: LOTS</b></p> <p><b>A. General.</b> The configuration and arrangement of lots shall be appropriate for and facilitate their intended use.</p>
	<p><b>[TO BE ADDED] B. Irregular Lots.</b> Lots with irregular shapes (e.g., curves, jogs, dog-legs) shall not be created unless warranted by site-specific conditions of topography, or the location of natural features (e.g. streams, shorelines) or existing roads.</p>
	<p><b>[TO BE ADDED] C. Lot Ratio.</b> Lots shall not exceed a ratio of 1 to 5 (width-to-depth or depth-to-width) unless warranted by site-specific conditions of topography, or the location of natural feature (e.g. streams, shorelines) or existing roads.</p>
<p><b>B. Side Lines.</b> All side lines of lots shall be at right angles to straight street lines and radial to curved street lines, unless a variation from this rule will give a better street or lot plan.</p>	<p><b>D. Side Lot Lines.</b> Side lot lines shall be generally at right angles to straight roads, or radial to curved roads.</p>
<p><b>C. Corner Lots.</b> In general, corner lots should be larger than interior lots to provide for proper building setback from each street and provide a desirable building site.</p>	<p><b>E. Corner Lots.</b> Corner lots shall be designed to accommodate a proper building setback from each street and provide a desirable building site.</p>
<p><b>D. Driveway Access.</b> Driveway access and grades shall conform to specification of the Town Driveway Ordinance, if one exists. Driveway grades between the street and the setback line should not exceed 10 percent.</p>	<p><b>[TO BE DELETED]</b></p>

Adopted Language	Recommended Language												
	<p><b>[TO BE ADDED] F. Building Envelopes.</b> All lots created after the effective date of these regulations shall have designated building envelopes to identify and limit the location of principal and accessory structures, parking areas, and associated above ground site development (excluding roads and utilities) on one or more portions of a lot. No land disturbance shall occur outside a building envelope except as related to an agricultural, silvicultural or recreational (non-commercial) use. Building envelopes shall:</p> <p>(1) Not include floodplains, wetlands, streams or drainage ways, surface waters, steep slopes or other unbuildable land.</p> <p>(2) Generally not be located on ridgelines, hilltops, and in other visually prominent areas.</p> <p>(3) Generally not be located on prime agricultural soils, and shall be located along the edge of, rather than in the center of, fields and meadows.</p> <p>(4) Not be greater than 2 acres in area unless otherwise approved by the Planning Board to accommodate a specific intended use.</p> <p>(5) Be set back at least 50 feet from all lot lines unless otherwise approved by the Planning Board so that development will be compatible with the settlement pattern of the area and fit into the surrounding natural and built environment.</p> <p>(6) Be set back at least 100 feet from all streams, 50 feet from all wetlands and 25 feet from all ponds.</p>												
	<p><b>[TO BE ADDED] SECTION 3: ACCESS</b></p> <p><b>A. Frontage.</b> All lots shall have the minimum frontage on an existing or proposed street, except that the Planning Board may approve the creation of up to 4 residential lots without the minimum required frontage if the lots will be accessed by a single shared driveway and if all the lots will have deeded access to an existing or proposed street over a right-of-way with a minimum width of 50 feet. The minimum required frontage shall be based upon the type and posted speed of the street the lot will front on as specified in the table below:</p> <table><tr><th></th><th>0-30 MPH</th><th>31-45 MPH</th><th>46-55 MPH</th></tr><tr><td>Town or Private Road</td><td>50 ft</td><td>100 ft</td><td>200 ft</td></tr><tr><td>State or County Highway</td><td>75 ft</td><td>150 ft</td><td>300 ft</td></tr></table>		0-30 MPH	31-45 MPH	46-55 MPH	Town or Private Road	50 ft	100 ft	200 ft	State or County Highway	75 ft	150 ft	300 ft
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Adopted Language	Recommended Language
	<p><b>B. Approval of Access onto a Public Street.</b> Access onto public streets is subject to approval by the town, county or state as applicable. Approval of access onto a public street shall be obtained before the approval of a final subdivision plat.</p>
	<p><b>C. Single Access Point.</b> No lot shall be served by more than one access unless the subdivider can demonstrate to the satisfaction of the Planning Board that the additional access is necessary to provide adequate access for emergency response, ensure vehicular and pedestrian safety, and/or minimize impacts to the natural environment.</p>
	<p><b>D. Corner and Through Lots.</b> Where a property fronts one more than one street, access shall be on the less traveled street unless the subdivider can demonstrate to the satisfaction of the Planning Board that access on the more heavily traveled street would be safer.</p>
	<p><b>E. Shared Access.</b> Subdivision of a parcel after the effective date of these regulations shall not create an automatic right to construct more than one access. The Planning Board may require provision for shared access between adjoining properties.</p>
	<p><b>F. Width of Access.</b> Access shall be limited to a maximum defined width of 40 feet and the Planning Board may further limit the width of access to the minimum necessary to accommodate anticipated traffic.</p>
	<p><b>G. Access to Working Lands.</b> Subdivisions shall be designed to avoid restricting access to surrounding farm and forest land by agricultural and forestry vehicles and equipment.</p>

Adopted Language	Recommended Language
	<p><b>[TO BE ADDED] SECTION 4: RESIDENTIAL DRIVEWAYS</b></p> <p><b>A. General.</b> New driveways serving not more than 4 dwellings shall be designed and built to provide suitable access to building sites in accordance with the provisions of the New York State Uniform Fire Prevention and Building Code and the standards below:</p> <ol style="list-style-type: none"> <li>(1) Driveways shall be not less than 10 feet or more than 20 feet in width. Driveways shall have a cleared width and height of not less than 14 feet.</li> <li>(2) Driveways shall not exceed a 12% slope as averaged over any 100-foot section</li> <li>(3) Driveways shall not exceed 3% slope within 50 feet of their intersection with the street and shall provide a suitable negative grade within 20 feet of the intersection with the street pavement.</li> <li>(4) Driveways shall not intersect the street at less than a 75-degree angle.</li> <li>(5) Driveways shall be set back a minimum of 10 feet from lot lines unless providing shared access to contiguous properties or unless an access easement is obtained across the adjoining lot.</li> <li>(6) Driveways shall be designed to prevent adverse impacts from stormwater drainage or erosion on public streets and infrastructure.</li> <li>(7) Driveways shall be designed with adequate turnaround areas so that vehicles do not back out onto the street.</li> </ol>
	<p><b>[TO BE ADDED] SECTION 5: STREETS</b></p> <p><b>A. Applicability.</b> Streets shall be designed to reflect the rural, scenic and agricultural character of the Town of Hartford. The Planning Board shall not approve any subdivision involving new street construction unless proposed streets are designed in accordance with the requirements of this section or any Public Works Specifications duly adopted by the Town of Hartford. Approval of a subdivision by the Planning Board shall not be deemed to constitute or be evidence of acceptance by the Town of Hartford of any street or easement. Every street shown on a plat that is filed or recorded in the Washington County Clerk's Office shall be deemed a private street unless it has been formally accepted as a public street by resolution of the Town Board.</p>
	<p><b>B. Improvements within Public Rights-of-Way or Streets.</b> Where the subdivider proposes improvements within existing public rights-of-way or streets, the proposed design and construction details shall be approved in writing by the appropriate town, county or state entity, as applicable.</p>

Adopted Language	Recommended Language
<p><b>SECTION 1: GENERAL REQUIREMENTS</b></p> <p><b>D. Specifications for Private Streets.</b></p> <p>(1) Application of Standards to Private Streets. Where proposed streets are not intended to be taken over or maintained by the Town of Hartford but are to be maintained by other means, such private streets shall not be required to conform to the requirements of Section 2. and 3. of this Article, except private streets shall comply with the requirements of Sections 2(I) and 3(D) of this Article. Such private streets shall not be required to comply with the current Town of Hartford Street and Highway Specifications, except that all such private streets shall be subject to and conform with the right-of-way requirements as specified in said Town of Hartford Street and Highway Specifications.</p> <p>(2) Notation of Rights-of-way, Covenants and Restrictions. Any lot created not fronting on an existing street, or any lot containing any portion of a proposed right-of-way, shall have all rights-of-way, covenants and restrictions so noted on the legal transfer of ownership of such lots.</p> <p>(3) Sign Denoting Private Street. Prior to the offer for sale of any lot fronting on a private street, such private street shall have been clearly posted by the developer as private street. Placement of any signage for such posting shall be by approval of the Town of Hartford Superintendent of Highways where such private road enters onto a Town of Hartford street, or upon approval of the appropriate County or State official for entry onto such other streets.</p> <p>(4) Denial for the Development of Private Streets. Where the Planning Board finds that a proposed private street does not conform to the policies of said Board as stated in Article I of these regulations, said Board may deny the approval of any plan proposing private streets or require such streets to meet the standards required to be met by streets intended to be taken over and maintained by the Town of Hartford.</p>	<p><b>C. Private Streets.</b> In addition to the design standards of Paragraph D below, the following requirements shall all private streets:</p> <p>(1) All private streets shall be designated as such and shall include that designation on required road signs.</p> <p>(2) Where the subdivision streets are to remain private, the following words shall appear on the recorded plat, "All streets in this subdivision shall remain private streets to be maintained by the developer or the lot owners and shall not be accepted by the town unless they meet all applicable design and construction standards. Conformance with applicable design and construction standards shall not be deemed to constitute or to mandate the town's acceptance of private streets."</p> <p>(3) A road maintenance agreement shall be recorded with the deed of each property to be served by a private street. The agreement shall provide for a method to initiate and finance a private street and maintain that street in adequate condition, and a method of apportioning maintenance costs to current and future users.</p>
<p><b>SECTION 3: STREET DESIGN</b></p> <p><b>A. Improvements.</b> Streets shall be graded and improved with pavement, curbs, gutters, sidewalks, storm drainage, utilities, water mains, sewers, street lights and signs, street trees, and fire hydrants, except where the Planning Board may waive, subject to appropriate conditions, such improvements as it considers may be omitted without jeopardy to the public health, safety and general welfare. Pedestrian easements shall be improved as required by the Town Engineer. Such grading and improvements shall be approved as to design and specifications by the Town Engineer.</p>	<p><b>D. Street Design Standards.</b> These design standards shall control the roadway, shoulders, clear zones, curbs, sidewalks, drainage systems, culverts and other appurtenances associated with the street, and shall be met by all proposed streets. The following design standards shall apply to all new streets, whether public or private:</p>

Adopted Language	Recommended Language
<p><b>SECTION 2: STREET LAYOUT</b></p> <p><b>A. Width, Location and Construction.</b> Streets shall be of sufficient width, suitably located, and adequately constructed to conform with the Master Plan, if such exists, and to accommodate the prospective traffic and afford access for fire fighting, snow removal and other road maintenance equipment. The arrangement of streets shall be such as to cause no undue hardship to adjoining properties and shall be coordinated so as to compose a convenient system.</p>	<p>(1) <b>General.</b> The arrangement, character, extent, width, grade and location of all streets shall be considered in their relation to existing and planned streets, to topographical conditions, to public convenience and safety, and to the proposed uses of the land to be served by such streets.</p>
<p><b>B. Arrangement.</b> The arrangement of streets shall provide for the continuation of the principal streets of adjoining subdivisions, and for proper projection of principal streets into adjoining properties which are not yet subdivided, in order to make possible necessary fire protection, movement of traffic and the construction or extension, presently or when later required, of needed utilities and public services such as sewers, water and drainage facilities. Where, in the opinion of the Planning Board, topographic or other conditions make such continuance undesirable or impracticable, the above conditions may be modified.</p>	<p>(2) <b>Interconnected Street Network.</b> The arrangement of new streets shall provide for the continuation, if appropriate, of streets in the surrounding area and be such as to compose a convenient system both for the subdivision and connection to the existing street network. The Planning Board may require the reservation of a right-of-way easement to provide continuation of the street where future development is possible on the subject or an adjoining parcel. The Planning Board may require construction of street stubs or financial guarantees to ensure future construction of street connections.</p> <p>(3) <b>Streets and Utilities.</b> Street layout shall consider the installation of utility distribution and service lines and shall be situated so as to best accommodate these installations in an acceptable manner. The construction of streets and the installation of utilities shall be planned sequentially, so that construction operations do not conflict and so that subsequent construction operations do not interfere with or destroy completed work.</p>
<p><b>C. Minor Streets.</b> Minor streets shall be so laid out that their use by through traffic will be discouraged.</p>	<p>[TO BE DELETED]</p>
<p><b>D. Special Treatment Along Major Arterial Streets.</b> When a subdivision abuts or contains an existing or proposed major arterial street, the Board may require marginal access streets.</p>	<p>[TO BE DELETED]</p>
<p><b>J. Relation to Topography.</b> The street plan shall bear a logical relationship to the topography of the property and all streets shall be arranged so as to obtain as many possible of the building sites at or above the grades of the streets. Grades of streets shall conform as closely as possible to the original topography.</p>	<p>(4) <b>Streets and Topography.</b> Street layout shall follow the natural contours of the site and the grade of streets shall conform as closely as possible to the natural terrain. Street grades shall be arranged to allow for maximum number of proposed building sites to be situated at or above the finished grade level of the street.</p>

Adopted Language	Recommended Language
	<p>(5) <b>Streets and Protection of Natural Resources.</b> Street layout shall minimize stream and wetland crossings, avoid traversing steep slopes, and avoid soils with susceptibility to erosion or slippage. Clearing and grading for street and utility installations shall be limited to that which is necessary to construct safe streets, provide needed roadside and embankment drainage, construct stable cuts and fills, and provide for utility installation.</p>
<p><b>E. Dead-End Streets.</b> Subdivision containing twenty (20) lots or more shall have at least two street connections with existing public streets, or streets shown on the Official Map, if such exists, or streets on an approved Subdivision Plat for which a bond has been filed.</p>	<p>(6) <b>Street Connections.</b> Any subdivision expected to generate average daily traffic of 200 or more trips per day shall have at least two connections to an existing public street or a private street that meets the standards of this section.</p>
	<p>(7) <b>Compatibility with Anticipated Traffic and Use.</b> Streets shall be designed to standards that will accommodate the average daily traffic expected to occur on the street and the intended use. The Planning Board may increase minimum standards as deemed necessary to accommodate anticipated traffic levels, travel speed, truck traffic, terrain, or types/density of development to be served by the street.</p>
<p><b>F. Block Size.</b> Blocks generally shall not be less than 400 feet nor more than 1200 feet in length. In general no block width shall be less than twice the normal lot depth. In blocks exceeding 800 feet in length, the Planning Board may require the reservation of a 20 foot wide easement through the block to provide for the crossing of underground utilities and pedestrian traffic where needed or desirable and may further specify, at its discretion, that a 4-foot wide paved foot path be included.</p>	<p><b>[TO BE DELETED]</b></p>

Adopted Language	Recommended Language																
<p><b>SECTION 2: STREET LAYOUT</b></p> <p><b>G. Intersections with Collector or Major Arterial Roads.</b> Minor or secondary street openings into such roads shall, in general, be at least 500 feet apart.</p> <p><b>H. Street Jogs.</b> Street jogs with center line offsets of less than 125 feet shall be avoided.</p> <p><b>I. Angle of Intersection.</b> In general, all streets shall join each other so that for a distance of at least 100 feet of the street is approximately at right angles to the street it joins.</p> <p><b>SECTION 3: STREET DESIGN</b></p> <p><b>D. Grades at Intersections.</b> Grades of all streets shall in no case be more than three percent within 50 feet of any intersection.</p> <p><b>E. Steep Grades and Curves; Visibility of Intersections.</b> A combination of steep grades and curves shall be avoided. In order to provide visibility for traffic safety, that portion of any corner lot (whether at an intersection entirely within the subdivision or of a new street with an existing street) which is shown shaded on Sketch A shall be cleared of all growth (except isolated trees) and obstructions above the level of three feet higher than the center line of the street. If directed, the ground shall be excavated to achieve visibility.</p>	<p>(8) <b>Intersections.</b> Streets intersections shall be designed in accordance with the following:</p> <p>(a) Street grade shall not exceed 3% within 50 feet of any intersection.</p> <p>(b) All intersections shall be separated as specified in the table below unless directly opposite each other. Jogs in a street with centerline offsets less than the minimum separation requirement shall be prohibited.</p> <p>(c) Streets shall be laid out so as to intersect as close as possible to a right angle. No street shall intersect another street at an angle of less than 75 degrees.</p> <p>(d) Within the sight triangle (as established in the table below, based on the highest posted speed), visibility shall not be restricted by natural landform or by the location of any structure or vegetation.</p> <table><tr><th></th><th>0-30 MPH</th><th>31-45 MPH</th><th>46-55 MPH</th></tr><tr><td>Minimum Intersection Spacing</td><td>150 ft</td><td>300 ft</td><td>500 ft</td></tr><tr><td>Minimum Sight Distance</td><td>200 ft</td><td>400 ft</td><td>600 ft</td></tr><tr><td>Minimum Sight Triangle</td><td>30 ft</td><td>40 ft</td><td>50 ft</td></tr></table>		0-30 MPH	31-45 MPH	46-55 MPH	Minimum Intersection Spacing	150 ft	300 ft	500 ft	Minimum Sight Distance	200 ft	400 ft	600 ft	Minimum Sight Triangle	30 ft	40 ft	50 ft
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<p><b>SECTION 2: STREET LAYOUT</b></p> <p><b>E. Dead-End Streets.</b> The creation of dead-end or loop residential streets will be encouraged wherever the Board finds that such type of development will not interfere with normal traffic circulation in the area. In the case of dead-end streets, where needed or desirable, the Board may require the reservation of a 20-foot wide easement to provide for continuation of pedestrian traffic and utilities to the next street.</p>	<p>(9) <b>Dead-End Streets.</b> Dead-end streets shall only be allowed where necessitated by site-specific physical conditions (e.g., steep slopes, streams, wetlands, etc.) or where a street will serve not more than 9 residential lots. Dead-end streets with an anticipated average daily traffic level of 100 or more trips shall terminate with a cul-de-sac. All other dead-end streets may terminate in a T-turnaround adequately sized to accommodate emergency response and service vehicles.</p>																
<p><b>SECTION 3: STREET DESIGN</b></p> <p><b>F. Watercourses.</b> Where a watercourse separates a proposed street from abutting property, provision may be required for access to all lots by means of culverts or other structures of design approved by the Town Engineer. Where a subdivision is traversed by a watercourse, drainage way, channel or stream, there shall be provided a storm water easement or drainage right-of-way as required by the Town Engineer, and in no case less than 20 feet in width.</p>	<p>(10) <b>Crossing Watercourses.</b> Where a watercourse separates a building site from the street, provision shall be made for a culvert or other structure as appropriate.</p>																

Adopted Language	Recommended Language
<p><b>SECTION 3: STREET DESIGN</b></p> <p><b>A. Improvements.</b></p> <p>(2) Street Lighting Facilities. Lighting facilities shall be in conformance with the lighting system of the Town. Such lighting standards and fixtures shall be installed after approval by the appropriate power company and the authorized Town electrical inspector.</p> <p><b>SECTION 4: STREET NAMES</b></p> <p><b>A. Type of Name.</b> All street names shown on the Preliminary Plat or Subdivision Plat shall be approved by the Town Board or their designee. In general, street shall have names and not numbers or letters.</p> <p><b>B. Names to be Substantially Different.</b> Proposed street names shall be sufficiently different so as not to be confused in sound or spelling with present names except that streets that join or are in alignment with streets of an abutting or neighboring property shall bear the same name.</p>	<p>(11) <b>Curbs.</b> Unless necessary for stormwater management purposes, streets in rural residential subdivisions shall not be designed with curbs.</p> <p>(11) <b>Street Lights.</b> Streets in rural subdivisions shall generally not be designed with street lights. The Planning Board may approve installation of street lights at intersections and/or where it deems necessary for public safety. Street lights shall be full cut-off fixtures and use of energy-efficient fixtures is strongly encouraged.</p> <p>(12) <b>Street Names.</b> Streets shall be named and numbered in conformance with Washington County 911 street naming and numbering conventions.</p>

Adopted Language	Recommended Language
<p><b>SECTION 3: STREET DESIGN</b></p> <p><b>B. Utilities in Streets.</b> The Planning Board shall, wherever possible, require that underground utilities shall be placed in the street right-of-way between the paved roadway and street line to simplify location and repair of lines when they require attention. The subdivider shall install underground service connections to the property line of each lot within the subdivisions for such required utilities before the street is paved.</p> <p><b>C. Utility Easements.</b> Where topography is such as to make impractical the inclusion of utilities within the street rights-of-way, perpetual unobstructed easements at least 20 feet in width for such utilities shall be provided with satisfactory access to the street. Wherever possible, easement shall be continuous from block to block and shall present as few irregularities as possible. Such easements shall be cleared and graded where required.</p>	<p><b>[TO BE ADDED] SECTION 6: UTILITIES</b></p> <p><b>A. General.</b> All utility systems, existing and proposed, shall be shown on the subdivision plat and shall be located and designed as follows:</p> <p>(1) All utility systems, which may include but not be limited to water, sewer, electric, gas, telephone, fiber optics, and television cable, shall be located underground. The Planning Board may waive this provision, if the applicant can demonstrate that undergrounding is unreasonable and prohibitively expensive (i.e., burial would require extensive blasting and ledge removal or disturbance of ecologically sensitive areas).</p> <p>(2) Underground utilities shall be placed, wherever possible, in the street right-of-way to simplify location and repair of utilities. Underground service connections shall be installed to the lot line of each lot for all required utilities. Where topography is such as to make impractical the inclusion of underground utilities within the street right-of-way, perpetual unobstructed easements at least 20 feet wide shall be provided with satisfactory access to the street. Such easements shall be cleared and graded where required.</p> <p>(3) To the greatest extent feasible, utility corridors shall be shared with other utility and/or transportation corridors, be connected to and/or continue corridors from adjoining parcels, and be located to minimize site disturbance and any adverse impacts to natural, cultural, agricultural or scenic features, and to public health.</p> <p>(4) All utility boxes shall be screened from public view to the greatest extent feasible. Utility buildings shall be designed to have the exterior appearance of residential or agricultural accessory buildings typical of the area in which they will be located.</p>
	<p><b>B. Wastewater.</b> The subdivider shall submit evidence of site suitability for subsurface sewage disposal prepared by a licensed professional engineer in full compliance with New York State Department of Health regulations. Reserve areas designated for future replacement of an on-site wastewater disposal system shall be shown on the subdivision plat and restricted in the deed so as not to be built upon. If a common wastewater treatment system is provided by the subdivider, the design, construction and operation of the system shall conform to state regulations.</p>

Adopted Language	Recommended Language
	<p><b>C. Water Supply.</b> Individual wells shall be sited and constructed to prevent infiltration of surface water, and contamination from subsurface wastewater disposal systems and other sources of potential contamination. Lot design shall permit placement of wells, subsurface wastewater disposal areas and reserve sites for subsurface wastewater disposal areas in compliance with state regulations. If a common water supply system is provided by the subdivider, the location and protection of the source, the design, construction and operation of the system shall conform to state regulations</p>
<p><b>SECTION 3: STREET DESIGN</b></p> <p><b>A. Improvements.</b></p> <p>(1) Fire Hydrants. Installation of fire hydrants shall be in conformity with all requirements of standard thread and nut as specified by the New York Fire Insurance Rating Organization and the Division of Fire Safety of the State of New York.</p>	<p><b>D. Fire Protection.</b> All residential subdivisions of 10 or more homes shall provide adequate access to and storage of water for fire fighting purposes as specified below. The Planning Board may require a subdivision of any size to provide access to and storage of water for fire fighting purposes if deemed necessary to protect life and property.</p> <p>(1) Facilities may be ponds with dry hydrants, underground storage reservoirs or other methods acceptable to the fire department.</p> <p>(2) A minimum storage capacity of 10,000 gallons plus 2,000 gallons per lot or principal building shall be provided. The Planning Board may require additional storage capacity upon a recommendation from the fire department.</p> <p>(3) Where ponds are proposed for water storage, the capacity of the pond shall be calculated based on the lowest water level less an equivalent of 3 feet of ice.</p> <p>(4) An easement shall be granted to the town granting access to and maintenance of dry hydrants or reservoirs where necessary.</p> <p>(5) Hydrants or other provisions for drafting water shall be provided to the specifications of the fire department. Minimum pipe size connecting dry hydrants to ponds or storage vaults shall be 6 inches. A suitable access way to the hydrant or other water source shall be constructed.</p>
<p><b>SECTION 6: DRAINAGE IMPROVEMENTS</b></p> <p><b>A. Removal of Spring and Surface Water.</b> The subdivider may be required by the Planning Board to carry away by pipe or open ditch any spring or surface water that may exist either previous to, or as a result of the subdivision. Such drainage facilities shall be located in the street right-of-way where feasible, or in perpetual unobstructed easements of appropriate width.</p>	<p><b>D. Stormwater Management.</b> Stormwater shall be managed on-site so that there is no increase in the rate of drainage flowing onto adjoining properties or streets Surface water drainage facilities shall be designed to handle all on-site runoff (25-year storm frequency as the minimum design criteria). The subdivider shall submit a stormwater management plan for Planning Board approval.</p>

Adopted Language	Recommended Language
<p><b>B. Drainage Structure to Accommodate Potential Development Upstream.</b> A culvert or other drainage facility shall, in each case, be large enough to accommodate potential run-off from its entire upstream drainage area, whether inside or outside the subdivision. The Town Engineer shall approve the design and size of facility based on anticipated run-off from a “ten-year” storm under conditions of total potential development in the watershed.</p>	<p>[TO BE DELETED]</p>
<p><b>C. Responsibility from Drainage Downstream.</b> The subdivider’s engineer shall also study the effect of each subdivision on the existing downstream drainage facilities outside the area of the subdivision; this study shall be reviewed by the Town Engineer. Where it is anticipated that the additional runoff incident to the development of the subdivision will overload an existing downstream drainage facility during a five-year storm, the Planning Board shall notify the Town Board of such potential condition. In such case, the Planning Board shall not approve the subdivision until provision has been made for the improvement of said condition.</p>	<p>[TO BE DELETED]</p>
<p><b>D. Land Subject to Flooding.</b> Land subject to flooding or land deemed by the Planning Board to be uninhabitable, should not be platted for residential occupancy, nor for such other uses a may increase danger to health, life or property, or aggravate the flood hazard, but such land within the plat should be set aside for such uses as shall not be endangered by periodic or occasional inundation or improved in a manner satisfactory to the Planning Board to remedy said hazardous conditions.</p>	<p>[TO BE DELETED]</p>

Adopted Language	Recommended Language
<p><b>SECTION 7: RECREATIONAL AREAS, ASSOCIATED FEES, AND NATURAL FEATURES</b></p> <p><b>A. Recreational Areas.</b></p> <p>(1) For Minor Subdivisions, a fee of Fifty Dollars (\$50) for each lot created in addition to the original. Said fees are to be paid by the Subdivider upon the approval of the subdivision and prior to the signing of the mylar for any such subdivision by the Planning Board. This fee shall apply to Exempt Subdivisions as well as Minor Subdivisions, and the fee shall be used by the Town Board for the funding of recreational opportunities in the Town of Hartford.</p> <p>(2) For many Major Subdivisions, the Planning Board may require a given area to be set aside for recreational use. Such an area or area may be dedicated to the Town by the Subdivider if the Town Board approves such dedication. In deciding whether or not to require recreational areas, the Planning Board shall take into account the area proposed to be dedicated, the ease of maintenance by the Town, the potential for use of said lands by the residents of the Town, and the overall feasibility of such dedication of such lands. If the Planning Board decides not to require the payment of a fee to be placed into an account by the Town Board for the funding of recreational opportunities in the Town of Hartford.</p> <p>The fee schedule shall be as follows:</p> <p>For Major Subdivisions of up to 10 lots in addition to the original lot: \$200 per lot. For example, a 9 lot subdivision will require a fee of \$1800.</p> <p>For Major Subdivisions of up to 20 lots in addition to the original lot: \$500 per lot. For example, a 19 lot subdivision will require a fee of \$9,500.</p> <p>For Major Subdivisions of more than 21 lots in addition to the original lot: \$750 per lot. For example, a 29 lot subdivision will require a fee of \$21,750.</p> <p>Said fees are to be paid by the developer upon the approval of the subdivision and prior to the signing of the mylar for any such subdivision by the Planning Board.</p>	<p><b>[TO BE ADDED] SECTION 7: OPEN SPACE AND RECREATION</b></p> <p><b>A. Open Space.</b> All subdivisions of 10 or more lots shall make provision for preservation of Open Space as follows:</p> <p>(1) A minimum of 50% of the parcel to be subdivided shall be designated as Open Space and shall be restricted from further subdivision or development through a conservation easement. Open Space land may be improved for recreation (non-commercial) or agricultural use. Water, wastewater or drainage infrastructure may be located on Open Space land provided that the subdivider can demonstrate to the satisfaction of the Planning Board that such infrastructure will have no adverse ecological impacts.</p> <p>(2) All unbuildable areas (surface waters, floodplains, wetlands, steep slopes, etc.) shall be included in the designated Open Space.</p> <p>(3) The remaining required Open Space shall consist of those parts of the buildable lands with the greatest ecological, agricultural or scenic value such as:</p> <ul style="list-style-type: none"> <li>(a) Stream banks, wet soils, swales, springs, vernal pools and adjacent buffer areas</li> <li>(b) Habitat for rare, endangered or threatened species</li> <li>(c) Moderate to steep slopes and areas prone to erosion</li> <li>(d) Prime agricultural soils</li> <li>(e) Open fields and meadows, particularly when in the foreground of a scenic view</li> <li>(f) Visually prominent features such as knolls, hilltops and ridgelines</li> </ul> <p>(4) Open Space shall generally be contiguous and shall adjoin the largest practicable number of lots within the subdivision.</p> <p>(5) Any type of ownership of Open Space, including private or third-party ownership, may be approved provided that the Open Space will be protected in perpetuity and its ecological, agricultural, recreational and/or scenic functions will be maintained.</p> <p>(6) The Planning Board may allow a subdivider to meet the Open Space requirement by conserving an amount of land equal to 75% of the parcel to be subdivided elsewhere in the Town of Hartford provided that the subdivider demonstrates to the satisfaction of the Planning Board that the proposed land conservation better meets the policies and objectives of these regulations than designating Open Space on the parcel to be subdivided.</p>

Adopted Language	Recommended Language
	<p><b>B. Recreational Areas.</b> Any residential subdivision of 5 or more lots with an average lot size of less than 1 acre shall provide recreational land and amenities. If the subdivision tract will include designated Open Space, a portion of that land may be improved for recreational use. Otherwise, a minimum of 2 acres of land shall be set aside for recreational use for the first 10 dwellings within the proposed subdivision plus 1 additional acre per each additional 10 dwellings. The Planning Board may require the subdivider to provide recreation amenities (such as play structures, sport courts or trails) as deemed appropriate to the proposed subdivision.</p>
<p><b>Article II: Definitions</b></p>	
<p>Consider moving the definitions to be the final article in the law. Added definitions of terms used in the recommended changes to the law.</p> <p>Recommendations include changes to the definition of an exempt subdivision. The current law contains a potential loophole by allowing an exemption for lots being transferred to a family member with no limitation on how many such lots can be created and transferred. The recommended language provides an alternative to this exemption that would allow creation of an exempt lot once every 5 years irrespective of who the lot will be transferred/sold to.</p>	
Adopted Language	Recommended Language
For the purpose of these regulations, certain words and terms used herein are defined as follows:	Certain words and terms used in these regulations are defined in this article. Words not defined in this article shall have their ordinary dictionary meaning.
	<p><b>Building Envelope.</b> Area of a building lot within which structures and their supporting above ground improvements may be located.</p>
<p><b>Master or Comprehensive Plan.</b> If such exists, means a comprehensive plan, prepared by the Planning Board pursuant to Section 272-A of the Town Law which indicates the general locations recommended for various classes of public works, places and structures and for general physical development of the Town and includes any unit or part of such plan separately prepared and any amendment to such plan or parts therein.</p>	<p><b>Comprehensive Plan.</b> The official document, adopted by the Town Board pursuant to Section 272-a of the New York State Town Law, that provides a consistent policy direction to guide the immediate and long-range protection, enhancement, and development of the Town of Hartford.</p>
	<p><b>Conservation Easement.</b> A legal agreement in the form of an easement, covenant, restriction or other interest in real property created under and subject to the provisions of Article 49, Title 3, of the New York State Environmental Conservation Law and filed at the Washington County Clerk's office, which limits or restricts the development, management or use of such real property in perpetuity for the purpose of preserving or maintaining the scenic, agricultural, open, historic, recreational, archaeological, architectural or natural condition, character, significance or amenities of the property.</p>

Adopted Language	Recommended Language
	<b>Driveway.</b> A private way situated within a lot for vehicular traffic providing access from a street to a dwelling or a commercial premises. Shared driveways, providing access to not more than 4 dwellings or lots may be approved by the Planning Board.
<b>Easement.</b> Means authorization by a property owner for the use by another, and for a specified purpose, of any designated part of his property.	<b>Easement.</b> The acquired right of one property owner to use a designated part of another person's property for a specified purpose.
<b>Engineer or Licensed Professional Engineer.</b> A person licensed as a professional engineer by the State of New York.	<b>Engineer.</b> A person licensed as a professional engineer by the State of New York.
	<b>Lot.</b> A parcel of land having defined boundaries as shown on a duly approved and recorded subdivision plat filed with the Washington County Clerk.
	<b>Lot, Corner.</b> A lot located at the corner of two intersecting streets with frontage both streets.
<b>Frontage on an Existing Public Roadway.</b> (a) A fee ownership of land on an existing public roadway a minimum of thirty (30) feet wide. (b) A right-of-way or easement shall not be considered Frontage on an Existing Public Roadway.	<b>Lot Frontage.</b> The uninterrupted linear or curvilinear extent of a lot measured along the street right-of-way from the intersection of one side lot line to the intersection of the other side lot line.
	<b>Lot, Interior.</b> A lot without frontage on a street.
	<b>Lot, Through.</b> A lot, other than a corner lot, having frontage on more than one street.
	<b>Improvements.</b> A physical change to the land or installation of certain services necessary to create usable lots or building sites.
<b>Official Map.</b> If such exists, means the map established by the Town Board pursuant to Section 270 of the Town Law, showing streets, highways and parks and drainage, both existing and proposed.	<b>Official Map.</b> A map showing streets, highways and parks heretofore laid out, which may be adopted by the Town Board in accordance with Section 270 of the Town Law.
	<b>Parcel.</b> A contiguous area of land owned by or recorded as the property of the same person or legal entity.
<b>Planning Board.</b> Means the Planning Board of the Town.	<b>Planning Board.</b> The Planning Board of the Town of Hartford.

Adopted Language	Recommended Language
	<p><b>Plat.</b> The map of a subdivision showing the location, boundaries and proposed ownership of individual properties and associated improvements.</p>
<p><b>Preliminary Plat.</b> Means a drawing or drawings clearly marked “preliminary plat” showing the salient features of a proposed subdivision, as specified in Article V, Section 3 of these regulations, submitted to the Planning Board for purposes of consideration prior to submission of the plat in final form and of sufficient detail to apprise the Planning Board of the layout of the proposed subdivision.</p>	<p><b>Plat, Preliminary.</b> The maps, drawings and other data showing the layout and associated improvements of a proposed subdivision, as specified in these regulations, submitted to the Planning Board for approval prior to submission of the final plat.</p>
<p><b>Subdivision Plat or Final Plat.</b> Means a drawing, in final form, showing a proposed subdivision containing all information or detail required by law and by these regulations to be presented to the Planning Board for approval, and which if approved, may be duly filed or recorded by the applicant in the office of the County Clerk or Register.</p>	<p><b>Plat, Subdivision or Final.</b> The final maps, drawings and other data on which the subdivider’s plan of subdivision, containing all information or detail required by law and by these regulations, is presented to the Planning Board for approval, and which, if approved, shall be submitted to the Washington County Clerk for filing or recording in order to complete the subdivision approval process.</p>
	<p><b>Resources, Agricultural.</b> The natural (land, soil, water), built and human resources necessary to sustain agricultural production.</p>
	<p><b>Resources, Ecological.</b> Components and processes present or produced by nature, including soil types, geology, slopes, vegetation, surface water, drainage patterns, aquifers, recharge areas, climate, floodplains, aquatic life, and wildlife.</p>
	<p><b>Resources, Historic and Cultural.</b> Buildings or other structures, objects, landscapes, archaeological resources, or sites listed or eligible for listing on the State or National Registers of Historic Places or locally designated as an historic or cultural resource by the Town Board.</p>
	<p><b>Resources, Scenic.</b> Natural or built features or landscapes and vistas over them, which would be described as beautiful or visually pleasing by the average viewer.</p>
	<p><b>Resubdivision.</b> Any change in the plat of a subdivision, which has previously been filed with the Washington County Clerk, that affects any street layout, land reserved for public use, or the area or any other dimension of any lot. A resubdivision shall be considered a subdivision for the purposes of these regulations.</p>
	<p><b>Rural Character.</b> Sense of place created by a relatively undeveloped landscape that is primarily devoted to working agricultural and forest lands and/or open space.</p>

Adopted Language	Recommended Language
<b>Sketch Plan.</b> Means a sketch of a proposed subdivision showing the information specified in Article V, Section I of these regulations to enable the subdivider to save time and expense in reaching general agreement with the Planning Board as to the form of the layout and the objectives of these regulations.	<b>Sketch Plan.</b> A sketch of a proposed subdivision showing the information required by these regulations to enable the subdivider to save time and expense in reaching general agreement with the Planning Board as to the form of the layout and the objectives of these regulations.
<b>Street.</b> Means and includes municipal streets, roads, avenues or lanes.	<b>Street.</b> A public or private right-of-way, other than a driveway, that provides vehicular access to abutting properties.
<b>Dead-End Street.</b> Means a street or portion of a street with only one vehicular outlet.	<b>Street, Dead-End.</b> A street with only one means of vehicular ingress and egress and with a turnaround at its terminus.
<b>Private Street.</b> A street not intended to be taken over or maintained by the Town of Hartford.	<b>Street, Private.</b> A street owned and maintained by a private entity (such as a homeowners' association).
<b>Public Roadway.</b> Means those highways as defined in Section 3 of the New York State Highway Law. Private streets are not public roadways.	<b>Street, Public.</b> A street owned and maintained by a public entity (such as the state, county or town).
	<b>Street, Through.</b> A street with two or more means of vehicular ingress and egress.
<b>Major Street.</b> Means a street which serves or is designated to serve heavy flows of traffic and which is used primarily as a route for traffic between communities and/or other heavy traffic generating areas.	[TO BE DELETED]
<b>Collector Street.</b> Means a street which serves or is designated to serve as a traffic way for a neighborhood or as a feeder to a major street.	[TO BE DELETED]
<b>Minor Street.</b> A street intended to serve primarily as an access to abutting residential properties of not more than twenty-five (25) lots.	[TO BE DELETED]
<b>Street Pavement.</b> Means the wearing or exposed surface of the roadway used by vehicular traffic.	[TO BE DELETED]
<b>Street Width.</b> Means the width of right-of-way, measured at right angles to the center line of the street.	[TO BE DELETED]
<b>Subdivider.</b> Means any person, firm, corporation, partnership or association, who shall lay out any subdivision or part thereof as defined herein, either for himself or others.	<b>Subdivider.</b> Any person or legal entity seeking to subdivide land.

<p><b>Subdivision.</b> Means the division of any parcel of land into two or more lots, blocks, or sites, with or without streets or highways and includes re-subdivision.</p>	<p><b>Subdivision.</b> The division of any parcel of land into two or more lots, plots, sites for the purpose, whether immediate or future, of lot line alteration, transfer of ownership, lease for other than recreation, conservation or agricultural purposes, or building development. Such division shall include resubdivision of any parcel of land for which an approved plat has already been filed with the Washington County Clerk.</p>
<p><b>Subdivision, Exempt.</b> A division of land approved by a probate or other court; the sale or transfer of a single parcel of land from an originally wholly owned parcel, to a specific family member limited to the owner(s) parents, children, grandparents or grandchildren; any bulk transfer of thirty (30) acres or more; or the sale or exchange of parcels of land between owners of adjoining property if added lots are not created. Any of the above referenced subdivisions of land shall have frontage on an existing street to be considered an exempt subdivision.</p>	<p><b>Subdivision, Exempt.</b> The following divisions of land shall be classified as exempt subdivisions:</p> <ol style="list-style-type: none"> <li>(1) A division of land approved by a probate or other court.</li> <li>(2) A lot line adjustment that does not result in the creation of additional lots or a change of more than 10% in the total acreage and road frontage of the involved parcels.</li> <li>(3) A merger of contiguous lots in common ownership.</li> <li>(4) The creation of not more than one additional lot from a parcel within any consecutive 5-year period. The newly created lot shall not be further subdivided unless reviewed and approved by the Planning Board as a minor or major subdivision.</li> </ol>
<p><b>Major Subdivision.</b> Means any subdivision not classified as a Minor or Exempt Subdivision, including, but not limited to, subdivisions of five or more additional lots, or any size subdivision requiring any new street or extension of municipal facilities. A Major Subdivision shall also include any subdivision of any parcel created in a Minor or Exempt subdivision if such subdivision is proposed within any five (5) year period of the date of the sale or transfer of such parcel.</p>	<p><b>Subdivision, Major.</b> Any subdivision not classified as an exempt or minor subdivision.</p>
<p><b>Minor Subdivision.</b> Means any subdivision containing up to four additional lots from a parcel within any consecutive five (5) year period, having frontage on an existing public roadway, not involving any new street or public roadway or the extension of municipal facilities. Each new lot in a new subdivision requires a minimum of thirty (30') feet frontage on an existing public roadway.</p>	<p><b>Subdivision, Minor.</b> Any subdivision creating not more than 4 additional lots from a parcel within any consecutive 5-year period and not involving any new street or extension of municipal facilities.</p>
<p><b>Surveyor.</b> Means a person licensed as a land surveyor by the State of New York.</p>	<p><b>Surveyor, Land.</b> A person licensed as a professional land surveyor by the State of New York.</p>
	<p><b>Town Engineer.</b> The licensed professional engineer, either employee or consultant, who has been designated by the Town Board upon recommendation of the Planning Board to perform the duties of the Town Engineer for purposes of these regulations.</p>

## Design Guidelines

### Introduction

The Town of Hartford Planning Board could use these design guidelines during its review of site plans and subdivisions. Applicants could be provided a copy of the design guidelines with their applications.

The purpose of these guidelines is to aid in effective communication of how future development can be planned and designed to protect and maintain Hartford's agricultural economy, rural character and small-town way of life. By providing illustrated descriptions of desirable development patterns and design elements, the guidelines can provide a useful reference for residents, developers, planning board members and others. The guidelines should assist in:

- Clarifying Hartford's community design goals and objectives.
- Illustrating the intent of the town's existing land use and development laws
- Encouraging innovation and improving the quality of subdivision, site and building design

The guidelines are not intended to be legally binding requirements. Instead, they provide examples of the types of design forms and character that are encouraged by Hartford's Comprehensive Plan and existing land use and development laws. The guidelines provide developers, architects, landscape architects and engineers with a clear picture of the town's expectations before they begin designing projects in the Town of Hartford.

These guidelines are divided into sections addressing the following development considerations:

- Conservation of Agricultural Resources
- Conservation of Natural Resources
- Development and Rural Roads
- Residential Development
- Commercial and Industrial Development

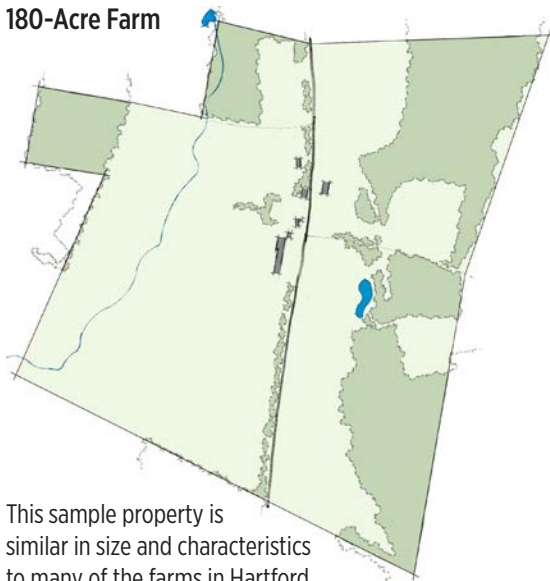
For each of those five topics, the guidelines provide a description of how development might respond to meet the community's goals and objectives as expressed in Hartford's Comprehensive Plan, Agriculture and Farmland Protection Plan, Subdivision Law, and Site Plan Review Law.

## Conservation of Agricultural Resources

Agriculture is the town's primary industry and land use. Cultivated fields create an open and expansive landscape in many areas of town. The geometry of fields and the textures of crops create a distinctive visual pattern. The conversion of farmland to non-agricultural uses could have significant impacts on both the long-term viability of Hartford's agricultural economy and the scenic character of its rural landscape. Guidance on designing subdivisions and development to minimize loss of productive farmland and disruption of agriculture include:

- ❁ **Location of New Development.** Locate non-agricultural development on land with the least agricultural value. When subdividing a portion of an agricultural property, determine the size of the development area based on the land area necessary to maintain viable agricultural production (Diagram A). Lots should be delineated following existing field patterns and boundaries (Diagram B). In large-lot subdivisions, residential lots can be laid out in a manner that centralizes the homes and allows new residential landowners to lease undeveloped land back to the farmer for agricultural use (Diagram C).
- ❁ **Maintain Traditional Landscape Patterns.** Preserve existing vegetation on development sites. Subdivision or site plans should show the location of existing vegetation and designers should incorporate this vegetation as a positive site feature. New planting will enhance the town's rural character when native plant species are used and planting plans reflect the planting patterns of the agricultural landscape and the natural plant massing of the surrounding landscape.
- ❁ **Maintain Traditional Buildings.** The farmstead is an important historic and cultural resource and farmsteads serve as landmarks in the town's scenic rural landscape. The farmstead includes the farmhouse, the barns and outbuildings, and the surrounding landscape. New development should preserve the visual integrity of the farmstead by not encroaching on it. Hedgerows, wood lots and physical distance can be used to establish a clear separation between new development and existing farmsteads.
- ❁ **Site Planning.** The pattern of new development should relate to existing agricultural patterns. Minimize the visual dominance of scattered development in the generally open agricultural landscape. Strip development along existing roads can have a significant impact on the visual appearance of the agricultural landscape. Development obstructs view of the agricultural landscape from the road, and buildings begin to dominate rather than fit into the agricultural landscape (Diagram D). Avoid siting new development in the middle of open fields and instead locate development along the edges of hedgerows, wood lots and in areas of successional growth. When possible, use landform and vegetation to screen views of the new development from roads. This will provide greater privacy for residents and maintain the sense of visual openness associated with the farm landscape.
- ❁ **Cluster and Buffer Development.** By organizing new development into small clusters, neighborhoods or hamlets, it is possible to preserve more farmland and views along the road (Diagram C). Centralized development of residential lots will facilitate separation from agricultural activities while establishing a sense of community for new residents. In open agricultural areas, buffer plantings should be established to provide a separation between residential and agricultural land use, to create windbreaks, and to provide privacy for new homes. Native trees and shrubs should be used to create a screen that is visually impenetrable year-round.

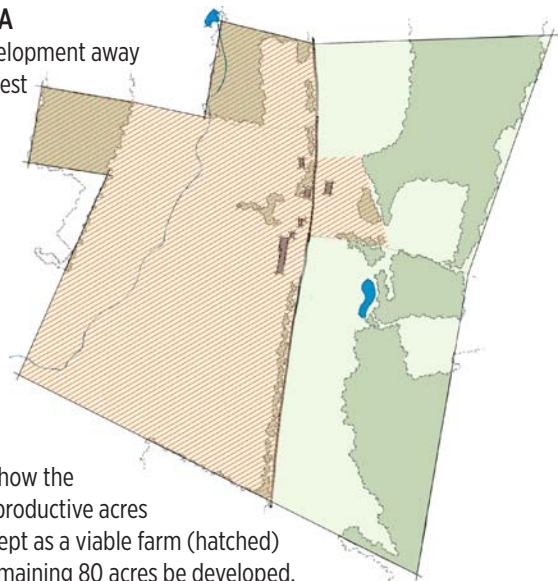
### 180-Acre Farm



This sample property is similar in size and characteristics to many of the farms in Hartford

### Diagram A

Guide development away from the best farmland



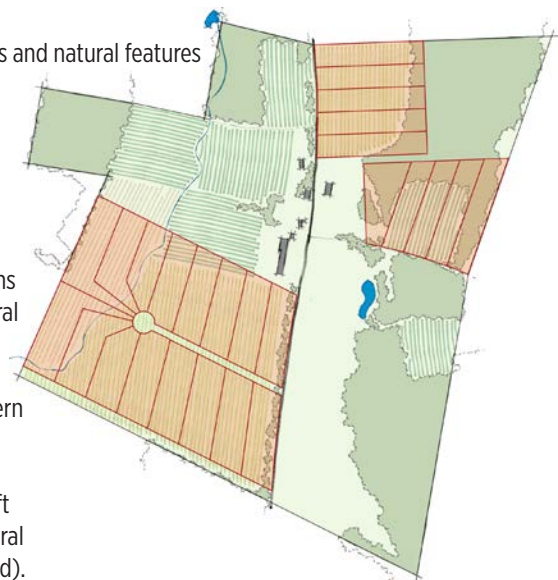
Illustrates how the 100 most productive acres could be kept as a viable farm (hatched) and the remaining 80 acres be developed.

### Diagram B

Pattern of fields and natural features

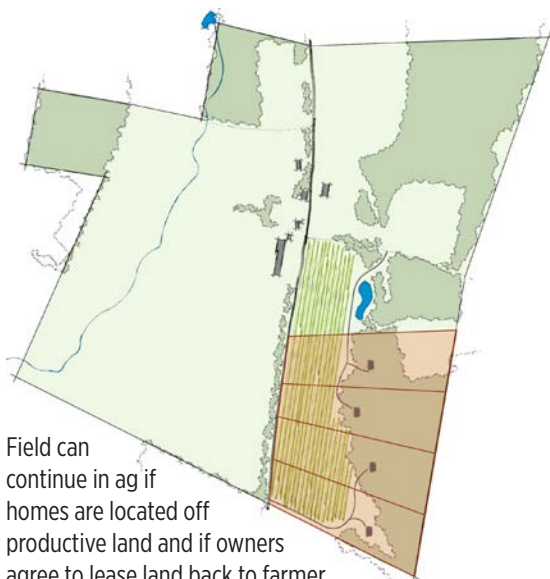


Fields and natural features form patterns that contribute to rural character. The lots created in the upper right follow the pattern of existing fields, (encouraged), while those in the lower left ignore field and natural patterns (discouraged).

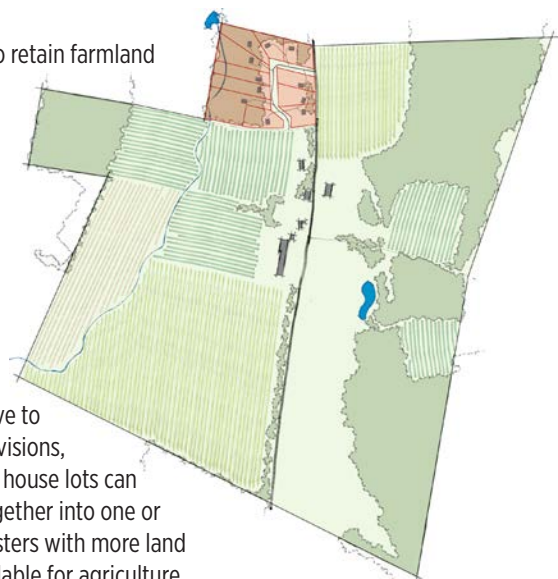


### Diagram C

Siting homes to retain farmland

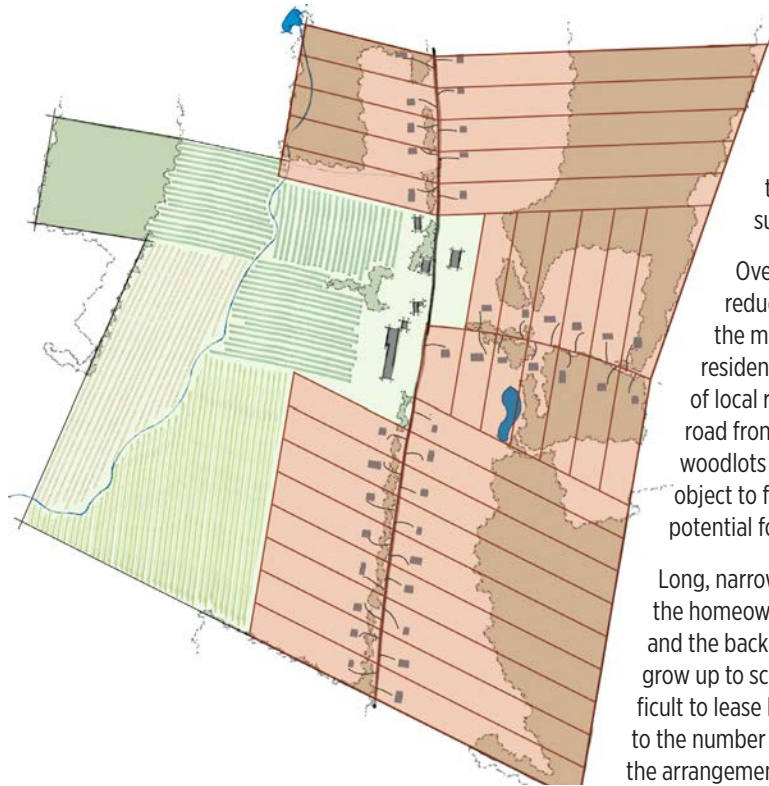


Field can continue in ag if homes are located off productive land and if owners agree to lease land back to farmer.



As an alternative to large-lot subdivisions, small (<2 acre) house lots can be grouped together into one or more small clusters with more land remaining available for agriculture.

**Diagram D. Strip Residential Development**



Strip residential subdivision along existing roads is a common rural development pattern, which should generally be avoided if rural character and productive farm or forest land are to be protected. Preferred options for residential subdivisions are shown on pages 62-65.

Over time this development pattern can significantly reduce rural and scenic character as new homes become the most prominent part of a view. The proliferation of residential driveways can reduce the safety and efficiency of local roads. Access to interior land can be limited if all the road frontage is divided into residential lots. Interior fields or woodlots abut to multiple residential lots whose owners may object to farming or forestry practices, which increases the potential for conflict between neighbors.

Long, narrow residential lots are an inefficient use of land as the homeowner typically uses only an acre or two near the road and the back land is effectively abandoned (if cleared, it may grow up to scrub and further reduce scenic views). It is often difficult to lease back land to a farmer or manage it for forestry due to the number of individual property owners that have to agree to the arrangement for it to be feasible.

**Examples of Development Patterns to be Avoided**



Below: This is a large-lot strip development on a former open field with homes set back from the road, which also results in an inefficient use of land and a lack of privacy for the homeowners. If the homes had been sited near the existing tree lines, the open field along the road could have been kept in agricultural use and the corridor's rural character maintained.

Above: This residential strip subdivision is characterized by narrow lots with homes set close to the road at regular intervals and with a consistent setback, which creates a suburban rather than rural character along this corridor. Most of the land behind the homes is not being used.



## Conservation of Natural Resources

Discouraging development on productive agricultural land results in more development occurring in upland and other undeveloped natural areas. Many of these areas include features such as wetlands, streams, steep slopes that pose challenges to development and are sensitive to the disturbance often associated with development. Excessive clearing of wooded uplands may adversely affect runoff and slope stability putting new development at risk and threatening water quality and land uses located downhill. Wooded and other natural undeveloped areas also contribute to the town's rural and scenic character. Conservation of natural resources is directly tied to the health of the land, on which the agricultural economy depends, and Hartford's rural way of life. Guidance on designing subdivisions and development to conserve natural resources and protect the health of the natural environment include:

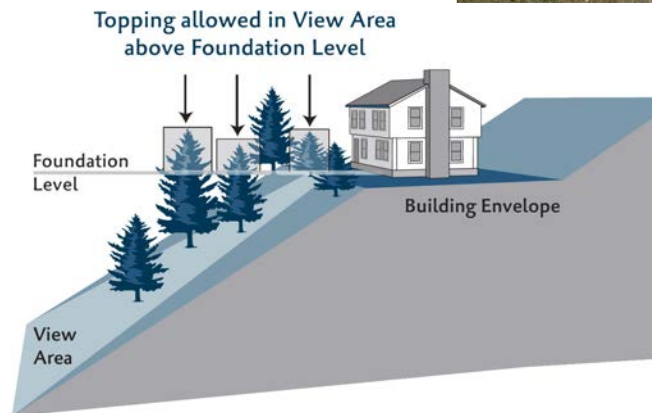
- ❁ **Site Grading.** Site development to minimize the need for grading and clearing of natural vegetation. Grading removes stabilizing vegetation and creates new slopes that are vulnerable to erosion. To reduce the potential for erosion, new cut slopes should not exceed 33% and fill slopes should not exceed 25%. Design buildings that relate to the topography and reflect the underlying slope. Locate development sites on moderate to level slopes and consider terracing with retaining walls when moderate slopes are not available. Roads, driveways and utility corridors should follow existing contours.
- ❁ **Site Drainage.** Development can alter natural drainage patterns both during and after construction. Developers should prepare and implement an erosion control plan to prevent soil loss during construction and a grading plan for development that assures the best possible drainage of the post development site. It is desirable to maintain the natural pre-development drainage patterns to the greatest extent possible. Direct runoff away from steep slopes and newly graded areas, avoid channelizing water flow along driveways and walkways, and minimize the development of impervious surfaces that lead to increased runoff. When development increases runoff, provide on-site detention areas.
- ❁ **Water Resources.** Set development back from streams, ponds and wetlands. Clearing of vegetation adjacent to surface waters and wetlands should be kept to a minimum. Use of chemical fertilizers and pesticides in proximity to surface waters and wetlands should be avoided.
- ❁ **Existing Vegetation.** Site new development to preserve existing vegetation. Avoid clear-cutting of existing vegetation and in wooded areas, maintain an undisturbed naturally vegetated buffer along the road. Clearing of lawns for new homes should be limited to the area adjacent to the residence and away from the road. Selective thinning and/or clearing of narrow corridors to provide views is preferred to general clearing.
- ❁ **New Planting.** Decorative and ornamental plantings associated with urban parks and suburban development are often costly to install, difficult to maintain and look out of place in a rural landscape. However, planting may be necessary to stabilize slopes, establish windbreaks and provide privacy. New landscaping should incorporate native plant materials to reduce maintenance costs, eliminate the use of chemical fertilizers and strengthen the visual relationship between the new development and the natural surroundings. The use of locally suited vegetation planted in groupings rather than as individual species is better suited to long-term survival in rural landscapes, requires less maintenance and fits into the surrounding landscape.
- ❁ **Materials and Colors.** Minimize the use of reflective building materials when structures will be highly visible from off-site. Use natural or muted colors to fit development into the surrounding natural landscape.



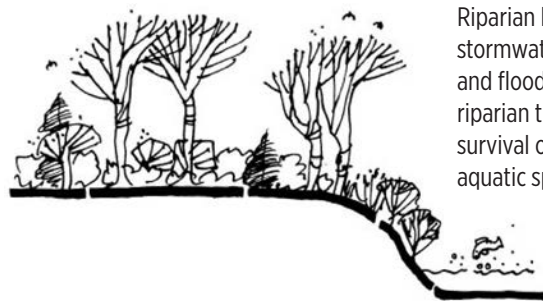
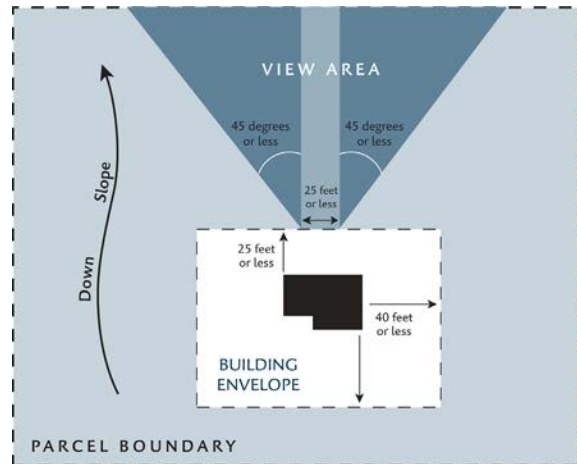
Above: Only small areas were cleared of trees to accommodate these new homes. There is greater privacy between the homes. When viewed from off-site, the development is not prominent and blends into the surrounding landscape.

### Diagram E. Tree Clearing

Below: These lots were largely cleared of all existing trees before the homes were built. There is less privacy between the homes and the development is more visible from off-site vantage points.



On wooded, hillside building lots, tree clearing to create a view should be carefully planned and targeted and 'clear-cutting' of a large area should be avoided so that the new home will blend into the hillside. Building envelopes can be used to limit tree clearing outside the immediate building site.



Riparian buffers slow and filter nutrients and sediments out of stormwater before it reaches streams. Vegetated buffers also stabilize streambanks and floodplains, reducing erosion. The cool stream temperatures maintained by riparian trees are essential for the survival of many fish and other aquatic species. Buffers can also providing important habitat and migration corridors for wildlife. Retaining or establishing vegetated riparian buffers of 25 to 100 feet along streams is encouraged.

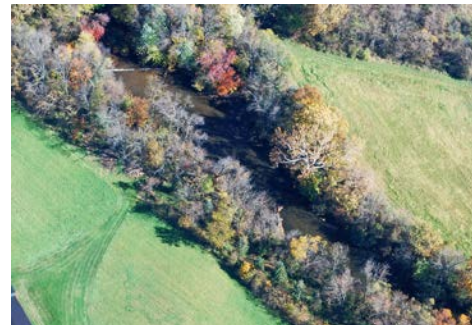


Diagram F. Riparian Buffers

## Development and Rural Roads

Access from public roads on to development sites must be carefully considered to assure safety and maintain the service level of the existing road. The location of new driveway and road intersections requires sufficient line-of-sight to assure adequate distance for a car to stop at the legal travel speed. The higher the speed limit, the greater the sight distance required to stop. Hartford's rolling terrain can make it difficult to find locations with adequate sight distance. Developers must work closely with the Planning Board to locate points of access and assure vehicular safety.

- ❁ **Site Access.** A safe access point(s) should be identified early in the subdivision or site design process. The town, county or state may limit the number and location of new curb cuts onto public roads. If the development includes construction of a new road, the road should be designed so that it could be extended to adjoining property if that land were to be developed at a later time.
- ❁ **Development Roads.** When a new residential development will be located along an existing main road, the homes should not be located in a strip pattern along the existing road but instead should be organized so that the homes will face onto and be accessed from a private development road. Development roads should be designed to discourage high speed travel. Drivers will travel more slowly on roads that are narrow, curvilinear, gravel and/or tree-lined. Development roads should be built to basic standards that will ensure adequate access by emergency and service vehicles, but should not be over-built for a rural setting and low volume of traffic.
- ❁ **Non-Vehicular Travel.** The ability to walk, bike, snowmobile or ride a horse on or alongside the road in relative safety is an important component of the town's rural character. Lightly traveled back roads or minor streets may be suitable for other users to share with vehicles. When sharing the road is not a safe option, shoulders or off-road paths should be considered. Off-road trails or paths can add considerable value to nearby lots and are one of the most sought after quality of life amenities that a rural community can offer.



Above: This road is more suited to a rural subdivision. It is relatively narrow and gravel surfaced, and some sections are tree-lined. It provides adequate access for emergency and service vehicles but is not overbuilt.

Below: The road serving this rural subdivision is built to suburban standards and is wider than the public road it connects to. The town's road standards also required sidewalks along the new road even though the new road would have little traffic and be safe for pedestrians to walk on, and even though there are no public sidewalks to connect to at the end of the road.



## Residential Development

The spread of residential lots along existing public roads could have a significant impact on Hartford's agricultural economy, rural and scenic character, and development potential over time. The development of roadside property for residential lots could ultimately limit access to interior land, which would pose challenges to either keeping it in agriculture/forestry or to developing it for another use.

Hartford's rural lands have been and continue to be used for a variety of natural-resource based industries - agriculture, forestry and mining. These traditional uses can be incompatible with residential development and lead to conflicts. Hartford has adopted a local right-to-farm law to help resolve any incompatibility issues that might arise between farm and non-farm neighbors. However, with thoughtful planning and design of residential development most of these conflicts could be avoided altogether.

- ❁ **Access.** Prevent the land locking of valuable farmland, woodlots or development sites by laying out development roads and access ways. As property is being subdivided or developed, plan ahead for the extension of development roads on to adjoining properties and for accessing interior fields or woodlots.
- ❁ **Site Design.** Avoid strip development paralleling existing roads and encourage development in small nodes accessed by development roads or shared driveways. Strip development can eliminate access to interior land and diminish rural character. Give consideration to protecting the views from the road that are an essential component of Hartford's rural and scenic character by thoughtfully locating development along the edges of fields and along/within tree lines rather than along existing roads.
- ❁ **Contextual Fit.** Subdivision or site plans should fit and complement the natural and/or agricultural patterns of the surrounding landscape. Buildings, roads and driveways should be designed to fit the site and to minimize grading and clearing of vegetation. Avoid new development becoming a visually dominant feature in the landscape.



Above: 10 homes on a 50-acre site. Only 5 acres was developed and the remaining 45 acres is permanently conserved farm and forest land. The conserved farmland was acquired by a local farmer and is being used to grow nursery plants.

Homes are clustered and placed in the woods or at the edge of fields in these conservation subdivisions.

Below: 16 homes built on a 17-acre parcel. Only 7 acres were developed and 10 acres were conserved - a hayfield and a woodlot.



## Recommended Process for Planning and Designing a Rural Residential Subdivision

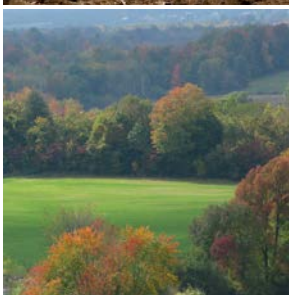
Rural residential subdivisions can be planned and designed to protect the character and features that people are moving to the countryside for - open views, largely unspoiled natural or agricultural landscapes, quiet, privacy, dark night-time skies, and opportunities to enjoy the outdoors. Subdivisions that protect rural character generally produce a greater return for the developer, have higher resale value for future homeowners, and do not detract from the value of nearby land.

By following the three steps below, residential subdivisions can be designed to fit into their surroundings and take maximum advantage of the features available on the site:

- ❁ **Identify Resources.** Some of the site features that should be looked for and identified as resources include:



**Agricultural Soils.** Soils can be an indication of agricultural and ecological quality. Prime farmland soils that are nationally designated prime soils and statewide designated important soils should be identified for their value in agricultural production. Development should be located off these soils to the greatest extent feasible.



**Meadows or Fields.** Open meadows and fields provide scenic views across Hartford's landscape that appeal to people and makes these sites attractive for development. However, developing in the meadow or field itself can undermine the beauty that attracts people in the first place and generally destroys any future potential for agricultural use of productive land. In some cases these meadows or fields may be better kept in agriculture, while development can instead occur in adjacent wooded areas. Early successional habitats such as old meadows or fields are generally in decline yet they are highly productive and important for many animals and plants.



**Hedgerows.** Hedgerows divide farm fields and break up the landscape into a patchwork quilt pattern. Many modern developments erase these old lines as they lay out a new subdivision, yet they offer many design opportunities. Clusters of houses can be grouped together in areas bounded by hedgerows. The hedgerows can be used to provide privacy to residents and new roads can be laid out to run alongside creating an instant tree-lined road that feels like it has been there for many years. Hedgerows can create a windbreak and prevent blowing, drifting snow. Wide hedgerows can provide cover and serve as corridors for plant and animal movement. They can also buffer new homes from incompatible or intensive agricultural activities.



**Views.** The pastoral setting, scenic vistas and picturesque landscapes viewed while travelling along Hartford's roads strongly define the character of different areas of town. Often these views can be protected by minimizing the amount of disturbance to the land along the road corridor, helping to maintain the rural character which makes these areas attractive to people in the first place. Natural or agricultural areas along the road can be preserved, while placing development further back where it can be more private.



**Water Features.** Maintaining undisturbed natural buffers around water features such as rivers, streams and ponds is an effective way to protect water quality, and also provides habitat to a variety of plant and animal life. These buffers provide many benefits including filtering water pollutants, absorbing water to help lessen flooding impacts, and providing shade to help regulate stream temperatures.



**Wetlands and Vernal Pools.** Wetlands and vernal pools are highly productive and important for biodiversity. While major wetland areas are generally evident in the landscape, smaller wetlands and vernal pools are often overlooked. Vernal pools are small and only seasonally wet, therefore they are very vulnerable to development and alteration. Because they do not support fish populations they offer breeding grounds for invertebrates and amphibians where there is no threat of fish predation. As with streams and ponds, development should be directed away from wetlands and vernal pools, and undisturbed natural buffers should be left around these features. It may be possible to utilize the natural function of these features as part of the site's stormwater management system.



**Steep Slopes.** Steep slopes pose challenges to development. When a development will occur on a steep slope, much more land above and below the building site must be re-graded to level the area, making it an inefficient place to build and destroying more of the natural landscape. Soils are often thin on steep slopes, making them more vulnerable to erosion. Stormwater runs off steep slopes with considerable velocity and force, and when a large area on a slope is disturbed and cleared of trees the amount and rate of runoff is further intensified, which can result in erosion downslope. Steep slopes and prominent hillsides are often visible from many vantage points around town, so large clearings to accommodate development may be highly visible.



**Historic Structures.** Traditional farmhouses, barns, outbuildings, silos, stone walls, fences and other historic structures can create picturesque scenes that add to the beauty of the landscape. These structures can be preserved to maintain the allure they bring to an area. A farm along the road can be preserved as a functioning farmstead and also serve as an entrance way to new development. Old stone walls and fences can be kept in place and used as a design feature that adds character to a site. A stone wall or traditional farm fence can be used to line the side of a new entrance road. The form, style, materials and colors of traditional farmhouses, barns and other outbuildings can also serve as models for new buildings that will be appropriate for their setting.

- ❁ **Select Conservation and Development Areas.** Select areas with significant resources to conserve first, then design the residential subdivision to fit on the remaining land. If the undeveloped land is to remain in agriculture, consider the minimum amount of land necessary for a viable farm operation and ensure that there is adequate separation between areas of intensive agricultural activity and future residential areas. If the undeveloped land is to be managed woodlands, ensure that there will be adequate access to the land for forestry vehicles and equipment and that a buffer will be provided between areas where timber will be harvested and future residential areas.
- ❁ **Locate House Sites and Lay Out Subdivision.** Once the conservation and development areas are delineated, consider where homes should be placed. Ideally, house sites should provide homeowners with the benefits of rural character (pleasing views of open land or natural landscapes, privacy, quiet) while also minimizing the intrusion of the new house into the view of the property from public roads and adjoining lots. Once house sites have been selected, a means of access will need to be designed and lots delineated. Use of shared driveways or development roads, rather than individual driveways is strongly encouraged.

**Diagram G. Rural Subdivision Design Process**



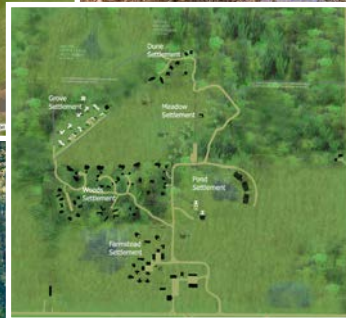
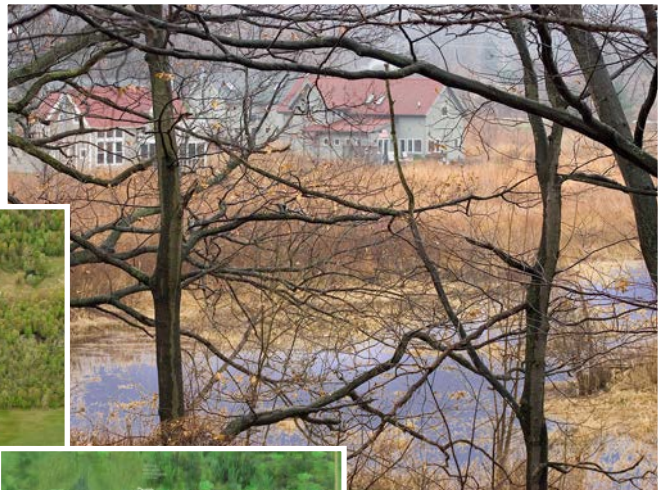
Site features have been identified and areas have been selected for conservation and for development.



House sites have been selected. Access to the house sites has been laid out. Lots have been delineated.

Example of a conservation subdivision on a 170-acre farm that is keeping 130 acres in sustainable agricultural use and protected from future development. Homes are being carefully located in several clusters on the property, creating a variety of settings and housing options for buyers.

Approximately 70 homes have been built already and 80 more are planned for future construction.



The development includes community gardens, common facilities for keeping farm animals, trails, and a barn converted to a community building that can be rented for events.



**Tyron Farm, Michigan City, Indiana**

## Commercial and Industrial Development

Commercial and industrial development could have a positive impact on the local economy and Hartford's tax base, and could balance the increased costs generated by residential growth. However, this development should be carefully planned and sited to take advantage of existing infrastructure (already developed sites, available buildings, roads, utilities, etc.) and at a scale appropriate for Hartford.

Commercial and industrial development can easily stand out in the rural landscape. The linear expanse of parking lots and buildings associated with strip development patterns detracts from the natural beauty of the rural landscape. New development should be designed to fit the context of the surrounding landscape with buildings that are designed to be compatible with the town's traditional building styles.

- ❁ **Location.** The rural countryside is an appropriate setting for commercial or industrial uses that require a large building and/or that have large on-site storage needs. Smaller businesses should be encouraged to locate within or near one of Hartford's village areas. Commercial or industrial uses that generate a high volume of traffic should be located along state or county highways. Businesses with limited traffic generation can be located away from main traffic routes, set back from the highway and screened from view. Uses that generate heavy truck traffic should be carefully sited to limit impact on existing residential areas. Centralized, rather than scattered, development should be encouraged so that infrastructure and vehicular access can be shared.
- ❁ **Design.** New development should be designed to fit into the surrounding rural landscape, protect unique natural features on the site, and avoid excessive grading and removal of existing vegetation. New buildings should be similar in scale and style to traditional buildings in town. The facades of large buildings should be designed to diminish the appearance of the building's mass. Mitigate the visual impact of storage and service areas by screening them from the road.
- ❁ **Access.** Wherever possible use a shared access road with internal circulation that will allow people to travel between businesses without needing to re-enter and re-exit the main road.
- ❁ **Parking.** The strip pattern of development with parking lots that parallel the road can significantly reduce the service level along the road and compromise safety. New buildings, particularly those housing businesses that have regular customer traffic, should face the road with parking areas located alongside or behind, rather than in front, of the building.
- ❁ **Signs.** Signs should be clearly visible but should not become dominant landscape features. Signs should be coordinated whenever there is a group or cluster of buildings.
- ❁ **Vegetation.** Avoid ornamental landscaping and instead provide additional native vegetation where needed to integrate the development site with the surrounding landscape. Set buildings back from the road and provide a suitable planting strip between the building and the road.

## Diagram H. Parking and Access



Left: Pavement dominates the view of these properties from the road creating an unattractive commercial corridor. The poorly defined access to many properties creates traffic hazards as vehicles can enter/exit the highway from too many points.



Above: Businesses are set back and screened from the road by wooded buffers, maintaining rural character.



Left: The parking lot is located to the side and rear of these commercial buildings. The view from the road is primarily of landscaped greenspace and buildings, rather than asphalt and vehicles.

## Diagram I. Signs

Signs should:

- ✓ Be compatible in design and color to the structures on the site
- ✓ Be consistent in terms of color, graphic style, lighting, location, material and proportions with other signs on the site
- ✓ Contain a minimum amount of lettering, colors and other design features necessary to clearly communicate their message
- ✓ Be designed and constructed of durable materials
- ✓ Be placed in a manner that complements the architecture of buildings, when mounted on a building facade
- ✓ Be aesthetically landscaped, when free-standing

Signs should not:

- ✗ Be located off-site
- ✗ Be more than 15 ft tall or 100 sf in area
- ✗ Be placed on roofs
- ✗ Block windows or doors or extend beyond the top or edge of the wall
- ✗ Move or have moving parts or include banners, pennants or balloons
- ✗ Include flashing, intermittent, rotating or moving lights





**Diagram J. Building Design**

Left: Newly constructed “barn” that houses several professional offices.

Below: A CVS pharmacy that is designed to look like a house from the street with parking to the side and a landscaped front yard.



Left: Two examples of well-designed vehicle repair garages with attractive signs and landscaping in front.



Above: Newly constructed retail store with of-ice space on the second floor.

Left: Convenience store designed to fit the character of a historic village.



## 5C. Survey Results

Hartford sent surveys out 83 surveys to farm operators and owners of farmland within the town in December 2010. Twenty-five surveys were returned. This report presents the results of those responses.

### Results

#### 1. Please fill-in the following regarding the acreage of your farm (term includes forestry) operation.

	Farm Total	In Hartford	Owned	Rented
Responses	22	23	24	7
Total acreage	5,034	4,216	4,019	281
Average acreage	229	183	167	40
% with <50 acres	23%	26%	29%	86%
% with 50-249 ac	45%	48%	46%	14%
% with 250+ ac	32%	26%	25%	0%

#### 2. Please fill-in the following regarding the acreage you farm in Hartford.

Owned Land	Acres Tillable	Acres Cropped	Acres Pasture	Acres Woodland
Responses	21	14	17	19
Total acreage	2,161	1,974	868	794
Average acreage	103	141	51	42
% with <50 acres	38%	14%	59%	68%
% with 50-249 ac	52%	71%	41%	32%
% with 250+ ac	10%	14%	0%	0%

Rented Land	Acres Tillable	Acres Cropped	Acres Pasture	Acres Woodland
Responses	3	3	2	1
Total acreage	219	219	43	10
Average acreage	73	73	22	10
% with <50 acres	67%	67%	100%	100%
% with 50-249 ac	33%	33%	0%	0%
% with 250+ ac	0%	0%	0%	0%

### Analysis

The majority of survey respondents own large amounts of farmland. Survey respondents own most of the land they farm.

Several respondents indicated that the farmland they own in Hartford is rented out to another farmer, rather than being farmed by the owner. Some of these respondents then completed the survey for the farmland they owned but do not farm themselves. So the survey results likely under-represent the amount farmland in Hartford that is rented.

Most of the tillable land survey respondents own is currently being cropped.

There are likely similar issues with the responses for rented land to those discussed in Question 1.

## Results

### 3. Have you sold or transferred any farmland in Hartford since 2000?

	#	%
Yes	2	8%
No	22	88%
No Response	1	4%

### 4. Have you purchased or acquired any additional farmland in Hartford since 2000?

	#	%
Yes	4	16%
No	20	80%
No Response	1	4%

### 5. Which do you consider yourself to be, and how many hours do you devote to farming on average each week?

	#	%	Total Hours	Average Hours
Full-time farmer	10	40%	434	72
Part-time farmer	11	44%	126	18
No Response	4	16%		

### 6. Do you or other family members have off-farm employment and if yes, how many hours do you work off the farm on average each week?

Respondent	#	%	Total Hours	Average Hours
Yes	9	36%	340	38
No	13	52%		
No Response	3	12%		

## Analysis

The response to Questions 3 and 4 indicate that farmland ownership in Hartford has been largely stable during the past decade. This suggests that Hartford's farmers are facing little pressure/demand to sell their land for development. It may also suggest, however, that new farmers are not starting operations in town.

Based on comments received, it also appears that a substantial amount of farmland in Hartford is rented to area farmers by owners who have stopped or scaled back their farming operations (many due to age). This farmland is more at risk of being converted to other uses or left fallow in future years than land owned and actively used by a farm operator.

Survey respondents who farm full time are working nearly twice as many hours as would typically be considered "full-time" for other types of employment.

Nearly all the survey respondents who reported that they had off-farm employment also identified themselves as part-time farmers. Combining the hours these respondents work on and off the farm indicates that these farmers also work more than full time.

## Results

Other Family	#	%	Total Hours	Average Hours
Yes	8	32%	320	40
No	9	36%		
No Response	8	32%		

### 7. How many people other than yourself work on the farm and how many hours (total) do they spend farming on average each week?

	Responses		Total Workers	Total Hours	Average Hours
	#	%			
Family members	17	68%	30	629	21
Full-time employees	3	12%	4	215	54
Part-time employees	2	8%	3	15	
Seasonal employees	2	8%	15	6	
No response	1	4%			

### 8. How much of your farm acreage in Hartford was used to grow the following crops this year?

	Responses		Total Acres	Average Acres
	#	%		
Alfalfa	11	44%	406	37
Hay	17	68%	1,576	93
Corn (silage)	10	40%	510	51
Fruit	4	16%	12	3
Vegetables	4	16%	3	1
Timber	4	16%	292	73
No response	3	12%		

## Analysis

A majority of those who responded to the survey have family members working with them on the farm. A relatively small percentage have non-family employees.

The results suggest that there may have been some confusion with regard to this question. The hours reported by some respondents may be average per worker rather than total hours. Therefore, the hours data may not be valid.

Hartford's farmland is primarily being used to growing animal feed crops (alfalfa, hay and corn silage). None of the respondents reported growing grain corn or other small grains. Other crops listed by respondents included nursery stock and hops.

A number of survey responses from part-time farmers and owners of land rented to other farmers, indicate that haying is the only agricultural activity occurring on their property. This suggests that there is a substantial amount of cultivated land that is being maintained through haying, but that is no longer associated with an active farm.

## Results

### 9. How much of the following did you produce on your farm this year?

	Responses		Total Acres	Average Acres
	#	%		
Milk (pounds)	6	24%	8,004,625	1,334,104
Eggs (dozen)	6	24%	832	139
Timber (board feet)	1	4%	5,000	5,000
Maple syrup (gallons)	2	8%	108	54
No response	8	32%		

### 10. How many of the following livestock did you raise on your farm this year?

	Responses		Total Number	Average Number
	#	%		
Dairy cattle	7	28%	589	84
Replacement heifers	8	32%	436	55
Beef cattle	5	20%	145	29
Calves	6	24%	558	93
Horses/ponies	3	12%	15	5
Hogs	1	4%	2	2
Sheep	4	16%	259	65
Goats	1	4%	2	2
Alpacas	2	8%	32	16
Chickens	5	20%	195	39
Other poultry	2	8%	32	16
No response	9	36%		

## Analysis

Milk is Hartford's primary agricultural product. Respondents that reported producing milk did not report also producing other products on their farms. This suggests that many of Hartford's farmers rely entirely on a single product – milk.

Most respondents that reported producing products other than milk reported producing multiple products. Other products respondents reported producing included wool and apples.

No respondents reported producing honey, although one respondent reported having a hive that was not harvested.

Most respondents who reported raising dairy cows also raised replacement heifers and calves, but few of them reported raising other types of livestock.

Other poultry being raised included turkeys.

## Results

### 11. What percentage of your farm products were sold this year through the following?

	Responses		Average Acres
	#	%	
Co-op	5	20%	93%
Auction	4	16%	45%
Direct-to-consumer	12	48%	70%
Wholesale	3	12%	73%
Unsold	2	8%	28%
Other	4	16%	
No response	7	28%	

### 12. Did you use any of the following to sell your farm products directly to consumers this year?

	#	%
Your own roadside stand	2	8%
Through/to other farmers	2	8%
Mail order/internet sales	1	4%

### 13. Are you interested in expanding or diversifying your farm operation?

	#	%
Yes	9	36%
No	12	48%
No Response	4	16%

## Analysis

Most respondents rely primarily on a single mechanism for selling their products. Due to the small sample size, the average amounts do not accurately reflect the responses.

One of the other mechanisms identified by survey respondents include an independent milk company.

While 40% of survey respondents reported selling products direct to consumers in response to Question 11, only 20% reported on the type of direct-to-consumer sales opportunities they used. No respondents reported selling products through farmers markets, pick-your-own or CSAs. This relates to the heavy focus on dairy production in Hartford.

Respondents did report using signs for their farm, and advertising at local venues like stores and auctions.

Around one-third of survey respondents reported being interested in expanding or diversifying. This statistic is interesting in relation to the responses to the questions below, particularly Question 16 which suggests that most respondents do not envision scaling back their farm operation in the next five years. This suggests that most respondents may be planning to continue operating their farm largely as they are doing now.

## Results

### 14. Since 2000 have you done or considered any of the following to increase the profitability of your farm operation?

	Doing Now		Tried Not Doing		Considered Not Tried	
	#	%	#	%	#	%
More of the same	10	40%	1	4%	1	4%
New crops/livestock	4	16%	1	4%	3	12%
Organic products	1	4%	0	0%	5	20%
Value-added products	1	4%	0	0%	4	16%
Direct sales	9	36%	0	0%	3	12%
Agri-tourism	2	8%	0	0%	4	16%
Custom services	2	8%	0	0%	3	12%
Other	1	4%	0	0%	0	0%

### 15. Since 2000 have you scaled down your farm operation or stopped providing certain products?

	#	%
Yes	6	24%
No	13	52%
No Response	6	24%

### 16. Do you anticipate making any of the following changes in your farm operation during the next 5 years?

	#	%
Diversify enterprises/markets	6	24%
Make capital improvements	9	36%
Farm more acreage	5	20%
Raise more livestock	6	24%
Stop working an off-farm job	1	4%
Hire additional employees	2	8%
Sell some land	2	8%
Farm less acreage	2	8%
Raise fewer livestock	1	4%

## Analysis

More of the survey respondents who have wanted to increase the profitability of their farms over the past decade have chosen to produce more of the same crops or livestock, as compared to diversifying their products. More than one-third are now selling products direct to consumers.

The response to this question further suggests that agriculture in Hartford has been fairly stable over the past decade.

Survey respondents indicate that they are more likely to expand, diversify or improve their farm operation over the next five years than they are to scale their operation back. No respondents reported that they anticipate selling their farm, starting to work an off-farm job or employing fewer workers.

## Results

### 17. To what extent are the following negatively affecting your ability to continue farming?

	Significantly		Slightly		Not at All	
	#	%	#	%	#	%
Farm income	11	44%	7	28%	2	8%
Property taxes	12	48%	8	32%	1	4%
Income taxes	3	12%	13	52%	3	12%
Federal regulations	4	16%	9	36%	5	20%
State regulations	3	12%	12	48%	4	16%
Local regulations	2	8%	4	16%	11	44%
Traffic	0	0%	5	20%	13	52%
Age	6	24%	7	28%	7	28%
Ability to diversify	1	4%	7	28%	10	40%
Development pressure	1	4%	4	16%	13	52%
Non-farm neighbors	0	0%	4	16%	13	52%
Need new facilities	4	16%	7	28%	7	28%
Need new equipment	6	24%	12	48%	2	8%
Capital available	6	24%	5	20%	8	32%
Credit available	3	12%	4	16%	11	44%
Labor shortage	1	4%	6	24%	11	44%
Labor turnover	1	4%	4	16%	12	48%
Access to new markets	2	8%	5	20%	12	48%

## Analysis

Survey respondents indicated that farm income, taxes, equipment, capital and age are the factors that are having the greatest negative affects on their ability to continue farming. Labor, development pressure, traffic and neighbors were reported as the factors with the least negative impacts on farming in Hartford.

## Results

### 18. How helpful would the following measures be to the long-term economic success of your farm operation?

	Significantly		Slightly		Not at All	
	#	%	#	%	#	%
Tax abatements	12	48%	4	16%	3	12%
Credit, loans, grants	6	24%	6	24%	6	24%
Sale of dev. Rights	5	20%	4	16%	9	36%
Business planning	4	16%	5	20%	10	40%
Estate planning	6	24%	6	24%	7	28%
Labor management	1	4%	5	20%	12	48%
Processing services	2	8%	6	24%	9	36%
Additional farms	3	12%	5	20%	10	40%
Lower utility rates	9	36%	8	32%	2	8%
Farm business alliance	5	20%	10	40%	3	12%
Ag-tourism promotion	4	16%	8	32%	5	20%
Marketing assistance	4	16%	8	32%	5	20%
Reduced env. laws	3	12%	11	44%	4	16%
Stronger subdiv. law	5	20%	4	16%	9	36%
Town ag plan	10	40%	6	24%	4	16%
Training	4	16%	6	24%	8	32%

### 19. Please list up to 3 of your ideas for retaining and improving agriculture in Hartford.

1. Taxes.
2. Tax breaks. Tax breaks. Tax breaks.
3. Bigger tax break.
4. Tax relief.
5. Hold school and land taxes to present level.
6. Be cautious of development that requires additional services.
7. Keeping property taxes as low as possible given mandated costs present at the county and school level.
8. Less influx of housing.
9. Ag is very important however commercial / manufacturing / industry is just as important. If we forget about the others then we won't have ag either.
10. Tax incentives to keep your farmland and protect green-space.
11. Some sort of incentive to keep farmland.
12. Grants for young farmers to create "new" farms for the future security of our community.

## Analysis

Survey respondents reported that tax abatements for new business ventures and assistance negotiating lower utility rates would be the two most helpful measures. Also considered helpful were the town's agriculture and farmland protection plan, increased availability of credit, loans and grants, assistance with estate planning and forming a business alliance. The least helpful measures were attracting additional farmers to Hartford, additional processing services and assistance with labor management issues.

13. Aim to encourage folks to settle here who are interested in a synergistic mix of business & pleasure activities which tend to keep land open, rural, and support one another.
14. Continuous rotating farm tour options.
15. Creating farming situations that city people can participate in.
16. Encourage non-traditional farming endeavors that bring more people into the community. Not necessarily agri-tourism, but more marketing to customers at the farm. That will help other non-farm businesses capture visitor dollars and encourage commercial development, helping to keep property taxes down.
17. Promoting Hartford's agricultural products.
18. Internet needs to be available.
19. More options to market product.
20. Broader market for our product.
21. The farmers market may help, but if the customers came to the farm it would be even better – get them hooked on your product at the market then develop your own farm store.
22. Networks in place – marketing products, sharing of resources / equipment.
23. A co-operative dairy program.
24. Local slaughterhouse for processing meat animals – USDA inspected.
25. Increase local availability of inspected slaughter facilities for exotic species/sheep.
26. Understand market/product dynamics. Dairy is a “mature” business. Price/cost drives success. Economy of scale is imperative. Hartford Co-op with shared investments, responsibilities, marketing, equipment, etc. How about a 3,000 cow “Hartford Combine Farm” instead of 20 with 150 cows.
27. More vegetable and fruit to provide to local families, schools and businesses
28. More stable prices.
29. If farm profit margins were better land would stay in ag.
30. Ability to provide a living wage for farmers, especially dairy farmers.
31. Agriculture has niche sectors which come and go rapidly. Need to respond quickly. Be on top of activity. Need ongoing research and a “flexible” group of farmers with proper mix of products & services. “Embryonic” and “high growth” sectors are not price/cost pressured like “mature” sectors, but require \$\$ for investment.
32. Starting a new business or enterprise, it is very important to have a business plan which is difficult to write one or I find it difficult, so I think there needs to be some start up business school, which there are some around but sometimes hard to find.
33. Opportunities for education and sharing of new concepts.
34. Involvement of youth to get them interested in the “business.”
35. Less EPA and government.
36. Practices that are environmentally safe yet affordable and easily adaptable.
37. Ag protection.

38. Continue to have town government be supportive of farming. Our current land use regulations are pro-farming and I feel the town government is doing what it can to help maintain viable agriculture in the town.
39. Make sure the right-to-farm law is enforced and maybe improved.
40. Cooperation from townspeople through appreciation of ag.
41. Educating the community: acceptable farm practices, buying locally, how to support local agriculture and the benefits of doing so.

## **20. What are your concerns for the future of agriculture in Hartford?**

1. Degradation of green-space by selling portions of farmland for development which also depletes the picturesque setting. Not having improved lucrative markets will lessen the viability of farming and expanding other agricultural ideas. Lack of funds to preserve historic barns could lessen appeal to tourists. We need to preserve our historic structures and our beautiful views.
2. If land base – enough and quantity of – is capable of supporting enough ag to also support the industries (vet, equipment, etc.) that would be wanted or needed. As development continues, traffic issues, noise, smells, etc. become bigger, land becomes more valuable so taxes will rise. All of this is reason for Hudson Valley not having as many farms as it used to. Not sure how or if it can be changed.
3. Keeping the land open and efficiently used is a goal worth striving for. This shouldn't preclude related activities which may not be business focused. Livestock comes in many forms. Some are used for pleasure or subsistence/independence. Attracting folks seeking these will help to keep land open. Shops, services and businesses should be synergistic to these. Bringing in businesses just to "reduce taxes" can be counterproductive.
4. If we lose too many farms, we will lose services, vets, machine dealers, etc.
5. We must be ready to change to meet the needs of our immediate community. I don't think we need to think globally, we need to provide locally. If our own farmers can produce the foods and products we need to provide for our schools, businesses and families that would be amazing. And we could trade with other communities for other products.
6. If dairy is to succeed we must find a way to be collaborative. Create one product for the area and sell it.
7. Most concerns are much broader than the town. Federal dairy policy is the largest threat to traditional dairy farming in our area. Until that, and ethanol policy, are changed at the federal level, there is nothing that the town or county can do to help. At the state level, regulations by DEC and Ag & Markets represent significant problems for farmers. While the state government, and these agencies, are run by downstate individuals, they will continue to remain a threat to farming. Ag & Markets should be a major resource to farmers and does offer some significant help, but continual cuts have left most of their beneficial programs unable to realize the positive benefits they were intended to create. Given the current policy and regulatory climate, I see diversification into either value-added or emerging products/markets as the most realistic change for long-term agricultural viability in Hartford and most of northeastern New York.

8. [Rents 100 acres of farmland to another farmer]. I would like to see farming and other agriculture industries continue in Hartford. I dread to see housing projects fill all the farmland.
9. Being a horse person and noting we have 60 parcels with horses, suggests to me that with proper planning and promotion, this activity could be expanded. Trails for all to use is an example...similar to snowmobiles. Generally people in these activities may not be pressed by taxes/expenses, and more amenable to new ideas and upgrades.
10. Developing a theme for town with a nickname attached would perhaps awaken Washington County and the Hudson Valley to us. I don't have one to offer at the moment. May be something like "Hartford – the crossroads of agriculture" or "business meets pleasure" or "land of animals and vegetables" or ... Hope these ramblings are helpful. Just reflects some thoughts based on my years in "strategic planning."
11. How to make enough profit to stay in business.
12. If farmers don't start getting a fair price for their products there won't be a future for farmers. Costly government regulations makes it even harder for farms to survive.
13. Everybody that comes in from the outside with an idea they right up front this is not a get rich thing for the farmer, i.e. wood pellets, firewood, pulp (for firewood and pulp they pay \$10/cord and sell it for \$125-250/cord). Grass pellets for fuel. Milk processors. They want your manure for compost or to make methane – they think it is a waste product so they should get it free.
14. Government making laws restricting the labor from young people. They are the most ambitious age group. Get them interested and they will work harder than anybody.
15. Would be nice to have a local bank office or outlet in town.
16. Public awareness and citizen appreciation of ag through education. The complexity of the town has changed in the last 50 years to some who enjoy the rural atmosphere but abhor the smells and sights of ag. Ag is the #1 industry of Hartford, NY, USA!
17. Other businesses in Hartford could provide a better tax base thus alleviate some of the tax burden on farmers. It concerns me greatly to see farms being sold or not being used. Also there is a great need for the younger generations to learn farming.
18. I need to add that we are an unusual situation. We are 68 years of age and rent out a good portion of our farm and land. Currently, we rent the barn and some land to a farmer that milks 70 head of cattle. We also rent out land that is used for hay, corn and pasture. All of this allows us to keep our farm "as a farm" which is very important to us. We have been doing this type of operation in 1995 and have been fortunate to be able to continue to do so.
19. There is no future for agriculture in Hartford. We are a dying breed of people. No one wants to work this hard for so little money.
20. Assessment based on "as used."
21. Phone Comment: Primary problem is national agriculture policy – subsidies for very large farms. Compare to Canadian system with government control of production – farmers get a higher price for their products.
22. Import/export is a concern.



## 5D. Panel Discussion Notes

### Opportunities for and Challenges to Increased Farm Profitability

#### The Experience of Washington County Agricultural Entrepreneurs

7 p.m., Wednesday, March 16

Hartford Fire Hall

**Welcome and Introductions.** Jaci Gebo, chairperson of Hartford's Agriculture and Farmland Protection Planning Committee, welcomed everyone to the meeting and introduced the panelists:

- ❁ **Marge Randles, Owner, Argyle Cheese Farmer.** From their farm in Argyle, Marge and Dave Randles use milk produced on-site at the family farm to create high-quality yogurts and artisan cheeses. The business began in 2007 when Marge began making yogurt and has since expanded to include cheeses, cheese spreads, cheesecakes, breads, greek yogurt, and gelato. Argyle Cheese Farmer products can be purchased at their on-site farm store, at regional farmers markets, and several other stores in the area.
- ❁ **Meg Southerland, Owner, Gardenworks.** Meg Southerland is the third generation on her family farm in Salem. Upon her return to the farm in 1992, she began working to extend the seasons for the farm business, which was then marketing specialty crops including berries, pumpkins and Christmas trees, with sales of fresh and dried flowers and a complete Christmas shop. Nearly 20 years later, Gardenworks farms more than 12 acres, has a greenhouse full of annual and perennials, and the former dairy barn has been transformed into a marketplace offering local cheeses, meats, organic vegetables, baked goods, local handcrafts and artwork. Gardenworks has become a country destination where agriculture meets the arts.
- ❁ **Brian Gilchrist, Executive Director, Washington County Cooperative Extension.** Cornell Cooperative Extension in Washington County works with ag producers – both one-to-one and in group settings – on all aspects of farming and operating agri-businesses. Cooperative Extension also works with consumers on issues related to food – taking a “whole ag” approach from production through consumption of agricultural products. Brian Gilchrist is a lifelong resident of Washington County. In addition his work with Cooperative Extension, he and his family own and operate a beef farm.
- ❁ **Chris Khraling, Project Manager, Agricultural Stewardship Association.** ASA is a nonprofit land trust helping landowners conserve farmland in Washington and Rensselaer counties. The organization's goal is to ensure that future generations can continue to enjoy our local agricultural traditions, landscapes, and products. Since its formation in 1990, ASA has completed nearly 70 projects to conserve more than 9,000 acres of farmland, with another 18 projects consisting of 4,200 acres in the process of being protected.
- ❁ **Jen Small, Owner, Flying Pigs Farm.** Flying Pigs Farm is a small-scale, pastured livestock operation located along the Battenkill River in Shushan. Since 2000, farm owners/operators Michael Yezzi and Jen Small have raised rare, heritage breed pigs, as well as meat chickens and laying hens for eggs. Mike and Jen have grown the farm from finishing three pigs in their first year to over 600 pigs in 2009. The farm also raises 1,500 laying hens and 3,000 chickens for meat. The farm has been featured in articles a number of publications including Bon Appetit, Food & Wine, the New York Times and the Wall Street Journal. Flying Pigs Farm products are sold at Greenmarkets in New York City, through the web, and directly to a number of New York City restaurants.

Jaci then introduced Brandy Saxton, the planning consultant assisting the town with development of the Agriculture and Farmland Protection Plan. Brandy provided an overview of the state's Agriculture and Farmland Protection Planning program, through which the town received a grant to fund this project, and what the committee has been doing since it began work in the fall of 2010: a survey has been sent out to farm operators in town, the process of identifying the town's resources has begun, the committee has researched and discussed opportunities for agricultural economic development in Hartford.

### **Panelist Presentations.**

**Marge Randles, Argyle Cheese Farmer.** The Randles are the fourth generation working the land in Argyle that has been in the family since 1860. While her husband Dave operated the dairy farm, Marge worked as an accountant with a clientele composed primarily of area farmers. Around 1995, she began to notice a trend – her existing dairy farm clients were not adding new assets to their ledgers and she was not seeing new farmers starting up dairies. The trend was clearly towards a loss of medium-sized dairies and consolidation into fewer, larger operations. At the same time, her family was operating one of those medium-sized dairy farms and the future did not look bright.

Marge realized that if they did not do something there wouldn't be a fifth generation on the farm. It was Sandy Buxton at Cooperative Extension that suggested cheese. It took three years to get training and get the business started. Making the transition was difficult and expensive. Marge recognizes why few existing dairy farmers enter into a new business like cheesemaking: (1) it costs a lot to start up; (2) farmers don't have time to learn a new business while keeping their existing operation afloat; (3) dairy farmers aren't accustomed to marketing their products – they are used to a business model where a truck shows up each day and takes away their milk; and (4) you have to deal with different licensing and regulatory requirements. Faced with the challenge of starting this new business, Marge returned to two things her father always said – that what makes a successful farmer is a love of farming and nothing ventured, nothing gained.

Getting started, she had to figure out how to sell her cheese. She started selling through farmers markets, primarily in the Capital District, and this became the core of her business initially. Now, she is trying to move more into selling through CSAs (community supported agriculture). She is connecting with farms that operate as CSAs to provide yogurt and cheese to their members as part of the share. CSAs are farms where customers buy in at the start of the year and receive a share of the produce throughout the growing season (this takes out the risk for the farmer because you know what your income will be before the products are grown/made); CSAs began largely with vegetable crops and are now moving towards providing a wider range of products including meat, cheese, honey, etc. CSAs also benefit consumers by bringing them fresh products at a reasonable price. Consumers at all price points are interested in healthy, fresh, natural and family-grown products – they want to know where their food comes from.

The cheese business is a growing niche in Washington County now. Marge says it hasn't made her family rich, but they haven't had to go to the bank yet.

**Meg Southerland, Gardenworks.** Meg Southerland grew up on her family's farm in Washington County. She went to college and majored in horticulture. She ultimately ended up

in Kentucky working for Cooperative Extension at a time when farmers there were facing a major transition as the market for their tobacco was in decline. Farmers in the area were trying lots of different things, experimenting with different crops. She saw some farms that converted from growing tobacco to growing flowers – and she began to think about doing something similar back on her family farm in New York. By this point, her parents had converted their farm to a retirement operation – primarily growing berries.

Meg and her family moved back to Washington County and she began to help her parents on the farm. She also began researching and thinking about how to expand the business. At some point, she realized she just needed to jump in and so she started in 1992 to extend the farm's seasons. She began with a greenhouse in the spring, flowers for cutting and drying in the summer, some vegetables, fall squashes and pumpkins, and Christmas trees and a Christmas shop. The business now crams 4 seasons in between April and December.

In the beginning, Meg took every opportunity to get out and spread the word and she slowly built the business. She has tried lots of new ideas – some work and some don't, but you won't know until you try. She works closely with everything else going on in the community. Working together – complementing each other, rather than competing. The former dairy barn on her farm has been converted to a retail marketplace, which now offers products from a number of producers in the area. She realized at some point that she didn't need to grow everything herself, she could coordinate retail with other farms and become a marketplace for the community.

**Brian Gilchrist, Cooperative Extension.** Brian Gilchrist provided an overview of how Cooperative Extension can assist farmers interested in researching and starting up new businesses.

He agreed with Marge that all segments of the population are becoming increasingly interested in local food and agriculture. He noted that one of Washington County's strengths is diversity – there is diversity in the types of farms and in the land base. At Cooperative Extension they are seeing people asking new questions.

While Cooperative Extension will continue to be an important resource for the county's dairy farmers, they are also getting more programs going to assist farmers in other sectors. Their regional vegetable team is doing a lot of research – from use of high tunnels to extend the growing season to on-farm variety trials too see what is well-suited to grow in the county. They held a very popular new farmer workshop series recently.

They have been providing assistance with business planning and marketing. Brian noted that marketing is a key issue – farmers need to figure out who their customer is and what is the best way to get their product to their customer.

Agriculture and food systems are regional. Regions - like the Finger Lakes for their wineries – become a destination not through the farmers competing with each other but by complementing each other. Could Washington County become known for its cheese or some other product?

Brian concluded by discussing how Cooperative Extension is working with consumers as well in order to find out what they want. There is a lot of confusion about labeling for instance. They are working to build relationships between consumers and producers.

**Chris Khraling, Agricultural Stewardship Association.** Chris opened with an overview of the ASA, which was started in 1990 by a group of farmers who recognized the need to protect the land base for future generations. He described what a conservation easement is and how they are used to restrict future development or subdivision of farmland. He talked about the tax benefits available if conservation easements are donated and the state and federal programs that fund the purchase of development rights.

Since ASA's formation, \$4.9 million of state money and \$1 million in matching federal funding has come into Washington County for the purchase of development rights. This money has allowed farmers to retire and pass the farm on to the next generation, supported expansion and improvements to farm operations, and the starting of new farm businesses.

Right now, due to state budget constraints, the funding for purchase of development rights has slowed. When Hartford gets its Agriculture and Farmland Protection Plan in place, farmland owners in town interested in selling their development rights will be more competitive in the state program when funding is again available.

Protecting an adequate land base for farming is critical – right now the acreage in production in New York can only feed 30% of the state's population.

**Jen Small, Flying Pigs Farm.** Jen Small described herself as a first generation farmer. She grew up in the suburbs out of state, but her father had grown up on a farm in Washington County and she spent summers here. An opportunity arose when the land next door to that farm was being sold to a developer – before she knew it, she had become the owner of that farm and had kept it from being developed.

She and her husband had no idea what they were doing and started the first year by raising three pigs. The business has grown quickly over the last several years and now they plan on raising 800 pigs this year in addition to chickens. Her husband left his job and works on the farm full time – she still works off-farm for American Farmland Trust. They employ 5 people full time and 3 people part time.

The demand is enormous. They sell their meat and eggs primarily in the New York City market either at farmers markets or direct to restaurants. They went to the city to sell their product because they wanted to sell a volume of product quickly - their first time to the market they took the meat from 14 pigs and they sold out within a couple of hours. The city markets are also a way to get a premium price for your product – she said eggs are selling for \$10 or more a dozen and they are able to sell their bacon for \$15/pound.

Jen emphasized that one of Washington County's strengths is access to urban markets – NYC, Boston, Montreal – within a few hours drive. Farmers can bring money from outside Washington County into the county – and farmers spend a lot locally compared to other businesses so that helps support other parts of the local economy. She quoted statistics that found that a 100-cow dairy brings \$1.4 million into the local economy each year. Jen also spoke about the importance of dairy to supporting the smaller and diversified farms. Dairies keep the farm services going and in New York dairy receipts are still greater than all other farm receipts combined.

She concluded with discussing the value of farmland. Farmland is becoming an increasingly scarce resource and with a growing population worldwide, we are going to have to produce more food on less land. She sees a future where farmland will be worth more for its productive value than it is today for development. Washington County has good soils, good water, has the infrastructure in place to support agriculture, still has its land base, and has people who know how to work hard. We are in a good position to meet that future demand to produce more food.

### **Roundtable Discussion.**

Jeff Cornell talked about how he has struggled to market his maple syrup. There was discussion of identifying who the customer for the product is, and getting a website. Cooperative Extension is putting together more materials and training to help farmers market their products.

Dana Haff talked about getting Hartford's farmers market up and running for this year. They are also going to have two festivals – a honey festival and a lavender festival. They may add a hops festival in another year. They have tried to identify unique festivals that no one else is doing. They have a great location for their market at the corner of Routes 40 and 149, which gets a lot of summer traffic to and from Vermont. They only have four vendors committed to the market, but need to start somewhere and it will grow over time. Jen suggested connecting with Better Bee in Greenwich regarding the honey festival.

Emily Debolt asked the panelists about use of social media, email newsletters, etc. There was discussion about how these are useful for reaching some customers. Meg noted that her weekly email newsletter is very popular – she uses it to let people know what is going on at the farm each week. Marge noted that you can hire someone to design your website – you don't have to do it all yourself.

Marge also talked about the importance of working together and cited the cheese tour as an example. 2,000 people came through her business in 2 days – she would never be able to generate that amount of traffic on her own but through cooperation everyone benefited, not only the farms on the tour but other businesses those people stopped at.

Meg also talked about the importance of using sample foods and offering recipes – need to educate consumers. People need to know what can be done with a product or how they can use it.

Jen talked about how the city farmers market is like a trade show. It is a great place to make contacts for marketing your business. The farmers market is less profitable than selling online or to restaurants, but it is needed for volume and to sell the full range of products (the meat sold online and to restaurants are usually the premium cuts). She also noted that the reason they ended up selling at the NYC market initially was that there were waiting lists for the farmers markets closer by in Troy and Saratoga.

Bill Donaldson talked about the cost of processing his beef and the need to find a customer willing to pay a premium price so he can make a profit. Jen spoke to that issue, noting that processing for her pigs is in a similar price range - \$2 to \$2.50 a pound. She uses Eagle Bridge and has been very happy with them.

There was further discussion of Washington County's location with regards to markets in the Capital District and the larger metropolitan areas and to connecting with the "foodie" community in those cities.

Bob Holmes asked about other options for selling products such as wholesale. There was discussion of some of the regional distributors working in the area – Regional Access, Red Tomato, etc., and of the Hunts Point wholesale market.

The panelists talked about the informal network that has built among the farmers in Washington County who are marketing to the city. They often transport each others products, make deliveries, etc. May want to look into growers associations – examples include the Roundout Growers Association in the Lower Hudson Valley and the Eden Growers Association in western New York.

John Brennan asked about niches that are currently under supplied. The demand for eggs remains very strong. Extending the season and providing fresh products either earlier or later in the season is a way for farmers to get a premium price for products that may be over supplied during the regular growing season. In urban areas, even within the Capital District, there is demand for ethnic food ingredients. Right now lamb, game birds and rabbit are popular in the markets.

Farmers should think about how they can adapt over time to evolving trends in food – if you are raising chickens and turkeys, you might be able to also raise other birds that are currently in demand (ex. quail). There is demand from chefs for "baby beef" which could fit easily in with what beef farmers are already doing.

There was discussion of co-processing, co-packing and value-added products and the farm-to-table strategies. These types of prepared foods are popular at markets. In the Hudson Valley, the cafeteria and kitchen at a closed IBM plant has been converted to a facility where farmers can bring raw product in and have them processed according to a recipe they supply and then have the product packaged and labeled for sale. The Cornell Geneva station has a test kitchen.

Jen talked about a school program she had heard about from elsewhere in the country, where a school district decided to incorporate more local food into their meals by employing the kitchen staff throughout the summer. During the summer months, when school was closed, the staff processed, packaged and stored local produce for use during the next school year.

The meeting wrapped up with some final words from Marge about the importance of taking account of your assets. We often focus on the negatives instead of trying to build on the positives.

### **Closing.**

Brandy thanked the panelists and everyone who came out for the meeting.

## 5E. Resource Library

The following resources have been compiled during the development of the Agriculture and Farmland Protection Plan. Copies may be borrowed from the Town Office or found online through the town website.

### Agritourism

- ❁ **Farm Camp. Compilation of information about the Farm Camp at Flying Pigs Farm.** Located in the heart of the Battenkill River Valley, Farm Camp at Flying Pigs Farm is a one-of-a-kind educational opportunity for professionals working in food service, food media, and farm and food advocacy to learn about both the challenges and opportunities associated with agricultural production and distribution in the Northeast. More info available at [www.farmcampnewyork.org](http://www.farmcampnewyork.org).
- ❁ **Entertainment Farming and Agri-Tourism: Business Management Guide.** National Sustainable Agriculture Information Services (ATTRA). September 2004. Agri-entertainment and -tourism—new, highly consumer-focused types of agriculture—may offer additional options for diversification and adding stability to farm incomes. Farmers have invented a wide variety of “entertainment farming” options. There are three agri-tourism basics: Have something for visitors to see, something for them to do, and something for them to buy.
- ❁ **Evaluating a Rural Enterprise: Marketing and Business Guide.** Appropriate Technology Transfer for Rural Areas (ATTRA). May 2002. Evaluating an enterprise boils down to asking a series of good questions. Among these questions are: Do I have the resources to do this? Do I really want to do this? Do I have the experience and information to do this? How much profit can I make? How will I market the products? This publication seeks to provide enough information to help you judge whether a new enterprise is right for your operation. Additionally, it provides a resource section of additional information on relevant topics.
- ❁ **Taking the First Step: Farm and Ranch Alternative Enterprise and Agritourism Resource Evaluation Guide.** Southern Maryland Resource Conservation and Development Board, Inc. January 2004. This publication was prepared in response to requests from local advisors, farmers, and ranchers for a simple guide to the first step in identifying alternative income-producing agricultural enterprises and agritourism opportunities. The guide discusses evaluating your resources, marketing considerations, and legal and liability considerations.

### Direct Marketing

- ❁ **Cooking Up Success.** The Post Star. September 2007. Article about the opening of the Battenkill Kitchen. More information can be found at [www.battenkillkitchen.org](http://www.battenkillkitchen.org).
- ❁ **Bringing Local Food to Local Institutions: A Resource Guide for Farm-to-School and Farm-to-Institution Programs.** National Sustainable Agriculture Information Service (ATTRA). 2003. This publication provides farmers, school administrators, and institutional food-service planners with contact information and descriptions of existing programs that have made these connections between local farmers and local school lunchrooms, college dining halls, or cafeterias in other institutions.
- ❁ **Selling to Restaurants: Business and Marketing.** National Sustainable Agriculture Information Service (ATTRA). 2004. Locally grown food is gaining in popularity among chefs in upscale restaurants. Chefs buy from local farmers and ranchers because of the quality and freshness of the food, good relationships with the producers, customer requests for local products, and the availability of unique or specialty products. Selling to chefs

is among the alternatives that will help to build a diverse, stable regional food economy, and a more sustainable agriculture.

- ❁ **Farmers' Markets: Marketing and Business Guide.** National Sustainable Agriculture Information Service. 2008. This publication is a resource for those who want to organize a farmers' market, to improve an existing market, or to increase their sales.
- ❁ **Community Supported Agriculture.** National Sustainable Agriculture Information Service (ATTRA). 2006. This publication reports on the history of Community Supported Agriculture (CSA) in the U.S. and discusses the various models that have emerged. Recent trends in the CSA movement are presented. Several CSA cases are profiled and a survey of recent research is presented. References and resources follow the narrative.
- ❁ **The Value of Farmers' Markets to New York's Communities.** Farmers' Market Federation of New York. November 2006. Farmers' markets play a significant role in community development all across New York State. The large numbers of customers drawn to farmers' markets helps to create new business start-ups and incubates businesses that spin off into the community. Existing businesses benefit from the traffic generated by a farmers' market, increasing their sales potential on market days and experiencing growth along with the growth of the farmers' market. The result is the creation of a renewed business district, new jobs and an increase in the community's tax base.
- ❁ **A Resource Guide to Direct Marketing Livestock & Poultry.** Martha Goodsell and Dr. Tatiana Stanton. January 2011. The purpose of this resource guide is to help New York farmers better understand the current regulations governing the slaughtering, processing, and marketing of meat animals. Two ways for farmers to realize higher returns for their farm products are to take over some of the traditional roles of middlemen or to shift completely to direct marketing. This resource guide explains the complex meat laws in layman's terms and clarifies the legal logistics of direct marketing livestock and poultry. Ultimately, this should lead to a more direct market chain from farmer to consumer in New York and hence, more local dollars circulating in local communities.
- ❁ **Direct Marketing: Business Management Series.** Appropriate Technology Transfer for Rural Areas (ATTRA). November 1999. This publication on direct marketing alternatives with emphasis on niche, specialty and value-added crops features many farm case studies, as well as information on enterprise budgets and promotion/publicity. A new section discusses implications of Internet marketing and e-commerce for agriculture.

## Dairy

- ❁ **Dairy Resource List: Organic and Pasture-Based.** ATTRA - National Sustainable Agriculture Information Service. 2006. The following are many sources of information helpful to organic and pasture-based dairy farmers. This annotated list provides information on some of the best resources, both in-print and online, but the list is not meant to be all inclusive.
- ❁ **Dairy Beef.** ATTRA - National Sustainable Agriculture Information Service. 2010. Dairy beef is an opportunity to diversify operations and boost income, especially when production is pasture-based. This publication discusses production, finishing, niche markets and direct marketing, and analyzing profitability.
- ❁ **Cattle Production: Considerations for Pasture-Based Beef and Dairy Producers.** ATTRA - National Sustainable Agriculture Information Service. 2006. Market demand is rapidly increasing for sustainably-raised beef and dairy products. Pasture or grass-based livestock production is inherently sustainable as this production system relies on biodiversity and ecological complexity to maintain production without the use of costly inputs. Cattle producers are beginning to recognize that intensively-managed rotational grazing (also

called management-intensive grazing or planned grazing) can lower production costs, reduce animal stress, and boost the animal's immune system. This publication highlights these and other practices producers are using to provide customers with nutritious food from sustainable farms and ranches.

- ❁ **Dairy Farm Energy Efficiency.** ATTRA - National Sustainable Agriculture Information Service. 2010. Rising energy costs and environmental concerns are causing dairy farmers to alter their management practices. Dairy farmers are analyzing their energy inputs and investing in cost-effective energy conservation and energy efficiency measures. This publication provides an overview of how dairy farms can implement efficiency improvements and energy-saving technologies that can reduce energy consumption and energy-related costs.
- ❁ **Hidden View Farm, Clinton County: Changes Support Future of Three Brothers' Families Plus Parents' Retirement.** Northern New York Agricultural Development Program. NNY Dairies Share Success Strategies. Profile of the Tetreault brothers, who own 891 acres, 510 of it tillable, and rent another 150 acres in Champlain, NY. In 2005, the Tetreault brothers formed a limited liability company (LLC) for the equipment only. The LLC owns the equipment, runs the business and leases other assets from the brothers' partnership. One goal of this structure was to protect family from liability.
- ❁ **Ooms Dairy, Franklin County: Made the Move to Farming On Their Own.** Northern New York Agricultural Development Program. Profiles of Successful Strategies for Small Farm Dairies. Profile of Randy and Elizabeth Ooms, who struck out on their own in 1992, leaving a partnership with Randy's family, and moving 60 dairy animals to Constable, N.Y.
- ❁ **Ortman Dairy, St. Lawrence County - Weathering a Dairy Start-Up.** Northern New York Agricultural Development Program. Profiles of Successful Strategies for Small Farm Dairies. Profile of Loren Ortman of Brasher Falls, N.Y. who started dairying after working for 30 years in the newspaper industry.
- ❁ **Recore Farm, Franklin County - Making Farming More Manageable.** Northern New York Agricultural Development Program. Profiles of Successful Strategies for Small Farm Dairies. Profile of Don and Sharon Recore who sold their cropping equipment to concentrate on cows in Burke, NY.
- ❁ **Sullivan Dairy Farm, Lewis County - Milking 46 of 52 Weeks at Seasonal, Grazing Dairy.** Northern New York Agricultural Development Program. Profiles of Successful Strategies for Small Farm Dairies. Profile of Kevin and Amy Sullivan who operate a 65-cow dairy in Lewis County. The Sullivans converted to rotational grazing in 1987 and in 1991 began switching to seasonal dairying, which requires that all cows be dried off simultaneously from January through March.
- ❁ **Thompson Dairy, St. Lawrence County - Farming to fit assets and interests.** Profiles of Successful Strategies for Small Farm Dairies. Northern New York Agricultural Development Program. Profile of Doug Thompson, Gouverneur, N.Y., who made changes on his dairy to better suit his assets and interests. He stopped growing corn, switched to rapid rotational grazing and adopted a different hay harvest system.
- ❁ **B&R Dairy, Clinton County: Custom Heifer Operation Serves Farm Land Base Well.** Profiles of Successful Strategies for Small Farm Dairies. Northern New York Agricultural Development Program. Profile of brothers-in-law Steve Bechard and Bob Roy, who transitioned from milking 150 cows to custom raising heifers so their farming operation would support two families and provide for retirement for the family's senior generation.
- ❁ **New York Small Dairy Innovators: Successful Strategies for Smaller Dairy Farms. Profiles of Successful Strategies for Small Farm Dairies.** Northern New York Agricultural

Development Program. 2010. A series of 7 profiles of successful dairy farms around New York.

- ❁ **Conservation Easement to the Rescue: Dairyman Finances Start-Up Farm by Selling Development Rights.** Profiles of Successful Strategies for Small Farm Dairies. Northern New York Agricultural Development Program. 2005. Profile of a farm in Essex County who sold development rights to farmland to help finance starting up a new farm.
- ❁ **Value-Added Dairy Options.** ATTRA. August 2001. Dairy farmers can add value to their milk by processing and marketing their own products, such as cheeses, yogurt, butter, ice cream, and farm-bottled milk. Many consumers are willing to pay a premium for locally produced, high-quality, farmstead dairy products; organic certification may further enhance the market potential.
- ❁ **Planing a Farmstead Cheese Operation.** Fay Benson. Small Farm Quarterly. October 2007. A profile of the Randles family's planning of their farmstead cheese operation in Argyle.
- ❁ **The Small Dairy Resource Book: Information sources for farmstead producers and processors.** Vicki Dunaway, The Hometown Creamery Revival. January 2000. This publication is a product of the Hometown Creamery Revival project, which arose in response to a growing interest in the United States in on-farm and small-scale processing of dairy products and the lack of a unified source of information on that subject. Because on-farm processing usually implies that milk is also produced on the same farm, we have not limited this publication to the processing end of things. The HCR also has a focus on sustainable, low-input milk production with the use of as few medications and pesticides as possible.

## Meat Processing

- ❁ **Guide to Designing a Small Red Meat Plant with Two Sizes of Model Designs.** Iowa State University Extension. 2009. If you intend to construct, expand, or upgrade a locker-type meat plant, these plans were created to help you avoid some headaches, including determining whether or not you should actually expand—sometimes a bottleneck can be corrected by upgrading or moving equipment without adding more space, by changing the way you schedule your product processes, increasing batch size, or changing product flow in other ways. An experienced meat plant consultant created these designs for the Iowa Meat Processors Association and the Small Meat Processors Working Group, a collaboration of Iowa organizations seeking to support small meat processors.
- ❁ **Niche Meat Processor Webinars and Videos.** Cooperative Extension. [http://www.extension.org/pages/Archived\\_Niche\\_Meat\\_Processor\\_Webinars](http://www.extension.org/pages/Archived_Niche_Meat_Processor_Webinars). [http://www.extension.org/pages/Meat\\_Processing\\_Videos](http://www.extension.org/pages/Meat_Processing_Videos).
- ❁ **Meat Inspection and Understanding Poultry Exemptions.** Cooperative Extension. 2009/2010. There are basically four types of inspection a meat processor can operate under: Federal Inspection (USDA); State Inspection; Retail-Exempt; and Custom-Exempt. All poultry exemptions are regulated by Chapter 9, Code of Federal Regulations, Section 381.10. After the Summary table below, we overview the poultry exemptions that allow a producer or processor to slaughter birds and sell them within their state.
- ❁ **Mobile Slaughter Unit Manual.** Niche Meat Processor Assistance Network. 2010. This manual offers comprehensive guidance for anyone interested in building and/or operating an inspected mobile slaughter unit (MSU) based upon on the experiences and expertise of several USDA-inspected MSUs in operation.
- ❁ **Meat Processor Financial Assistance and Other Loan Guarantee Programs.** Cooperative Extension. 2008/2010. Many financial assistance programs at the state and federal levels

will not work for small meat processors. While assistance programs do change from time to time, the five programs listed below are the only ones we found that work reliably for small meat processors.

- ❶ **Final Report: Natural Livestock Feasibility Study.** National Center for Appropriate Technology. 2009. Natural and organic meat sales have grown significantly at the national level over the past five years. However, this growth has been built on a very small base of total alternative livestock product sales. Even with significant market growth at the retail level, the livestock producer may have limited ability to capture a price premium in these markets. This feasibility study is primarily focused on the question of whether it is feasible to develop alternative markets for livestock products in Inyo and Mono counties that can add value to the current 30,000-plus calves and 21,000-plus lambs and sheep produced there annually.
- ❷ **Niche Meat Processory Case Studies.** Cooperative Extension. 2010. The following case studies offer a detailed look inside a variety of niche-oriented meat processors. Some have photos, design drawings, and even videos. The processors gave generously of their time and information so that we could share their stories with you.
- ❸ **Demand and Options for Local Meat Processing: Finding the way from pasture to market in the Connecticut River Valley.** Community Involved in Sustaining Agriculture. 2008. In the past two years farmers in Massachusetts, Connecticut, and Vermont faced an abrupt shortage of slaughter and meat processing services as two USDA-inspected slaughterhouses burned and several other options dwindled, at the same time that market demand was growing for their local meat products. In the following report, we review previous studies, lay out several possible solutions to the shortage of slaughter options, determine the demand for processing services through a farmer survey, outline the pros and cons of a small-scale facility, and review the economic feasibility for one livestock processing scenario.
- ❹ **Meat Processing Facility Feasibility Study.** Hudson Valley Livestock Marketing Task Force. 2000. Report evaluating the feasibility of developing a single, USDA-inspected facility that would offer the region greater slaughter capacity in combination with other services so producers would be able to market their products profitably.

