

# CHAPTER VI - EXISTING LAND USE

---

## INTRODUCTION

Population growth, housing needs, economic trends, and the regulatory environment have resulted in direct changes to the Hudson landscape. The Town's existing natural features, roadways, and built environment are the foundation for future development and conservation efforts. An examination of existing land use patterns provides a base for the future land use plan presented in Chapter IX. This chapter discusses 1) historic development patterns; 2) existing land uses, including residential, recreational, commercial, industrial and agricultural land uses; 3) Hudson's existing zoning districts, and 4) an analysis of undeveloped land.

## HISTORIC DEVELOPMENT PATTERN

Hudson, with an area of 29.2 square miles, is the sixth-largest municipality in the Nashua region and has the second-highest population density in the region (see Chapter II). Hudson has grown dramatically over the past few decades both as a bedroom community for Nashua and employment centers in Massachusetts as well as a center of employment in its own right. By the close of the 19th Century, most of Hudson's 1,200 residents were concentrated in the vicinity of the Taylor's Falls Bridge area. The remainder of the population was located in the old Hudson Center area on NH 111, on fertile farmlands along the Merrimack River, scattered along major roadways and on more isolated farmsteads throughout what was an overwhelmingly rural community. The Town's commercial uses were few and



Above: Aerial Photo of Sagamore Bridge Area

tended to be interspersed with residences to serve the local needs of a non-automobile-oriented society. In rural areas, non-residential uses included farms as well as traditional rural industries such as sawmills, cooperages, inns, and taverns. As the 20th Century progressed, fundamental technological, economic, and social changes took place which would forever alter the landscape in all the region's communities. Hudson, however, developed differently than most.

After World War II, most rural communities confronted development by becoming increasingly residential in character. Hudson, however, welcomed commercial and industrial growth along with residential development even though the Town had not historically been an

employment center. Furthermore, although the Town's population grew rapidly, most housing development corresponded with the extension of public water and sewer which resulted in higher density residential development that was reasonably contained to the central and western portions of Town. As a result, much of the eastern portion of the Town has continued to be rural in character. With development of the Sagamore Bridge in south Hudson and improvements to the Town's highway

network (see photo above), commercial development sprawled along major routes such as Lowell Road (NH 3A), Derry Street (NH 102) and Central Street (NH 111). Industrial areas also developed which were to include some of the region’s largest employers such as Digital Equipment Corporation and Sanders Associates (now known as BAE Systems). The Town’s commercial, industrial and residential development, however, consumed most of its rich productive farmland, some of which was located along the Merrimack River.

## EXISTING LAND USE

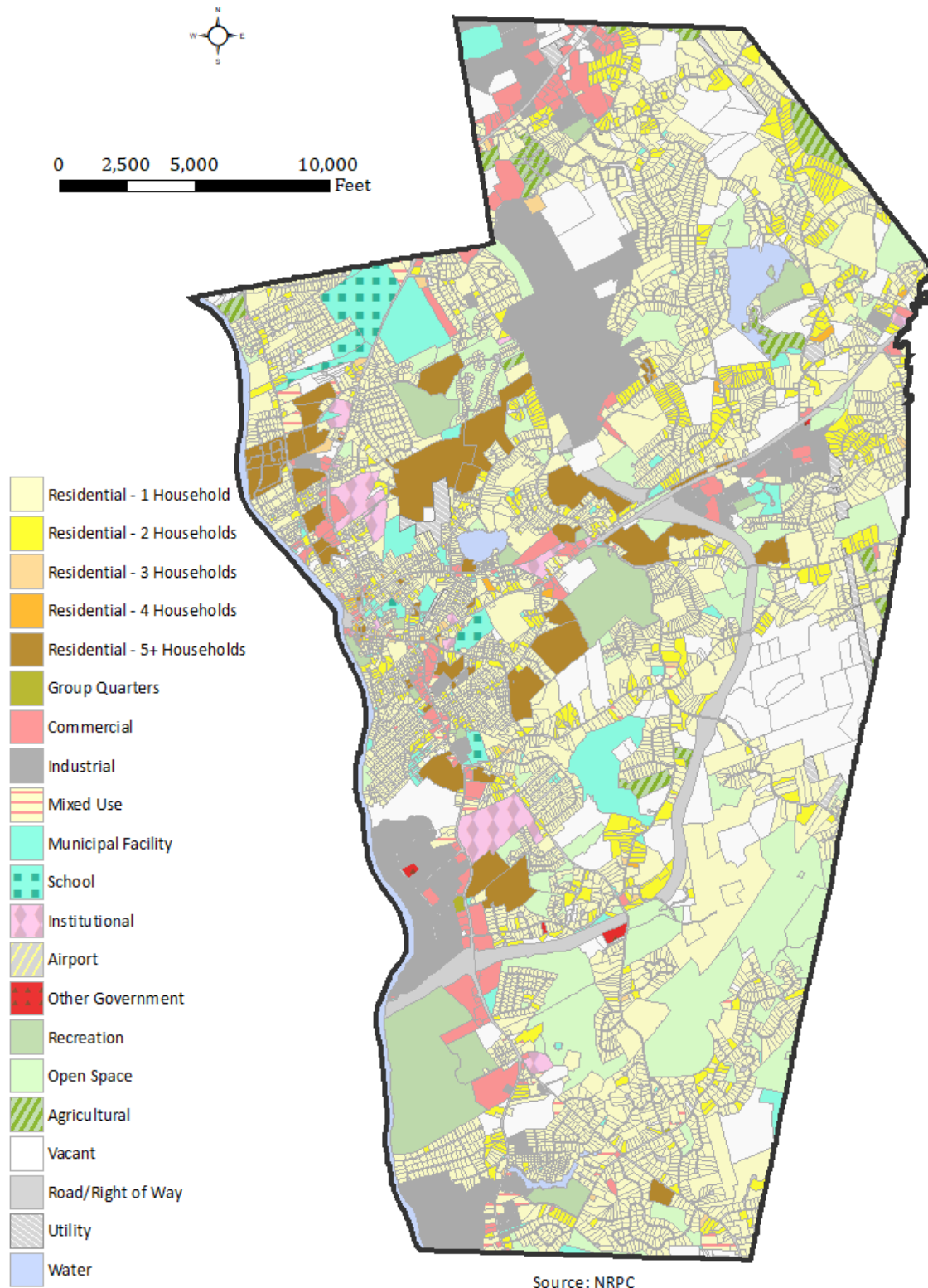
The Nashua Regional Planning Commission (NRPC) maintains a Geographic Information System (GIS) database for generalized land use in Hudson based on data provided by the Town of Hudson Assessor. This GIS database is a general representation of how land is being used and is broken down into various land use categories. The database is parcel specific: i.e., each property is assigned one use for the entire area of the property. These categories include Agricultural, Commercial, Four Family Residential, Group Quarters, Industrial, Institutional, Mixed-Use, Multi-Family Residential, Municipal Facility, Other Government, Permanent Open Space, Recreation, Road, ROW, School, Single Family Residential, Three Family Residential, Two Family Residential, Utility, Vacant and Water. The location of these categories is illustrated in Map VI-1 and the area of each category is shown in Table VI-1.

**Table VI-1. Area of Generalized Land Use Types in Hudson**

Land Use Category	Acres	% of Total
Agricultural	238.5	1.3%
Commercial	570.4	3.0%
Four Family Residential	24.6	0.1%
Group Quarters	6.1	0.0%
Industrial	1413.1	7.5%
Institutional	234.8	1.3%
Mixed Use	141.7	0.8%
Multi-Family Residential	874.3	4.7%
Municipal Facility	699.6	3.7%
Other Government	16.7	0.1%
Permanent Open Space	1694.0	9.0%
Recreation	531.7	2.8%
Road	1120.2	6.0%
ROW	294.9	1.6%
School	209.1	1.1%
Single Family Residential	6869.9	36.6%
Three Family Residential	55.1	0.3%
Two Family Residential	1074.5	5.7%
Utility	157.5	0.8%
Vacant	2148.4	11.4%
Water	395.4	2.1%

Source: 2020 NRPC GIS parcel database for land use

Map VI-1. Existing Land Use Categories in Hudson, 2020



## ANALYSIS OF UNDEVELOPED LAND

As of March 2020, approximately 2,387 acres of the total land area in Hudson remained undeveloped for various uses. This is a large decrease from the 5,330 acres of undeveloped land reported in the last master plan update in 2003.

A simple Buildout Analysis was conducted on this potentially developable land. A Buildout Analysis estimates the amount of developable land remaining in the Town and estimates the number of housing units and non-residential acres that could be developed. The Buildout Analysis considers issues of slope, wetlands, and 100-year floodplains as development constraints. Table VI-2 shows the results of this simple Buildout Analysis. The table shows the amount of developable land remaining in the Business, General, General-1, Industrial, Residential-1, Residential-1, and Town Residence Districts. The locations of these Zoning Districts are illustrated on Map VI-2.

**Table VI-2. Undeveloped and Developable Land by Zoning District, 2020**

Zoning	Total Acres	Undeveloped Acres	Constrained Acres	Developable Acres
Business	802.2	69.9	14.69	55.2
General	2717.6	336.8	88.79	248.0
General - 1	7073.9	1571.9	408.87	1163.1
Industrial	1153.0	46.7	19.3	27.4
Residential - 1	1625.6	4.4	0.2	4.2
Residential - 2	4427.7	338.2	125.9	212.3
Town Residence	968.8	19.0	6.57	12.4
<b>TOTAL</b>	<b>18768.8</b>	<b>2386.9</b>	<b>664.3</b>	<b>1722.6</b>

Source: NRPC GIS database, 2020.

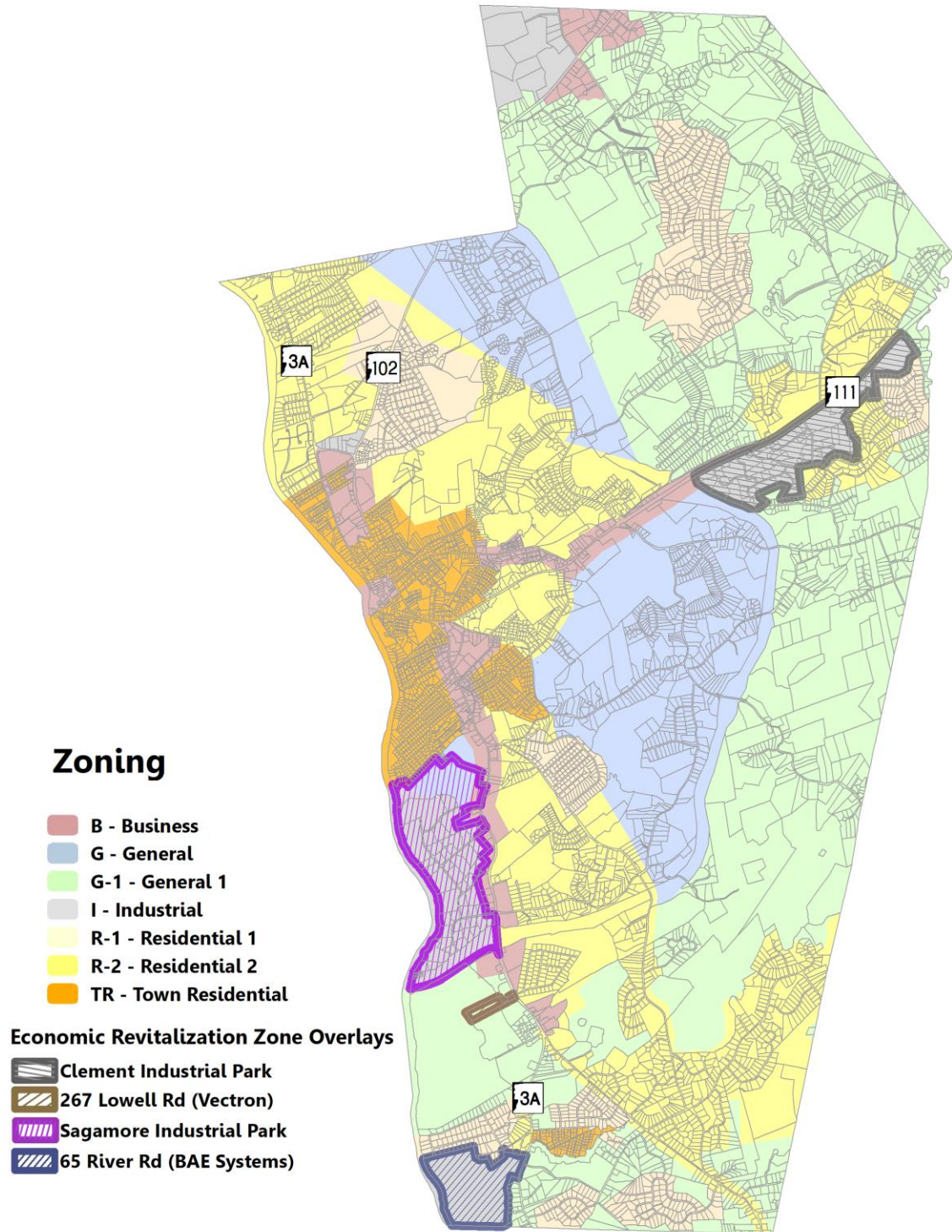
The results of the buildout analysis indicate that, of the total 2,387 acres of undeveloped land remaining in Hudson, there are about 664 acres of constrained land. Constrained land is considered undevelopable due to the physical challenges it poses for development. This includes land that contains wetlands, 100-year floodplain, and/or steep slopes greater than 25%. After the constrained land is removed from consideration, approximately 1,723 acres throughout Hudson remain for future development.<sup>1</sup>

The Residential-1 District has the smallest buildable area remaining in Hudson with only about 4.2 of developable land. Potentially, with water and sewer, an additional 6 single-family houses could be constructed on 30,000 square foot lots before the district is built out. Without water or sewer, 4 single-family houses could be constructed on 1-acre lots before the Residential-1 District is completely built out.

In the Residential-2 District, there are approximately 212.3 acres of developable land remaining. An additional 212 single-family homes can be constructed on 1-acre lots (with or without water and

<sup>1</sup> The potential number of buildable lots presented in each district is based on zoning and does not necessarily reflect what is built.

Map VI-2. Zoning Districts in Hudson, 2020



**Zoning**

- B - Business
- G - General
- G-1 - General 1
- I - Industrial
- R-1 - Residential 1
- R-2 - Residential 2
- TR - Town Residential

**Economic Revitalization Zone Overlays**

- Clement Industrial Park
- 267 Lowell Rd (Vectron)
- Sagamore Industrial Park
- 65 River Rd (BAE Systems)

sewer) until buildout. Similarly, 154 duplexes could be constructed on 60,000 square foot lots without Town water or sewer.

With the exception of multi-family housing units, all types of residential development are allowed in the General District. Elderly housing is permitted only if serviced by Town water and sewer. There are approximately 248 acres of land developable in this district. The General District has a minimum lot area requirement of 1-acre with or without Town water and sewer, so an additional 248 single-family, two-family, or manufactured could be constructed until buildout. An additional 248 elderly housing units could be constructed if serviced by water and sewer.

In the General-1 District, all residential uses are permitted except for multifamily and elderly housing. Approximately 1,163 acres of land are considered developable in the General-1 district. Current zoning requires a minimum lot size of two acres, with and without town water and sewer. Potentially, an additional 581 single-family, two-family, or manufactured dwellings could be constructed in the General 1-District until buildout.

The Town Residence District has about 12.4 acres of developable land remaining. Because this District allows smaller lots sizes, there is a potential for an additional 54 new single-family house lots that can be built. Assisted living facilities and elderly housing developments are also permitted in this district, however elderly housing must be serviced by Town water and sewer.

Similarly, the remaining 82 acres of developable land within the Business District could potentially support 119 commercial lots serviced by Town water or sewer (30,000 square foot lots), or 82 commercial lots without Town water and sewer (1-acre lots).

Lastly, 27.4 acres are available for development within the Industrial District, with a potential for 39 industrial lots serviced by Town water and sewer (30,000 square foot lots), or 27 industrial lots without water or sewer (1-acre lots).

It should be noted that calculations for build-out presented above are based on the 2019 Zoning Ordinance and do not reflect what may actually be constructed in each District. In addition, the remaining residential land area is unlikely to develop at the exact density permitted by the Zoning Ordinance, given land constraints such as steep slopes and areas needed for roads, utilities, and/or open space, and density options for accessory dwelling units and housing for older persons. The estimates apply to future commercial and industrial developments, as it is likely that the average floor area ratio will increase as land values rise and redevelopment occurs. A more detailed buildout analysis may be useful as a planning tool to determine the full potential of the Town's land to accommodate future housing units and non-residential development.

## ANALYSIS OF DEVELOPED LAND

### Agricultural

Agriculture is permitted in all of Hudson’s zoning districts. While approximately 2,186 acres of prime and statewide significant farmland soils can be found in Hudson, it is estimated that active agriculture uses encompass only about 238.5 acres, or about 1.3%, of Hudson’s total land area. Much of the former agricultural land in Hudson has been converted to other uses, particularly along the Merrimack River. The remaining agricultural land in Hudson includes several farms, including the Whispering Brook Farm, Living Legends Farm, Harmon Hill Farm, and the Smith Farm.

### Commercial

Commercial uses encompass about 570 acres, or 3%, of Hudson’s total land area. Of the 570 acres, there are about 2.54 million square feet of floor space and an average of around 4,400 square feet per acre. The pattern of “strip development” that has characterized commercial development in Hudson gives the appearance that business uses encompass far more of the Town’s land area than is actually the case. This is particularly true since commercial development is located along major arterials and at prominent intersections. Hudson’s most significant commercial areas are located along the NH 3A, NH 111 and NH 102 corridors. Under existing zoning, commercial uses are permitted in the Town’s Business District, General District, and General-1 District. A handful of commercial uses, such as restaurants, auto repair, and offices/professional services are also permitted in the Industrial District. Many commercial uses have also been developed in Residential Districts either before zoning was adopted in Hudson or through variances granted by the Zoning Board of Adjustment. In 1994, the Town’s zoning district map was amended to rezone some of the larger commercial developments so that they would be within the Business District; however, the process of realigning the zoning district boundaries to reflect existing land use patterns is not yet complete.

### Residential

Residential uses encompass 10,247 acres, or 55%, of Hudson’s 18,767-acre total land area. Residential development is by far the largest land use category. Based on a 2020 total housing unit count of 7,653, residential uses are developed at an average density of approximately 1.3 units per acre in Hudson.<sup>2</sup>

**Table VI- 3. Number of Residential Units by Type in Hudson**

Property Type	Number of Units	Total Acres
Single-family *	5,686	6,051
Condos and Condexes	1,059	2,422
2 - Family	744	1,002
3+ Family	124	609
Manufactured Housing	40	163
<b>Total</b>	<b>7,653</b>	<b>10,247</b>

\*Single Family includes Accessory Dwelling Units and other in-law units

Note: Acreage is slightly different than Table VI-1 due to more recent data from Hudson Assessing

Source: Hudson Assessing

<sup>2</sup> All housing unit counts from Town of Hudson Assessing data. All area figures are from NRPC GIS parcel database.

### Single-Family Residential Use<sup>3</sup>

Most of Hudson's residential land use is comprised of single-family dwelling units. Single-family residential uses encompass about 5,686 acres, or 30%, of Hudson's 18,767-acre total land area. In April 2020, 74%, or 5,686 housing units, were single-family. Single-family residential uses are developed at an average density of approximately 1.2 units per acre.

### Condos and Condexes<sup>4</sup>

Condos and condexes are the second-largest residential land use in Hudson, following single-family. In April 2020, condos and condexes encompassed 2,422, or 12.9%, of Hudson's 18,767-acre total land area. Condos and condexes also make up 13.8% of the total housing units in Hudson.

### Two-Family (Duplex) Residential Use

Two-family, or duplex, residential uses encompass about 1,002 acres, or 5.3%, of Hudson's 18,767-acre total land area. In 2020, 9.7%, or 744 of the total housing units in Hudson are two-family.

### Multi-Family Residential Use<sup>5</sup>

Multi-family (3+ units per building) residential uses encompass approximately 609 acres, or 3.2%, of Hudson's 18,767-acre total land area. In April 2020, 1.6%, or 124, of the total housing units were considered multi-family.

### Manufactured Housing

Manufactured housing uses encompass approximately 163 acres, or 0.9%, of Hudson's 18,767-acre total land area. In April of 2020, 0.5%, or 40 units, were considered manufactured.

## Industrial

Industrial land uses are the third largest land use category in Hudson, encompassing about 1,413 acres or 7.5% of the Town. Of those 1,413 acres, there are about 3.86 million square feet of floor space, averaging around 2,700 square feet of floor space per acre. As noted in Chapter IV, Economic Development, industry is an important component of Hudson's economy and of the region in general and many industrial uses tend to require large sites for their operations. Most of the Town's industrial uses are located between Lowell Road and the Merrimack River, on NH 102 near the Londonderry Town line and on NH 111. As with commercial uses, the General District and General-1 District also permit industrial uses.

## Institutional

Institutional uses include places of worship and privately owned cemeteries. Institutional uses encompass 234.8 acres, or 1.3%, of Hudson's total land area.

---

<sup>3</sup> Single-family residential use includes accessory dwelling units (ADUs) and all other accessory living units

<sup>4</sup> Condex – a duplex style condominium (Hudson Assessing)

<sup>5</sup> Multi-Family Housing – Includes all buildings containing three or more housing units. As defined by the U.S. Census.



## Mixed-Use

Multiple or mixed uses on a single lot, which includes a residential use, shall only be allowed by special exception. Mixed-Use occupies 141.7 acres, or 0.8%, of Hudson's total land area.

## Municipal Facilities and Other Government

Municipal facilities occupy 699.6, or 3.7%, of Hudson's total land area. "Other government" land use constitutes 16.7, or 0.1% of Hudson's total land area.

## Recreation

Park/Recreation uses encompass about 531.7 acres of Hudson's total land area. Parks and recreation lands encompass about 2.8% of the developed land in the Town. There are two types of park and recreation land uses in Hudson: private and public. Further discussion of parks and recreation can be found in Chapter VIII, Community Facilities

## Schools

Hudson offers five public schools and is home to several private schools/educational facilities. Schools occupy 209.1 acres or 1.1% of Hudson's total land area. For more information about schools, see the Community Facilities Chapter (Chapter VIII).

## Permanent Open Space

Open space is considered any land that is not developed and is protected in perpetuity through conservation easements or other deed restrictions. Open space land uses encompass about 1,694 acres, or 9%, of the total land area in Hudson. This is almost a 700-acre increase from the 2006 master plan.

## Current Use Land

NH RSA 79-A, enacted in 1973, authorized current use taxation of property. Administered by the NH Department of Revenue Administration, the current use program is designed to "prevent the loss of open space due to property taxation at values incompatible with open space usage. Open space land imposes few if any costs on local government and is therefore an economic benefit to its citizens. The means for encouraging the preservation of open space authorized by this chapter is the assessment of land value for property taxation on the basis of current use" (RSA 79-A:1). Parcels of fieldland, farmland and forestland of ten acres or more; "natural preserves" or wetlands of any size; and farmland generating more than \$2,500 annually are eligible for reduced property assessments under the program. Local officials must lower the assessed valuation of any property in the program to a prescribed level. When a parcel is removed from the program, the owner must pay a penalty (or "land-use change tax") equal to 10% of the land's fair market value.

In Hudson, 100% of this land-use change tax is allocated toward the purchase of land for conservation purposes; however, these taxes need to be spent within the year they are collected, or they are transferred into the General Fund. According to the Hudson Assessing Department, in the fall of 2019, approximately 1,650 acres of land in Hudson is in current use.