

## AGRICULTURE

### 7.1 Introduction

Agricultural land is an important land use that can provide economic development opportunities and define community character. According to the 2014 Green Industry Economic Impact Study by the University of Rhode Island, the agriculture industry in Rhode Island contributes an annual market value of \$238.9 million in agriculture sales (RIDEM, 2015). The state's farmland also provides approximately \$90 million in ecosystem services such as increased habitat, flood prevention, carbon sequestration, and improved air quality (RIDEM, 2015).

The Town of Lincoln has an important agricultural history with remnants of that heritage existing throughout the community. Several farmhouses, barns, and sheds survive in good condition. As an example, Chase Farm, which continued to operate dairy farming until the early 1980s, has a gambrel-roofed cow barn and twin wooden cylindrical silos (Society of Architectural Historians). Other well-preserved farmsteads include the Ballou Farm on Albion Road and Simon Aldrich Farm on the 1882 Old Louisquisset Pike. The Blackstone River Valley, which includes areas in Lincoln, historically supported various agricultural activities such as farming and mills.

Figure 7-1. Moffett Mill in Lincoln, RI



Source: Great Road Heritage Campus, [greatroadheritagecampus.org](http://greatroadheritagecampus.org)

This agriculture chapter provides information on farm types and products in Lincoln. Because agriculture resources span so many topic areas, they will also be discussed in other chapters of this plan, including land use, open space, and natural resources.

## 7.2 Existing Conditions

The existing conditions analysis describes current conditions in Lincoln (2023). This section summarizes the acreage of land that supports agriculture and the types of agriculture that exist in the Town. This information will be used to develop relevant actions and strategies that will help sustain the agricultural industry. The agriculture industry historically was an essential part of the Town. Today, a small number of operating farms remain, and some agricultural farmlands are being reused as open space. According to the 2021 U.S. Census, agriculture, forestry, fishing, hunting, and mining directly employ around 26 workers (or about 0.2% of the population) in Lincoln and 2% (262 acres) of the community's land is actively farmed (U.S. Census, 2021) (RIGIS, 2011).

Agricultural lands help maintain the Town's rural character. The Town has seen new development on lands that were once occupied by farms. Chapter 1 Land Use details the conversion of agricultural land to urban and highly developed land uses including low-density residential land use between 2001-2016 (Farms Under Threat, 2001-2016). Agricultural land use/land cover in the Town has decreased by 283 acres (2% of the total land area) and the Town's residential area has increased by 486 acres (4% of the total land area) between 1998 and 2020. There has been an increase in residential development between 1988 and 2020, consisting primarily of medium density (1 to ¼ acre lots). Today, over 3,464 acres (29%) of all developed land consists of residential development (RIGIS, 2020). Land use changes that occurred between 1988-2020 are summarized in *Chapter 1: Land Use*. Development on agricultural lands can have significant implications on the environment including loss of habitat and pollution from increased runoff. Sustainable development practices and the preservation of agricultural lands can promote efficient land use.

Approximately 1,507 acres, or 12.4%, of Lincoln is under the prime farmland soil unit. In addition to the soils identified as prime farmland, the NCSS has designated 988 acres, or 8.1% of Lincoln's farmland as farmland of statewide importance (see Map 7-1: Agricultural Map). The United States Department of Agriculture's National Resources Conservation Service (USDA NRCS) classifies agriculture soils and "prime farmland" or "farmland of statewide importance" as those that meet specific criteria based on the physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops (Natural Resources Conservation Service Rhode Island 2013). Prime farmland contains the highest quality combination of physical and chemical properties. Farmland of statewide importance does not meet the requirements for "prime farmland" but has similar properties. Criteria for identifying farmland of statewide importance are defined by the respective state agencies, which are maintained by the Rhode Island Department of Environmental Management. The proportion of land area in Lincoln that is actively farmed is low compared to farmland in Providence County in Rhode Island. Today, 262 acres, or about 2% percent of Lincoln, is land under active agricultural use. In comparison, 16,328 acres, or about 29% percent of Providence County in Rhode Island consists of land in farms (RI Food Policy Council, 2017).

Proper soil conditions are key to successful agricultural practices that concentrate on the growing of crops, and 181 acres, or 69% of the active farmland is located on prime farmland. This area was calculated using prime farmland and farmland of statewide importance overlapped with active farmlands in the RIGIS Ecological Communities dataset. Approximately 1,303 acres or 53% of prime farmland or farmland of statewide importance have been converted to developed land and are unavailable for future use as farmland. Map 7-1: Agricultural Map displays 1,192 acres of agriculturally valuable undeveloped soils remaining in Town. This area was calculated using prime

farmland and farmland of statewide importance overlapped with developed areas as found in the RIGIS Land Use 2020 dataset. In comparison, approximately 50,000 acres of prime farmland in Rhode Island was converted to developed land between 1981 and 2004, a total loss of 25% of prime farmland in Rhode Island over 23 years (RIDEM, The Nature Conservancy, URI, 2015). Maintaining the health and productivity of agricultural soils is important as they play a crucial role in supporting food production.

*7.2.1 Types of Agricultural Operation*

Agriculture can include cultivating crops and raising animals for food or resource production. Lincoln’s farms produce a variety of agricultural products including fruits and vegetables, meats, eggs, perennials, annuals, and Christmas trees. Farmland in Lincoln consists of primarily hayfields (117 acres or 45% of active farmland) and pasture (78 acres or 30% of active farmland). Nursery and Christmas trees cover 42 acres (16%) and cropland covers 24 acres (9%) of land in farms. Pasture areas are commonly associated with animal grazing and hayfields are used for forage (USDA, National Agricultural Statistics Service, 2017). The top crops produced by the county are nursery, greenhouse, floriculture, sod, vegetables, melons, and potatoes; the top livestock activity is cattle/calves, followed by horses, ponies, mules, burros, and donkeys (Census of Agriculture, 2017).

**Figure 7-2. Butterfly Farm Cows**



Source: Butterfly Farm, [www.butterflyfarmri.com](http://www.butterflyfarmri.com)

*7.2.2 Availability of Locally Grown Food*

The Butterfly Farm is one of the few working farms in Lincoln. It includes many different types of animals, a farm stand, a greenhouse, and dog training (Butteryfly Farm). Other farms have been



converted to open space or community gardens. Chase Farm, also known as Smith Farm, located at 667 Great Road was originally used as a dairy farm and was purchased by the Town and preserved for its historical value (Rhode Island's Blackstone Valley). The Lincoln Farmers Market is located on Chase Farm and hosts vendors from Butterfly Farm, Angell Farm, and individuals from the Town's community garden (Barr, 2023). The Lincoln Community Garden located on 397 River Road formerly known as Thibaudeau Farm is now used for passive recreation and conservation through an Open Space grant from RIDEM and offers scenic views in Town. (Dotzenrod, 2022). The food grown in the Lincoln Community Garden is often donated to local food pantries. The Town also offers Community Supported Agriculture (CSA) that connects local farmers directly with consumers to provide locally grown produce. Table 7-1: Farms and Farmstands in Lincoln provides information on farms and farmstands in Lincoln. Map 7-1: Agriculture Map displays active farmlands remaining in Town.

Figure 7-3. Farmstand at the Butterfly Farm



Source: Butterfly Farm, [www.butterflyfarmri.com](http://www.butterflyfarmri.com)

Table 7-1. Farms and Farmstands		
Farm Name	Location	Agricultural Type and Products
Angell Farm	15 Lantern Rd	Community Supported Agriculture (CSA)
Butterfly Farm	679 Great Rd	Meats, Eggs, Fruits, Vegetables, Perennials and Annuals, Christmas Trees, Farmstand, Greenhouse
Chaos Farm	1890 Old Louisquisset Pike	Alpaca Fiber Farm

Chase Farm (also known as Smith Farm)	667 Great Road	Lincoln Farmers Market, Various Vendors
Lincoln Community Garden (formerly known as Thibaudeau Farm)	397 River Rd	Vegetable Crops
Prospect Hill Farm	61 Reservoir Rd	Hay, Horseback Riding
Willow Brook Farm	1088 Great Rd	Horseback Riding, Equestrian Facility

Source: RIGIS and Town of Lincoln

### 7.2.3 Programs to Support Farming

The following state grants and initiatives help support farming operations in Rhode Island (RIDEM):

#### Farm Energy Program

Supports energy efficiency projects and helps farmers transition to renewable power.

#### Local Agriculture and Seafood Act (LASA)

Supports the growth, development, and marketing of local food and seafood in Rhode Island.

#### Resilient Food Systems Infrastructure Program

Supports expanded capacity for the aggregation, processing, manufacturing, storing, transporting, wholesaling, and distribution of locally and regionally produced food products, including specialty crops, dairy, grains for consumption, aquaculture, and other food products, excluding meat and poultry.

#### Specialty Crop Block Grant Program

Provides funds to enhance the Competitiveness of Specialty Crops grown in Rhode Island.

#### Organic Certification Cost Share Reimbursement

Accepts applications for organic certification cost share reimbursement.

#### RI Produce Safety Improvement Mini-Grants

Helps Rhode Island produce growers implement on-farm food safety practices, transition to compliance with the Food Safety Modernization Act (FSMA) Produce Safety Rule, and meet market demands for on-farm food safety.

The RI Grown program offers consumer and wholesale support to growers in Rhode Island. Growers are encouraged to use the RI Grown logo to distinguish their products to help consumers identify local agricultural products and offer a range of promotional materials, including listing on their interactive farm map and website (RIDEM).

The state farmland preservation program offers to purchase easements on property that restricts future uses except those related to farming to permanently protect farmland (RIDEM). The state agriculture lands preservation program, run by the Agricultural Lands Preservation Commission (ALPC), acquires development rights from farmers, enabling them to retain ownership of their property while protecting their lands for agricultural use (RIDEM, 2015). This preservation program protects Butterfly Farm in Lincoln.

Rhode Island’s Right to Farm law prohibits the Town from enforcing ordinances against agricultural operations that regulate and control the construction, location, maintenance, or removal of all places for keeping animals (Rhode Island General Laws). The Residential Agricultural District, established in Article II Definitions, §260-7 of the zoning ordinance was established to promote low-density residential growth in areas that were historically used for agriculture and/or have natural limitations for development (Town of Lincoln, 2022). Article III Use Regulations, §260-8 in the Town’s zoning ordinance defines agricultural operations allowed (Town of Lincoln).

The Farm, Forest and Open Space (FFOS) program is administered by RIDEM under the Farm, Forest, and Open Space Act. The purpose of the program is to help conserve land that is considered farmland, forestland wetlands, and open space through tax abatement. RIGL 44-27 allows property enrolled in the FFOS program to be assessed at its current use, not its value for development. The purpose is not to reduce property taxes but to conserve Rhode Island’s productive agricultural and forest land by reducing the chance it will have to be sold for development (RIDEM).

*7.2.4 Economic Importance of Agriculture in the Region*

Lincoln farms are part of Providence County’s agricultural economy, which contributed \$12,432,000 in sales in 2017 (USDA, National Agricultural Statistics Service, 2017). Town-level sales information was not available at the time of this writing.

Lincoln is unusual compared with the county because so much of its farmland is used for hayfields and pasture. Hayfields in the county only account for 11% of land in farms and pastureland accounts for only 17% (Census of Agriculture, 2017). Cropland covers 4,236 acres (26%) of land in farms in Providence County (Census of Agriculture, 2017). In comparison, cropland covers only 24 acres (9%) of the land in Lincoln and farmland consists of primarily hayfields (117 acres or 45% of active farmland) and pasture (78 acres or 30% of active farmland).

Between 2012 and 2017, the agriculture sector in Providence County has seen an increase in acres of hay and haylage (6%) and acres of cultivated Christmas trees (17%). There has been a decrease in acres of vegetables harvested (11%) and acres of apples harvested (6%). The top crops produced by the county are nursery, greenhouse, floriculture, sod, vegetables, melons, and potatoes; the top livestock activity is cattle/calves, followed by horses, ponies, mules, burros, and donkeys (Census of Agriculture, 2017). Information on sweet corn, layers, and pullets was withheld to avoid disclosing data for individual operations. There was a 53% increase in the number of sheep and lambs, a 35% increase in horses and ponies, a 26% increase in cattle and calves, and a 13% increase in goats being raised in the County between 2012-2017. There has been a 34% decrease in the number of turkeys and 16% in the number of hogs and pigs being raised in the County between 2012-2017. Cropland and livestock inventory changes that have occurred between 2012 and 2017 are summarized in Table 7-2: Providence County Cropland and Table 7-3: Providence County Livestock Inventory. The USDA 2022 Census of Agriculture was not available at the time of this writing.

Table 7-2. Providence County Cropland		
Crop Type	Total Acres (2017)	% change since 2012
Forage (hay/haylage), all	1,808	6%
Vegetables harvested, all	644	-11%
Sweet corn	(D) Withheld to avoid disclosing data for individual operations.	N/A

Cultivated Christmas trees	211	17%
Apples	171	-6%

Source: USDA Ag Census, 2012 and 2017

Table 7-3. Providence County Livestock Inventory		
Livestock Type	Livestock Inventory (2017)	% change since 2012
Meat-type chickens	444	N/A
Cattle and calves	1,174	26%
Goats	379	13%
Hogs and pigs	1,297	-16%
Horses and ponies	966	35%
Layers	(D) Withheld to avoid disclosing data for individual operations.	N/A
Pullets	(D) Withheld to avoid disclosing data for individual operations.	N/A
Sheep and Lambs	762	53%
Turkeys	126	-34%

Source: USDA Ag Census, 2012 and 2017

### 7.3 Goals and Policies

Goals and their corresponding policies reflect the desired changes of Lincoln residents for the next ten years, as gathered from a public workshop held in May 2024. As such, the Town hopes to continue preserving its active farmlands and ensuring their economic stability. The policies that align with this goal include increasing access to local agricultural products, promoting education of the Town’s agricultural offerings, and investing in farmland preservation strategies.

Table 7-4 Goals and Policies	
Goals	Policies
<b>AG1. Town Wide</b> Preserve and enhance agricultural lands.	<b>AG1.1. Town Wide</b> Support the preservation of prime agricultural lands.
	<b>AG1.2. Town Wide</b> Promote sustainable agricultural practices.
	<b>AG1.3. Town Wide</b> Encourage the economic development of agricultural enterprises.
	<b>AG1.4. Town Wide</b> Support access to local agricultural products.
	<b>AG1.5. Town Wide</b> Promote agricultural education and awareness.
	<b>AG1.6. Town Wide</b> Enhance community involvement in agricultural activities.

	<p><b>AG1.7. Albion</b> Preserve existing agricultural lands.</p>
	<p><b>AG1.8. Marville</b> Encourage the reuse of existing buildings for agricultural enterprises.</p>
	<p><b>AG1.9. Saylesville</b> Mitigate conflicts between agricultural and non-agricultural uses.</p>
	<p><b>AG1.10 Lonsdale</b> Leverage the village's historical and natural resources for agricultural tourism.</p>



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