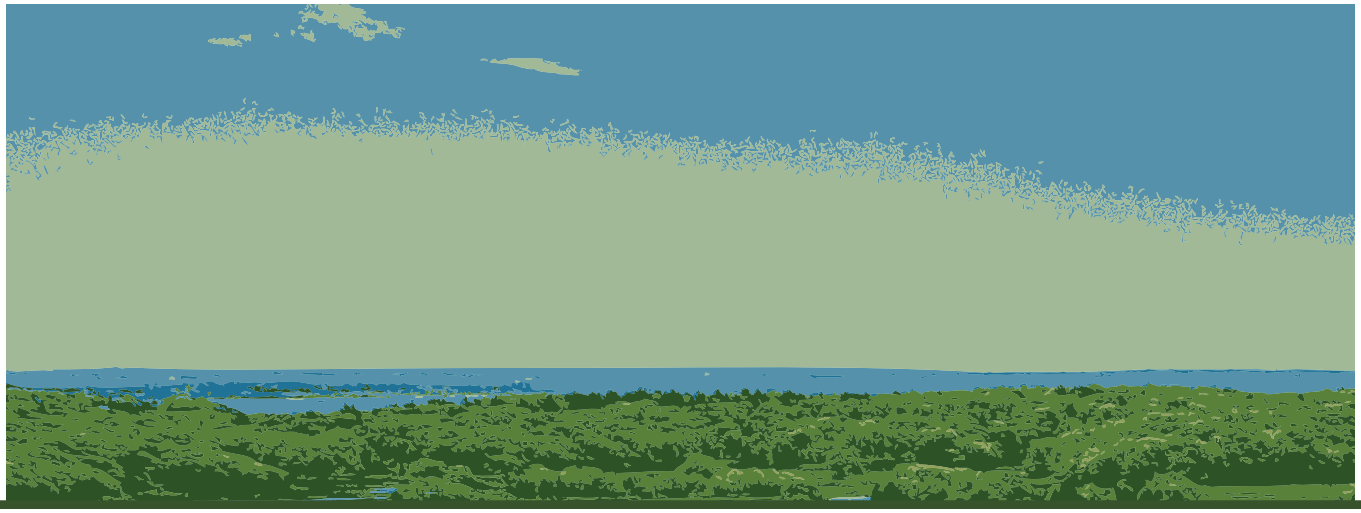
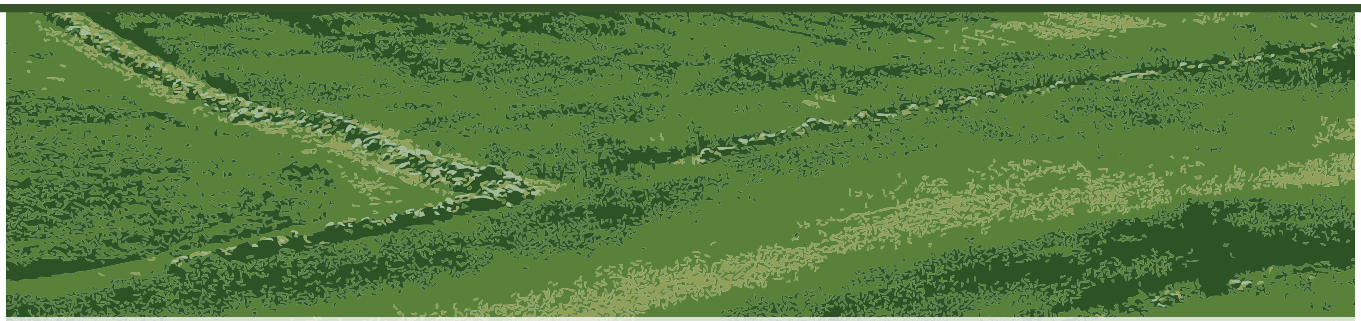


SECTION 2

COMMUNITY GROWTH & DEVELOPMENT



Chapter 4 | Land Use

Categorization of land into land use types. Changes in land use over time.

Chapter 5 | Housing

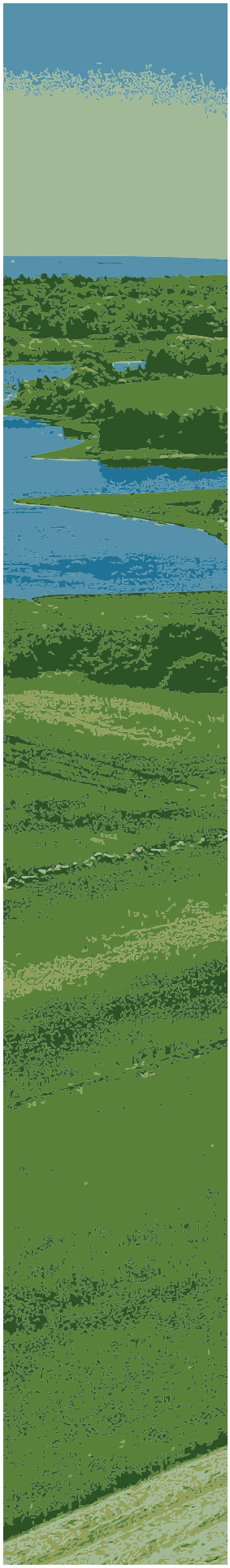
Types of housing available in Dartmouth. Housing needs and state requirements.

Chapter 6 | Economic Development

Dartmouth's economic base. Types of economic centers throughout Dartmouth. Dartmouth's Nature resource economy.

CHAPTER 4

LAND USE



Historical Land Development Patterns

The Dartmouth that we know today – its multiple village centers, waterfront districts, residential developments, commercial centers, and agricultural lands can be traced back to the settlement nodes that sprung up during the colonial period.

In 1652, Massasoit, the Chief Sachem of the Wampanoag Federation, and his son Wamsutta, sold the land covering Dartmouth and four other present towns, to elders of the Plymouth Colony, including Miles Standish, John Alden, and Governor William Bradford. These early real estate speculators sold off these then-frontier lands in smaller parcels, primarily to religious dissidents (Quakers and Baptists) who were seeking refuge from the religious persecutions being launched by the Massachusetts Bay and Plymouth Bay Colonies. The Town, named after an English port, was incorporated in 1664.

The terrain of waterways and inlets and the desire of Quakers to live freely outside of government and church authority shaped Dartmouth's colonial settlement. Settlers did not establish one main village center, but rather dispersed throughout the territory establishing farms and, over time, taking up the maritime activities of salt making and shipbuilding. The community grew quickly, attracting many who disagreed with the establishment and many more who sought work.

Dartmouth has maintained its agricultural and maritime roots, but development was subsequently influenced by other forms of industry and changes in lifestyle, including the small-scale industrial villages of the 18th century that located near water sources, and the 19th century summer resorts for the wealthy. It is argued that the lack of a deep harbor prevented Dartmouth from becoming a major port such as New Bedford. Instead, during the 19th and 20th centuries, Dartmouth was the destination of those desiring more spacious living.

The accessibility made possible by transportation improvements, such as Route 6 and the trolley line, fostered development in the community after the turn of the 20th century. During this period, Dartmouth functioned as a bedroom community to the urban areas of New Bedford and Fall River, and suburban housing was constructed for families interested in a single-family home. The construction of infrastructure such as Interstate Highway I-195 (1966) and a sewage treatment plant (1972) both supported and enhanced development.

Major developments such as the University of Massachusetts (then Southeastern Massachusetts University) in the late 1960s, the North Dartmouth Mall (1972), the Greater New Bedford Industrial Park (1980s), the Southern New England School of Law (1988), and the Bristol County Jail and House of Correction (early 1990s), have mixed late twentieth-century

commercial and institutional development with the Town's historic development pattern of dispersed village centers. Dartmouth now fulfills a significant regional role due to the presence of major institutions and a wide diversity of consumer services.

KEY LAND USE PLANNING DATA

Dartmouth's Neighborhoods

The third largest town in Massachusetts by land area, Dartmouth is 63.95 square miles in size (approximately 40,000 acres), including 2.13 square miles of water. Rooted in the historical development described above, Dartmouth is functionally and colloquially known to contain multiple identifiable neighborhoods and pockets with consistent development patterns. The **Neighborhoods and Centers Map** shows the locations of the following subsections of Dartmouth:

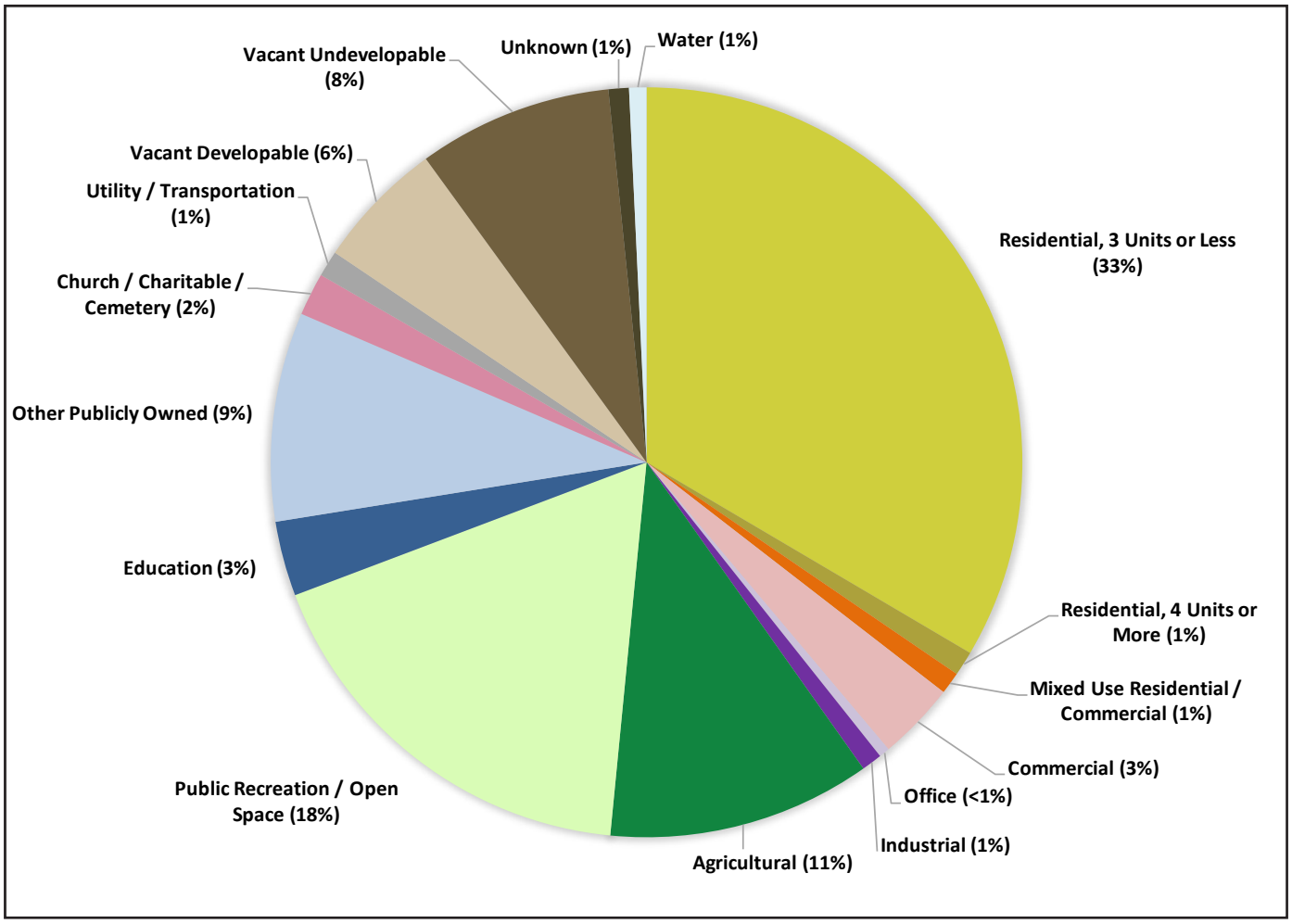
Historical Villages	Russells Mills (rural village) Hixville (rural village) Padanaram (maritime village)
Contemporary Centers	Bliss Corner Faunce Corner/Route 6 Commercial District UMass Dartmouth

Land Use in 2020

The physical makeup of Dartmouth is shaped by both the decisions of individual property owners and the rules for land use and development established by the community as a whole. Dartmouth contains areas with distinct character and specialized functions, from historic village centers to regional shopping centers to enclaves of summer homes to regional institutions. It is a community that is home to a wide spectrum of land uses each of which presents a different set of preservation- and growth-related concerns. A multi-faceted regulatory strategy is needed to effectively respond to the circumstances within each distinct area.

The analysis of the most recent available land use data relies on the land use categories assigned to each parcel of land in Dartmouth that are tracked annually in tax assessment data. The fifteen analysis groups vary from specific uses (e.g. "automobile sales") to larger categories (e.g. "commercial land"). The **Existing Land Use Map** shows the classification of each of Dartmouth's approximately 14,207 parcels the number of which fluctuates with subdivisions and mergers throughout the town. Figures 4.1 and 4.2 show the amount of land in each category in total and relative to other categories.

Figure 4.1: Relative Distribution of Land Uses in Dartmouth, 2020



Source: MassGIS Level 3 Parcel Data for Dartmouth, downloaded April 14, 2020

As can be seen in the figure, one-third of Dartmouth is developed with low-density residential lots. Public recreation and open space lands account for approximately one-fifth of Dartmouth's area. As a reflection of Dartmouth's historical agricultural roots and continued rural character, productive lands are the third-largest land use category by area. Publicly owned lands, vacant developable lands, and vacant undevelopable lands each represent between 5 and 10% of Dartmouth. Interestingly, commercial uses occupy only 3% of Dartmouth. Many land uses occupy less than 1% of Dartmouth's land area; including medium- and high-density residences, industrial, and mixed-use style development.

Figure 4.2: Overall Amount of Land in Major Land Use Categories in Dartmouth, 2020

Land Use Category	Total Acres	Percent
Residential, 3 Units or Less	12,663	33%
Public Recreation / Open Space	6,690	18%
Agricultural	4,284	11%
Other Publicly Owned	3,409	9%
Vacant Undevelopable	3,164	8%
Vacant Developable	2,105	6%
Commercial	1,274	3%
Education	1,220	3%
Church / Charitable / Cemetery	697	2%
Utility / Transportation	423	1%
Residential, 4 Units or More	399	1%
Mixed Use Residential / Commercial	360	1%
Industrial	334	1%
Unknown	332	1%
Water	282	1%
Office	173	<1%
Total	**37,809**	**100%**

Source: MassGIS Level 3 Parcel Data for Dartmouth, downloaded April 14, 2020

Comparing these figures to land uses recorded in Dartmouth's 2007 Master Plan can show trends over time. The major land categories in the 2007 data are not precisely equivalent to the assessment categories used in the current tabulations. Thus, while direct comparisons are not possible, we can see overall trends in an increase in the amount of land devoted to residences and a decrease in vacant and natural land, and a large relative increase in the amount of commercial space.

Figure 4.3: General Land Use Trends in Dartmouth, 1999-2020

Land Use Category	Total Acres 1999	Total Acres 2020	Pct. Change
Residential	7,046	13,062	+85%
Vacant / Natural / Open Lands	25,401	15,368	-39%
Agricultural	4,053	4,284	+6%
Commercial / Office / Mixed Use	676	1,807	167%
Education Church / Charitable / Cemetery ("institutional")	1,295	1,917	48%
Industrial / Utility / Transportation	737	757	3%
Unknown	-	332	-
Water	-	282	-
Total	**39,208***	**37,809**	

Source: MassGIS Level 3 Parcel Data for Dartmouth, downloaded April 14, 2020

*Note the discrepancy in total land area, most likely due to absence of roadway rights of ways from parcel data in 2020 or other data inconsistencies between parcel data (2020) and land cover data (1999)

Other Significant Land Use Typologies

In the description of their town's unique attributes, residents highlighted Dartmouth's natural areas, farmland and rural qualities, and, of course, the town's identity as a coastal community. Tracking land use attributes related to these paramount features of Dartmouth helps to inform policy that preserves these community characteristics.

Protected and Semi-Protected Natural Lands

In 2007, the Dartmouth Mater Plan recorded 9,890 acres, or 24.8% of the community, as permanently protected from development. Mechanisms for permanent protection include deed markers such as Agricultural Preservation Restrictions, Conservation Restrictions, or ownership by a conservation organization that would make conversion unlikely (including holdings of the DNRT, holdings of the Massachusetts Audubon Society, Town of Dartmouth parks and playgrounds, cemeteries, and state parks).

In 2020, the amount of land under a permanent preservation restriction or belonging to a class of publicly-owned land unlikely to be developed has increased to approximately 11,000 acres. The **Open Space and Chapter 61 Lands Map** shows the extent of preserved lands within the town as recorded by the Town's GIS service as of April 2019. The identified lands include lands under fee simple ownership by a conservation organization; an Agricultural Preservation Restriction; a Conservation Restriction held by a conservation organization; a Conservation Covenant; a Deed

Restriction required by municipal subdivision processes; protection of municipal drinking water wells and water supply areas; state or municipal beaches and parks; public access points; public recreation properties; historic preservation properties; resource protection required by Federal, State or private grants; State of Massachusetts wildlife refuges or other protected lands; and private Deed Restriction.

Apart from permanent development restrictions, some of the land that is currently experienced as natural land and open space is actually in a state of temporary preservation. The Massachusetts tax reduction program commonly known as "Chapter 61" allows landowners to voluntarily enroll their forested, agricultural and open space recreation areas as temporarily preserved lands in exchange for a reduction in property taxes. These lands, commonly known as "Chapter 61 lands" (Chapter 61 forestry; Chapter 61A agriculture; and Chapter 61B recreation lands) are not permanently protected. Property owners may un-enroll at any time. In exchange for the reduced property assessment, however, the property owner must provide the community the right of first refusal for purchase of the land and pay a partial recapture of the reduced property tax. Generally, Chapter Land is a good indication of active agricultural and managed forest areas in the Town.

The **Open Space and Chapter 61 Lands Map** indicates the location of Chapter lands in Dartmouth in 2020. Per current town estimates, there are in excess of 6,500 acres of Chapter land in Dartmouth, though the acreage fluctuates continually with property additions and removals.

Agricultural Lands

Agricultural activity remains a prominent feature of life in Dartmouth, and is supported by an active Agricultural Commission and the Agricultural Preservation Trust Council, as well as Right-to-Farm bylaws. The **Agricultural Lands Map** shows all of the existing agricultural and productive lands in Dartmouth (as identified by assessor's land use codes and Agricultural Preservation Restrictions). Overall, 4,284 acres in Dartmouth are categorized as having some type of agricultural use. Currently, 1,075 acres of land in Dartmouth are part of the state's Agricultural Preservation Restriction (APR) program, whereby lands have been set aside in perpetuity for agricultural use.

Most of the agricultural lands in Dartmouth produce field or truck crops including hay, wheat, tillable forage, and vegetables. Other large-acreage product types include unspecified agricultural operations not in the Chapter 61 program, and pasture land, and mixed-use agricultural land. Figure 13 shows the breakdown in agricultural lands per production type, where it is known (the inclusion of horse farm type properties here explains the discrepancy with the overall agricultural land figure).

Figure 4.4: Acres of Agricultural Land in Dartmouth by Product Type

Product Type	Acres	Percent
Field Crops / Truck Crops	1,732	40%
Agricultural/Horticultural Land not in Chapter 61A (product type not specified)	734	17%
Nursery / Greenhouse	198	5%
Pasture	533	12%
Cranberry Bog	42	1%
Productive Woodlot	427	10%
Agricultural Mixed Use with Residences, Horses, or Nonproductive Lands	453	10%
Necessary Accessory Lands and Farm Buildings	210	5%
Total	**4,330**	**100%**

Source: MassGIS Level 3 Parcel Data for Dartmouth, downloaded April 14, 2020

Per zoning regulations, agricultural uses are permitted in all zoning districts except for Residence C, Village Business, Bliss Corner, Office Park, Marine Industrial, and General Industrial districts (overall, these districts occupy small portions of land area in Dartmouth).

Rather than regulatory barriers, the continuation of active farmland in Dartmouth may face its biggest challenge from social and environmental pressures. Preserving the quality of prime agricultural soils into the future as climate change impacts bring more rain, erosion, summer drought, snap freezes, and pest pressures may require unconventional farming practices, such as no-till and similar operations, or the growth of different crops. From a social and demographic perspective, the 2009 American Farmland Trust survey found that 2/3 of respondents did not have a successor in line to continue the farming operation. Connecting young farmers with agricultural land may emerge as a key priority for maintaining Dartmouth's valued rural character.

Coastal Lands

Dartmouth residents are closely tied to their coastal location on Buzzards Bay. Dartmouth's scenery and recreational cultural are heavily identified with the bay and the town's waterfront. The Massachusetts Office of Coastal Zone Management identifies 30 public access points in Dartmouth, which are managed by either state, local or nonprofit entities (see the **Community-Waterbodies Nexus Map**). Located entirely within the Buzzards Bay Watershed, activity and land uses upland from the bay have significant consequences for the health of Dartmouth's waterways and Buzzards Bay. This plan discusses the issues of water access and watershed health further in the recreation and open space, and natural and cultural resources chapters, respectively.

While life on the water contributes a unique scenic beauty and maritime recreational opportunities, Dartmouth's coastal location also entails the possibility of severe flood and storm risks. The Federal Emergency Management Agency (FEMA)-designated Special Flood Hazard Area covers approximately 2,801 properties, in whole or in part. These properties contain about 1,614 structures located within the Special Flood Hazard Area (see the **Community-Waterbodies Nexus Map**). The large number of properties and improvements located within this high-risk flood area make it essential for the town to maintain its standing and compliant with the rules and regulations of FEMA's National Flood Insurance Program, and to consider high risk flood areas carefully when making locating high cost community facilities and infrastructure investments. (Additional details on this topic can be found in the Climate Change and Resilience element.)

Zoning

Zoning districts regulate the location of land uses within Dartmouth, as well as use intensity (amount of residential density or commercial square footage permitted) and form (setback requirements, height restrictions, etc.). The rules that regulate land use can change over time in response to community requirements, changes in lifestyle trends, or the acknowledgement of new realities and priorities. The creation and amendment of zoning bylaws is a function of Town Meeting decision-making processes.

Over time Dartmouth has progressively refined the Town's Zoning Bylaw in an effort to protect natural resources, respect the historical development pattern, and support economic development. The current Zoning Bylaw includes four residential districts, five business districts, four industrial districts, and one mixed use district (see the **Zoning – Base Districts Map**).

While the variety of zoning districts permits a wide range of commercial and residential uses, the proliferation of specific uses across Dartmouth is also tied to the districts' geographic scope. Figures 14 and 15 show the number of acres and relative extents of Dartmouth's zoning districts.

Figure 4.5: Absolute Acreage in Dartmouth occupied by each Zoning District

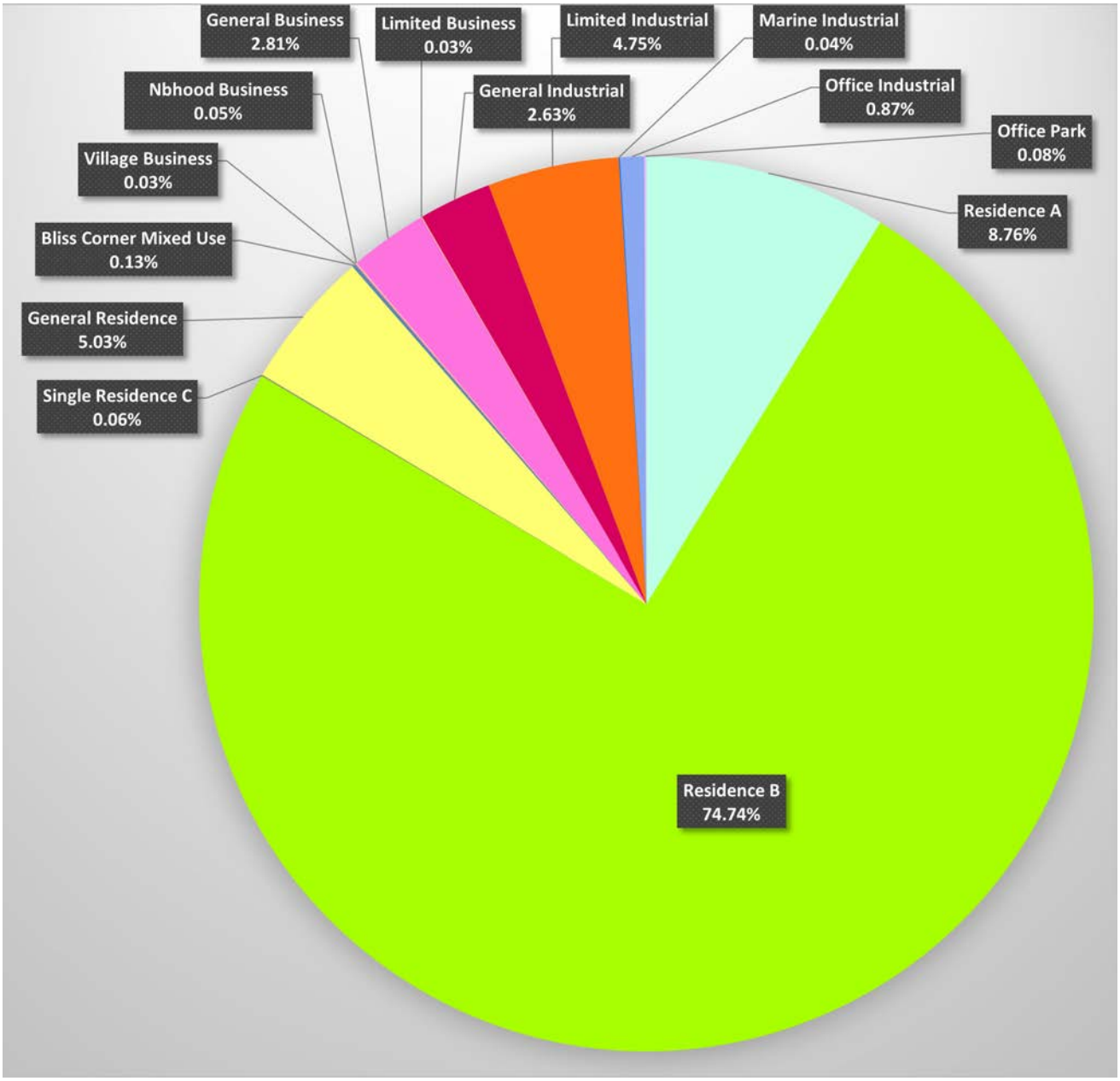
District	Total Acreage
Single Residence A	3,479.06
Single Residence B	29,676.97
Single Residence C	21.90
General Residence	1,997.78
Neighborhood Business	19.03
General Business	1,116.74
Limited Business	11.85
Village Business	13.50
Bliss Corner Mixed Use	49.72
Office Park	30.93
General Industrial	1,043.35
Limited Industrial	1,886.90
Marine Industrial	15.95
Office Industrial	345.48

Source: Town of Dartmouth, "Dartmouth Zoning Map March 23, 1999 Amended by Town Meeting to October 16, 2018" as digitized by SRPEDD in 2019

Figure 4.6: Proportion of Dartmouth in each Zoning District

As these figures show, the vast majority of land in Dartmouth – 88.25% - is zoned for residential use. In particular, a single zone, Residence B, covers 75% of Dartmouth. The Housing Element of this plan will further interrogate the implications of Dartmouth's residential zoning for housing options within the town. Dartmouth's zoning bylaw provides a statement of purpose for each zoning district, as summarized in the following sections.

Residential Districts



Source: Town of Dartmouth, "Dartmouth Zoning Map March 23, 1999 Amended by Town Meeting to October 16, 2018" as digitized by SRPEDD in 2019

There are four districts dedicated to residential uses:

District	Purpose
Single Residence A	Preserve the rural character of the Town by maintaining low and moderate population density. Minimize congestion on Town roads. Provide uses compatible with on-site sewage disposal and water supply capabilities. Minimize the impact of development on natural resources. Allow the use of property without creating a nuisance to abutting properties. Provide for certain non-residential uses which are compatible with the residential setting.
Single Residence B	Same as Residence A
Single Residence C	Provide for higher density single family dwellings in a District adjacent to a Smart Growth District.
General Residence	Same as Residence A and B.

We note that it may be problematic for three of the four residence districts to share an identical purpose with differing development standards. Examining the details of the development patterns allowed by these districts in the context of the development patterns that each is trying to achieve might assist the town in clarifying its goals and objectives for housing development.

Five zoning districts allow some residential uses, including the Neighborhood Business, Village Business, Limited Business, Bliss Corner Mixed Use, and General Business districts. Additional detail on the types of housing permitted in these districts is provided in the Housing Chapter.

Commercial Districts

There are six districts dedicated to commercial uses:

District	Purpose	Mixed-Use Permitting Some Residential
Neighborhood Business	Regular shopping / service needs	Yes
Village Business	Traditional mixed-use villages that are small and pedestrian friendly	Yes
Limited Business	Store and service establishments	Yes
Bliss Corner Mixed Use	Preserve the unique mixture of uses, historical character and scale of the Bliss Corner/ Dartmouth Street area	Yes
General Business	Provide for commercial uses and employment while not imposing nuisances on neighboring uses	Yes
Office Park	Provide for a transitional buffer between residential districts and commercial or industrial districts, and provide for uses on arterial roads	No

Industrial Districts

There are four industrial districts:

District	Purpose
Office Industrial	A space for office and industrial uses that capitalize on water, sewer and highway infrastructure
Marine Industrial	Provide for harbor dependent industrial uses
Limited Industrial	A space for industrial uses and employment while not imposing nuisances on neighboring uses
General Industrial	Provide for industrial uses and employment opportunities and diversity the tax base while not imposing nuisances on neighbors

Overlay Districts

In addition to the town's "base zoning" described above, there are six overlay districts that address specific concerns, either by apply additional performance standards and restrictions on the development permitted in the underlying area, or by expand the uses permitted for a limited area with a specific purpose. These districts are shown in the **Zoning – Overlay Districts Map**.

Overlay District	Purpose	Total Acreage	Number of Parcels
Floodplain	Reduce damage to public and private property resulting from floodwaters.	9,762.9	2,801
Aquifer Protection	Protect groundwater supplies from detrimental development and land use practices, and to ensure the adequate quality and quantity of drinking water for distribution within Dartmouth.	11,648.1	3,392
Faunce Corner	Preserve the value of the lots within the District, as those lots were formerly constituted, prior to the acquisitions by the Town of portions of the lots in the District for the purposes of widening Faunce Corner Road and a portion of Old Westport Road.	613.7	87
Waterfront	Provide adequate areas in the Town for harbor dependent uses and to promote access to the waterfront.	10	11
Lincoln Park Smart Growth	Encourage smart growth in accordance with MGL Chapter 40R and foster a range of housing options along with a mixed-use development component.	1.6	4
Marijuana Establishments	Designate areas in Town for such facilities that will have the least impact on community character.	1,546.6	134

Other Significant Bylaws

Land use and development options in Dartmouth are also controlled by other bylaws that sometimes integrate with zoning districts, but are not necessarily zoning-district dependent. There are two alternative residential subdivision options: Open Space Residential Development (OSRD) and Estate Lots.

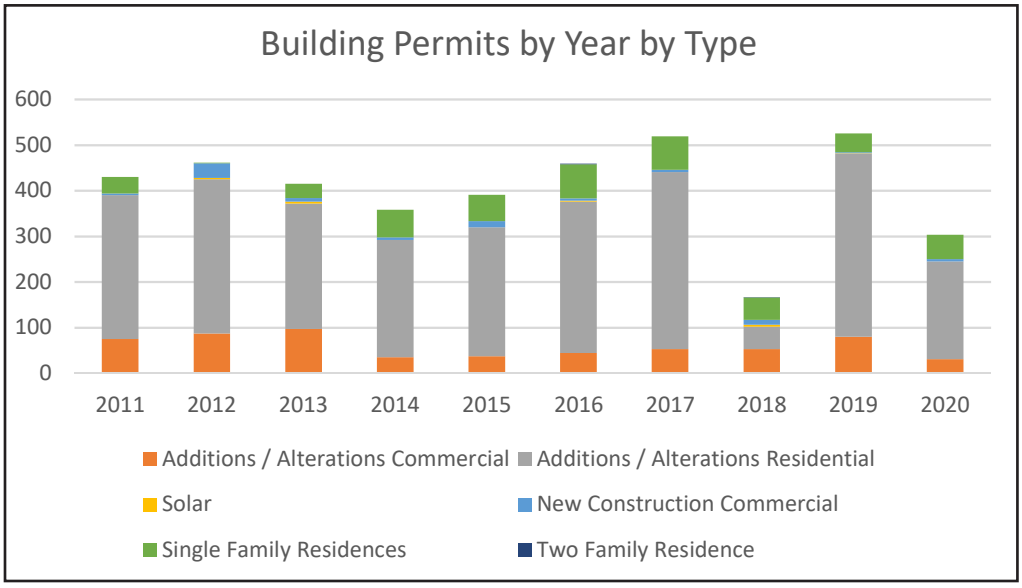
In particular, Dartmouth's OSRD bylaw has been cited as a statewide example of a successful instrument for preserving land in a developing municipality. OSRD provides an option for residential development with reduced lot area, frontage, and other requirements. The same total number of units are permitted as in a conventional subdivision, but the units are clustered together, allowing for the preservation of open space in the remainder of the lot. Dartmouth's requirement that any subdivision for five or more lots file concept plans for an OSRD is an example of a strong policy-based land use control.

Dartmouth also regulates development with a local Wetlands Bylaw administered by the Conservation Commission, Subdivision Rules and Regulations administered by the Planning Board, and local Board of Health regulations administered by the Board of Health. Infrastructure to support and guide development includes: water, sewer, and circulation related improvements. Public input from this Master Planning process echoes previous preferences for coordinating development with existing infrastructure.

Recent Development Trends

The housing and economic development elements of this plan delve into trends for these topics in greater detail, but it is notable that from 2011 to 2019, the town has recorded 424 permits for new single-family residences, and average of just over 47 permits per year. Most permits recorded are for additions and alterations to existing properties.

Figure 4.7: Building Permits issued in Dartmouth, 2011 to 2020



ROADMAP TO THE FUTURE

Land Use Goal 1:

Zone specific areas in town for medium-density housing options to expand access to new families and seniors.

Why Dartmouth / Why Now?

As will be described in detail below, Dartmouth residents feedback was against further large-lot, sprawling development and in favor of additional housing options on smaller lots. Between the existing Single Residence A and Single Residence B districts, 86% of the town is zoned for large-lot (an acre or more) houses. The Commonwealth's new MBTA Multi-Family Zoning Rule, expected to apply to Dartmouth within a couple of years, would force new zoning at 15 units per acre minimum density. The town can start now to proactively plan for this requirement in a way that also meets the express desires of residents for smaller-scale housing options.

Key Strategies for Action

Strategy		Responsible Party	Time frame
LU-1A	Rezone or establish overlay zones that permit higher-density housing along the Route 6 corridor, which is already close to transportation and water and sewer infrastructure.	Planning Board, Town Meeting	2-3 Years
LU-1B	Rezone or establish overlay zones that permit medium-density housing in village-type settings outside of the Route 6 corridor.	Planning Board, Town Meeting	2-3 Years
LU-1C	Where possible, couple these zoning changes with state programs like 40R that can help to recover some of the costs to the town of additional development.	Planning Board, Town Admin., Town Meeting	2-3 Years
LU-1D	Develop a proposed zoning bylaw for 62+ senior housing.	Planning Board, Town Meeting	2-3 Years

Land Use Goal 2:

Pursue mixed-use redevelopment projects.

Why Dartmouth / Why Now?

Redevelopment projects often enable the achievement of two conflicting goals at one time; additional needed residential and other built land uses can be achieved at a site that is already altered from its natural setting. In Dartmouth, smaller scale mixed-used development should be included in the villages.

Key Strategies for Action

Strategy		Responsible Party	Time frame
LU-2A	Route 6 is the town's main economic engine. In underutilized areas, some infill residential would be desirable.	Community & Economic Development, Planning Board, Town Admin	3-5 Years
LU-2B	Complete a review and implement components of the 2015 Reimagining the Dartmouth Retail Corridor Study, which examined possible futures for commercial sites along Route 6 from Faunce Corner Mall Road to Cross Road. The plan encourages the town to improve the corridor's "aesthetics and site planning, including improved features such as sidewalks, integrated transit facilities, and streetscaping."	Planning Board, Reviewers Group	2-3 Years
LU-2C	Include small-scale mixed-use development in village areas. Make zoning changes where necessary to bring about this type of mixed-use village development.	Planning Board, Town Meeting	3-5 Years

Land Use Goal 3:

Institute more low-impact development regulations.

Why Dartmouth / Why Now?

When you know better, you do better - that is the reasoning behind low-impact development in a nutshell. Development does not have to be pursued in the same way today as it was 50 years ago, even when contemplating single-family homes. Many communities have legacy regulations on the books that allow or require excessive impervious surfaces, that do not allow for innovative approaches such as green roofs, or that do not plan for adequate stormwater infiltration. Low impact development regulations allow for these innovations, reducing the toll that new housing and pavement takes on the natural environment.

Key Strategies for Action

Strategy		Responsible Party	Time frame
LU-3A	Complete a review of the Town's local regulations with respect to the creation of impervious cover and use of green infrastructure, as required under Dartmouth's Small MS4 General Permit. Town staff are pursuing the goal using a Mass Audubon checklist to assess different LID and green infrastructure criteria that may exist in the current code, and to identify possible areas for improvement.	Planning Board, Town Admin., local partners	1 Year

Land Use Goal 4:

Support the inherent resilience of land through targeted preservation and restoration projects.

Why Dartmouth / Why Now?

With anticipated sea level rise and intense storm outcomes resulting from climate change, we can mitigate some impacts by simply allowing land to remain in its natural, resilient state. Wetlands sequester more carbon than any other land cover. Marshes absorb wave action and floodwaters. Preserving and enhancing these features is imperative.

Key Strategies for Action

Strategy		Responsible Party	Time frame
LU-4A	Prioritize for preservation lands that have been identified as part of the town's "Green Infrastructure" network.	Town Admin., Conservation Commission, non-profits	on-going
LU-4B	Restore degraded coastal marshes and preserve land to allow for marsh migration under sea level rise conditions.	Town Admin., Conservation Commission, non-profits	on-going
LU-4C	Replenish the Agricultural Preservation Trust Fund to leverage additional agricultural preservation support from the state.	Agricultural Commission, Town Admin.	5-7 Years

Land Use Goal 5:

Plan in terms of connected landscapes with a balance of uses.

Why Dartmouth / Why Now?

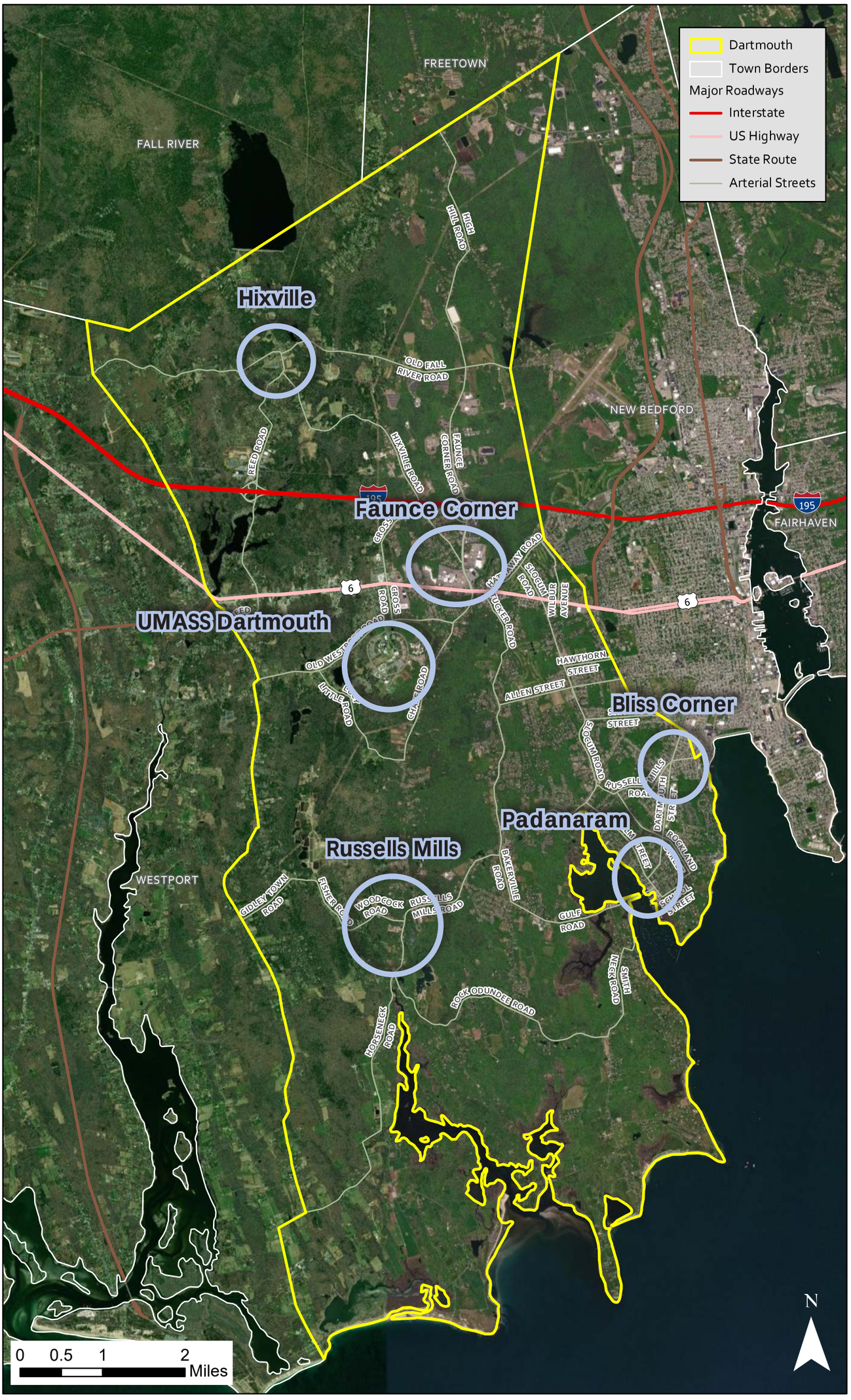
Context matters. Quality of life will be enhanced if denser housing is within a pleasant walk to parks, the coast, local commercial centers, or similar community facilities. Planning coordinated and comprehensive actions to improve water quality within a watershed is often more effective than isolated interventions. In its land use planning, the town should zoom out and keep these connections in mind.

Key Strategies for Action

Strategy		Responsible Party	Time frame
LU-5A	When zoning for new housing, plan these changes alongside sidewalk improvements, park enhancements, and other community features that are accessible without a motor vehicle.	All town departments	on-going
LU-5B	Connect preserved lands with networks of walking and biking trails and sidewalks.	Pathways Committee	on-going
LU-5C	Tackle intractable environmental concerns, like water quality impairments, on a sub-watershed basis. This will enable focused effort into one sub-basin at a time, for coordinated action and meaningful improvement of environmental conditions.	All town departments, Harbor Committee, and consultants	on-going
LU-5D	Formulate a collective vision for the Harbor by developing a **Harbor Use Map**. This Map will function to clarify public and private spaces on the Harbor, allow room for, a variety of different public access uses will protect both public and private interests.	All town departments, HMPIC, public input	1-3 years

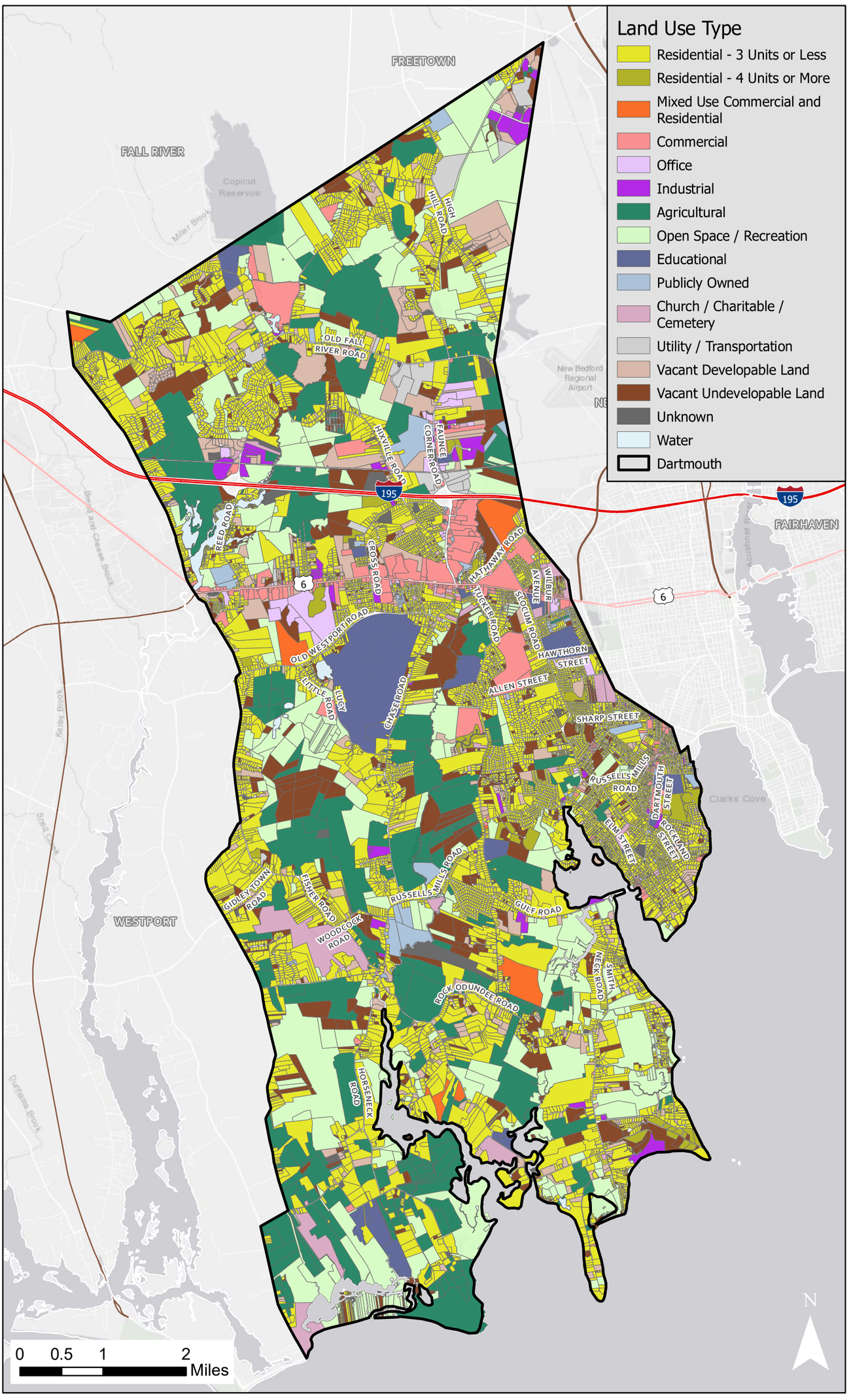
Neighborhoods & Centers Map

Source: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, MassGIS



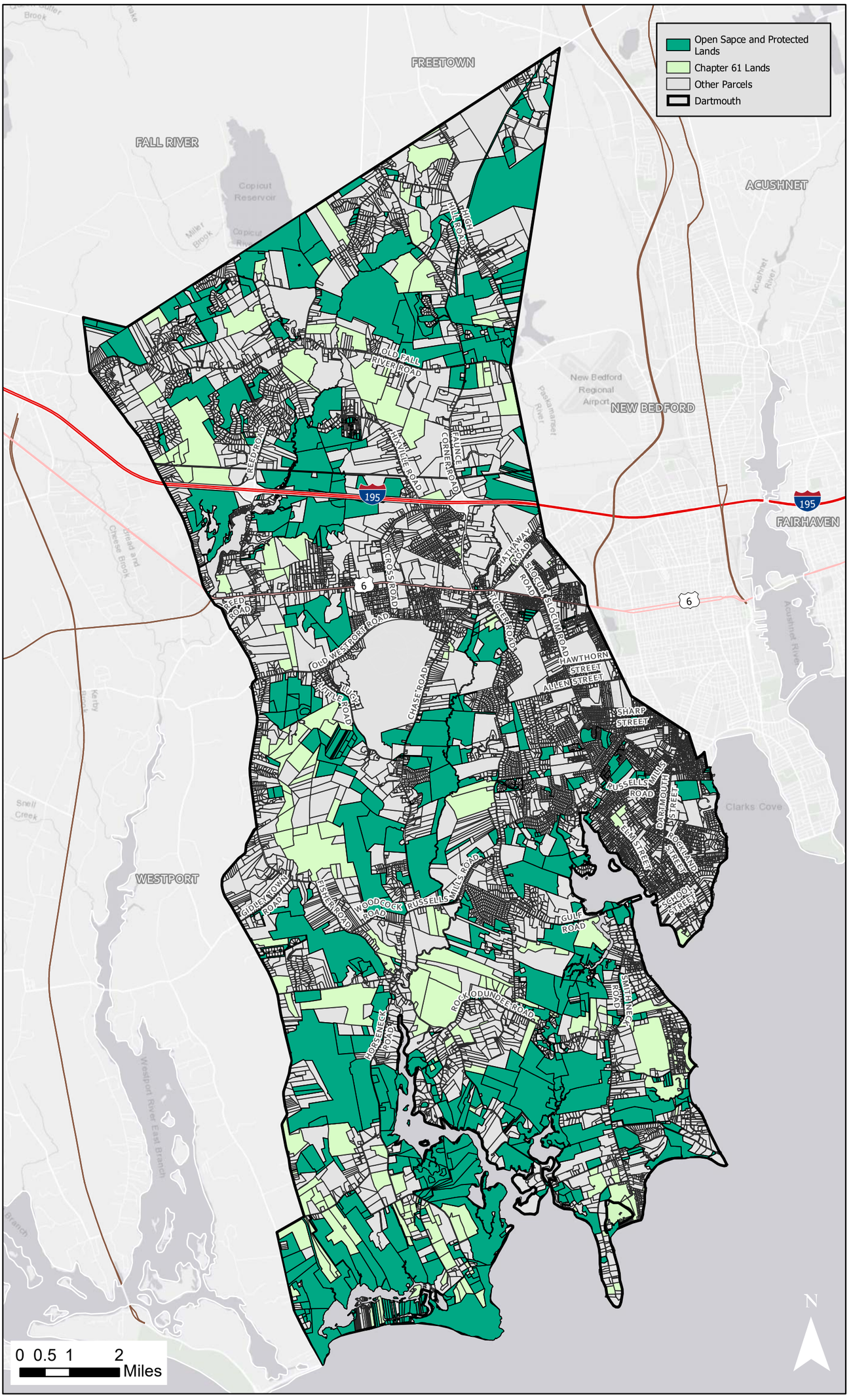
Existing Land Use Map

Source: MassGIS, Esri, HERE, Garmin, USGS, EPA, NPS



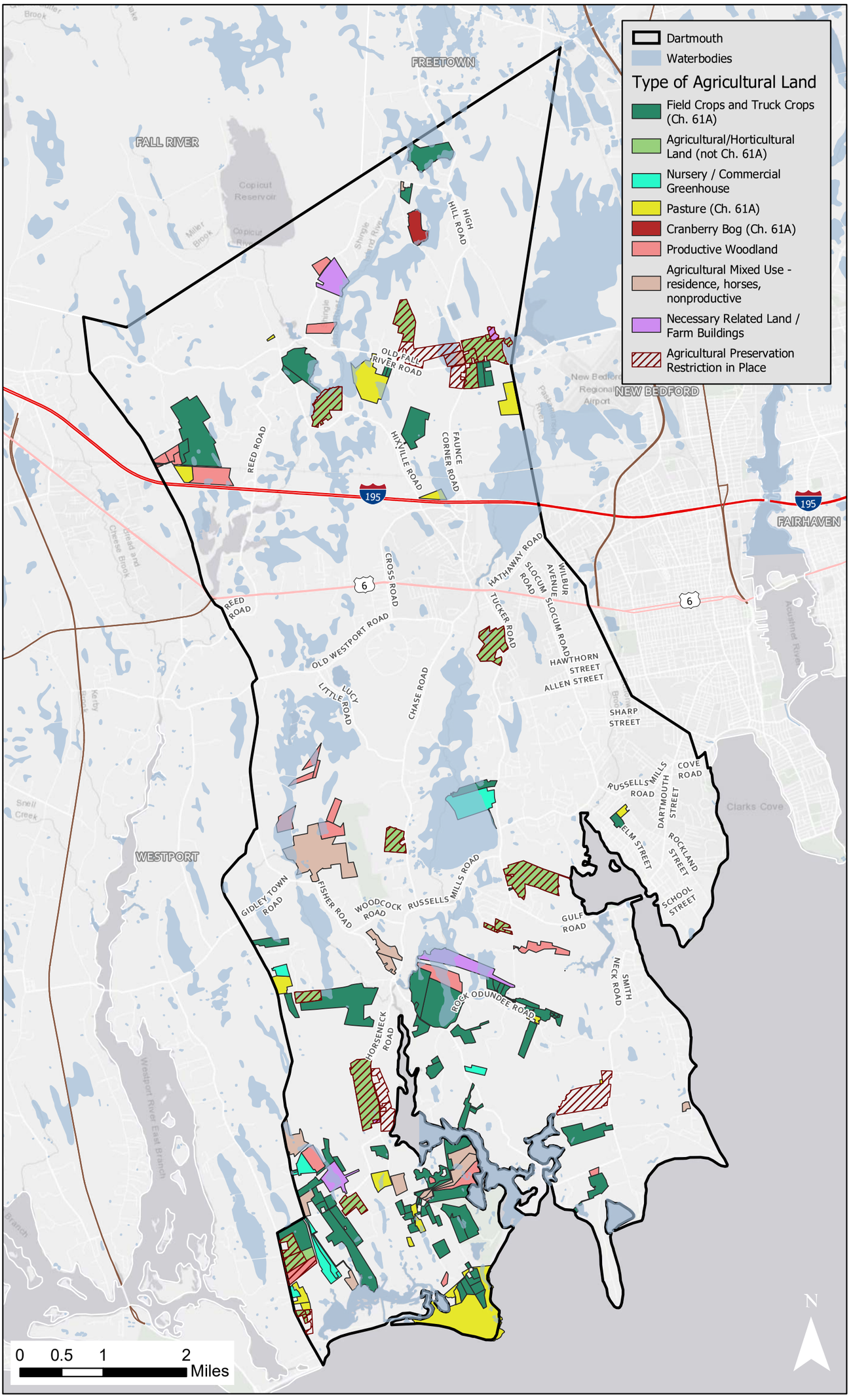
Open Space & Chapter 61 Lands Map

Source: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, MassGIS, Town of Dartmouth "Open Space and Protected Lands All Types of Protection" Map dated April 16, 2019



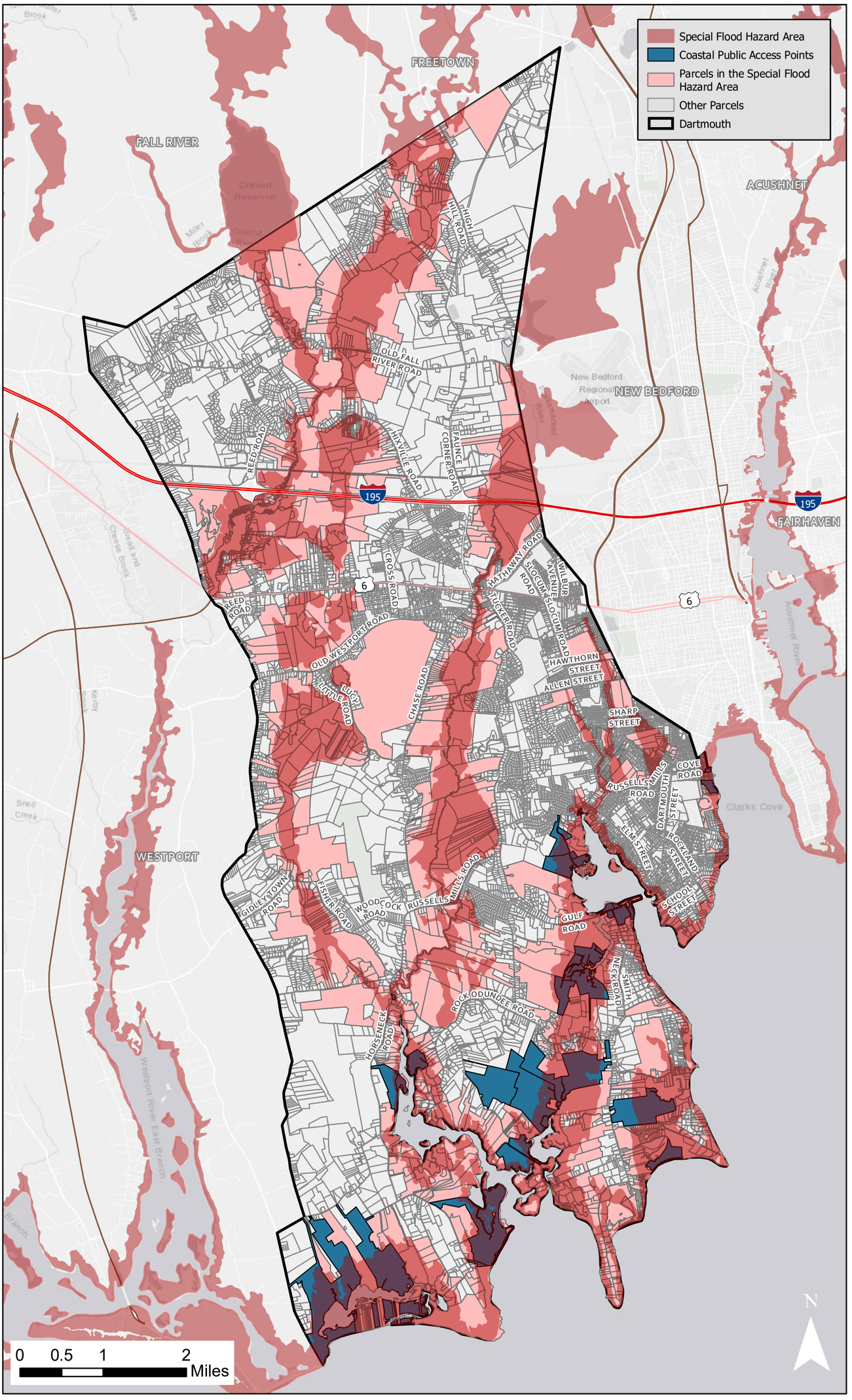
Agricultural Lands Map

Source: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, MassGIS, APR tracts as indicated on Dartmouth's Open Space and Protected Lands Categorized by Type of Protection map (April 16, 2018)



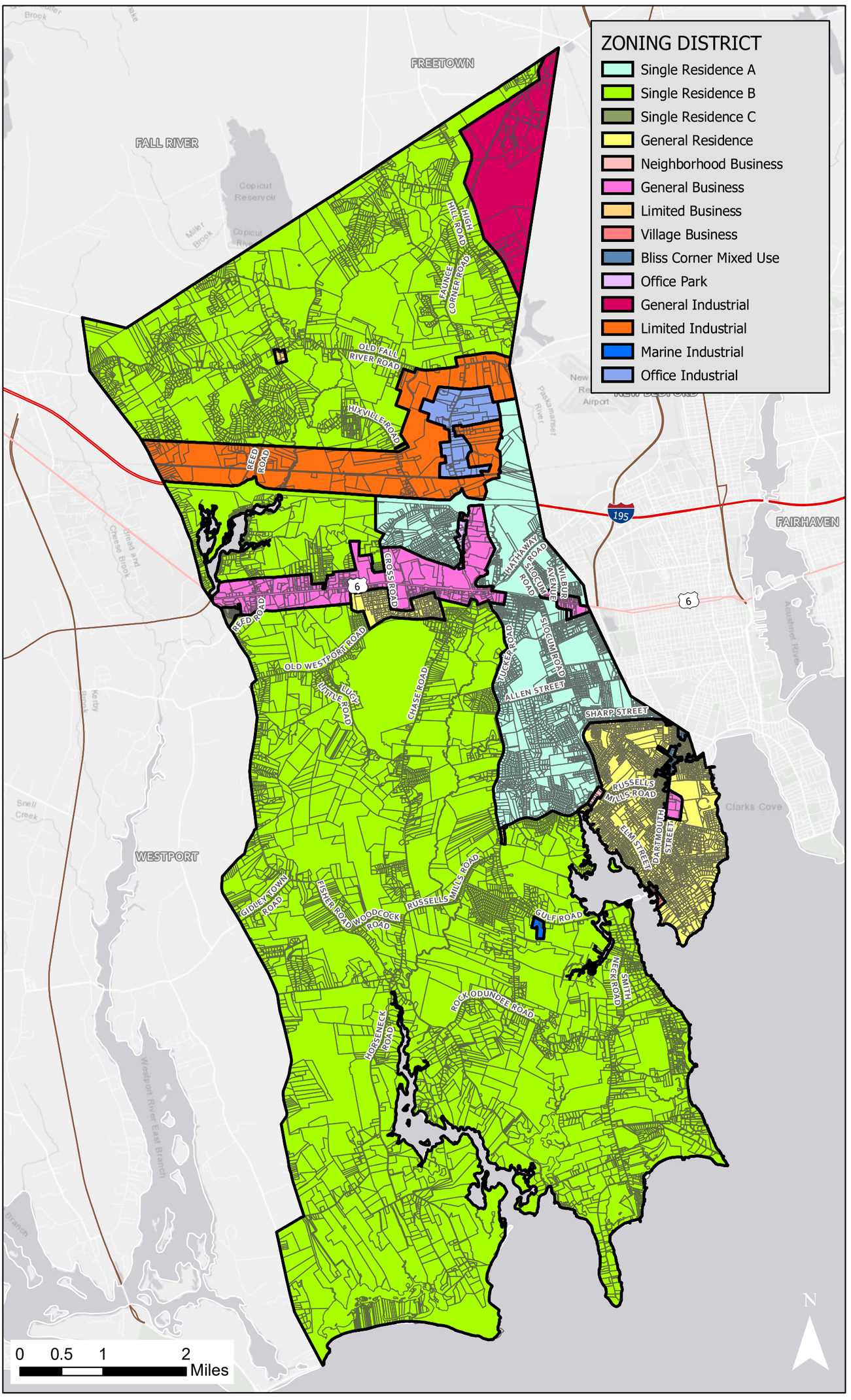
Community - Waterbody Nexus Map

Source: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, MassGIS, FEMA National Flood Hazard Layer, MA Office of Coastal Zone Management coastal access layer



Zoning - Base Districts Map

Source: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, MassGIS, Town of Dartmouth Zoning Map March 23, 1999 Amended By Town Meeting to October 16, 2018



Zoning - Overlay Districts Map

Source: MassGIS, Esri, HERE, Garmin, USGS, EPA, NPS, Town of Dartmouth GIS