TOWN OF BARRINGTON

LAND USE

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Executive Summary

Barrington is located in southeast New Hampshire in Strafford County. With a geographic area of almost 50 square miles and a population over 8,500, Barrington has a relatively low population density of 176 people per square mile. Residential development accounts for approximately 75% of developed areas in the town and 12% of the total area of the town. Nearly 80% of the town's land use is classified as undeveloped. This includes forested land (66%), wetlands (12%), and water (5%). Between 1962 and 2010, the percentage of developed land in Barrington increased from 3.5% to 15.4% of the total acreage of the town. Very little change in developed land occurred between 2005 and 2010. A total of 4,842 acres of land (15.6% of the town's area) are permanently conserved.

There are five primary zoning districts and six overlay districts in Barrington. Residential development is permitted in all districts of the town. The Regional Commercial district accounts for approximately 6% of the land area of the town and is located along Route 125 and Route 4. The Route 125 and Route 4 commercial corridors on the eastern side of the town and along the Highway Commercial Overlay District along Routes 9 and 202 comprise the majority of non-residential development in the town. The Town ensures that its valuable natural resources are protected through a number of environmental overlays, including a Prime Wetlands Overlay district.

A zoning based GIS build out analysis was conducted to identify remaining land suitable for development. Development of 30% of the total land area of the town is limited by land constraints including permanent conservation land; town or UNH owned lands; environmental constraints; and select local regulations, such as buffers around lakes, streams, and wetlands. The analysis showed that just over half of the town's land area could potentially be developed. Further, approximately 70% of the land within the Town Center District and 56% of the land within the Regional Commercial district is suitable for development. While this analysis indicates that there is ample space for Barrington to grow its commercial and industrial businesses and associated tax base, the small lot sizes and the lack of municipal sewer and water are a barrier to this type of development.

The Town continues to pursue objectives identified in its Town Center Plan that build the density, access to amenities and services, and diverse housing options and businesses spaces need to establish a downtown. At the same time, the Town strives to maintain the traditional rural character that residents seek and value. Land use planning — in conjunction with cultural, civic, and visioning initiatives and projects — creates a sense of place and identity in the community center. Innovative planning tools and design guidelines, for example, may drive the creation of a pedestrian friendly design aesthetic that is unique to Barrington. Transportation enhancements that establish complete streets help drive creation of a safe, vibrant community core by increasing walkability and livability. Continuing to examine, and amend as necessary, the Town's zoning ordinance and regulations in order to promote clustered development along corridors, to encourage commercial, industrial, and residential development in the areas best suited for those uses, and to protect the town's natural assets, will shape the near and long term future of the town's landscape. These issues will be explored in the Future Land Use Chapter.

Introduction

About The Chapter

Land use is closely tied to the physical environment. The physical features and natural resources that are unique to Barrington both shape and constrain its development and growth. Concurrently, development and growth impact the natural and cultural resources that are critical to maintaining a high quality of life within the community. Development also affects the provisioning of municipal services such as road maintenance and construction, emergency services, schools, and recreational resources. The town shapes its future land use and development through local regulations, conservation, infrastructure, and other measures.

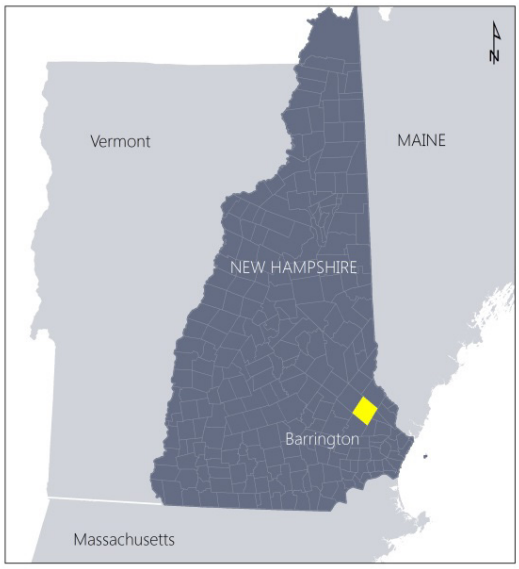
This Land Use Chapter provides an overview of the Town's existing land use, zoning and overlay districts, and development patterns. It also includes a zoning-based build out analysis. The data and resources used in this chapter include: local land use regulations, Barrington's 2004 Master Plan, Barrington's 2007 Town Center Plan, GIS data from UNH GRANIT, Strafford Regional Planning Commission building permit data, and data from the U.S. Census Bureau and Economic & Labor Market Information Bureau.

(Photo Credit: Town of Barrington)

Location + Physical Character

Location

Barrington is located in southeast New Hampshire within Strafford County. Seven municipalities share a border with Barrington: Strafford, Rochester, Dover, Madbury, Lee, Nottingham, and Northwood. The town lies approximately 6.5 miles from the Maine state border, 20 miles from the Massachusetts state border, and 18 miles from the New Hampshire Seacoast (as the crow flies).



Traditional Land Use Character

Barrington is a growing, traditionally rural, community. A majority of the town's developed land is residential. While population growth in Barrington has slowed since the 1980's and 1990's, the community continues to steadily grow. Between 2000 and 2010, the town's population increased by approximately 15% to over 8,576 people.

Commercial development within the town is limited and exemplifies typical strip development patterns. Through its land use plans and regulations, the town supports economic development along transportation corridors and within its core commercial area surrounding the Route 125 and Route 9 intersection in the west corner of the Town. The goals, design guidelines, and standards in Barrington's 2004 Master Plan, 2007 Village Center Plan, and Zoning Ordinance foster the creation of a pedestrian friendly commercial center and public realm that meets the evolving needs and desires of the community and promotes connectivity to the surrounding rural and residential districts.

(Photo Credit: Mountain Project)

Area

The total area of Barrington is 48.6 miles (31,117 acres). Water accounts for approximately 4.6% (1,435 acres) of the total area of the town. Barrington has the second largest land area of municipalities within Strafford County. With a population density of 176 people per square mile, Barrington is slightly less dense than the Stafford County average (Table 1).

Table 1. Population and population density in Barrington, Strafford County, and municipalities in Strafford County

	Barrington	Strafford County
Area (miles)	48.6	382.6
Population (2010)	8,576	123,143
Population Density (people/sq mi)	176.4	321.9

Municipalities in Strafford County	
Mean Area	29.4 sq mi
Mean Population Density	183.7 people/sq mi
Range Population Density	60 to 1,177 people/sq mi

Topography

The topography in Barrington ranges from an elevation of 60 feet on the eastern side of town to 180 feet in the west corner. Figure 1 displays 20 foot contours in the town.

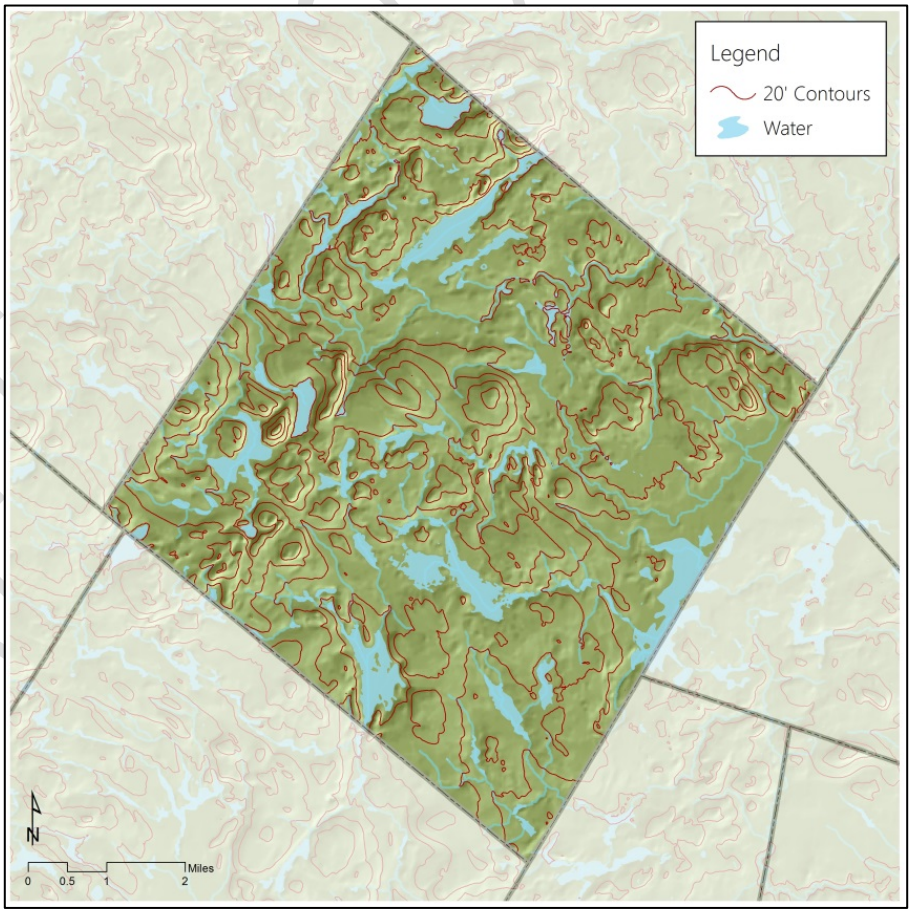


Figure 1. Topography (20 foot contours) and surface water in Barrington (Source: SRPC)

Watersheds + Bodies of Water

Barrington lies within the Oyster, Bellamy, Isinglass/Cocheco, and Lamprey River watersheds, which are all part of the Salmon Fall-Piscataqua River coastal watershed. Major bodies of water in Barrington include: the Bellamy River; Isinglass River; Swains Lake; Mendums Pond; Round Pond; Ayers Pond; Long Pond; Nippo Pond; and Stonehouse Pond.

Overview of Zoning Districts

Barrington's zoning districts are intended to promote a hierarchy of development opportunities that offer a variety of development densities in order to balance future growth that is sensitive to property rights as well as the community's future land use goals. Barrington has five zoning districts (Figure 2). Table 2 displays the total area of each zoning district.

The Town has two designated residential districts, General Residential and Neighborhood Residential, which account for nearly 85% of the total area of the town. However, residential development is permitted in all zoning districts. During the process of updating the 2004 Master Plan, the Town conducted visioning sessions and a design charrette to guide the creation of a new Town Center. This resulted in the establishment of the Village District and a set of dimensional and use requirements and performance standards to shape the future Town Center.[1] A brief summary of the intent of each zoning district is included on the following page.

Table 2. Area by zoning district (Source: SRPC)

Zoning District	Total Area (Acres)	Percent of Area
General Residential	21,873.7	70.3
Neighborhood Residential	4,287.8	13.8
Village District	1381.9	4.4
Regional Commercial	1,905.4	6.1
Town Center	365.8	1.2
Water Bodies	1,302.7	4.2

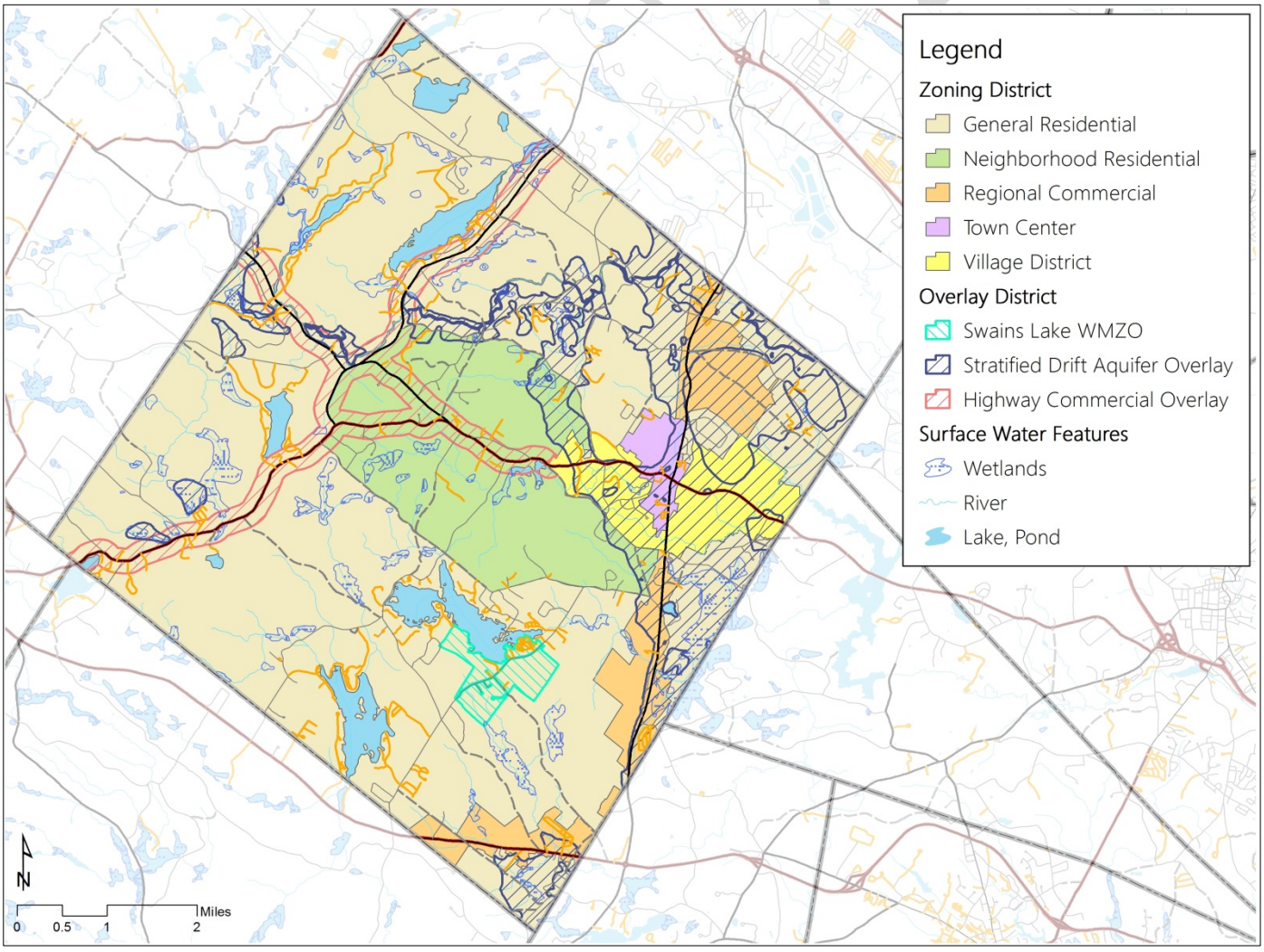


Figure 2. Barrington's zoning and overlay districts (Source: SRPC)

[1] See the Town Center Plan for more information (http://www.barrington.nh.gov/Pages/BarringtonNH_Land/Village%20Plan/)

BARRINGTON'S ZONING DISTRICTS

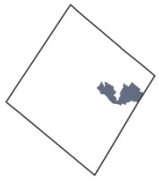
GENERAL RESIDENTIAL (GR)

The General Residential district composes over 70% of Barrington and creates a rural periphery around the community's core. This district consists of low density residential development in traditional or cluster Conservation Subdivisions and small scale business uses or establishments. The minimum lot size in the GR district is 80,000 square feet.

NEIGHBORHOOD RESIDENTIAL (NR)

The Neighborhood Residential district supports medium density residential development in the central region of town and is designed to promote open space for public recreation and conservation. This district also accounts for the second largest portion (14%) of the total land area of the town. Small scale business uses or establishments are permitted in the NR district. The minimum lot size in this district is 80,000 square feet.

VILLAGE DISTRICT (V)

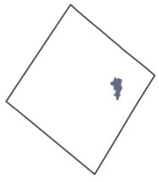


The Village District is intended to support mixed use development — including senior housing and apartments above commercial uses — at higher densities (30,000 square foot minimum lot size) to provide a centralized location for regular community interaction and convenience for purchasing goods and services. An important element of promoting pedestrian access in this district is the site and landscaping design. Traditional and conservation subdivisions are allowed in this district. The Village district includes 1,382 acres (4.4% of total area of town) on the east side of Barrington.

REGIONAL COMMERCIAL (RC)

The Regional Commercial district accommodates commercial and industrial development along the Route 125 and Route 4 corridors on the eastern and southern sides of town. Approximately six percent of the town lies within this district. This district is intended to support compact, nodal forms of development. Residential development is limited in this district. The minimum lot size in this district is 40,000 square feet.

TOWN CENTER (TC)



The Town Center district supports compact mixed-use development patterns around the Route 125 and Route 9 intersection. This is the community's core of high density commercial development, civic uses, and public open space. Residential uses are permitted as part of planned unit developments. The TC district occupies just 1.2% of the total area of the town or approximately half of a square mile. The minimum lot size in this district is 20,000 square feet.

Overlay Zoning Districts

Barrington has six overlay protection districts. These overlays are intended to protect natural resources, permit wireless communication infrastructure, and to support appropriate commercial development:

Environmental Overlays

- Wetlands Protection District Overlay (WDO)
- Shoreland Protection District Overlay (SDO)
- Floodplain Management District Overlay (FDO)
- Groundwater Protection District Overlay (GDO)
  - Stratified Drift Aquifer Overlay (SDAO)
  - Swains Lake – Water Management Zone Overlay (SL-WMZO)

Development Overlays

- Wireless Communications Facilities Overlay (WCO)
- Highway Commercial District Overlay (HCO)

Wetlands in Barrington (Image Credit: Town of Barrington)

Box 1. Prime wetlands

Prime Wetlands

Wetlands are typically designated as prime wetlands due to their large size, unspoiled character, and ability to sustain populations of rare or threatened plant and animal species. Barrington has a number of high quality wetlands and has elected to designate these wetlands as prime wetlands.

LAND USE CHARACTERISTICS

GENERALIZED LAND USE

Approximately 15% or 4,800 acres within Barrington are classified as developed land uses (Table 3)[2]. Residential land use is the predominant type of developed land use, accounting for over 71% of developed land (as of 2010). Additional developed land uses include commercial, services, and institutional land; transportation, communications, and utilities; and outdoor and other urban built-up land. Less than seven acres of developed land are classified as industrial and commercial complexes. Five percent of the town is vacant land.

Nearly 80% of the town is comprised of undeveloped land, including forests, wetlands, and agriculture. Forests are the dominant land use in Barrington, accounting for over 65% of the town's total area as of 2010. Wetlands comprise approximately 12% of Barrington. Land classified as agricultural land is limited to just over 400 acres (1.3% of area), however, small farms, gardens, and some fields may not be captured in this data. Figure 3 shows generalized land use type in Barrington.

Box 2. Definitions of land use classification used for digitizing aerial imagery.

LAND USE CLASSIFICATION DEFINITIONS

Residential – Single family, duplex, multi-family, low, medium, and high rise apartments, townhouses, mobile home parks, condominiums, and group and transient quarters

Commercial & Industrial – Retail, wholesale, services, lodging, government, educational, metal production, mining, and electronics

Transportation, Communications, & Utilities – Air, rail, water, and road transportation, and communication, electric, gas, and water and wastewater utilities

Outdoor & Other Built-Up Land – Urban or built-up land consisting of botanical gardens, zoos, stadiums, racetracks, amusement parks, golf courses, etc.

Agriculture – Cropland or pasture, orchards, bush fruits, vineyards, and ornamental horticulture

Transitional – Brush or transitional area between open and forested that may include herbaceous, non-woody vegetation and/or shrubs

Forest – Forest land as defined by the society of American Foresters; broadleaf, coniferous, and mixed

Water – Rivers, canals, lakes, ponds, reservoirs, bays and estuaries, and other waterways

Wetlands – Consists of forest, non-forest, and tidal wetlands

Other Non-Vegetated – Barren, disturbed, or idle land; undeveloped exposed areas or construction sites for new development

Vacant – Land that has been cleared and developed at one time but is currently vacant

[2] The GIS data used in the generalized land use analysis was generated by Strafford Regional Planning Commission in 2010 based on the NH Land Use Mapping Standard, which is a classification scheme and mapping protocol for producing land use data from high resolution, remotely sensed aerial photography. New land use data is expected to become available in 2016-2017 and the town should consider updating the data in this plan to reflect this.

Table 3. Generalized land use (2010) (Source: SRPC)

Land Use Classification	Acres	% of Area
Developed	4,798.1	15.4
Residential	3,565.3	11.5
Commercial, Services, and Institutional	173.9	0.6
Industrial	128.1	0.4
Transportation, Communications, and Utilities	475.9	1.5
Industrial and Commercial Complexes	6.6	0.0
Outdoor and Other Urban and Built-Up Land	443.5	1.4
Vacant Land	4.9	0.0
Agriculture	403.2	1.3
Transitional	178.1	0.6
Forest	20,368.9	65.5
Water	1,434.9	4.6
Wetlands	3,691.0	11.9
Other Non-Vegetated	243.0	0.8
Total	31,117.3	100.0

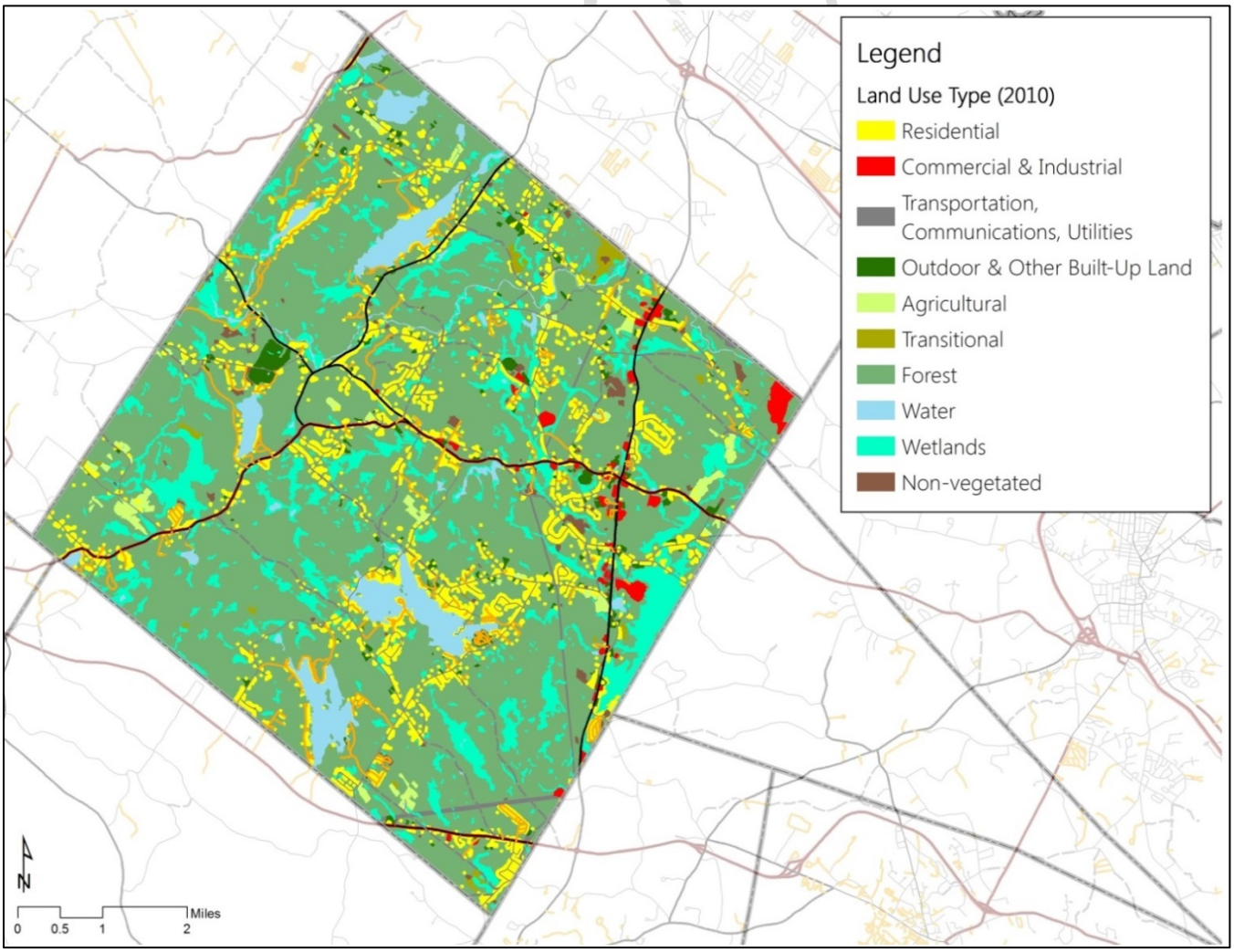


Figure 3. Map of generalized land use in Barrington (Source: SRPC)

Existing Development

Existing Residential

Residential development is the dominant developed land use in Barrington, accounting for a total of 3,565.3 acres or 74.3% of developed land (and 11.5% of the town's total area). Residential development is scattered throughout the town, with areas of concentration along transportation corridors and bodies of water including Swain's Lake, Round Pond, and Ayer's Pond. Although residential development is permitted in all zoning districts, the types of residential structures permitted in mixed use developments within the Village, Regional Commercial, and Town Center districts vary. Within the Village District and Town Center, residential structures are permitted within mixed use planned unit developments[3]. Residential structures that are permitted as part of mixed use development[4] within the Regional Commercial District are limited to accessory dwelling units.

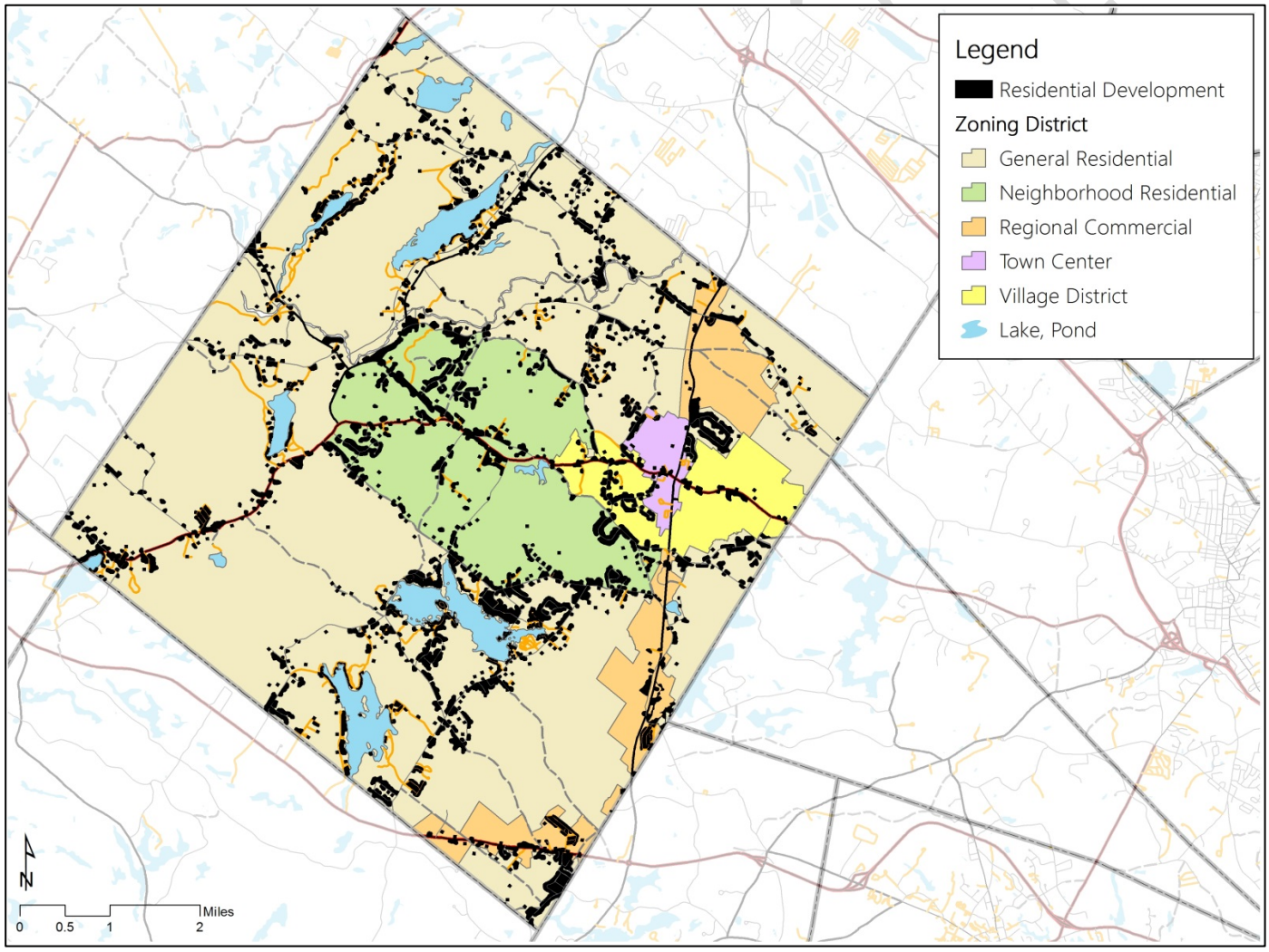


Figure 4. Zoning districts and residential development (Source: SRPC)

[3] A Planned Unit Development (PUD) is intended to offer an alternative approach to site design that reflects historic settlement patterns and town planning concepts such as narrow and interconnected streets, reduced front and side setbacks, and a street layout that is pedestrian-oriented within a "neighborhood" environment (Barrington Zoning Ordinance).
[4] Mixed use development: A single tract of land containing more than one primary building and use, where the different types of land uses are in close proximity, planned as a unified complementary whole, and functionally integrated to the use of shared vehicular and pedestrian access and parking areas. (Source: Town of Barrington Zoning Ordinance).

According to 2010 land use data, land built out with residential development comprises between 3.5% and 16.4% of each zoning district (Table 4). Nearly 97% of residential development is comprised of single family units and duplexes (Table 5).

Table 4. Land built out with residential development by zoning district (based on 2010 Land Use)

Zoning District	Residential Development (Acres)	Percent of Zoning District
General Residential	2,632.10	9.7
Neighborhood Residential	770.60	8.8
Village District	206.6	15.0
Regional Commercial	312.20	16.4
Town Center	74.50	3.5

Table 5. Residential development type (based on 2010 Land Use)

Residential Development	Acres	% of Area
Single Family/Duplex	3,455.4	96.9
Multi-Family, Low Rise Apartments and Townhouses	10.5	0.3
Multi-Family, Medium to High Rise Apartments and Condominiums	4.1	0.1
Mobile Home Parks	1.0	0.0
Group and Transient Quarters	94.3	2.3
Total	3,565.3	100.0

EXISTING COMMERCIAL + INDUSTRIAL

Commercial and industrial development has occurred primarily along Route 125 and Route 9 in Barrington within the Regional Commercial, Town Center, and Village District zones. The Highway Commercial Overlay district supports commercial uses within the General Residential and Neighborhood Residential districts along Routes 9, 125, and 202.

Across the town's five zoning districts, approximately 396 acres are comprised of commercial and industrial development (Table 6)[5]. Figure 5 displays parcels with commercial and industrial development along Route 125 and Route 9. Even in the town's Regional Commercial District, only 6.5% of the land area is built out with commercial or industrial uses. Small lots and the absence of a public water supply are two potential impediments to attracting new business along this commercial corridor.

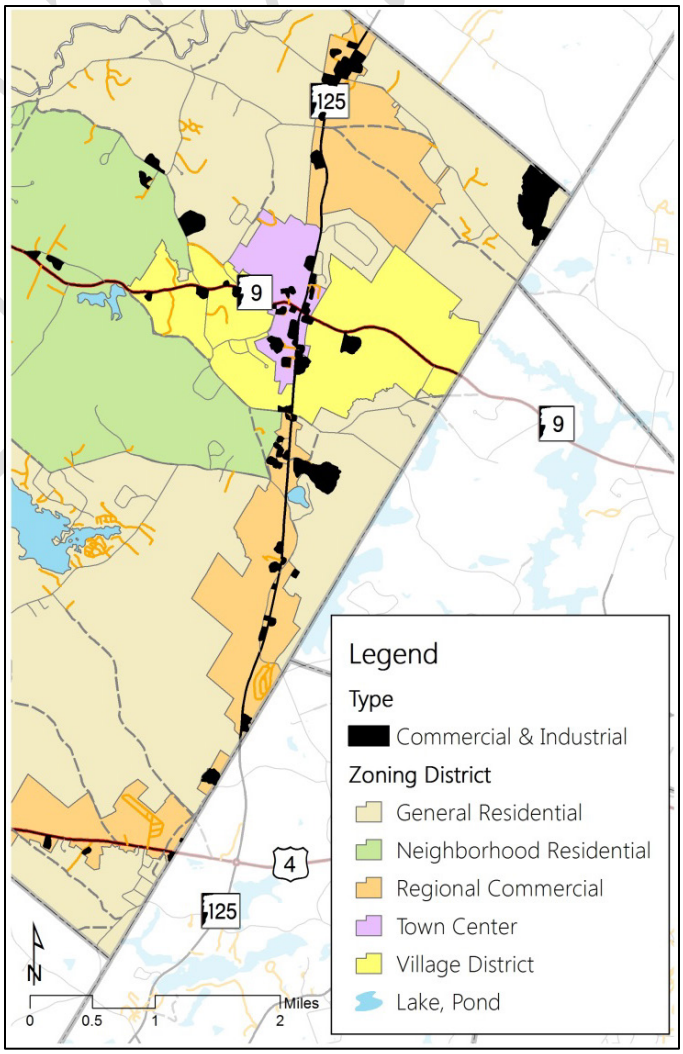


Figure 5. Commercial and industrial development (Source: SRPC)

[5] The 2010 GIS land use layer used in this generalized land use analysis was derived by SRPC using 2010 aerial photography. As a result, it is difficult to capture mixed use building types and other commercial development that is not large in scale. Therefore, some of the land that is categorized as residential development may also have commercial development. In order to more accurately display land use data in the future, local assessing data with building type could be used to geocode addresses of commercial buildings.

Table 6. Commercial and industrial development by zoning district

Zoning District	Commercial and Industrial Development (Acres)	Percent of Zoning District
General Residential	170.9	0.6
Neighborhood Residential	20.6	0.2
Village District	32.4	2.3
Regional Commercial	122.9	6.5
Town Center	49.2	2.3
Total	396.0	

(Photo Credit: Turbocam International)

Location of Major Employers

Few large businesses have been established in Barrington since the 1990's (Table 7). Turbocam International, a manufacturer of components for turbo-machinery operations, is the largest business in Barrington and was established in 2004. In 2014, Turbocam opened a second building off Route 9. In 2012, Liberty International Trucks of NH, LLC, was established. Both Turbocam and Liberty International Trucks of NH are located on Route 125 south of the Route 9 intersection. Associated Buyers, Computer Resources, Barrington Primary and Urgent Care, Christmas Dove, and Generator Connection are also located along the Route 125 corridor.

Table 7. Largest Businesses in Barrington (Source: Economic & Labor Market Information Bureau, NH Employment Security)

Business	Product/Services	Employees	Year Established
Turbocam International	Manufacturer of components for turbo-machinery operations	400	2004
Associated Buyers	Wholesale distributor of organic food products & supplements	105	1993
Computer Resources	Software for school administrators	24	1980
Barrington Primary & Urgent Care	Outpatient medical services	31	1991
Yankee Equipment Systems	Commercial laundry equipment	40	1990
Christmas Dove	Retail store	12	1973
Liberty International Trucks of NH LLC	Sales & service	18	2012
Generator Connection	Sales & service	17	1999

Town Center Plan

Existing conditions identified in the Town Center Plan:

- No gateways
- Limited Directional Signage
- Attractive historical buildings along Route 9
- A few well-established businesses with regional appeal and draw
- Fair amount of open lands for new development
- Good traffic flow in the district to support business development, but 125/9 intersection a growing concern
- Large percentage of year-round residents in the village district
- Growing Commercial Development along the 125 corridor.

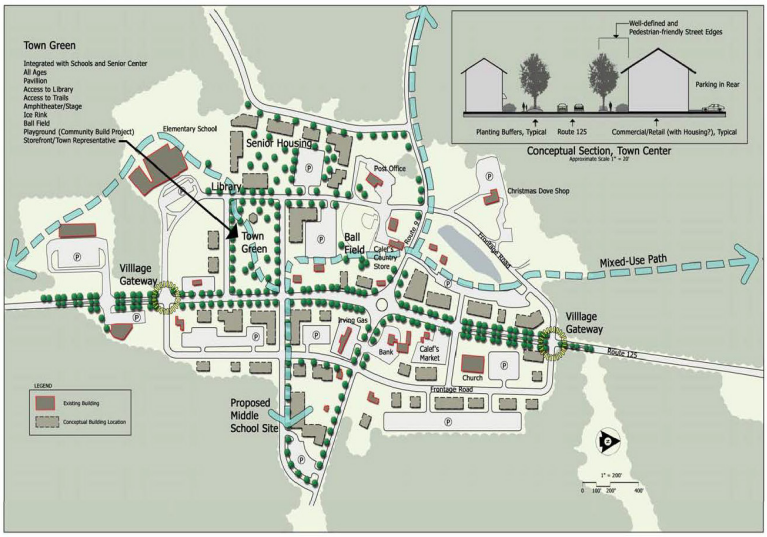


Figure 6. Town Center Concept (Source: Village Plan)

Undeveloped Land

Approximately 68% of Barrington is composed of undeveloped land. In comparison, undeveloped land in 2002 accounted for approximately 76% of the Town's land area. Much of this land is forested land within larger parcels that may have the potential to be further subdivided. Parcels with no structure account for approximately 50% of the area of the Town and 28% of total number of parcels within the Town.

(Photo Credit: Town of Barrington)

Conservation Land

A total of 4,841.8 acres of land, or 15.6% of the area of the town, are permanently conserved (Figure 7)[6]. The nearly 1,290 acre Samuel A Tamposi Water Supply Reserve and adjacent conservation lands on the south side of Barrington account for the largest contiguous area of conservation land within the town. The remaining conservation land is scattered throughout Barrington and ranges in size from less than an acre to approximately 250 acres. Table 8 displays municipal funding for conservation from 2001-2005. Additional funding sources for conservation land include: NH Land Conservation Investment Program, LCIP, NHDES Water Supply, Piscataqua Region Estuaries Partnership, NRCS Wetland, Reserve Program, Trust for Public Land, NH Fish and Game, Moose Plate, Fields Pond Foundation, Bafflin Foundation, and donations by landowners.

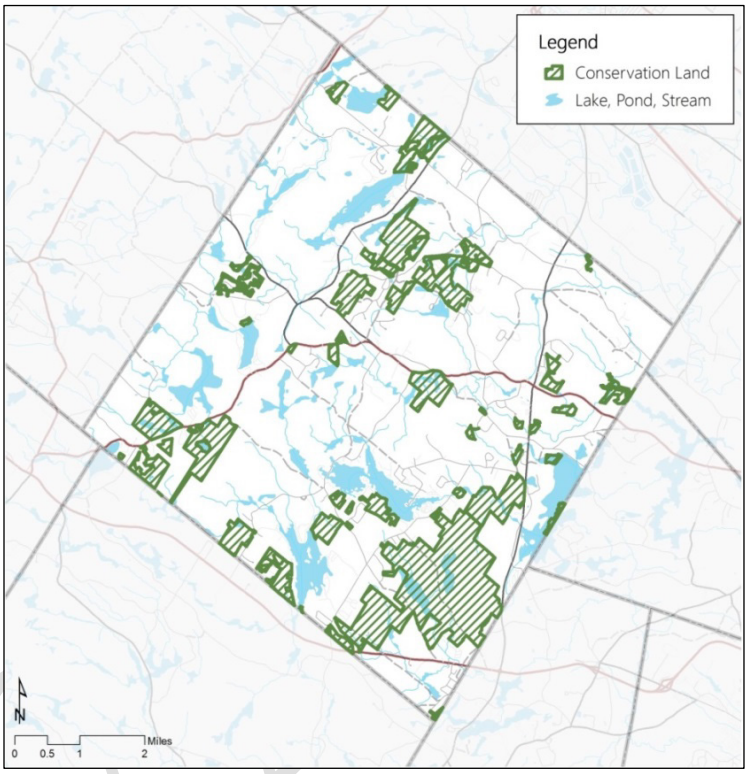


Figure 7. Permanently protected conservation land (Source: SRPC)

Current Use

Within Barrington, approximately 500 parcels totaling 12,845 acres have current use designation. These parcels are assessed based on the income producing capability of the land in its current use solely for growing forest or agricultural crops and not its real estate market value.

Table 8. Municipal funding for conservation in Barrington and southeast New Hampshire, 2001-2005 (Source: Society for the Protection of New Hampshire Forests)

	Bond Amount Passed	Appropriation Amount Passed	Total Amount of New Funding
Barrington	800,000	75,000	875,000
TOTAL in SE NH	32,334,200	3,125,100	35,459,300

[6] According to best data available from UNH GRANIT Conservation Lands and the Barrington Conservation Commission

LAND USE DEVELOPMENT PATTERNS

Between 1962 and 2010, the percentage of developed land — including residential, commercial, transportation, communication, urban built up, and vacant lands — in Barrington increased from 3.5% to 15.4% of the total acreage of the Town (Table 9). Very little change in developed land occurred between 2005 and 2010. Forest land has steadily declined over the last seven decades. As of 2010, forest land had declined by 22%, or 5,757 acres, since 1962, when it accounted for 84% of the area of the Town. Land classified as agricultural land is very limited in Barrington: of the 1,272 acres classified as agriculture in 1962, only 403 or 1.3% remain. Most agricultural land was converted to other land uses between 1962 and 1974. Note that the significant increase in wetlands between 1998 and 2005 (as shown in Table 9) is largely due to the availability of technical advances and higher resolution aerial imagery.

The maps in Figure 8 (page 14), display the change in land use in Barrington from the 1960s through 2010. A majority of the 140% increase in developed land between 1974 and 2010 occurred on the east side of the town along the town's major transportation corridors and Swains Lake.

Table 9. Generalized land use change (1962 – 2010) (Source: SRPC)

	1962		1974		1998		2005		2010		1962-2010	
Land Use Classification	Acres	% of Area	Acres	% of Area	Acres	% of Area	Acres	% of Area	Acres	% of Area	Acreage Change	% Change
Developed	1,095.9	3.5	1,995.9	6.4	3,715.1	11.9	4,790.6	15.4	4,798.1	15.4	3702.2	337.8
Agriculture	1,271.7	4.1	560.7	1.8	304.9	1.0	411.2	1.3	403.2	1.3	-868.5	-68.3
Transitional	-	-	-	-	-	-	178.1	0.6	178.1	0.6	178.1	-
Forest	26,126.1	84.0	25,520.0	82.0	23,862.9	76.7	20,365.2	65.4	20,368.9	65.5	-5757.2	-22.0
Water	1,334.6	4.3	1,378.7	4.4	1,543.0	5.0	1,434.9	4.6	1,434.9	4.6	100.3	7.5
Wetlands	670.0	2.2	822.9	2.6	938.6	3.0	3,691.0	11.9	3,691.0	11.9	3021.1	450.9
Other Non-Vegetated	619.1	2.0	839.1	2.7	752.8	2.4	246.2	0.8	243.0	0.8	-376.0	-60.7
Total	31,117.3	100.0	31,117.3	100.0	31,117.3	100.0	31,117.3	100.0	31,117.3	100.0	n/a	n/a

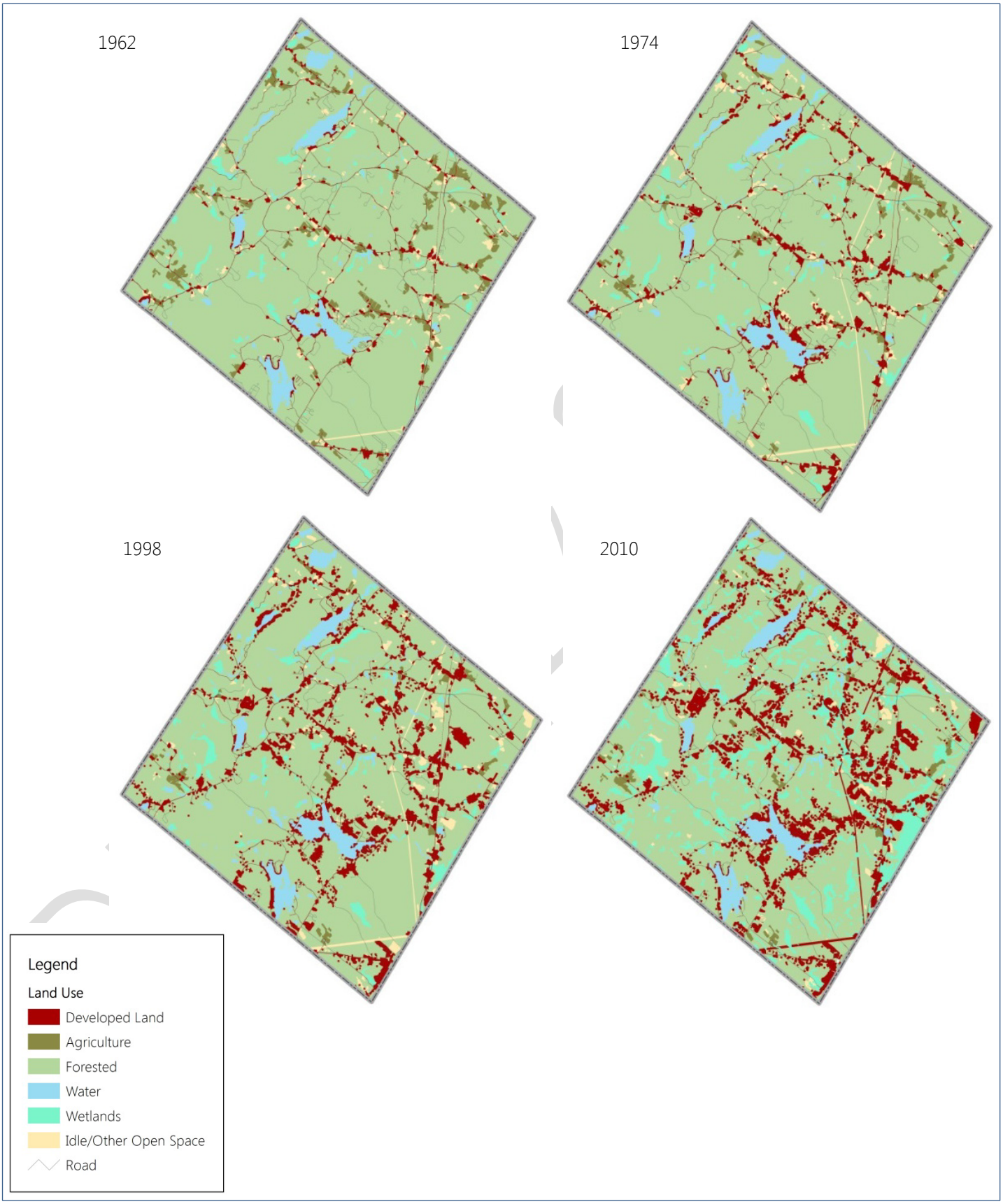


Figure 8. Generalize land use in 1962, 1974, 1998, and 2010 (Source: SRPC)

Development Patterns

Areas of Concentrated Development

Between 2006 and 2011, development occurred in scattered locations throughout the town and in several concentrated areas. Building footprint GIS data shows that between 2006 and 2011, development in the General Residential district was concentrated in the following six areas:

- South of Franklin Pierce Highway in the west corner of the town
- Adjacent to Parker Mountain Road and Stagecoach Road in the west side of the town
- South of Second Crown Point Road on the north side of the town
- Off Tolend Road and Oakhill Road on the east side of the town
- On the northeast side of Swains Lake
- Within River's Edge, a subdivision off Hall Road on the south side of the town.

Within the Neighborhood Residential district, development occurred primarily in the northern portion of the district off of Church Street. The Regional Commercial district experienced very little development between 2006 and 2014. Within the Village District, notable nonresidential development during this period includes Turbocam. The Barrington Middle School, built in 2003, is also located in this district. Within the Village District, 16 structures (including one secondary structure) were added to Barrington's landscape from 2012 to 2014, accounting for a 7.1% increase from 2011 (Figure 9). Five new structures were built in the Town Center District since 2006.

Figure 9. Building footprints in the Town Center and Village District (Source: SRPC)

Recent residential development includes the Cullen Woods subdivision on Smoke Street, and The Village Place and Ramsdell Lane, off Route 9 west of Route 125.

Conservation Subdivisions

The 2004 Master Plan recommended changing municipal regulations to encourage future land development activities to set aside more open space for the purposes of maintaining the town's character, protecting key natural resource features, preserving wildlife habitat, and creating recreation opportunities for residents. The Town's Conservation Subdivision regulations reflect these objectives and encourage open space preservation by promoting greater flexibility in the design of residential subdivisions. Twenty-six conservation subdivisions were constructed in Barrington, resulting in the conservation over 500 acres of land.

Table 10. Conservation Subdivision regulations

Zoning District	Minimum Size Tract of Land (acres)	Minimum Common Open Space (% of total tract area)
General Residential	20	50
Village District	20	60
Neighborhood Residential	30	60

Impervious Surfaces

Impervious surfaces account for approximately 13% of the area of the town. Between 1990 and 2010, impervious surfaces increased by nearly 90% from approximately 760 to 1,640 acers (Source: GRANIT 2010). Impervious surfaces contribute to stormwater runoff and have an adverse impact on water quality and the environment. As little as 10% coverage of a watershed by impervious surfaces can impact water quality.

Potential Future Development

Buildout Analysis

A zoning-based municipal buildout analysis was completed in order to show potential growth that could occur in Barrington if the community develops to the full extent allowed under its current zoning regulations. The buildout analysis was based upon existing development, land use regulations, and environmental constraints. The remaining land suitable for development was calculated for each zoning district using the following GIS (geographic information system)-based methodology:

A buildout analysis is a useful tool for anticipating the potential extent and impacts of future development. There are two main types of buildouts: a tax parcel-based buildout and a zoning-based buildout.

1. Calculate an estimate of the amount of undeveloped land by zoning district within the Town based on the most recent (2010) land use data by subtracting the area of developed land.
2. Calculate the total amount of non-developable and environmentally constrained lands by zoning district
    a. Non-developable lands:
        i. Permanently conserved lands
        ii. Town-owned and other protected lands
        iii. University of New Hampshire owned lands
    b. Other environmental land constraints
        ii. Steep slopes greater than 25%
        iii. Very poorly drained soils
        iv. Wetlands
    c. Select local regulations
        i. 50 foot buffer around wetlands
        ii. 100 foot buffer around prime wetlands
        iii. 75 foot buffer around year round streams and lakes and ponds greater than 2 acres
        iv. 100 foot buffer around the Isinglass River
3. Calculate the amount of potentially developable land by zoning district by subtracting the total amount of non-developable land (step 2) from the amount of undeveloped land (step 1).

Table 11 displays the total area and percentage of remaining land suitable for development after a full buildout under existing regulations. Note that this buildout does not consider all possible development constraints or regulatory impacts from the Town's conservation subdivision ordinance. Areas that are suitable for future development account for between 50 to 70 percent of each district. These areas are shown in Figure 10.

Table11. Currently built out, undeveloped land, land constraints, and remaining land suitable for redevelopment by zoning district

Zoning Districts	Gross Area (Acres)	Current Land Already Built Out (Acres)*	Amount of Undeveloped Land (Acres)	Land Constraints (Acres)**	Remaining Land Suitable for Development (Acres)	Percentage Remaining Land Suitable for Development
General Residential	21,873.7	3,626.1	18,247.6	7,306.2	10,941.4	50.0
Neighborhood Residential	4,287.8	712.0	3,575.8	922.4	2,653.4	61.9
Village District	1,381.9	294.5	1,087.4	331.0	756.4	54.7
Regional Commercial	1,905.4	403.4	1,502.0	444.3	1,057.7	55.5
Town Center	365.8	88.2	277.6	20.0	257.6	70.4
Total	29,814.6	5,124.2	24,690.4	9,023.9	15,666.5	52.5

*Based on 2010 Land Use

**Land constraints consist of conservation land and Town-owned properties, UNH land, non-developable land including wetlands, very poorly drained soils, steep slopes >25%, and local wetland and shoreland buffers

Figure 10. Remaining land suitable for redevelopment (Source: SRPC)