

# SUDBURY MASTER PLAN

# BASELINE REPORT

Adopted by the Sudbury Planning Board April 28, 2021





## Sudbury Master Plan

## **BASELINE REPORT**

April 28, 2021

Prepared for the Sudbury Master Plan Steering Committee







FITZGERALD & HALLIDAY, INC. Innovative Planning, Better Communities

# Table of Contents

Introduction	5
Community Profile	7
Transportation	
Housing	
Economic Development	
Historic and Cultural Resources	70
Town Services	
Open Space and Recreation	
Natural Resources	
Land Use	

#### List of Tables

Table 1: Median Age Regional Comparison (2000-2017)	Э
Table 2. Sudbury Population by Age (2000 to 2017)10	C
Table 3. Projected Growth of Population Ages 65 and older in Sudbury, 2020 and 203012	1
Table 4: Race and Ethnicity of Sudbury Residents (2000-2017)12	2
Table 5: People with a Disability in Sudbury, 2017	3
Table 6: Educational Attainment of Residents (Aged 25 Years and Older) in Sudbury (2000-2017)14	4
Table 7: Regional Educational Attainment (2017)    15	5
Table 8: Change in Median Household Income (2000-2017)1	5
Table 9: Household Composition in Sudbury (2000-2017)16	5
Table 10. Comparison of Crash Volumes, Sudbury and Nearby Communities (1990-2016)	5
Table 11. Age of Housing in Sudbury, 2017	5
Table 12. Change in Housing Types in Sudbury, 2000-2017	5
Table 13. Multi-Family Residential Development Constructed from 2010 to May 2019	5
Table 14: Tenure of Occupied Units in the Region, 2017	Э
Table 15. Annual Median Home Sale Prices in Sudbury, Neighboring Communities, Middlesex County,	
and Massachusetts, 2014-201840	C
Table 16: Household and Family Income of Sudbury Residents, 2000-201742	1
Table 17. Income Distribution Based on Household Occupancy, 201542	1
Table 18: Families and Individuals Below the Poverty Level in the Past 12 Months in Sudbury, 2000-2017	
	2
Table 19: Percentage of Individuals and Families Below the Poverty Level in the Past 12 Months in	
Sudbury and its Neighbors, 201742	2
Table 20: Severely Cost-Burdened Households in Sudbury, 201544	1
Table 21: Chapter Subsidized Housing Inventory (SHI) for Sudbury and its Neighbors, 9/14/1745	5

Table 22: Jobs per Resident Index	47
Table 23: Total Jobs by Geography	48
Table 24: Population by Geography	48
Table 25: Gross Regional Product by 2-Digit NAICS Code, 2017	50
Table 26: Employment by 2-Digit NAICS Code, 2018	51
Table 27: Employment & Earnings, Top 20 4-Digit NAICS, Sudbury	52
Table 28: Sector Job Growth, Sudbury	53
Table 29: Employment by 2-Digit SOC Code, 2018	54
Table 30: Employment & Earnings, Top 20 4-Digit SOC, Sudbury	55
Table 31: Median Annual Earnings by Occupation	56
Table 32: Industry of Employment of Residents vs. Sudbury Job Base	58
Table 33: Unemployment Rate Comparison, 2017	59
Table 34: Labor Force Participation Rate, 2017	60
Table 35: Sudbury Employers with 100+ Employees	62
Table 36: Sudbury Retail Businesses, 2017	63
Table 37: Cultural Landscapes in Sudbury	78
Table 38: Number of Police Department Calls, 2008-2018	
Table 39: Number of Fire Department Calls, 2008-2019	90
Table 40. Inventory of Recreation and Open Space Land (2019)	
Table 41: Chapter 61 Properties	111
Table 42: Public Land with Public Access	111
Table 43: Impaired Waterbodies in Sudbury	126
Table 44: Rare species observed in Sudbury	129
Table 45: Summary of Local Land Use Regulation in Sudbury	136
Table 46: Land Coverage Summary (2016)	139
Table 47. Types of Residential Structured Permitted, 2009-2018	140
Table 48: Sudbury Zoning Bylaw Summary (2018)	142

#### List of Figures

Figure 1. Population Projections for Sudbury to 2040	7
Figure 2: Regional Comparison, Population Change (1990-2010)	8
Figure 3. Distribution of Age Groups in the Population (2000-2017)	10
Figure 4. Projected Shifts in Population Projections by Age Group	11
Figure 5: Percentage of Residents Who Identify as Non-White Alone, Two or More Races, or Hispanic o	٥r
Latino in Sudbury (2000-2017)	12
Figure 6: Comparison Non-White Alone and Hispanic or Latino (2000-2017)	13
Figure 7. Percentage of Adults (18 years and older) with a Disability in Massachusetts	14
Figure 8: Median Household and Family Incomes of Sudbury and Its Neighbors (2017)	16
Figure 9. Traffic Volumes on Peakham Road, North of Austin Road	19
Figure 10. Where Sudbury Residents Work and Where Workers in Sudbury Live (2015)	26
Figure 11. Journey to Work	27

Figure 12: Total Housing Supply	4
Figure 13. Types of Housing in Sudbury and Neighboring Communities, 2017	7
Figure 14. Size of Housing Units by Number of Bedrooms in Sudbury and Neighboring Communities,	
2017	8
Figure 15. Tenure and Occupancy of Housing in Sudbury, 2017	9
Figure 16. Median Gross Rents in Sudbury and Neighboring Communities, 2017	0
Figure 17. Percentage of Units with Housing Cost Burdens by Occupancy Type in Sudbury, 2010 and 201	7
	3
Figure 18: Historical Job Growth by Geography, 2008-20184	.9
Figure 19: Top Sector Share of Sudbury GDP50	0
Figure 20: Top Sectors Share of Sudbury Jobs52	2
Figure 21: Commute Patterns, Sudbury5	7
Figure 22: Unemployment Rate, 2001-20175	9
Figure 23: Jobs per Square Mile, Town of Sudbury, 20156	1
Figure 24: Sudbury Retail Businesses, 20176	3
Figure 25: Assessed Value by Property Class, 201964	4
Figure 26: New Growth, Sudbury, 2015-20196	5
Figure 27: Tax Levy by Class, 20196	6
Figure 28: Property Tax Rates, 20196	7
Figure 29: Operating Budget per Capita, 20186	7
Figure 30: Avg. Revenue by Source, 201868	8
Figure 31: General Fund Expenditures by Function, 20176	9
Figure 32: Student Enrollment of Sudbury School District, 2012-2019	9
Figure 33: Student Enrollment of Lincoln-Sudbury Regional High School, 2012-2019	0
Figure 34. Residential Permits Issued by Year, 2004-201814	0

#### List of Maps

Map 1: Massachusetts Department of Transportation Roadway Classifications	
Map 2: Average Daily Traffic in Sudbury (2017)	20
Map 3: Posted Speed Limits on Principle and Arterial Roadways	22
Map 4: Three-Year Vehicle Crash Activity in Sudbury (2014-2016)	24
Map 5: Sudbury's Walking Network	
Map 6: Trail Network in Sudbury	
Map 7: Historic Resources in Sudbury	73
Map 8: Old Sudbury Historic District	75
Map 9: Wayside Inn Historic Districts	76
Map 10: King Philip and George Pitts Tavern Historic Districts	77
Map 11: Scenic Roadways in Sudbury	80
Map 12: Town Services & Facilities	89
Map 13: Recreation Resources	96
Map 14: Recreation and Open Space Resources	109

Map 15: Walking and Biking Trails in Sudbury	115
Map 16: Watersheds & Surface Water	
Map 17: Water Resources	
Map 18: Groundwater Resources	125
Map 19: Forested Land	
Map 20: Priority Habitat for Rare Species	131
Map 21: Prime Farmland	132
Map 22: Sudbury Current Land-Use, 2016	
Map 23: Sudbury Zoning	143
Map 24: Sudbury Overlay Districts	144

## Introduction

## What is the Sudbury Master Plan?

The Sudbury Master Plan sets the course for our future. It expresses our aspirations as a community to protect and support what we love about living in Sudbury. The Sudbury Master Plan looks at where we are, where we want to go, and how we're going to get there. It helps us be proactive and strategic about

what happens in Sudbury over the next 20 years. Because it outlines our future path, it will be used to guide public and private investments. It shows what we want to preserve, what needs to be strengthened, and what could be transformed to meet current and future needs of residents and the business community.

### Who wrote the Master Plan?

The Sudbury Master Plan was shaped by the community. Led by the Master Plan Steering Committee, the Town used a variety of methods to gather feedback and disseminate information about the Master Plan update process to residents, businesses, workers, and visitors of Sudbury as well as Town staff. These tools included:

- Larger public events such as forums and open houses
- Smaller focus groups
- Online and paper surveys
- Interviews with stakeholders
- Attendance at local events
- Editorials and news articles in the Town Crier
- Master Plan Steering Committee website

#### Who uses the Master Plan?

The Town uses it to...

- Help prioritize decisions
- Support funding and grant requests
- Justify capital improvements
- Place decisions in historical context
- Advocate for residents and local businesses

#### The Select Board and Town Boards,

Committees, and Commissions use it to...

- Serve as a strategic framework for decision making
- Justify regulatory decisions and investment of public funds

#### Residents and Community Groups use it to ...

 Guide their volunteer activities to ensure everyone in Town is rowing in the same direction

#### Private Developers use it to ...

Understand the community's vision

#### The State uses it to ...

 Learn about Sudbury's priorities and respect them in state plans

> Everyone should use it as a reminder Sudbury is a **great** place to live!

Additionally, the Master Plan Steering Committee held (at a minimum) monthly meetings which were open to the public. Many residents took advantage of this and participated in meeting discussions by offering their personal experiences of living and working in Sudbury.

## How is the Master Plan organized?

The Sudbury Master Plan is made up of three volumes: Baseline Report, Master Plan, and Action Plan.

#### **Baseline Report**

This document, the *Baseline Report*, is a snapshot of existing conditions as they relate to neighborhoods, parks, roadways, public services and facilities, the local economy, and historic and natural assets, among other items that define the quality of life in Sudbury. It includes inventories as well as population and buildout projections. This information was collected through Town staff interviews, outreach to key stakeholders, and reviews of existing reports and other documentation. The purpose of Baseline Report is to provide the foundation for sound policy development moving forward.

#### Master Plan

The *Master Plan* is the primary source policy document. It identifies the formative issues that will shape policy in all areas. It lays out the framework for how the Town will reach its vision. Public input from workshops, open houses, surveys, focus groups, and interviews have guided its development. The *Master Plan* will be used by Town leaders, staff, boards, committees, and other decision makers as well as incorporates short-, mid-, and long-term goals.

#### Action Plan

The final volume, the *Action Plan*, details how the Master Plan is implemented. It includes individual action items needed to meet community issues and needs. Advocates, entities that will champion an action to decision makers, such as Town departments, boards, committees, and commissions, are identified along with implementation timeframes. Since the Master Plan has a 20-year outlook, action items are divided into easy wins (completed within three years), short-term (completed within five years), mid-term (completed between five and 10 years), and long-term (completed in 10 to 20 years) periods. It is important to note that the Action Plan and Master Plan are companion documents and should be read together to understand the full context of action items.

# Community Profile

Examining Sudbury's population provides us with a snapshot of where we are today and where we have been as residents. While demographics are continually changing, analyzing patterns over time helps us understand how Sudbury has changed and what it might look like in the future. From this understanding, we can plan for needs around housing, recreation, transportation, and other aspects of our community that impact the quality of life.

Unless otherwise noted, data presented are from the U.S. Census Bureau's Decennial Census from 1990 to 2010, and American Community Survey (ACS) Five-Year Estimates published in 2017 (estimates for the years 2013 to 2017).<sup>1</sup> The Decennial Census is conducted once every ten years to provide an official count of the entire U.S. population and housing to Congress. The ACS is conducted every year to provide up-to-date information about the social and economic needs of communities. The ACS collects data from a sample of the population rather than from the whole population. Data are published as one-, three-, or five-year estimates depending on the size of the state, county, or place.

Sudbury experienced dramatic growth between 1990 and 2000 when the population increased 17% from 14,358 to 16,841. It slowed to 5% in the next decade, and in 2017, the population was estimated to be 18,697, another increase of 6%.

Recent population projections developed by the University of Massachusetts Donahue Institute (UMDI) and the Metropolitan Area Planning Council (MAPC) for the Massachusetts Department of Transportation (MassDOT)<sup>2</sup> forecast a consistent growth rate for Sudbury through 2040 (Figure 1).



Source: Data for Socio-Economic Projections for 2020 Regional Transportation Plans, prepared by UMDI and MAPC for MassDOT, 2018



<sup>&</sup>lt;sup>1</sup> <u>https://www.census.gov/programs-surveys/acs/about.html</u>

<sup>&</sup>lt;sup>2</sup> Socio-Economic Projections for 2020 Regional Transportation Plans available at <u>https://www.mass.gov/lists/socio-economic-projections-for-2020-regional-transportation-plans</u>

Changes in population for other communities in the region varied between 1990 and 2000. Like Sudbury, neighboring towns of Acton, Marlborough, and Stow all experienced growth of more than 20% during this time (Figure 2). Concord, Framingham, Hudson, and Wayland saw a small percentage change, and Lincoln and Maynard experienced population loss.



Source: US Census 1990, 2000, and 2010 Figure 2: Regional Comparison, Population Change (1990-2010)

## Age

Equally important as overall population growth is the change of a population within different age groups. People at various points in their lives have different preferences and needs for housing, parks, public health services, transportation, and employment. Understanding how age groups are shifting can help to predict these needs into the future.

Like so many other communities across the U.S., Sudbury has an aging population. The median age of residents rose significantly from 39 years in 2000 to 44 in 2017. This is comparable to most of Sudbury's neighbors, with the exception of Framingham, which maintains a median age under 40 years (Table 1).

	2000	2010	2017	Change in years
Sudbury	39	43	44	5
Acton	38	42	44	6
Concord	42	47	47	5
Framingham	36	38	38	2
Hudson	37	41	44	7
Lincoln	35	43	41	6
Marlborough	36	39	40	4
Maynard	38	44	44	6
Stow	39	44	44	5
Wayland	41	45	44	3
Middlesex County	36	39	39	3
Massachusetts	37	39	39	2

#### Table 1: Median Age Regional Comparison (2000-2017)

Source: US Census 2000 and 2010, 2013-2017 ACS 5-Year Estimates

The increase in median age is a result of a growing population that is 55 years and older. Since 2000, Sudbury's younger residents (under 19 years) and those between the ages of 34 and 55 years have always represented the largest portions of the Town's population, each about one third (Figure 3). However, as shown in Table 2, from 2000 to 2017, there were slight shifts, where the younger group saw little growth (2%) and residents between 35 and 54 years decreased (-8%). While still a smaller portion of the Town's total population, around 15%, the percentage of older residents has increased. As shown in Table 2, residents between the ages of 65 and 84 experienced the most growth of all age groups from 2000 to 2017 with an increase of 78%, with those 55 to 64 years not far behind with 72%. Residents 85 years and older grew by one third.



Source: US Census 2000 and 2010, 2013-2017 ACS 5-Year Estimates Figure 3. Distribution of Age Groups in the Population (2000-2017)

	2000	2010	2017	Actual Change 2000-2017	Percentage Change 2000-2017
19 years and younger	5,712	5,961	5,808	96	2%
20-34 years	1,521	1,160	1,405	-116	-8%
35-54 years	6,327	6,087	5,827	-500	-8%
55-64 years	1,628	2,296	2,804	1,176	72%
65-84 years	1,439	1,860	2,569	1,130	79%
85 years and older	214	295	284	70	33%
TOTAL	16,841	17,659	18,697	1,856	11%

Table 2. Sudbury Population by Age (2000 to 2017)

Source: US Census 2000 and 2010, 2017 ACS 5-Year Estimates (2013-2017)

These trends indicate that the town's older population will continue to grow. UMDI's 2015 population projections by age showed that residents 65 to 84 years could double, and those 85 years and older could quadruple (Table 3). These figures would raise the proportion of older residents to rival other age groups and increase the need for senior services (Figure 4).

		0		1.	
		2020	2030	Change	% Change
Age	2010	(projected)	(projected)	2010-2030	2010-2030
65-84 years	1,860	2,761	3,707	1,847	99%
85 years and older	295	594	835	540	183%

Table 3. Projected Growth of Population Ages 65 and older in Sudbury, 2020 and 2030

Source: UMDI, Long-term Population Projections for Massachusetts Regions and Municipalities, 2015



Source: UMDI, Long-term Population Projections for Massachusetts Regions and Municipalities, 2015 Figure 4. Projected Shifts in Population Projections by Age Group

## Race & Ethnicity

In 2017, the two largest racial groups in Sudbury were white at 86% and Asian at 10%. While the Town of Sudbury is predominately a white community (Table 4), the population of non-white residents has been growing at a faster percentage rate (Figure 5). Statistically, the largest growing groups from 2000 to 2017 are American Indian and Alaska Native at 240%; however, these small numbers can be within the margin of error for the 2017 estimates. The number of residents identifying themselves as some Other Race and Asian increased by 215% and 200%, respectively. When counting individuals (as opposed to percentages) the largest increase by far between 2000 and 2017 is with Asian residents. The census estimates this population grew by over 1,200 individuals during that time.

		% of Total		% of Total		% of Total	% Change
Race/Ethnicity	2000	Popn	2010	Popn	2017	Popn	2000-2017
One race	16,679	99%	17,343	98%	18,271	98%	10%
White	15,870	94%	16,036	91%	16,105	86%	1%
Black or African American	134	1%	149	1%	147	1%	10%
American Indian and Alaska Native	5	0%	9	0%	17	0%	240%
Asian	626	4%	1,041	6%	1,879	10%	200%
Native Hawaiian and Other Pacific Islander	5	0%	9	0%	0	0%	-100%
Some Other Race	39	0%	99	1%	123	1%	215%
Two or More Races	162	1%	316	2%	426	2%	163%
Hispanic or Latino (of any race)	208	1%	350	2%	336	2%	62%

#### Table 4: Race and Ethnicity of Sudbury Residents (2000-2017)

Source: MAPC, US Census 2000 and 2010, 2013-2017 ACS 5\_Year Estimates

Figure 6 shows the increase in minority residents between 2000 and 2017 in Sudbury and surrounding communities. Comparing Sudbury's racial composition to its neighboring communities, the town is less diverse than Concord and Wayland, and about the same as Hudson.







<sup>\*</sup>The difference of total population Not Hispanic or Latino and Not Hispanic or Latino White alone Source: US Census 2000, 2010, and 2013-2017 ACS 5-Year Estimates Figure 6: Comparison Non-White Alone and Hispanic or Latino (2000-2017)

### People with Disabilities

In the 2017 ACS, 6.2% of Sudbury residents were identified as having some disability. These are residents who noted having a long-lasting physical, mental, or emotional condition that makes it difficult to do everyday activities like walking, bathing, climbing stairs, bathing, or remembering. The data reflects the notion that when people age, they age into disability in that the percentage of people with disabilities increases with age. In 2017, the highest percentage of people with disabilities (Table 5) in Sudbury was among 75 years and over with 35.4% and the lowest percentage was 4% among children 17 years and under.

#### Table 5: People with a Disability in Sudbury, 2017

	Percentage of People with a Disability
Under 5 years	1.1%
5 to 17 years	2.8%
18 to 34 years	6.5%
35 to 64 years	4.5%
65 to 74 years	10.5%
75 years and over	35.4%

Source: US Census 2000, 2006-2010 ACS 5-Year Estimates, and 2013-2017 ACS 5-Year Estimates

Research by the New England Americans with Disabilities Act (ADA) Center<sup>3</sup> showed that the estimates of persons with disabilities is higher than reported by the ACS. In Massachusetts, 2017 ACS data estimate that 12% of adults 18 years and older have a disability, however, the New England ADA Center's estimates that 27% have a disability (Figure 7).



#### Percentage of Adults 18+ with Disabilities in Massachusetts

Source: New England ADA Center Figure 7. Percentage of Adults (18 years and older) with a Disability in Massachusetts

#### Education

Sudbury is a well-educated community. In 2017, nearly 80% of the population age 25 years and older was estimated to have a bachelor's degree or higher (Table 6). Over the same period of time, those with a graduate or professional degree increased by 10% (from 32% to 42%). The percentage of people with only a high school diploma stayed the same. Compared to its neighbors, Sudbury residents were only second to Wayland (83%) for with a percentage of higher education degrees (Table 7).

Table 6: Educational Attainment of Residents (Aged 25 Years and Older) in Sudbury (2000-2017)

				Change
	2000	2010	2017	2000-2017
Less than 9th Grade	8%	1%	1%	-8%
9th to 12th Grade, No Diploma	3%	2%	0%	-3%
High School Graduate (includes equivalency)	9%	8%	9%	0%
Some College, No Degree	10%	10%	8%	-2%
Associate Degree	6%	4%	3%	-2%
Bachelor's Degree	34%	35%	36%	2%
Graduate or Professional Degree	32%	39%	42%	10%

Source: US Census 2000, 2006-2010 ACS 5-Year Estimates, and 2013-2017 ACS 5-Year Estimates

<sup>&</sup>lt;sup>3</sup> <u>https://www.newenglandada.org/discover-true-nature-disability-new-england</u>

	Less than	9th to 12th grade, no	High school graduate (includes	Some college, no	Associate	Bachelor's	Graduate or
	9th grade	diploma	equivalency)	degree	degree	degree	higher
Sudbury	1%	0%	9%	8%	3%	36%	42%
Acton	2%	1%	7%	9%	5%	33%	44%
Concord	2%	3%	13%	7%	4%	29%	42%
Framingham	6%	5%	24%	14%	5%	27%	20%
Hudson	6%	3%	26%	15%	10%	25%	15%
Lincoln	1%	0%	5%	12%	6%	29%	47%
Marlborough	5%	4%	29%	15%	8%	23%	16%
Maynard	1%	2%	23%	16%	7%	25%	25%
Stow	0%	0%	13%	10%	8%	35%	34%
Wayland	1%	1%	6%	7%	3%	36%	47%
Middlesex County	4%	5%	20%	13%	6%	27%	27%
Massachusetts	5%	5%	25%	16%	8%	23%	19%

#### Table 7: Regional Educational Attainment (2017)

Source: US Census 2013-2017 ACS 5-Year Estimates

#### Household Income

Between 2000 and 2017 the median household income in Sudbury increased by an estimated 44%, however, when adjusted using the Consumer Price Index to show 2017 dollars, the rise in income decreased a household's buying power for goods and services by 2% (Table 8). Incomes in Sudbury have decreased similarly to the Commonwealth, whereas Middlesex County as a whole saw a 3% increase. Compared to its neighbors, in 2017, the median household and family household incomes were only lower than Wayland (Figure 8).

#### Table 8: Change in Median Household Income (2000-2017)

				% Change
	2000	2000		2000-2017
	(1999 dollars)	(2017 dollars*)	2017	(2017 dollars*)
Sudbury	\$118,579	\$175,262	\$170,945	-2%
Middlesex County	\$60,821	\$89,895	\$92,878	3%
Massachusetts	\$50,502	\$74,643	\$74,167	-1%

\* Based on US Bureau of Labor Statistics Consumer Price Index (CPI) inflation calculator

Source: US Census 2000, 2006-2010 ACS 5-Year Estimates, and 2013-2017 ACS 5-Year Estimates



Source: US Census 2000, 2006-2010 ACS 5-Year Estimates, and 2013-2017 ACS 5-Year Estimates Figure 8: Median Household and Family Incomes of Sudbury and Its Neighbors (2017)

#### **Household Characteristics**

US Census defines a household as one person or a group of people living in a housing unit. A home where all people are related by birth, marriage, or adoption is considered, family household. The household composition in Sudbury has not drastically changed in the last 20 years, however, what has changed, shown in Table 9, is the percent of family households with their own children under 18 years. This household composition decreased slightly from 51% in 2010 to 46% in 2017. Another notable change was the percentage of households with individuals living alone that were 65 years and older, which increased from 6% in 2000 to 8% in 2017.

#### Table 9: Household Composition in Sudbury (2000-2017)

	2000	2010	2017
Total households	5,504	5,771	6,226
Family Households (Families)	86%	86%	87%
With own Children under 18 years	51%	50%	46%
Married-Couple Family	79%	77%	80%
Nonfamily Households	14%	14%	13%
Householder Living Alone	11%	12%	11%
Householder 65 years and over	6%	7%	8%
Average Household Size	3.0	3.0	3.0
Average Family Size	3.3	3.3	3.2

Source: US Census 2000, 2010, and 2013-2017 ACS 5-Year Estimates

#### Definitions:

Family Household. A family is a group of two persons or more (one of whom is the householder) related by birth, marriage, or adoption and residing together; all of such persons (including related subfamily members) are considered as members of one family.

Household. A household consists of a householder living alone (a one-person household) or where the householder shares the home exclusively with people to whom he/she is not related.

# Transportation

Sudbury's transportation network includes roadways, walkways, and limited shuttle services. Off-road walking and biking trails are used for recreation but can offer opportunities to connect people to places.

## Roadway Functional Classification

Sudbury has over 160 miles of roadways. These roadways include a mix of arterials, collectors, and local roads that serve the town and the region. There are no interstate highways within the Town's borders. Interstate (I) 495 lies approximately five miles to the west, I-90 (Massachusetts Turnpike) is approximately three miles south, and I-95 lies approximately seven miles east. Map 1 shows the roadway functional classifications throughout Sudbury, as defined by the Massachusetts Department of Transportation (MassDOT):

 Arterial – Provides the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control. The Institute of Traffic Engineers, *Traffic Engineering Handbook*, classifies arterials as either principal or minor. Both classes of arterials serve to carry longer-distance traffic flows between centers of activity. Arterials are laid out as the backbone of a traffic network and *should* be designed to afford the highest level of service.

Principal arterials, such as Boston Post Road (Route 20) and Maynard Road/Hudson Road/Old Sudbury Road (Route 27) accommodate both regional and local traffic. However, only Boston Post Road is maintained by MassDOT. Boston Post Road also provides a regional connection to I-495 to the west. Minor arterials such as Hudson Road and North Road (Route 117) also carry both regional and local traffic, but to a lesser degree.

- Collector Provides a less highly developed level of service at a lower speed for shorter distances by collecting traffic from local roads and connecting them with arterials. The Federal Highway Administration defines collector streets as those that provide land access service and traffic circulation within residential neighborhoods, commercial, and industrial areas. Sudbury has many collector roads that link the local roadway network to the regional network.
- Local Consists of all roads not defined as arterials or collectors. Local streets primarily provide access to adjacent properties with little through movements. Local streets provide the lowest level of mobility and usually contain no bus routes. Utilization by through traffic is often deliberately discouraged.







#### Map 1: Massachusetts Department of Transportation Roadway Classifications

## **Traffic Analysis**

Available traffic counts in Sudbury were assembled from MassDOT's Geographic Information System (GIS) data. MassDOT has 17 traffic volume count locations in Sudbury. This data has limitations in that the counts were recorded at different times in recent history. This condition limits both the ability to compare counts to each other and may also limit their comparability to current conditions. The counts do provide a snapshot of traffic volume at specific moments in time and, where there was more than one count taken over time, these can be used as an indicator of growth and economic activity. As shown in Figure 9, traffic volume at Peakham Road (north of Austin Road) peaked in 1985 and then again in 2007 with 2,400 vehicles per day. Volumes dropped off in 2010 and have been on a slight incline since 2013. Many similar communities saw a similar drop between 2008 and 2010. This trend can be attributed to the recession, which caused a decline in the number of commuters traveling to work. Residents along roadways with heavy traffic have emphasized the importance of counting during peak commuter hours and school hours during AM and PM times. There are four periods of heavy traffic along the scenic and local roads that connect to Sudbury's many schools.



Figure 9. Traffic Volumes on Peakham Road, North of Austin Road

Map 2 shows the concentration of all traffic volumes in Sudbury on average in 2017 (latest available count year). The highest volumes are located on Boston Post Road, which has volumes between 15,000 and 20,000 vehicles per day. Union Avenue, Concord Road, North Road, and Nobscot Road have volumes between 15,000 to 18,000 vehicles per day. Maynard Road, Hudson Road, Old Sudbury Road, and Landham Road experience volumes between 6,000 and 12,000 per day. Available data for local roads indicates volumes between 550 and 6,000 vehicles per day.



Map 2: Average Daily Traffic in Sudbury (2017)

#### Regional Traffic

Development in neighboring communities impacts Sudbury, primarily on major transportation routes such as Routes 117, 27, and 20. Recent developments at Sudbury's borders with Maynard and Acton include the Maynard Crossing Development which has 320 housing units, the Market Basket store which will open in 2020, and the Beijing Royal International School, which is projected to enroll 500 students in grades K-12 beginning in 2020. Although located in other communities, these developments create additional regional traffic that may impact Sudbury, due to the development types and locations.

#### Speed Limits

Speeds limits in Sudbury vary based on roadway type and geography (Map 3). Typical speed limits on local roads are 25 miles per hour (MPH). Boston Post Road has speed limits between 30 and 50 MPH (west of Bigelow Drive). Speed limits of 30, 35, and 40 are common on minor arterial and collector roadways. Sudbury Police confirm speeding is not typically an issue in the Town Center, as traffic congestion helps to curb excessive speeds. Speeding does occur in the less congested, more rural areas, away from the Town Center. In a Road Safety Audit, conducted in 2015 and focused on the intersection of Boston Post Road (Route 20) and Landham Road, it was noted by the Sudbury Police Department, as well as other members of the audit team, many vehicles travel along Boston Post Road (Route 20) well in excess of the posted speed limit of 30 MPH, specifically along the eastbound approach. According to the Route 20 Corridor Study prepared by Vanasse Hangen Brustlin, Inc. in June 2012, the 85th percentile speed along Boston Post Road (Route 20) was 38 MPH, 8 MPH above the posted speed limit within the vicinity of Landham Road.

#### Traffic Operations

There are six signalized intersections in the Town of Sudbury, four of which are located on Boston Post Road, which serves the commercial areas and plazas along the state route. The other two signalized intersections are located at the intersection of Hudson Road, Concord Road, and Old Sudbury Road, and the intersection of North Road, Pantry Road, and Dakin Road. Signal upgrades to this intersection will be required when the Quarry North residential housing development on North Road (Route 117) is constructed.

Traffic congestion, primarily experienced on Boston Post Road, is related to queues at the four intersections, as well as left-turning vehicles into various business driveways. There are crosswalks located at all six signalized intersections in town. Funding is in place for the construction of a signalized intersection at Route 20 and Landham Road. This location has multiple stop signs and roadway islands that can be confusing to drivers. Additionally, this location also warrants signalization due to traffic volumes. Construction of this signalized intersection is expected to begin in late 2020. It should also be noted there is no way to cross Boston Post Road on a roadway in a north or south direction without actually getting onto Boston Post Road, at least temporarily, in an east or west manner.





## **Crash Analysis**

Crash data was obtained from the MassDOT – Highway Division for the latest three available years (2014, 2015, and 2016). Crash data is derived from the Registry of Motor Vehicles (RMV) Crash Data System (CDS). The RMV Division of MassDOT obtains and compiles crash reports from local police, state police, and other police agencies. The threshold for reporting is any crash involving an injury or fatality, or damage to any one vehicle or personal property that exceeds \$1,000. Crashes not in public ways or in off-street parking lots are usually excluded from the data. Because comparing crash data by individual years may distort analysis results, three years of data were analyzed to account for anomalies caused by outside variables such as construction projects.

The crash data obtained from the CDS revealed that 799 crashes occurred within the Town of Sudbury over the three-year period between 2014 to 2016. Crash severity statistics are presented below:

- 1 Fatality
- 386 Property Damage Only
- 407 Non-Fatal Injury
- 5 Unknown

The greatest number of crashes are concentrated on Boston Post Road, primarily at the intersection of Boston Post Road and Union Avenue (see Map 4). These crashes are mostly rear-ended, property damage only types of collisions that are typical of areas with many or frequent signalized intersections. As discussed above, this area of Boston Post Road has a concentration of four signalized intersections, many commercial driveways, and high average daily traffic volumes (between 15,000 to 20,000 per day), which contribute to elevated crash rates at this location. Union Avenue is also an arterial roadway that is the primary north-south connection between the two-state highways, Route 20 and Route 27.

There are other pockets of high crash activity including the intersection of Boston Post Road and Goodman's Hill Road, and the four-way intersection of Hudson, Concord, and Old Sudbury Roads. There are many commercial driveways located in close proximity to the intersection of Goodman's Hill Road and Boston Post Road, as well as curves in the roadway that may contribute to the high crash activity at this location.

The most recent available three-year crash records utilized in this report were for the years 2014, 2015, and 2016. It is important to note that in 2016, the Town of Sudbury completed roadway redesign and reconstruction at the intersection of Concord Road, Hudson Road, and Old Sudbury. Improvements to this location were aimed at increasing the safety of the intersection for all users. Without more recent crash data, it is unclear if a reduction in crashes at this location has occurred in the years since the construction project was completed.



Map 4: Three-Year Vehicle Crash Activity in Sudbury (2014-2016)

#### Historic Crash Activity

A review of historic crash data between 1990 and 2016 reveals crash volumes have decreased by a significant amount (Table 10). In 1990, there were 524 reported crashes in the Town of Sudbury, and by 2016, this number had decreased to 277 crashes. This is a nearly 50% reduction in crash incidences. The decrease is consistent with neighboring towns such as Framingham, Concord, and Wayland. Marlborough was the only neighboring community to see an increase in crash numbers. See below for crash volume changes between 1990 and 2016.

	% Change in Crash		
Community	Volumes 1990 – 2016		
Sudbury	- 47.1 %		
Marlborough	+ 6.9 %		
Maynard	- 33.2 %		
Wayland	- 36.5 %		
Framingham	- 47.2 %		
Concord	- 44.0 %		

Table 10. Comparison of Crash Volumes, Sudbury andNearby Communities (1990-2016)

Source: MassDOT

#### **Commuting Patterns**

Sudbury residents are heavily reliant upon the automobile to get to work. In 2017, approximately 82% of residents drove to work alone. Most current commuting destination data from 2015 indicates the most common work destinations were Boston, Waltham, Framingham, and destinations within Sudbury.

Additionally, there were over 5,600 commuters into Sudbury, an overwhelming majority of which are dependent upon the automobile for travel. Nearly 7,300 Sudbury residents commuted out of town for work daily. The maps at right show commuting data for 2011 and 2015. In 2011 (most historic numbers available), the number of commuters into Sudbury was over 6,100, while almost 6,500 residents commuted away from Sudbury for work.





OntheMap tool

*Commuters into and out of Sudbury (2011 and 2015)* 

The 2015 commuter data also showed approximately 760 Sudbury residents that both lived and worked in Sudbury. This was an increase from 2011, where 714 Sudbury residents both lived and worked in the town.

Figure 10 shows where Sudbury residents are commuting for work, as well as where workers into Sudbury are commuting from. There are similarities between the two maps, but some differences as well. A greater number of Sudbury residents commute to Boston and other major employment centers for work. Sudbury attracts more workers from neighboring towns such as Marlborough and Framingham.



Source U.S. Census Bureau, Center for Economic Studies, OntheMap tool Figure 10. Where Sudbury Residents Work and Where Workers in Sudbury Live (2015)

#### Journey to Work

When compared to Middlesex County, a greater number of Sudbury's residents drive alone to work according to the US Census Bureau's 2017 estimates. More Sudbury residents work from home though,

when compared to the County. Fewer Sudbury residents talk about public transportation than the County as a whole. These are all factors of location and available transit resources. Of the approximately 8,754 workers age 16 and over in Sudbury, 82.6% drive alone, 9.3% work at home, 3.5% carpooled, 3.3% took public transportation, and 1% walked or biked (Figure 11).



e U.S. Census Bureau, ACS 5-year estimates, Bureau of Labor Statistic Figure 11. Journey to Work

## Public Transportation

#### MBTA Rail

There is no direct Massachusetts Bay Transportation Authority (MBTA) commuter rail service to Sudbury. There is direct service to North Station, Boston on the Fitchburg Line at Lincoln Station, Concord Station, West Concord Station, and the Kendall Green Station in Weston. Parking is very limited at these stations. There is also service to South Station, Boston on the Framingham–Worcester Line in Framingham and Natick. There is a commuter rail station in Framingham with access to the Framingham/Worcester Line. This line runs daily between Worcester and South Station in Boston weekdays between 5:30 AM and 10:15 PM, and weekends between 7:40 AM and 11:40 PM. Limited parking is available at the Framingham Station, and bicycles are allowed on trains. The closest MBTA subway stop is Riverside Station in Newton on the Green Line. Travelers without vehicles who wish to take the train have limited options to get to nearby rail stations such as the one located in Framingham. A new pilot bus shuttle started on June 10, 2019 and will run until June 2020. This Commuter Shuttle runs from Marlborough through Sudbury on Route 20 to the MBTA Riverside Station where commuters can choose to ride the Greenline subway or take an express bus to Boston. Rideshare services such as Uber or Lyft are often utilized, but at low volumes, as indicated by the Transportation Network Companies 2017 assessment for the town.

#### MBTA Bus

Sudbury has limited transit services available to residents. There are no fixed-route buses servicing Sudbury. A temporary grant-funded pilot service targeted to seniors and persons with disabilities operates on Tuesdays and Thursdays between Marlborough through Sudbury and into Wayland (run by the Sudbury Senior Center). As mentioned above, the MetroWest Regional Transit Authority (MWRTA) started a pilot commuter shuttle along Route 20 in June 2019, that begins in Marlborough with optional stops in Sudbury and Wayland, connecting to the Riverside T station.

With an aging population, Sudbury residents face challenges associated with access to medical appointments and other services, which are increasingly vital to older adult residents. Additionally, Sudbury has transportation needs other than senior travel service. These include disabled residents and those without access to a vehicle. Between the hours of 8:30 AM to 4:00 PM, Monday through Friday, wheelchair accessible van service is provided by the Sudbury Senior Center. This is available to seniors and residents with disabilities. The van travels anywhere throughout Sudbury but will also take patrons a mile over the border within neighboring towns. Sudbury also received a grant for a shuttle bus that operates on Tuesday and Thursdays between 8:30 AM and 3:30 PM. This shuttle is open to residents over 60 and those with disabilities and others on a space-available basis. The shuttle provides service to three housing developments in Sudbury and operates along Boston Post Road (Route 20) between Marlborough and Wayland.

#### FISH of Sudbury

Friends In Service Helping (FISH) of Sudbury is a program of the Sudbury Senior Center where volunteers provide transportation for residents to medical appointments in the MetroWest area and Boston. FISH is available to all Sudbury residents and operates five days a week. It has approximately 75 active drivers, serving around 150 Sudbury residents. FISH typically receives 60 requests per month and is often at or over capacity. It is looking to recruit younger volunteer drivers, as many existing volunteers are aging. FISH is operated out of the Sudbury Senior Center and advertisements for the program are posted in the Senior Center Newsletter.

## Pedestrian and Bicycle Infrastructure

#### Walkways

Sudbury has over 36 miles of walkways along its public roads (Map 5). All new subdivisions require the construction of walkways within the subdivision or along the adjacent public ways leading to the subdivision. In some instances, developers may contribute to a Town walkway fund for construction of walkways in underserved areas of town. Although recent development has increased traffic on Sudbury's roads, walkway construction has not kept pace with this growth, and many of the older, established neighborhoods are in need of walkways. At the same time, budgetary constraints have eliminated the annual appropriation for walkway construction and maintenance. Sudbury's Department of Public Works maintains and clears all walkways after winter storms. They also repair and replace broken sidewalks.

Despite budget constraints, Sudbury has been active in working towards expanding pedestrian infrastructure. In 2000, the Sudbury Walkway Committee identified an additional 16 miles of high priority walkways needed to improve safety. The Town has made some progress towards that objective having constructed walkways on local roads such as Maynard Road, but many other roads identified by the Committee still lack walkways. There are many gaps and "missing links" in the walkway network, particularly along Peakham Road. Walkway easement issues have made it challenging to connect some locations. Sudbury has many narrow, winding roads, many of which have trees or stone walls lining the edge of the pavement. This lack of space makes it difficult to manage traffic and equally challenging to accommodate bicycle or pedestrian infrastructure.

Boston Post Road (Route 20) is the main commercial corridor in Sudbury, with many shops, restaurants, and businesses. This roadway serves both regional and local traffic. Although Route 20 has many destinations that residents may wish to visit on foot, the corridor is very uncomfortable for pedestrians. Destinations are disconnected, and high speeds and congestion make it challenging for pedestrian travel, even along the places with walkways.

#### Greenways

Sudbury is located along the Bay Circuit Trail system, which will eventually create a continuous trail system in a semi-circular arc around the suburbs of Boston from the North Shore to the South Shore. The trail system is being created by members of various environmental organizations across the Commonwealth with the cooperation of local landowners. As shown in Map 6, the proposed trail meanders through Sudbury in the southern portion of the town, crossing the Sudbury River.

29



Map 5: Sudbury's Walking Network

#### Bicycle Infrastructure

Sudbury has very little bicycle infrastructure. There are no dedicated bicycle lanes on local roads in town. Cyclists are allowed to use walkways, but this has the potential to create a conflict with pedestrians. Furthermore, cyclists may be riding on walkways opposite to traffic flow, which may create unsafe conditions between drivers and cyclists. State roadways in Sudbury have bicycle detection pavement marking signals at intersections. These indicators show where cyclists should position themselves in the roadway to trigger a green light to proceed through the intersection.

#### Trails

The Bruce Freeman Rail Trail (BFRT) follows the 25-mile route of the abandoned New Haven Railroad Framingham and Lowell line, and, once open in town, will be accessible to non-motorized uses such as cycling, jogging, walking, and cross-country skiing. It will run through the communities of Lowell, Chelmsford, Westford, Carlisle, Acton, Concord, Sudbury, and Framingham. Construction of the BFRT has already begun in the towns of Lowell, Chelmsford, Westford, Carlisle, Acton, and Concord. Sudbury is working towards 25% design of 4.5 miles of trail in town. Construction is expected to begin in 2022. The BFRT will be an asset to Sudbury because it will connect many of Sudbury's cultural and historic resources and open space parcels. It will also connect commercial areas, residential areas, and schools, and offer a robust off-road travel network throughout Sudbury. It is anticipated the Department of Public Works will need an additional two staff members to maintain the trail.

The Mass Central Rail Trail (MCRT) will also pass through Sudbury. This east-west trail will travel 104 miles between Boston and Northampton and connect 24 communities. Currently, 47 miles of the trail are open, primarily in and around the terminuses of Boston and Northampton. Construction has not started on the Sudbury segment. The route will traverse the southern end of Sudbury, between its border with Wayland and Hudson. The MCRT will cross the BFRT near Union Avenue and Boston Post Road.

Challenges associated with the rail trails include maintenance costs and establishing safe crossings where the trails intersect with existing roadways. Other challenges include long stretches with no or few "eyes on the trail," which may raise safety concerns for users. Signal improvements may be necessary at some intersections, particularly the intersection of Peakham Road and Hudson Road. This intersection will become signalized as part of the BFRT construction, although many believe this location has warranted a signal for quite some time.



Map 6: Trail Network in Sudbury

## Parking

Municipal parking in Sudbury is available at the Sudbury Town Hall parking lot, located between the Town Hall and the Noyes School. Parking for commercial businesses and plazas is generally off-street, surface parking that is privately owned and serves the adjacent businesses. There is no dedicated parking enforcement in Sudbury. According to the Livable Sudbury Community Needs Assessment, completed in January of 2019, satisfaction with parking is relatively high amongst Sudbury residents, with 86% of survey respondents indicating they were satisfied or very satisfied with parking availability. This satisfaction is referring to available parking for retail and in-town locations, not general parking for commuting purposes.

#### **Roadway Improvements**

- A road safety audit was conducted in 2015 that focused on the intersection of Boston Post Road (Route 20) and Landham Road. These roads intersect to form a three-way unsignalized intersection. In 2020, MassDOT converted this location to a signalized intersection.
- In 2016, the Town of Sudbury completed a roadway redesign and reconstruction at the intersection of Concord Road, Hudson Road, and Old Sudbury Road in its Town Center.
  Improvements to this location were aimed at increasing the safety of the intersection for automobiles, pedestrians, and bicyclists. Other objectives of the construction project included improving traffic flow through the center without increasing speeds. Doing so protects the existing scale and character of the center and its role as a civic location.

# Housing

Safe and secure housing is essential for everyone to be healthy and successful in their personal lives and in the community, creating economic and social stability. A community that offers diverse housing choices opens opportunities for all ages, incomes, and abilities, and bolsters local economic sustainability.

Housing characteristics are important to evaluate when planning for a community's future.<sup>4</sup> These characteristics include types of options available (such as rentals or number of bedrooms in a unit or house), how many homes are available (if there is competition for a limited few), and their age (older homes are less energy-efficient and have a higher risk of environmental hazards such as lead-based paint or asbestos). Housing costs impact current residents and their ability to meet the cost of living in a community, as well as determining who can afford to move into a municipality.

## **Housing Supply**

Between 2000<sup>5</sup> and 2017, Sudbury increased its housing supply by an estimated 14%, consistently adding between 7% to 8% per decade (Figure 12). This was consistent with population growth, where the town saw a 5% to 6% increase per decade and a total increase of 11% between 2000 and 2017.



Source: Table DP04; 2000 and 2010 Census and 2017 American Community Survey 5-Year Estimates (2013-2017) Figure 12: Total Housing Supply

<sup>&</sup>lt;sup>4</sup> Unless otherwise noted, data presented are from the US Census Bureau's American Community Survey (ACS). The ACS is conducted every year to provide up-to-date information about the social and economic needs of communities. The US Census Bureau collects data from a sample of the population in the US and Puerto Rico rather than from the whole population. It is important to keep in mind that all ACS data are estimates for one, three, or five-year periods. ACS data are published with a margin of error (MOE). https://www.census.gov/programs-surveys/acs/about.html

<sup>&</sup>lt;sup>5</sup> The Census is conducted once every 10 years to provide an official count of the entire US population and housing to Congress.
## Age of Homes

Sudbury's housing stock is dominated by post-World War II construction, with over 40% of all homes having been built between 1950 and 1969 (Table 11). It is important to consider the public health impacts of older homes. For example, homes built before 1970 (almost half of Sudbury's housing stock) tend to have environmental concerns, such as asbestos and lead-based paint, which pose health risks to those with respiratory conditions or young children.

Table 11. Age of Housing in Sudbury, 2017				
Year Built	Number of Units			
1939 or earlier	330 (5%)			
1940 – 1949	187 (3%)			
1950 – 1959	1,155 (18%)			
1960 – 1969	1,404 (22%)			
1970 – 1979	801 (13%)			
1980 – 1989	732 (12%)			
1990 – 1999	889 (14%)			
2000 – 2009	661 (10%)			
2010 or later	197 (3%)			
Total	6,356			

Source: Table DP04, 2017 American Community Survey 5-Year Estimates (2013-2017)

## Types of Homes

As shown in Table 12, all housing types grew from 2010 to 2017. The number of single-family attached homes (townhouses or condominiums; units that share a wall) grew faster than any other type. Buildings with ten or more housing units have also seen a significant increase.

Units in Structure	2000	2010 Est	2017 Est	Change 2000-2017
Total Housing Units	5,590	5,764	6,356	1,136
Single-Family, Detached*	5,322 (95%)	5,193 (90%)	5,634 (89%)	221
Single-Family, Attached*	14 (0%)	239 (4%)	384 (6%)	331
2 Units	37 (1%)	66 (1%)	51 (1%)	14
3 or 4 Units	58 (1%)	70 (1%)	66 (1%)	8
5 to 9 Units	6 (<0%)	26 (<0%)	18 (<1%)	12
10 or More Units	153 (3%)	170 (3%)	203 (3%)	50

Table 12. Change in Housing Types in Sudbury, 2000-2017

\* Single-family structures include fully detached, semi-detached (semi-attached, side-by-side), rowhouses, duplexes, quadruplexes, and townhouses. In order for attached units to be classified as single-family structures, each unit must: be separated by a ground-to roof wall, have a separate heating system, have individual meters for public utilities, and have no units located above or below. (https://www.census.gov/construction/chars/definitions/)

Source: Table DP04, 2000 Census and 2010 (2006-2010) and 2017 (2013-2017) American Community Survey 5-Year Estimates

While single-family detached homes still make up an estimated 89% of all homes in town, this is down from over 95% in 2000, suggesting that Sudbury has made gains toward diversifying its housing stock over the past two decades. Table 13 lists multi-family and single-family attached units developed since 2010. Many of these include subsidized units meeting local affordable housing needs (see discussion later in this chapter). A handful of projects are still under construction at this time.

Name	Total Units	Subsidized Units	Location	Owner/Manager	Notes
Sudbury Housing Authority Duplex Reconstruction	12	12	various locations	Sudbury Housing Authority	
Villages at Old County Road	37	10	Old County Road	Trask, Inc (Southboro)	
Landham Crossing	31	8	192 Boston Post Road	Trask Development	
The Coolidge	64	64	189 Boston Post Road	B'nai B'rith Housing	
278 Maynard Road	3	3	3 Marlboro Road	Sudbury Housing Trust	
Dudley Brook Preserve	26	0	40 Tall Pine Drive	Pickwick Development	Age-restricted
Avalon Sudbury	250	63	Bay Drive	Sudbury Avalon, Inc.	Under construction
Highcrest at Meadow Walk	60	0	Farmstead Lane	Pulte Homes	Age-restricted, Under construction
The Coolidge Phase 2	56	56	189 Boston Post Road	B'nai B'rith Housing	Age-restricted, Under construction
TOTAL UNITS	539	216			

#### Table 13. Multi-Family Residential Development Constructed from 2010 to May 2019

Source: Sudbury Department of Planning and Community Development, May 7, 2019

Similar to Sudbury, single-family homes in neighboring towns are the dominant type of housing (Figure 13). In 2017, communities like Acton, Framingham, and Marlborough offered more diverse housing options, and most of their multi-family units were in larger structures of 10 or more units.

In 2017, the US Census identified 6% of Sudbury residents were living with a long-lasting physical, mental, or emotional disable condition. The majority of these populations are older residents who are 75 years and over. Currently, three long-term care facilities provide housing and services for individuals who are managing illness and/or disability attributed to physical and/or mental health conditions:

- Orchard Hill Sudbury Assisted Living
- Wingate at Sudbury
- Sudbury Pines



Source: Table DP04, 2017 American Community Survey 5-Year Estimates (2013-2017) Figure 13. Types of Housing in Sudbury and Neighboring Communities, 2017

## Number of Bedrooms

Consumers seek out a particular home to meet the size of their family or to accommodate other needs. In Sudbury, smaller housing options (two bedrooms or less), which are attractive to empty nesters looking to downsize and young families, tend to be less available compared to neighboring towns. In 2017, these types of housing options represented just 12% of the total housing stock (Figure 14), and most homes had four bedrooms or more.



Source: Table DP04, 2017 American Community Survey 5-Year Estimates (2013-2017) Figure 14. Size of Housing Units by Number of Bedrooms in Sudbury and Neighboring Communities, 2017

## **Tenure and Occupancy**

Most housing in Sudbury was occupied (98%) in 2017 and primarily by owners (Figure 15). Only an estimated 130 homes (2%) were vacant. Of the occupied homes, only 8% were rentals. While this is a small percentage, it is an increase from 2000, where rentals made up only 6% of total occupied units. Overall, Sudbury had the lowest percentage of rental units compared to its neighbors, falling below Stow and Wayland (Table 14).



Source: Table DP04, 2017 American Community 5-Year Estimates (2013-2017) Figure 15. Tenure and Occupancy of Housing in Sudbury, 2017

Table 14:	Tenure of	Occupied	Units in th	e Region, 2017
1001010 111		00000100	0	

	Owner-Occupied	<b>Renter-Occupied</b>	
	Units	Units	
Sudbury	92%	8%	
Acton	75%	25%	
Concord	77%	23%	
Framingham	54%	46%	
Hudson	75%	25%	
Lincoln	62%	38%	
Marlborough	57%	43%	
Maynard	73%	27%	
Stow	90%	10%	
Wayland	89%	11%	

Source: Table DP04, 2017 American Community 5-Year Estimates (2013-2017)

## Housing Affordability

#### Housing Costs

The housing market in the region is strong, and housing costs have increased over the past five years. Table 15 illustrates the changes in housing sales from 2014 to 2018 in Sudbury, neighboring communities, Middlesex County, and the Commonwealth of Massachusetts. The median sales price for a single-family home in Sudbury in 2018 was \$749,900, an increase of 11% since 2014, the lowest percentage change along with Lincoln in the area. The town had the fourth-highest median sales price in 2018 after Wayland, Concord, and Lincoln, where the latter two had sales of \$900,000 and higher.

	2014	2015	2016	2017	2018	% Change 2014-2018
Sudbury	\$675,000	\$680,000	\$695,000	\$718,500	\$749,900	11%
Acton	\$482,603	\$505,000	\$521,500	\$531,500	\$565,000	17%
Concord	\$775,000	\$842,000	\$830,000	\$910,250	\$900,000	16%
Framingham	\$317,000	\$343,000	\$379,000	\$395,000	\$425,000	34%
Hudson	\$300,000	\$311,500	\$330,000	\$333,500	\$359,000	20%
Lincoln	\$858,000	\$700,000	\$857,500	\$850,000	\$954,500	11%
Marlborough	\$273,000	\$288,200	\$315,000	\$335,108	\$350,000	28%
Maynard	\$295,000	\$310,000	\$325,000	\$360,000	\$359,000	22%
Stow	\$426,000	\$455,715	\$476,000	\$465,000	\$520,000	22%
Wayland	\$619,000	\$695,000	\$700,000	\$675,000	\$752,000	21%
Middlesex Co.	\$420,000	\$442,500	\$460,000	\$497,000	\$533,500	27%
Massachusetts	\$325,000	\$335,000	\$344,900	\$360,000	\$380,000	17%

 Table 15. Annual Median Home Sale Prices in Sudbury, Neighboring Communities, Middlesex County, and

 Massachusetts, 2014-2018

Source: The Warren Group

Gross monthly rents in Sudbury have also increased. In 2000, the median monthly rent was \$795 and in 2017, it was estimated to be \$923, an increase of \$128. When compared to its neighbors (Figure 16), rents in Sudbury were the lowest. The median gross monthly rents were estimated to be between \$1,000 and \$2,000, and many of these communities had over 20% of their housing as rentals, while Sudbury had only 8%.



Figure 16. Median Gross Rents in Sudbury and Neighboring Communities, 2017

## Household Incomes and Poverty

With a strong housing market, the costs of homes and rents continue to rise and require higher incomes for people who want to live in Sudbury. As shown in Table 16, median incomes for both households and families have increased from 2000 to 2017 to meet these rising costs. However, overall, when adjusted using the Consumer Price Index to show incomes in 2017 dollars, the rise in income decreased a household's buying power for goods and services by 2% and families by 5%.

					% Change
	2000		2010 Est	2017 Est	2000-2017
Median Income:	\$118,579	\$175,262	\$153,295	\$170,945	-2%
Households	(1999 dollars)	(2017 dollars)	(2010 dollars)	(2017 dollars)	
Median Income:	\$130,399	\$192,732	\$166,008	\$183,234	-5%
Families	(1999 dollars)	(2017 dollars)	(2010 dollars)	(2017 dollars)	

#### Table 16: Household and Family Income of Sudbury Residents, 2000-2017

Source: Table DP03, 2000 Census and 2010 (2006-2010) and 2017 (2013-2017) American Community Survey 5-Year Estimates

The U.S. Department of Housing and Urban Development (HUD) takes a deeper dive into household income and other data through its Comprehensive Housing Affordability Strategy (CHAS) program. Through HUD CHAS data, a town can learn more about how many of its households might have low or very low incomes (80% or less of the area median income), which are vulnerable to rising costs. The latest CHAS data were from 2015 and it reported an estimated 15% of households in Sudbury fell within these criteria (Table 17). By occupancy, nearly three-quarters of renters and 11% of owner-occupied households were considered low or very low income.

#### Table 17. Income Distribution Based on Household Occupancy, 2015

Income Distribution Overview	Owner-Occupied Households	Renter-Occupied Households	Total Households
Household Income <= 30% HAMFI	285 (5%)	115 (32%)	400 (7%)
Household Income >30% to <=50% HAMFI	95 (2%)	135 (38%)	230 (4%)
Household Income >50% to <=80% HAMFI	225 (4%)	25 (7%)	250 (4%)
Household Income >80% to <=100% HAMFI	290 (5%)	10 (3%)	300 (5%)
Household Income >100% HAMFI	4,815 (84%)	70 (20%)	4,885 (81%)
Total	5,710	355	6,065

HAMFI – HUD Area Median Family Income. This is the median family income calculated by HUD for each jurisdiction, in order to determine Fair Market Rents (FMRs) and income limits for HUD programs. HAMFI will not necessarily be the same as other calculations of median incomes (such as a simple Census number), due to a series of adjustments that are made (For full documentation of these adjustments, consult the <u>HUD Income Limit Briefing Materials</u>). If you see the terms "area median income" (AMI) or "median family income" (MFI) used in the CHAS, assume it refers to HAMFI.

Source: HUD CHAS data based on 2015 American Community Survey 5-Year Estimates (2011-2015)

As incomes increased, the proportion of families living in poverty remained the same. However, individuals living in poverty rose slighting between 2010 and 2017 (Table 18). Notable increases were children under 18 years old, which rose by 3% since 2010, and children under five years old, which rose

by 7%. Residents 18 years and older living in poverty also went up by 1%. However, residents 65 years and older living in these circumstances decreased by 4%.

	2010 Est	2017 Est	Change 2010-2017
Families Below the Poverty Level	2%	2%	0%
Individuals Below the Poverty Level	2%	3%	1%
Under 5 years	2%	9%	7%
Under 18 years	2%	5%	3%
18 years and older	5%	6%	1%
65 years and older	6%	2%	-4%

Table 18: Families and Individuals Below the Poverty Level in the Past 12 Months in Sudbury, 2000-2017

Source: Table DP03, 2010 (2006-2010) and 2017 (2013-2017) American Community Survey 5-Year Estimates

When compared to its neighbors, Sudbury poverty rates were among the lowest for both households and families, followed by Lincoln and Acton, respectively (Table 19). Framingham, the most populated community in the group, had the highest percentage of households and families in poverty.

Table 19: Percentage of Individuals and Families Below the Poverty Level in the Past 12 Months in Sudbury andits Neighbors, 2017

		% of
	% of Families	Individuals
Sudbury	2%	3%
Acton	2%	4%
Concord	4%	6%
Framingham	8%	12%
Hudson	5%	6%
Lincoln	2%	3%
Marlborough	5%	7%
Maynard	7%	8%
Stow	2%	4%
Wayland	1%	3%
A		

Source: Table DP03, 2017 American Community Survey 5-Year Estimates (2013-2017)

## Cost Burdened Households

As housing costs rise, some households are not seeing their incomes increase proportionately. As discussed above, poverty rates are one indicator of affordability. Another indicator measures the percent of income spent on housing. As a rule of thumb, when aggregated, housing costs (rent, mortgage, insurance, utilities, fees, real estate taxes, etc.) should be no more than 30% of a household's income. When housing costs are greater than 30%, a household is considered to be "cost-burdened." Figure 17 shows the change from 2010 to 2017 in renter-occupied households and owner-occupied households, with and without a mortgage with housing cost burdens in Sudbury.



#### Source: Table DP04, 2010 (2006-2010) and 2017 (2013-2017) American Community Survey 5-Year Estimates Figure 17. Percentage of Units with Housing Cost Burdens by Occupancy Type in Sudbury, 2010 and 2017

Since 2010, fewer households experienced the burden of housing costs with the exception of owneroccupied units that do not have a mortgage. These households are typically retired residents who have paid off their mortgage and are most likely living on limited incomes.

Housing cost trends, however, are expected to continue to increase, but incomes are not keeping up. This could put additional households at risk if the gap grows. As an example, as noted in Table 15, the median home sales price in 2018 was \$749,900. It is estimated the monthly mortgage payment for a home with this cost is \$4,285, and the household income needed to afford this payment is \$171,040.<sup>6</sup> The median household income for Sudbury was \$170,945 and the median family household income was \$183,234 (Table 16). This payment would equate to approximately 30% and 28% of the monthly income for these households, respectively, at or slightly under the 30% threshold.

### Homelessness

According to the Massachusetts Coalition for the Homeless, the number of people experiencing homelessness and housing instability in the Commonwealth remains high.<sup>7</sup> The Massachusetts Department of Housing and Community Development (DHCD) stated in its third-quarter report (May 2018), in fiscal year 2018, 1,902 families applied for emergency assistance and another 1,268 entered shelters, hotels/motels, or other home assistance during that quarter alone. The total number of families applying for emergency assistance to date during the fiscal year 2018 was 5,640. The top reason for families or individuals seeking emergency assistance and shelter was health and safety reasons (62%), followed by domestic violence (16%), and eviction (14%). Health and safety reasons can include housing being irregular housing, housing not meant for human habitation, violent conduct in the home, mental illness, substance abuse, or conditions of housing.

<sup>&</sup>lt;sup>6</sup> Assumes a 20% down payment and includes insurance, taxes (\$17.91/\$1,000 for FY 2019), and P&I. Source: <u>https://www.zillow.com/mortgage-calculator/</u>. \$4,285 x 12 months = \$51,420, which is 30% of \$171,400.
<sup>7</sup> <u>https://www.mahomeless.org/about-us/basic-facts</u>

The Massachusetts Department of Elementary and Secondary Education reported that over 21,000 students in the Commonwealth were identified as being homeless. Most were staying with friends or family or in shelters. The Sudbury School District has a district homeless policy to ensure that homeless students have the same access to academic and educational programs as all students.<sup>8</sup>

Resources for the homeless in Sudbury can be found through the Massachusetts Homeless Coalition.<sup>9</sup> Current facilities in the area are:

- Shelters for Families
  - Pathways Family Shelter, Framingham
  - South Middlesex Opportunity Council, Framingham
- Shelters for Unaccompanied Adults
  - Turning Point, Framingham
  - Survivors of Domestic Violence
    - Voices Against Violence, Framingham

The Massachusetts Homeless Coalition identifies the lack of affordable housing as a main driving force behind the rise of homelessness. Those most at risk in Sudbury are individuals and families which are cost-burdened, particularly those paying more than 50% of their income on housing (severely cost-burdened). These data were available through the 2015 CHAS data, and it was estimated that 615 households were severely cost-burdened in Sudbury (Table 20). A significant portion of the households that fell within this category had an elderly person, who typically have fixed incomes. While some may have paid off mortgages and still live in their homes (refer back to Figure 17), increasing heating and other utility costs, among other housing expenses, can take funds away from other needs such as healthcare, transportation, and food. The Sudbury Council on Aging works closely with seniors, and their family members and caregivers to ensure elderly residents are receiving the services and resources they need.

#### Table 20: Severely Cost-Burdened Households in Sudbury, 2015

Household Type	Estimated Households
Elderly Family Households (2 persons either or both 62 years or older)	155
Elderly Non-Family Households (2 persons either or both 62 years or older)	212
Small Family Households (2 persons neither 62 years or older, or up to 4 persons)	190
Large Family Households (5 persons or more)	23
Other Household Types (non-family, non-elderly)	35
Estimated Total	615

Severely cost-burdened: Household paying more than 50% of its income on aggregate housing costs Source: HUD CHAS data based on 2015 American Community Survey 5-Year Estimates (2011-2015)

<sup>&</sup>lt;sup>8</sup> <u>http://sudbury.k12.ma.us/index.php?option=com\_content&view=article&id=153:special-services-and-programs&catid=65</u>

<sup>&</sup>lt;sup>9</sup> <u>https://www.mahomeless.org/get-help</u>

## Addressing Housing Affordability in Sudbury

### Housing Production Plan

The Town's Housing Production Plan (HPP)<sup>10</sup> was approved by the Massachusetts Department of Housing and Community Development (DHCD) in 2016. It is the Town's strategy to plan for and develop affordable housing to meet needs in the community in a manner consistent with the Chapter 40B statute and associated regulations.<sup>11</sup> Communities in the Commonwealth are required to meet the 10% threshold of affordable housing, which is measured by the number of eligible Subsidized Housing Inventory (SHI) units as a portion of total year-round housing in 2010. Through the HPP, annual housing production goals are established, increasing units at a minimum of 0.5% of the total units per year for five years (the timeframe of the HPP). After five years, a town can revisit its HPP and decide if it wants to update its current HPP or write a new one. Sudbury has reached and exceeded its 10% affordable housing threshold, but it still must maintain and improve upon its affordable housing inventory.

While some aspects of housing affordability are addressed in this chapter, the HPP offers a full analysis of the affordability gap in Sudbury and the region for low-income residents as well as the needs for middle-income households.

Since the approval of its HPP in 2016, Sudbury has increased its SHI units from 358 (6.05%) to 669 (11.3%), exceeding its 10% requirement (Table 21). This is a great accomplishment for the Town, and it will continue to monitor needs and stated goals in the HPP to ensure it maintains the 10% threshold into the future. The HPP highlights that most affordable housing is needed as rentals and targeted at the 65 years and older population. Through the production of SHI units over the past three years, the Town is making strides to meet these needs.

Town	2010 Census Year- Round Housing Units	Total Development Units	SHI Units	% of 2010 Units
Sudbury	5,921	887	669	11.3%
Acton	8,475	1,144	568	6.7%
Concord	6,852	926	804	11.7%
Framingham	27,443	2,871	2,871	10.5%
Hudson	7,962	1,051	892	11.2%
Lincoln	2,153	310	238	11.2%
Marlborough	16,347	1,962	1,866	11.4%
Maynard	4,430	398	380	8.6%
Stow	2,500	337	185	7.4%
Wayland	4,957	370	254	5.1%

#### Table 21: Chapter Subsidized Housing Inventory (SHI) for Sudbury and its Neighbors, 9/14/17

Source: MA Department of Housing and Community Development, dated September 14, 2017, <u>https://www.mass.gov/files/documents/2017/10/10/shiinventory\_0.pdf</u>, obtained April 3, 2019

<sup>10</sup> <u>https://sudbury.ma.us/housingtrust/2016/04/21/sudburys-2016-housing-production-plan-approved/sudbury-housing-production-plan/</u>

<sup>11</sup> https://www.mass.gov/files/documents/2018/09/14/hpregs.pdf

#### Partners

The Town of Sudbury has several partners in meeting affordable housing needs.

### Sudbury Housing Authority

The Sudbury Housing Authority develops and manages affordable rental housing for families, seniors, and disabled residents. It currently owns and operates 64 apartment units for elderly and disabled residents at the Musketahquid Village, and 28 units of single-family and duplex rental housing that house low-income families.

#### Sudbury Housing Trust

In 2006, the Sudbury Housing Trust was formed to provide for the preservation and creation of affordable housing in the community for the benefit of low- and moderate-income households. It also works to show performance towards the 10% minimum of Community Preservation Act spending/allocation requirement on community housing.

The Trust sponsors The Small Grant program which aids senior and moderate-income residents to make repairs and alterations to their homes for safety and health reasons.

The Trust generates revenue by performing lottery, resale, and monitoring agent services for Sudbury and other neighboring communities, which provides opportunities for local eligible buyers with connections to Sudbury to find affordable housing.

#### Regional Housing Services Office

The Regional Housing Services Office (RHSO) is a multi-jurisdictional collaborative effort that came to formation after the Metropolitan Area Planning Council (MAPC) conducted a study which revealed a gap in municipal functioning of affordable housing in 2011. The RHSO was formed through the Inter-Municipal Agreement three years later to serve the Towns of Acton, Bedford, Burlington, Concord, Lexington, Sudbury, Wayland, and Weston.

The RHSO serves its member towns by assisting with the municipal function of affordable housing, including proactive monitoring, program administration, project development, and resident assistants. The first host town was Sudbury and the organization currently has its office in Concord.

# Economic Development

This economic baseline assessment offers a general outlook on the economic situation in the Town of Sudbury by comparing high-level economic indicators to seven surrounding towns, Middlesex County, the Boston Metropolitan Statistical Area (MSA),<sup>12</sup> and the United States as a whole. It provides an evaluation of the Town's current economic wellbeing and insight into future trends that could affect the local economy.

Sudbury has a strong, predominantly residential, tax base. While the town is not a large employment center within the region, it does have a significant concentration of jobs in the Professional Services and Health Care sectors. Additionally, its high quality of life and proximity to jobs in Boston and Cambridge, and along Route 128, reinforce its appeal as a desirable place to live and keeps the Town in a stable fiscal position. Moreover, though small in scale compared to its residential base, Sudbury's commercial businesses offer shopping and amenities that serve local residents and contribute to the vibrancy of the town.

## Local Businesses and Employment

## Jobs and Population

Table 22 below compares the number of jobs in each geography to the total population in that geography. With a ratio of 0.39 in 2018, the Town of Sudbury shows fewer jobs than residents based on historical and projected job and population figures. Little change in Sudbury's ratio is expected through 2028.

Year	Jobs per Resident, Sudbury	Jobs per Resident, Middlesex County	Jobs per Resident, Boston MSA	Jobs per Resident, US
2008	0.42	0.58	0.56	0.47
2018	0.39	0.59	0.57	0.46
2028	0.41	0.61	0.59	0.49

#### Table 22: Jobs per Resident Index

Source: EMSI

<sup>&</sup>lt;sup>12</sup> The Boston MSA, or officially, the Boston-Cambridge-Newton Metropolitan Statistical Area, is defined by the US Census Bureau as consisting of the following counties: Essex County (MA), Middlesex County (MA), Norfolk County (MA), Plymouth County (MA), Suffolk County (MA), Rockingham County (NH), and Stafford County (NH).

Jobs and population over this time period are shown in Table 23 and Table 24.<sup>13</sup>

Year	Sudbury	Middlesex County	Boston MSA	US
2008	7,081	862,933	2,502,156	141,406,006
2018	7,285	955,955	2,772,645	151,221,504
2028	7,686	1,026,830	2,987,025	165,943,231
% Change 2008-2018 % Change	3%	11%	11%	7%
2018-2028	6%	7%	7% 8%	
Source: EMSI				

#### Table 23: Total Jobs by Geography

#### Table 24: Population by Geography

Year	Sudbury	Middlesex County	Boston MSA	US
2008	16,952	1,477,069	4,483,129	304,093,955
2018	18,793	1,615,086	4,871,773	328,038,851
2028	18,961	1,671,582	5,046,453	340,591,282
% Change 2008-2018 % Change	11%	9%	9%	8%
2018-2028	1%	3%	4%	4%

Source: EMSI

Figure 18 below compares the job growth trajectory in Sudbury to the county, MSA, and nation, indexed to 2008. Sudbury fared better than the county, MSA, and nation during the recessionary period of 2008-2009. Sudbury did, however, begin to experience job market volatility in 2010, a trend that continued through 2013.

Between 2010 and 2011, Sudbury experienced job losses in the manufacturing and utility sectors. Specifically, Pharmaceutical and Medicine Manufacturing (NAICS 3254) lost 141 jobs and Electric Power Generation, Transmission, and Distribution (NAICS 2211) lost 138 jobs.<sup>14</sup> These represented losses of 78% and 48% of the total jobs in these industries in Sudbury, respectively. Volatility in the number of child daycare positions between 2011 and 2013 caused overall job figures to bounce around, before stabilizing in 2014. Job growth in Sudbury has steadied and tracked to the region since that time.

<sup>&</sup>lt;sup>13</sup> Job and population projections from EMSI are based on historic trends locally, regionally, and nationally and assumes a "status quo" future trajectory. Changes in land use policies and development patterns are likely to impact these projections.

<sup>&</sup>lt;sup>14</sup> EMSI



## Economic Output by Sector

The Professional, Scientific, and Technical Services; Wholesale Trade; and Government sectors are sizable contributors to Sudbury's economy. Together, these sectors account for nearly 53% of Sudbury's economic output (Gross Regional Product, GRP) and 38% of its jobs. Within these sectors, Education and Hospitals; Architectural, Engineering, and Related Services; Computer Systems Design and Related Services; and Machinery, Equipment, and Supplies Merchant Wholesalers are prevalent sub-industries.



Sector Share of Sudbury GDP

Source: EMSI

#### Figure 19: Top Sector Share of Sudbury GDP

Table 25 shows each sector's contribution to GRP in 2017. The Professional, Scientific, and Technical Services industry is the town's greatest contributor to its GRP, at 23.6%. Wholesale Trade follows, contributing 17.5% of GRP. These contributions are similar to the comparison geographies, although Manufacturing constitutes a greater portion of GRP in the county, MSA, and the US.

NAICS (2- digit)	Description	2017 GRP, Sudbury	Sector Share of Sudbury GRP (%)	Sector Share of Middlesex County GRP (%)	of Boston	Sector Share of US GRP (%)
54	Professional, Scientific, and Technical Services	\$213,890,917	23.6%		14.3%	7.9%
42	Wholesale Trade	\$158,719,045			6.3%	6.6%
90	Government	\$105,020,119	11.6%	7.1%	8.8%	13.0%
62	Health Care and Social Assistance	\$79,018,965	8.7%	6.5%	9.4%	8.0%
44	Retail Trade	\$71,021,636	7.8%	3.9%	4.8%	6.4%
31	Manufacturing	\$55,916,398	6.2%	14.7%	10.2%	13.4%
52	Finance and Insurance	\$43,495,655	4.8%	5.8%	13.7%	9.3%
56	Administrative and Support and Waste Management and Remediation Services	\$32,720,289	3.6%	3.1%	3.2%	3.4%
53	Real Estate and Rental and Leasing	\$27,482,816	3.0%	2.6%	3.5%	4.0%
72	Accommodation and Food Services	\$24,561,366	2.7%	2.0%	2.6%	3.1%
23	Construction	\$23,536,830	2.6%	4.3%	4.5%	4.9%
81	Other Services (except Public Administration)	\$22,346,259	2.5%	1.4%	1.6%	2.1%
51	Information	\$18,486,521	2.0%	11.0%	7.0%	5.5%
22	Utilities	\$13,586,951	1.5%	0.7%	1.1%	1.8%
71	Arts, Entertainment, and Recreation	\$9,043,988	1.0%	0.6%	1.0%	1.1%
61	Educational Services	\$4,828,933	0.5%	4.6%	3.3%	1.3%
48	Transportation and Warehousing	\$3,212,576	0.4%	1.2%	1.8%	3.4%
55	Management of Companies and Enterprises	\$191,506	0.0%	3.5%	2.6%	2.2%
11	Agriculture, Forestry, Fishing and Hunting	\$0	0.0%	0.3%	0.2%	1.1%
21	Mining, Quarrying, and Oil and Gas Extraction	\$0	0.0%	0.1%	0.1%	1.5%
TOTAL		\$907,080,771	100%	100%	100%	100%

#### Table 25: Gross Regional Product by 2-Digit NAICS Code, 2017

Source: EMSI

## Employment by Sector

Table 26 on the following page presents employment data for the Town of Sudbury by 2-digit NAICS code, as well as the makeup of employment by sector in the county, MSA, and nation. Health Care and Social Assistance (NAICS 61) provided nearly 20% of Sudbury's jobs in 2018, which is higher than the concentration of the industry in the county, MSA, and country. Professional, Scientific, and Technical Services; Government; and Retail Trade also provide significant concentrations of the town's jobs, each making up over 10% of employment. Figure 20 displays the top sectors in terms of share of Sudbury jobs.

NAICS (2-digit)	Description	2018 Jobs, Sudbury	Sector Share of Sudbury Jobs (%)	Sector Share of Middlesex County Jobs (%)	Sector Share of Boston MSA Jobs (%)	Sector Share of US Jobs (%)
62	Health Care and Social Assistance	1,428	19.6%	12.5%	15.9%	12.9%
54	Professional, Scientific, and Technical Services	1,180	16.2%	14.1%	10.2%	6.1%
90	Government	1,078	14.8%	9.9%	11.5%	16.2%
44	Retail Trade	853	11.7%	8.2%	9.3%	10.5%
42	Wholesale Trade	526	7.2%	3.6%	3.1%	3.9%
72	Accommodation and Food Services	515	7.1%	6.8%	8.3%	9.0%
81	Other Services (except Public Administration)	371	5.1%	3.4%	3.8%	4.0%
56	Administrative and Support and Waste Management and Remediation Services	327	4.5%	5.5%	5.2%	6.0%
71	Arts, Entertainment, and Recreation	249	3.4%	1.3%	1.7%	1.5%
52	Finance and Insurance	189	2.6%	2.9%	5.3%	4.1%
31	Manufacturing	148	2.0%	7.7%	6.3%	8.2%
23	Construction	146	2.0%	4.2%	4.0%	4.8%
61	Educational Services	82	1.1%	9.2%	6.5%	2.6%
53	Real Estate and Rental and Leasing	68	0.9%	1.1%	1.4%	1.5%
48	Transportation and Warehousing	51	0.7%	1.8%	2.2%	3.5%
51	Information	51	0.7%	4.2%	2.9%	1.9%
22	Utilities	21	0.3%	0.2%	0.2%	0.4%
55	Management of Companies and Enterprises	<10	0.0%	2.9%	2.1%	1.5%
11	Agriculture, Forestry, Fishing and Hunting	0	0.0%	0.3%	0.2%	0.9%
21	Mining, Quarrying, and Oil and Gas Extraction	0	0.0%	0.0%	0.0%	0.4%
99	Unclassified Industry	0	0.0%	0.0%	0.0%	0.2%
TOTAL		7,285	100%	100%	100%	100%

Source: EMSI





#### Source: EMSI Figure 20: Top Sectors Share of Sudbury Jobs

Table 27 shows the top 20 industries in the Town of Sudbury at the more detailed 4-digit NAICS level, in terms of 2018 job figures. Child Day Care Services and Education and Hospitals (Local Government) are the town's top employers with 788 and 783 jobs respectively in 2018, each making up 10.8% of total jobs. The Child Day Care Services industry has low average earnings<sup>15</sup> of \$35,071 per job per year. Average earnings are higher for Education and Hospitals (Local Government) at \$89,673. Many of the top 4-digit industries display very high average earnings with six showing average earnings above \$100,000.

NAICS (4 digit)	Description	2018 Jobs, Sudbury	Sector Share of Sudbury Jobs (%)	2017 Avg. Earnings, Sudbury
6244	Child Day Care Services	788	10.8%	\$35,071
9036	Education and Hospitals (Local Government)	783	10.8%	\$89,673
5413	Architectural, Engineering, and Related Services	441	6.1%	\$140,627
5415	Computer Systems Design and Related Services	441	6.0%	\$172,373
7225	Restaurants and Other Eating Places	396	5.4%	\$26,457
4451	Grocery Stores	298	4.1%	\$30,630
4411	Automobile Dealers	219	3.0%	\$79,416
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	213	2.9%	\$115,831
7139	Other Amusement and Recreation Industries	213	2.9%	\$23,980
6231	Nursing Care Facilities (Skilled Nursing Facilities)	204	2.8%	\$52,214
5613	Employment Services	162	2.2%	\$64,005
6241	Individual and Family Services	157	2.2%	\$30,443
5617	Services to Buildings and Dwellings	147	2.0%	\$57,108
9039	Local Government, Excluding Education and Hospitals	143	2.0%	\$101,526
5242	Agencies, Brokerages, and Other Insurance Related Activities	129	1.8%	\$101,085
6212	Offices of Dentists	108	1.5%	\$69,249
5417	Scientific Research and Development Services	108	1.5%	\$132,626
8131	Religious Organizations	106	1.5%	\$25,602
8121	Personal Care Services	102	1.4%	\$32,740
7211	Traveler Accommodation	97	1.3%	\$42,470
TOTAL		5,255	72.1%	

#### Table 27: Employment & Earnings, Top 20 4-Digit NAICS, Sudbury

Source: EMSI

Table 28 shows the historical and projected job growth in Sudbury, by sector. Between 2013 and 2018, the Health Care and Social Assistance, and Professional, Scientific, and Technical Services sectors

<sup>&</sup>lt;sup>15</sup> Includes wages and supplemental benefits

experienced the most growth in Sudbury, in terms of the number of jobs. Both sectors are expected to continue to drive growth through 2023. The addition of jobs to the Child Day Care Services (NAICS 6244), Computer Systems Design and Related Services (NAICS 5415), and Specialized Design Services (NAICS 5414) industries are large contributors to the growth in these sectors. Only two sectors showed declines: Manufacturing and Finance, and Insurance. Neither of these sectors accounts for a substantial share of the town's economy (each less than 3% of jobs), and employment declines over the study period were minimal.

					2013 -	2013 -	2018 -	2018 -
		2013	2018	2023	2018	2018 %	2023	2023 %
NAICS	Description	Jobs	Jobs	Jobs	Change	Change	Change	Change
62	Health Care and Social Assistance	1,437	1,603	1,739	166	12%	136	8%
54	Professional, Scientific, and Technical Services	1,235	1,346	1,410	111	9%	64	5%
71	Arts, Entertainment, and Recreation	193	277	327	84	44%	50	18%
81	Other Services (except Public Administration)	511	574	617	63	12%	43	7%
72	Accommodation and Food Services	466	521	548	55	12%	27	5%
90	Government	977	1,026	1,069	49	5%	43	4%
42	Wholesale Trade	497	536	533	39	8%	(3)	(1%)
23	Construction	175	202	210	27	15%	8	4%
44	Retail Trade	847	870	873	23	3%	3	0%
56	Administrative and Support and Waste Management and Remediation Services	389	411	418	22	6%	7	2%
22	Utilities	0	21	12	21	Insf. Data	(9)	(43%)
53	Real Estate and Rental and Leasing	71	83	84	12	17%	1	1%
61	Educational Services	80	90	97	10	13%	7	8%
48	Transportation and Warehousing	50	56	60	6	12%	4	7%
11	Agriculture, Forestry, Fishing and Hunting	0	0	0	0	0%	0	0%
21	Mining, Quarrying, and Oil and Gas Extraction	0	0	0	0	0%	0	0%
51	Information	54	54	52	0	0%	(2)	(4%)
99	Unclassified Industry	0	0	0	0	0%	0	0%
52	Finance and Insurance	209	206	196	(3)	(1%)	(10)	(5%)
31	Manufacturing	169	147	90	(22)	(13%)	(57)	(39%)
55	Management of Companies and Enterprises	<10	<10	0 1	nsf. Data	Insf. Data I	nsf. Data I	Insf. Data
TOTAL		7,361	8,023	8,334	662	9%	311	4%

#### Table 28: Sector Job Growth, Sudbury

Source: EMSI

### Occupations

Table 29 below compares employment by 2-digit SOC occupation in the town, county, MSA, and nation. Education, Training, and Library Occupations are the top employing occupation category in Sudbury at 15.1%. This is higher than the other three study areas and driven by the high employment share of public schools and childcare in Sudbury. Office and Administrative Support Occupations are the second most prevalent occupations in Sudbury with 12.1% of jobs, and are the top occupation category throughout the other three study areas.

SOC (2-digit)	Description	2018 Jobs, Sudbury	Sector Share of Sudbury Jobs (%)	Sector Share of Middlesex County Jobs (%)	of Boston	Share of US Jobs (%)
25-0000	Education, Training, and Library Occupations	1,097	15.1%	7.0%	6.4%	5.9%
43-0000	Office and Administrative Support Occupations	879	12.1%	14.5%	15.2%	15.5%
41-0000	Sales and Related Occupations	726	10.0%	8.3%	8.8%	9.9%
39-0000	Personal Care and Service Occupations	609	8.4%	3.9%	4.2%	3.7%
11-0000	Management Occupations	526	7.2%	8.8%	7.9%	5.1%
35-0000	Food Preparation and Serving Related Occupations	523	7.2%	6.9%	8.2%	8.9%
15-0000	Computer and Mathematical Occupations	376	5.2%	6.7%	4.6%	3.0%
53-0000	Transportation and Material Moving Occupations	304	4.2%	4.4%	4.8%	6.8%
17-0000	Architecture and Engineering Occupations	287	3.9%	3.3%	2.3%	1.7%
13-0000	Business and Financial Operations Occupations	271	3.7%	5.9%	6.0%	5.2%
37-0000	Building and Grounds Cleaning and Maintenance Occupations	268	3.7%	3.6%	3.3%	3.2%
29-0000	Healthcare Practitioners and Technical Occupations	242	3.3%	5.1%	6.6%	5.8%
49-0000	Installation, Maintenance, and Repair Occupations	220	3.0%	2.9%	3.0%	4.0%
31-0000	Healthcare Support Occupations	188	2.6%	2.4%	2.8%	2.8%
51-0000	Production Occupations	152	2.1%	4.1%	3.9%	6.1%
47-0000	Construction and Extraction Occupations	141	1.9%	3.4%	3.2%	4.0%
21-0000	Community and Social Service Occupations	122	1.7%	1.9%	2.1%	1.7%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	102	1.4%	1.5%	1.6%	1.4%
33-0000	Protective Service Occupations	101	1.4%	2.0%	2.3%	2.4%
19-0000	Life, Physical, and Social Science Occupations	83	1.1%	2.4%	1.5%	0.8%
23-0000	Legal Occupations	44	0.6%	0.6%	0.9%	0.8%
55-0000	Military-only occupations	19	0.3%	0.2%	0.2%	0.6%
45-0000	Farming, Fishing, and Forestry Occupations	<10	0.1%	0.2%	0.2%	0.8%
99-0000	Unclassified Occupation	0	0.0%	0.0%	0.0%	0.0%
Total		7,285	100.0%	100.0%	100.0%	100.0%

#### Table 29: Employment by 2-Digit SOC Code, 2018

Source: EMSI

Preschool and Kindergarten Teachers employs the most workers of any 4-digit SOC occupation in Sudbury with 364 jobs in 2018, which constitutes 5% of total jobs. Childcare Workers and Teacher Assistants follow with 235 and 232 jobs, respectively. Many of these jobs can be attributed to childcare and preschool centers within the town including Next Generation Children's Center, Sudbury Extended Day, Leap School and Summer Fun, Sunny Hill Preschool, and others. General and Operations Managers have the highest average hourly wages of the top 20 occupations with earnings of \$68.30 per hour. Earnings vary widely across this list of occupations with a minimum of \$12.60 per hour for Cashiers. **Table 30: Employment & Earnings, Top 20 4-Digit SOC, Sudbury** 

SOC (4-digit) Descrip	tion	2018 Jobs, Sudbury	Sector Share of Sudbury Jobs (%)	2018 Avg. Hourly Earnings, Sudbury
25-2010 Preschool and Kinderga	rten Teachers	364	5.0%	\$19.33
39-9010 Childcare Workers		235	3.2%	\$14.32
25-9040 Teacher Assistants		232	3.2%	\$16.65
41-2030 Retail Salespersons		210	2.9%	\$14.74
25-2020 Elementary and Middle	School Teachers	199	2.7%	\$37.82
15-1130 Software Developers an	d Programmers	187	2.6%	\$55.70
43-6010 Secretaries and Adminis	strative Assistants	164	2.3%	\$24.16
11-1020 General and Operations	Managers	155	2.1%	\$68.30
35-3020 Fast Food and Counter	Workers	152	2.1%	\$13.35
41-2010 Cashiers		148	2.0%	\$12.60
39-9020 Personal Care Aides		137	1.9%	\$14.99
41-4010 Sales Representatives, V Manufacturing	Wholesale and	128	1.8%	\$45.26
37-2010 Building Cleaning Work	ers	127	1.7%	\$17.36
43-9060 Office Clerks, General		123	1.7%	\$19.75
25-2030 Secondary School Teach	iers	120	1.7%	\$38.24
31-1010 Nursing, Psychiatric, ar	d Home Health Aides	118	1.6%	\$15.94
37-3010 Grounds Maintenance V	Vorkers	118	1.6%	\$18.93
53-7060 Laborers and Material I	Movers, Hand	114	1.6%	\$16.38
43-4050 Customer Service Repre	sentatives	108	1.5%	\$21.84
35-3030 Waiters and Waitresse	5	107	1.5%	\$14.96
TOTAL		3,246	44.6%	

Source: EMSI

## Earnings by Occupation

Median annual earnings are lower in Sudbury than in the surrounding county and MSA. Median annual earnings for jobs within Sudbury are \$44,300 which is considerably lower than the median earnings of Sudbury residents which is \$81,609.<sup>16</sup> This points to a mismatch between resident skills and the types of employment opportunities in town, and explains the high level of cross-commuting illustrated in Table 31.

<sup>&</sup>lt;sup>16</sup> US Census American Community Survey 2017 5-Year Estimates.

#### Table 31: Median Annual Earnings by Occupation

SOC	Description	Median Annual Earnings, Sudbury	Median Annual Earnings, Middlesex County	Median Annual Earnings, Boston MSA	Median Annual Earnings, US
11-0000	Management Occupations	\$110,635	\$116,953	\$110,678	\$91,240
13-0000	Business and Financial Operations Occupations	\$78,049	\$77,620	\$75,980	\$67,068
15-0000	Computer and Mathematical Occupations	\$97,903	\$98,055	\$93,331	\$82,563
17-0000	Architecture and Engineering Occupations	\$86,638	\$91,935	\$87,020	\$78,218
19-0000	Life, Physical, and Social Science Occupations	\$73,920	\$77,738	\$75,160	\$65,911
21-0000	Community and Social Service Occupations	\$47,566	\$46,219	\$45,903	\$43,437
23-0000	Legal Occupations	\$84,205	\$86,199	\$88,484	\$78,50
25-0000	Education, Training, and Library Occupations	\$45,182	\$61,562	\$58,654	\$47,11
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	\$44,581	\$47,833	\$47,079	\$41,37
29-0000	Healthcare Practitioners and Technical Occupations	\$77,971	\$77,384	\$80,493	\$65,70
31-0000	Healthcare Support Occupations	\$34,201	\$34,441	\$34,014	\$28,60
33-0000	Protective Service Occupations	\$53,863	\$51,294	\$51,317	\$39,85
35-0000	Food Preparation and Serving Related Occupations	\$26,710	\$26,570	\$26,438	\$21,82
37-0000	Building and Grounds Cleaning and Maintenance Occupations	\$31,412	\$33,652	\$32,481	\$24,63
39-0000	Personal Care and Service Occupations	\$27,107	\$29,665	\$28,881	\$23,32
1-0000	Sales and Related Occupations	\$34,723	\$35,249	\$32,729	\$28,69
43-0000	Office and Administrative Support Occupations	\$42,098	\$42,697	\$41,602	\$34,78
45-0000	Farming, Fishing, and Forestry Occupations	Insf. Data	\$31,468	\$30,717	\$24,34
47-0000	Construction and Extraction Occupations	\$51,240	\$53,230	\$50,991	\$39,37
19-0000	Installation, Maintenance, and Repair Occupations	\$51,688	\$53,463	\$51,793	\$43,17
51-0000	Production Occupations	\$39,303	\$41,027	\$38,347	\$33,90
53-0000	Transportation and Material Moving Occupations	\$33,179	\$35,003	\$35,083	\$31,88
55-0000	Military-only occupations	\$0	\$41,847	\$40,444	\$34,60

Source: EMSI

### **Commuting Patterns**

In 2015, there were 760 people who were both employed and living in the Town of Sudbury. Over 90% of resident workers (7,260) commute out of Sudbury for work, while over 88% of workers (5,649) commute into the town for work.



Figure 21: Commute Patterns, Sudbury

Table 32 on the following page shows the industry of employment of Sudbury residents compared to jobs located in Sudbury. This data provides insight into how the skills of Sudbury's resident workforce compare to the employment opportunities available in town. Industries in which a high share of residents work but represent a comparatively smaller share of the town's employment base are industries for which residents must commute out of Sudbury for job opportunities. Collectively, Finance and Insurance, Real Estate and Rental and Leasing; and Manufacturing, stand out as industries that collectively employ a high share of residents (approximately 25%), but account for just 6% of Sudbury jobs.

Likewise, industries with a higher share of jobs than residents must attract workers from out of town. Wholesale Trade, one of the top industries in Sudbury in terms of employment, has more than double the share of jobs than residents. The Industrial Machinery and Equipment Merchant Wholesalers subindustry (NAICS 423830) is a major driver of Wholesale Trade jobs in Sudbury. In 2018, this subindustry had 221 jobs within the town with average earnings per job of \$116,295.

NAICS (2- digit)	Description	Sudbury Residents Employed by Industry		dian Annual Earnings	Share of Sudbury Residents Employed in Industry	Share of Sudbury Jobs in Industry
11 & 21	Agriculture, Forestry, Fishing and Hunting, and					
	Mining	6	-		0%	0%
23	Construction	206	\$	54,886	2%	2%
31	Manufacturing	1,181	\$	125,396	13%	2%
42	Wholesale Trade	91	\$	93,664	1%	7%
44	Retail Trade	583	\$	30,190	7%	12%
22 & 48	Transportation and Warehousing, and Utilities	140	\$	85,263	2%	1%
51	Information	398	\$	148,393	4%	1%
52 & 53	Finance and Insurance, and Real Estate and Rental					
JZ & JS	and Leasing	1,047	\$	128,472	12%	4%
54, 55, &	Professional, Scientific, and Technical Services;					
56 56	Management; Administrative and Support; and	2,178	\$	138,269	24%	21%
50	Waste Management and Remediation Services					
61 & 62	Educational Services and Health Care and Social					
01 & 02	Assistance	2,055	\$	60,481	23%	21%
71 <mark>&amp;</mark> 72	Arts, Entertainment, and Recreation; Accommodation and Food Services	597	\$	5,855	7%	11%
81	Other Services (except Public Administration)	279	\$	20,347	3%	5%
90	Government	189	\$	76,542	2%	15%
TOTAL		8,950	\$	91,418	100%	100%

#### Table 32: Industry of Employment of Residents vs. Sudbury Job Base

Source: ACS 2017 5-Year Estimates; EMSI

Retail Trade; Arts, Entertainment, and Recreation and Accommodation and Food Services also have more jobs than residents. Grocery Stores (NAICS 4451), Automobile Dealers (NAICS 4411), Other Amusement and Recreation Activities (NAICS 7139), and Restaurants and Other Eating Places (NAICS 7225) are responsible for a large number of the jobs in these sectors.

## Local Labor Force

### Labor Force Characteristics

To understand how Sudbury's labor force compares to its neighbors, we compared the town's unemployment and labor force participation rates to those of the seven towns that border Sudbury. Table 33 compares unemployment rates for 2017 across the eight towns, the county, and the state according to the Bureau of Labor Statistics. Three adjacent towns and the state show a higher unemployment rate than Sudbury, while four towns and the county show unemployment rates that are lower than that of Sudbury.

Geography	Unemployment Rate, Not Seasonally Adjusted	
Hudson	3.8%	
State of MA	3.7%	
Maynard	3.2%	
Marlborough	3.1%	
Sudbury	3.0%	
Middlesex County	3.0%	
Framingham	3.0%	
Concord	3.0%	
Wayland	2.8%	
Stow	2.8%	

#### Table 33: Unemployment Rate Comparison, 2017

Source: US Bureau of Labor Statistics

Historically, Sudbury's unemployment rate has been below that of the county, state, and nation.



Unemployment Rate, 2001-2017

Table 34 displays the labor force participation rates (LFPR)<sup>17</sup> in 2017 for Sudbury and surrounding towns,

the county, and the state. Sudbury saw an LFPR of 65.7% in 2017, which was less than the county, state, and most surrounding towns. This indicates a lower than average share of the town's population is part

<sup>&</sup>lt;sup>17</sup> The US Census Bureau defines the Labor Force Participation Rate as the proportion of the total 16 years old and over population that is in the labor force. The labor force consists of people classified as employed or unemployed. Unemployed is defined as (1) neither "at work" nor "with a job but not at work" during the reference week, and (2) were actively looking for work during the last 3 weeks, and (3) were available to accept a job.

of the labor force, and a higher than average share of individuals are in groups who choose not to work, such as students, homemakers, and retirees.

Geography	Labor Force Participation Rate
Marlborough	73.9%
Maynard	72.2%
Framingham	71.7%
Stow	71.4%
Middlesex County	69.8%
Hudson	68.7%
Wayland	68.4%
State of MA	67.3%
Sudbury	65.7%
Concord	56.1%

#### Table 34: Labor Force Participation Rate, 2017

Source: ACS 2013-2017 5-Year Estimates

### Major Employment Centers

Employment in Sudbury is primarily clustered along the Route 20/Boston Post Road corridor, as exhibited in Figure 23. This area, particularly near the intersections of Union Avenue and Nobscot Road, is the main commercial hub of the town. Many retailers, including chain stores and local businesses, are located in this area. Meadow Walk Sudbury, a new mixed-use development located at the center of this cluster, includes 75,000 square feet of retail space anchored by a Whole Foods and is currently still being leased. The development also includes 250 luxury apartments, 60 active-adult condominiums, and 48 assisted-living units.<sup>18</sup>

The second area of concentration as shown on the map to the northwest of the Route 20/Boston Post Road cluster is Sudbury Public Schools' Administrative Offices, to which all school district employment is attributed. On a day-to-day basis, however, the school district staff report to individual schools throughout the town.

<sup>&</sup>lt;sup>18</sup> <u>http://www.meadowwalksudbury.com/</u>



Figure 23: Jobs per Square Mile, Town of Sudbury, 2015

## Major Employers

Table 35 below provides details on the Town of Sudbury's largest employers. According to the Massachusetts Executive Office of Labor and Workforce Development, there are 17 establishments that employ at least 100 workers. This list encompasses a broad array of 4-digit industries, the most common of which being Grocery Stores (NAICS 4451), Elementary and Secondary Schools (NAICS 6111), and Nursing Care Facilities (NAICS 6231). Each of these contains two of the town's largest employers.

#### Table 35: Sudbury Employers with 100+ Employees

Employers with 100+ Workers, Town of Sudbury					
Company Name	Number of Employees	NAICS Description			
Sudbury Farms	250-499	4451 Grocery Stores			
A Blade of Grass LLC	100-249	5617 Services to Buildings and Dwellings			
Adtech Systems	100-249	4431 Electronics and Appliance Stores			
Bosse Sports	100-249	7139 Other Amusement and Recreation Industries			
Bridges by Epoch at Sudbury	100-249	6231 Nursing Care Facilities			
Curtis Middle School	100-249	6111 Elementary and Secondary Schools			
Lincoln Sudbury Regional High	100-249	6111 Elementary and Secondary Schools			
Longfellow's Wayside Inn	100-249	7121 Museums, Historical Sites, and Similar Institutions			
MA State Police Crime Lab	100-249	9211 Executive, Legislative, and Other General Government Support			
Method's Machine Tools Inc.	100-249	4238 Machinery, Equipment, and Supplies Merchant Wholesalers			
Shaw's Supermarket	100-249	4451 Grocery Stores			
SPEC Center	100-249	6213 Offices of Other Health Practitioners			
Staples Industrial	100-249	4214 Professional and Commercial Equipment and Supplies Wholesalers			
Sudbury Pines Extended Care	100-249	6231 Nursing Care Facilities			
Whole Foods Market	100-249	4451 Grocery Stores			
Wingate At Sudbury	100-249	6231 Nursing Care Facilities			
Winnetu Inn & Resort	100-249	7211 Traveler Accommodation			

Source: Massachusetts Office of Labor and Workforce Development

#### **Retail Businesses**

Of the retail businesses located within Sudbury, 24% are Food Services and Drinking Places. This is followed by Miscellaneous Store Retailers (13%) and Clothing and Clothing Accessories Stores (11%). Table 36 and Figure 24 display the breakdown of top retail businesses by 3-digit NAICS industry in Sudbury.

#### Table 36: Sudbury Retail Businesses, 2017

Industry Group	NAICS	Number of Businesses
Food Services & Drinking Places	722	30
Miscellaneous Store Retailers*	453	16
Clothing & Clothing Accessories Stores	448	14
Sporting Goods, Hobby, Book & Music Stores	451	11
Furniture & Home Furnishings Stores	442	10
Health & Personal Care Stores	446	10
Food & Beverage Stores	445	8
Motor Vehicle & Parts Dealers	441	7
Bldg Materials, Garden Equip. & Supply Stores	444	7
Nonstore Retailers	454	5
Electronics & Appliance Stores	443	3
Gasoline Stations	447	2
General Merchandise Stores	452	1
TOTAL		124

Source: ESRI

\*Miscellaneous Store Retailers includes: Office supplies, Stationary, and Gift Stores; Used Merchandise Stores; and Florist.



Sudbury Retail Market, 2017

Source: ESRI Figure 24: Sudbury Retail Businesses, 2017

## Municipal Fiscal Health

This section compares multiple fiscal indicators of Sudbury and surrounding Towns, based on data provided by the Massachusetts Department of Revenue.

Sudbury relies heavily on its residential tax base with 93% of overall assessed value. Both its residential and commercial tax rates fall in the middle of the range of neighboring communities. Per capita spending is on the higher end of neighboring Towns, with the majority of revenues coming from tax levies.

## Value by Property Class

Sudbury's total assessed value of \$4.7 billion puts it in the middle compared to its neighbors. It has a high residential tax base at about 93%, which is similar to many of its neighbors. Only 1% of Sudbury's tax base is industrial and 4% is commercial.



Assessed Value by Class, 2019

Figure 25: Assessed Value by Property Class, 2019

New growth in Sudbury can predominantly be attributed to the residential property class. 78% of new growth in 2019 is attributed to the residential property class which is up from 48% in 2018. Personal property has consistently been the second-largest driver of new growth and, in 2019, 22% of new growth was attributed to this property class.



### New Growth Value, Sudbury, 2015-2019

Figure 26: New Growth, Sudbury, 2015-2019

## Tax Levy by Property Class

The chart below compares the makeup of the tax levy by property class for 2019. Contribution to the tax levy by class varies across the Towns with Sudbury having 91% sourced from the residential property class, 5% from commercial, 1% from industrial, and 3% from personal property. Residential makes up the largest portion of the tax levy for all Towns, with three Towns having an even higher portion of their tax levy attributed to residential than Sudbury.



### Property Tax Rates

In terms of 2019 tax rates, Sudbury falls in the middle when compared to the seven neighboring Towns. Sudbury has a split tax rate with a rate of \$17.91 for residential property and a rate of \$24.30 for commercial, industrial, and personal property (CIP). Maynard, Hudson, Framingham, and Marlborough also have a split rate.

Sudbury's residential property tax rate of \$17.91 is lower than three surrounding Towns and higher than four. Residential property tax rates of these Towns range from \$14.07 to \$21.04. Sudbury's CIP property tax rate is lower than that of four neighboring Towns and higher than that of three neighboring Towns. CIP property tax rates have a broader range than residential property tax rates, ranging from \$14.19 to \$34.10.



# Property Tax Rates, 2019

### Per Capita Spending

Sudbury spent \$5,301 per capita in 2018, which is on the higher end when compared to its neighboring Towns. Figure 29 shows each Town's operating budget per capita in 2018. Sudbury's per capita spending is above spending in Framingham, Maynard, Stow, Hudson, and Marlborough, but below that of Concord and Wayland.



## Operating Budget per Capita, 2018

## **Budget** Composition

The pie charts below outline the sources of revenue and expenditures for the Town of Sudbury for 2018. About 82% of revenues for 2018 were sourced from tax levies (real and personal property tax) which is higher than the average for all Massachusetts municipalities (64%).

Local Receipts consist of local fees, fines, permits, and other charges, including penalties and licenses. The largest component of local receipts is the automobile excise tax. These receipts are relatively small compared to property tax revenues.

State Aid consists primarily of Chapter 70 School Aid (76%) and Unrestricted General Government Aid (22%), which includes distributions from state lottery revenues and other sources. State aid is distributed to municipalities based on various complex formulas, primarily based on household incomes and the property wealth (aggregate assessed value) of each of the state's communities. As an affluent community, Sudbury receives a relatively low level of State Aid: 8% of municipal revenues compared to an average of 14% across all municipalities.



Figure 30: Avg. Revenue by Source, 2018

On the expenditure side, more than half of the budget (66%) was attributed to Education compared to an average of 47% across all Massachusetts cities and towns. Other significant expenditures in Sudbury include Fixed Costs consisting primarily of health insurance and pension costs (10%), and Public Works (6%).



Source: Division of Local Services, MA Department of Revenue Figure 31: General Fund Expenditures by Function, 2017

# Historic and Cultural Resources

Among the oldest towns in New England, Sudbury has one of the longest-running Town Meeting forms of government. The town boasts a rich history and strong cultural resources. For example, the Wayside Inn, one of Sudbury's historic landmarks, is said to be the nation's oldest operating inn which started operating in 1716 as How's Tavern. The Wayside Inn's longevity is accredited to Henry Ford who purchased the property in 1923, restored it, and donated it to a charitable foundation which continues the operation today. Sudbury also played a significant role in King Philip's War, contributing the most militia members of any town and serving as the site of a battle in 1676. These, along with historical farms, houses, cemeteries, churches, parks, schools, and landscapes, as well as events, define the character of Sudbury and contribute to its sense of place and quality of life. The Town of Sudbury is committed to preserving its rich historical heritage through a strong preservation effort.

## **Historic Overview**

Named after a town in the County of Suffolk in eastern England, Sudbury was incorporated in 1639 and included its current area plus most of the area within the present Towns of Wayland (split off in 1780) and Maynard (split off in 1871). Before the first permanent European settlements in Sudbury in 1638, the area was home to Nipmuc Indians. The Nipmuc people are descendants of the indigenous Algonquian peoples of Nippenet which means 'the freshwater pond place.

Repeated contact with European settlers and explorers in the 1500s and early 1600s caused multiple epidemics of smallpox and other European diseases in Native American tribes. As a result, many Native Americans died.

The number of permanent European residents of Sudbury in early 1639 was about 130, many of whom came from different boroughs, parishes, and towns in England. To better structure the town, Sudbury's founders had begun to develop not only a new community, but a new government system based on the idea of giving political power directly to its citizens. Through this effort, the Town Meeting structure was developed which borrowed from each system of local government the settlers came from and modeled after the New England Congregational Church meeting.<sup>19</sup> The Town Meeting structure was adopted by other towns in the Massachusetts Bay and Plymouth colonies, and remains an important civic feature across the Commonwealth today.

Reverend Edmund Brown was chosen as the Town's first minister. He and the European settlers planned their new land to operate differently from England's parish/Town governing system. In doing this, the Town Meetings functioned differently from the church.

<sup>&</sup>lt;sup>19</sup> The History of Sudbury, Massachusetts, 1638-1889, Alfred Sereno Hudson <u>https://archive.org/stream/historyofsudbury00huds/historyofsudbury00huds\_djvu.txt</u>
Before the 1670s, there was relatively peaceful coexistence between the neighboring Native Americans and the European immigrants. This all changed when King Phillip's War erupted in 1675. Captain Samuel Wadsworth and his men fought to their death at a battle in the Town's Green Hill area defending the site and winning the war, which lasted until August 1676. Captain Wadsworth and his troops were later buried in the Wadsworth Cemetery near today's King Philip Historic District.

At the start of the American Revolutionary War in 1775, Sudbury's territory included the present Town of Wayland and part of the present Town of Maynard with a population about 2,160. Due to its large size, the Town of Sudbury was able to supply men to participate in the war. Almost all of the adult male population of about 500 living within the Town boundaries fought in the Revolutionary War and about half of them were experienced soldiers. Sudbury Militia soldier Josiah Haynes at the age of 78 died at the Battle of Lexington on April 19, 1775. The Haynes School is named in his honor.

In the early 19<sup>th</sup> century, the Town continued to change and grow with more people, a railroad system (1871), and businesses like Enoch Kidder's leather shop on the corner of Boston Post Road and Concord Road, along with a gristmill, sawmill, and machine shops. This era also saw the rise of greenhouse industry in Sudbury, establishing it as the carnation capital of the region. In the later 19<sup>th</sup> century, education and culture began to develop in town. In 1861, the Goodnow Library was bequeathed to the Town by John Goodnow.

By the early 20<sup>th</sup> century, the Town was dealing with automobile traffic and excessive speeding. In 1905, it was estimated that about 100 cars per day were passing along the Boston Post Road, which was significant at the time.<sup>20</sup> In the 1920s, Henry Ford made an impact in Sudbury by purchasing the Wayside Inn and surrounding properties, and building a chapel and fieldstone grist mill. In addition, Mr. Ford moved the Redstone School to its current site, and employed and trained many young boys in the area via The Wayside Inn Trade School.

By the 1920s and 1930s, commercial farming was thriving with many commercial trucks, chicken, and fox farms. While business was booming, fire disasters were a major concern as there was limited capacity to combat fires adequately. Some notable fire disasters in town occurred at Hunt's Store in 1922, the Sudbury Music Hall in 1925, and the original Town Hall in 1930. Soon after the last fire in 1930, the Town formed its first Fire Department comprised of local farmers and businessmen.

Before the 1940s, Sudbury was a rural community with many small farms and a steady population. After World War II, Sudbury's population and industry grew rapidly. The first Police Department was formed in the 1940s with the Chairman of the Select Board serving as acting chief, and one full-time officer kept a small office at the Town Hall. By the 1950s, the population was at the highest in the Town's history and talk about how to fund services for residents had started. To address these issues the Planning Board appointed an Industrial Development Board to expand the commercial base in town. As a response,

<sup>&</sup>lt;sup>20</sup> Sudbury Chamber of Commerce, <u>https://www.sudbury.org/home</u>

Raytheon opened in 1958 employing 2,100 people. Shortly after that Sperry Rand opened in 1960, followed by Star Market and then First National supermarket which is now known as Sudbury Farms. While these businesses were opening and operating many of the schools in town were being constructed. Lincoln-Sudbury Regional High School in 1956, followed by Peter Noyes and Ephraim Curtis middle schools, and the three elementary schools. Following the schools were services such as the first Post Office, expansion of the Goodnow Library, and first Police Station, all in the 1960s.

#### **Resource Inventories**

With its rich history Sudbury has a variety of noteworthy sites, many of which are listed on the National and State Registers of Historic Places as shown on Map 7. In addition to many buildings, Sudbury is home to a variety of other historic neighborhoods, farms, and landscapes, including the town's many ponds and streams that contribute to Sudbury's overall scenic character. There are over 400 historic sites inventoried in the Massachusetts Cultural Resources Information System (MACRIS).<sup>21</sup> Sudbury, like many communities in the country, started off as a rural community with many small farms.

Of special note is the Hosmer House. It was built in 1793 by Elisha Wheeler and Asher Goodnow. The house was later purchased by Ella and James Willis who conducted many business operations in the building including a general store and Post Office on the first floor, and ballroom for local dancers in the larger room on the second floor.<sup>22</sup> In 1897, the house was purchased by Reverend Edwin Barrett Hosmer. He lived there with his wife, Abbie Louisa Ames, and five children including daughter Florence Ames Hosmer. Miss Hosmer went on to become a well-known artist. She deeded her house to the Town of Sudbury in 1959. The stipulation in her will was the house and all of its contents be on display to the general public as a living memorial to her father. Miss Hosmer resided in the house until her death in 1979. Before her passing she donated over 450 of her paintings to the Town, which are displayed throughout the house. Today, the Hosmer House is open to the public on certain dates and by appointment.

Developing inventories is one way to understand what resources exist as well as heighten public awareness of these resources. Protection can also come from the federal, state, or local level through formal designations as shown on Map 7. The following provides an overview of these types of designations and how they are established.

<sup>&</sup>lt;sup>21</sup> <u>http://mhc-macris.net/</u>

<sup>&</sup>lt;sup>22</sup> Hosmer House, <u>https://s3-us-west-2.amazonaws.com/cdn.sudbury.ma.us/wp-</u> content/uploads/sites/300/2014/08/HosmerHouse.pdf?version=ee1cd199d20b1d5fc26175a6cbca3eb7



Map 7: Historic Resources in Sudbury

### National Register of Historic Places

The National Register of Historic Places is the official list of the nation's historic places worthy of preservation. It is a federal program of the National Park Service that coordinates and supports public and private efforts to identify, evaluate, and protect America's historic and archeological resources. The process of designation begins with the local Historical Commission which evaluates resources to determine potential eligibility as an individual property or a historic district for listing in the National Register of Historic Places. The property must meet at least one of the following criteria:

- Association with events that have made a significant contribution to the broad patterns of our history;
- Association with the lives of persons significant in our past;
- Embodiment of distinctive characteristics of a type, period, or method of construction, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- Likelihood of yielding information significant in history or prehistory.

The Sudbury Historical Commission forwards their recommendation to the Massachusetts Historical Commission where they determine whether it meets the criteria for listing in the National Register as an individual property or as part of a National Register District. A National Register District nomination occurs if the property is located within areas containing other significant properties.

The National Register status does not place any constraints on private properties when using private funding. However, if using state or federal funding, permits, or licensing, the Massachusetts Historical Commission will review alterations. The Sudbury Historical Commission might reference the National Register status when it reviews Demolition Permits through the Demolition Delay Bylaw discussed later in this section.

### State Register of Historic Places

The State Register of Historic Places was established in 1982 as a comprehensive listing of the buildings, structures, objects, and sites that have received local, state, or national designations based on their historical or archaeological significance. Properties are included on the State Register if they are:

- Listed in or determined eligible for listing in the National Register of Historic Places
- Within local historic districts
- Local, state, and national landmarks
- State archaeological landmarks
- Properties with preservation restrictions

The State Register of Historic Places is published once a year by the Massachusetts Historical Commission.

### Local Historic Districts

Massachusetts municipalities are given the authority to create local historic districts through Chapter 40C of the Massachusetts General Laws. They are established by ordinance or bylaw adopted at Town Meeting by a two-thirds vote. However, in Sudbury, the process is slightly different as the creation of local historic districts is governed by a Special Act of Chapter 40 of the Acts of 1963, as amended in 2005. While still requiring a two-thirds vote by a Town Meeting or a Special Town Meeting, a Warrant Article to propose the creation of a new local historic district can be brought forth in any manner prescribed for all other types of Warrant Articles. As part of this process, the Planning Board is required to hold a duly advertised public hearing, and report its findings and recommendation to the Town Meeting. A historic district may include multiple properties or a single property.

#### Old Sudbury Historic District

The Old Sudbury Historic District (1963), also known as the Sudbury Center Historic District, was the first district to be established in town under Chapter 40 of the Acts of 1963. In 1967, at the Annual Town Meeting, the boundaries were expanded along Hudson Road to the railroad tracks. The boundaries were expanded again in 1967 along Hudson Road to the intersection with Maynard Road. The last expansion of this District was in 2000, and today the Old Sudbury Historic District covers Route 27/Old Sudbury Road between Water Row and Maynard Road, and Concord Road between Morse Road and Penny Meadow Road.



Map 8: Old Sudbury Historic District

The Old Sudbury Historic District is comprised of 98 buildings on the National Register of Historic Places that span over 300 years of growth and development in the community. These sites include the First Parish Meetinghouse, Hosmer House, Loring Parsonage, Town Hall, the Fire Department building, Noyes School, Sudbury Common, and many more. The Town Center was located at the heart of the District in 1723 when the West Meetinghouse was built. Previously, there was a single meetinghouse located near the Sudbury River at what is now known as Wayland's North Cemetery. The first meetinghouse was built in Sudbury shortly after the Town was incorporated in 1639 and served as a place for both worship and Town Meetings. At the time, voters were legally required to attend church both for services and Town Meetings. For the residents on the west side of the river, it was a treacherous passage in the winter.

Eventually, the petition to build a second meetinghouse was granted and in 1722 the Reverend Israel Loring crossed the river to become the preacher there. The Loring Parsonage was constructed soon after so he and his family could better serve the growing population on the other side of the river. Reverend Loring lived and worked there until his death in 1772. Today, the Loring Parsonage is being repurposed

for the Sudbury History Center.<sup>23</sup> It was also in this District that, on the morning of April 19, 1775, over 300 of Sudbury's men gathered to march to Concord to take part in the Battles of Lexington and Concord at the start of the American Revolution.<sup>24</sup>

#### Wayside Inn Historic Districts

The Wayside Inn Districts I and II (1967) were collectively the second historic district to be established in Sudbury. The Districts run from Dutton Road to Boston Post Road/Route 20 and from Peakham Road to Austin Road. In this area is the famous Wayside Inn which claims to be the nation's oldest and longestrunning inn. The Inn was made famous by Henry Wadsworth



Map 9: Wayside Inn Historic Districts

Longfellow when he wrote Tales of the Wayside Inn shortly after his first visit to the Red Horse Inn.<sup>25</sup> Also in this District is the Redstone Schoolhouse, which is said to be where Mary and her little lamb went to school from the famous nursery rhyme "Mary Had A Little Lamb."<sup>26</sup>

The District has 36 designated Local Historic Places including Dutton Lodge, the Parmenter House, Carding Millpond, the Walker House, and more. The District also has one site on the National Register of Historic Places, a 1767 Milestone.

<sup>&</sup>lt;sup>23</sup> Sudbury Historic Society, <u>http://www.sudbury01776.org/historycenter\_2.html</u>

<sup>&</sup>lt;sup>24</sup> Sudbury's Historic Districts, <u>https://sudbury.ma.us/historicdistricts/historicdistricts/</u>

<sup>&</sup>lt;sup>25</sup> Sudbury History, <u>https://www.sudbury.org/</u>

<sup>&</sup>lt;sup>26</sup> The Redstone Schoolhouse, <u>https://www.atlasobscura.com/places/the-redstone-schoolhouse-sudbury-massachusetts</u>

#### King Philip Historic District

The King Philip Historic District was established at the 1972 Annual Town Meeting and expanded at the 2005 Annual Town Meeting. The District sits on Concord Road between Codjer Lane and Boston Post Road/Route 20. This area is historically significant in that it was the site of the King Philip's War Battle of 1676 where Captain Samuel Wadsworth and his troops were killed. The men were honored by erecting the Wadsworth Monument which now appears on the Town seal.

In this District are four designated National Register of Historic Places — Moses Brewer House, Goodnow Library, Civil War-Union Soldier Monument, and a 1767 Milestone. The District also includes 64 designated Local Historic Places including the Goulding House (the oldest existing home in Sudbury), the Clark House, Morse Barn, and many more.

#### George Pitts Tavern Historic District

Adjacent to the King Philip Historic District is the George Pitts Tavern Historic District created in 2008, located along Boston Post Road/Route 20 and Maple Avenue. The District is significant in that it was the location of the famous 1721 Town Meeting that approved the building of a new church in western Sudbury, which ultimately separated Wayland from Sudbury.<sup>27</sup>

The District consists of 18 designated Local Historic Places including the Forrest D. Bradshaw House, the Christopher G. Cutler House, and others.



Map 10: King Philip and George Pitts Tavern Historic Districts

### Cultural Landscapes

Sudbury is defined by its open space and cultural landscapes which stem from its historic farming identity. While farming has decreased over the years, there are 14 landscapes in town and some still practice small scale farming. Table 37 highlights currently landscape assets in town.

<sup>&</sup>lt;sup>27</sup> Sudbury's Historic Districts, <u>https://sudbury.ma.us/historicdistricts/historicdistricts/</u>

#### Table 37: Cultural Landscapes in Sudbury

Landscape, Nursery
Lanuscape, Nuisery
Landscape, Nursery
Vegetable
Vegetable
N/A
Nursery
Equestrian
Small Farm Stand and Hay Fields
N/A
N/A
Equestrian
Equestrian
Landscape, Nursery
N/A

Source: Town of Sudbury

#### Massachusetts Heritage Landscape Inventory Program

Sudbury is one of 37 communities in the Freedom's Way Heritage Association. In 2006, the Massachusetts Department of Conservation and Recreation and the Freedom's Way Heritage Association collaborated to produce the Heritage Landscape Inventory Program. The primary goal of the program is to help communities identify a wide range of landscape resources, particularly those that are significant to the town and provide strategies for preserving them.

A reconnaissance report was prepared for each of the 37 communities as part of Freedom's Way Landscape Inventory. In Sudbury, the inventory identified eight High Priority Heritage Landscapes (listed alphabetically):

Heritage landscapes are special places created by human interaction with the natural environment that help define the character of a community and reflect its past. They are dynamic and evolving; they reflect the history of a community and provide a sense of place; they show the natural ecology that influenced land use patterns; and they often have scenic qualities. The wealth of landscapes is central to each community's character, yet heritage landscapes are vulnerable and ever changing. For this reason, it is important to take the first steps towards their preservation by identifying those landscapes that are particularly valued by the community – a favorite local farm, a distinctive neighborhood or mill village, a unique natural feature or an important river corridor. - MA Department of Conservation and Recreation, Freedom's Way Heritage Association

- 1. Hop Brook Corridor
- 2. Hunt-Bent Farm
- 3. Indian Grinding Stone
- 4. Nobscot Reservation

- 5. Sudbury River Corridor
- 6. Town Center
- 7. Water Row Corridor
- 8. Wayside Inn Complex

For each of the landscape, the reconnaissance report provides recommendations for preservation and enhancement of the landscape's features and attributes.

### Scenic Roadways

Sudbury adopted a Scenic Roads Bylaw in 2003. The purpose of the bylaw is to protect the scenic quality and character of Sudbury's town roads by establishing rules and regulations governing modifications within the public right of way. The bylaw governs the cutting or removal of trees, and the tearing down or alteration of stone walls during repair, maintenance, reconstruction, paving, or other alterations of roads that hold the scenic designation.

There are 32 roads in Sudbury that have been designated with the Scenic Roadway status. These roads are rich in scenic value because of their stone walls, tree canopies, views of rivers, marshlands, mill ponds, farmlands, and historic buildings. Many of the roads in town date back to Colonial times, some began as old Native American paths between encampments, and most of the designated roads appear on the 1830 or 1875 street maps of Sudbury. The narrow width and curved routes of these roadways are important characteristics for the Town to preserve. As shown in Map 11, Sudbury's Historic Districts are all located in areas where there are many Scenic Roadways. Scenic Roadways include:

- Bowditch Road
- Brimstone Lane
- Candy Hill Road
- Clark Road
- Concord Road
- Dakin Road
- Dudley Road
- Dutton Road
- French Road
- Goodman's Hill Road
- Goodnow Road

- Haynes Road
- King Philip Road
- Lincoln Road
- Marlboro Road
- Morse Road
- Mossman Road
- Newbridge Road
- Old County Road
- Old Framingham Road
- Old Garrison Road
- Old Lancaster Road

- Pantry Road
- Peakham Road
- Plympton Road
- Powers Road
- Rice Road
- Water Row
- Wayside Inn Road
- Weir Hill Road
- Willis Road
- Woodside Road

Historically, commerce began to center around the major transportation routes passing through Sudbury dissected by the three major stagecoach routes. The Boston-Worcester line ran through south Sudbury along the "great road," today's Boston Post Road/Route 20. Built in 1790 as the link between Boston and Albany, it now extends to the West Coast. The Boston-Berlin line ran through the center of town along Route 27, and the northern route or Fitchburg Highway traversed the modern-day Route 117. No major highways run through Sudbury, however, the old coach roads still remain the major autoroutes.



Map 11: Scenic Roadways in Sudbury

# **Tools to Protect Historic Resources**

The Town of Sudbury has, through several means, acted to protect and preserve its historic and cultural resources as development and growth continues in town.

#### General and Zoning Bylaws

#### Wayside Inn Historic Preservation Zone

The Wayside Inn Historic Preservation Zone is a residential zoning district with a minimum lot size of five acres. Single-family dwellings are allowed by right and other types of residential developments, such as cluster, flexible, and senior residential communities, require a Special Permit from the Planning Board. Residential apartments or businesses on second or third floors of structures, incentive senior developments, and residential care facilities are prohibited. Other uses allowed by right in the zone include farming and farm stands as well as religious, educational, childcare, and family care uses.

#### Historic Districts and the Zoning Bylaw

While not part of the Zoning Bylaw, they are included in the Town's official Zoning Map and highlighted in the Sudbury Zoning Bylaw for informational purposes.

#### Demolition Delay of Historically Significant Buildings, Structures, or Sites

This purpose of this bylaw is to protect the historic and aesthetic qualities of Sudbury through preservation, rehabilitation, or restoration, whenever possible, of buildings, structures, or archeological sites that constitute or reflect distinctive features of the Town's architectural or historic resources. The bylaw provides the opportunity to develop preservation solutions for properties threatened by demolition. It allows the property owner, the Sudbury Historical Commission (SHC), and other Town departments the time to find grants or other resources to purchase, preserve, rehabilitate, or restore the building or structure.

The bylaw applies to the following structures:

- A building or portion thereof, structure, or archeology site listed on the National Register of Historic Places or the State Register of Historic Places, or the subject of a pending application or listing on either of said Registers.
- A building or portion thereof, structure, or archeology site located within 200 feet of the boundary line of any federal, state, or local historic district.
- A building, or portion thereof, structure, or archeology site included in the Inventory of the Historic and Prehistoric Assets of the Commonwealth or designated by the SHC for inclusion in the inventory.
- Homes listed in the "Old Homes Survey" of the SHC, plus those structures or portion thereof constructed prior to January 1, 1940 town-wide or any building or portion thereof or structure of indeterminate age.

The bylaw does not apply to any building or structure located in a local historic district which is subject to regulation under Chapter 40 of the Acts of 1963.

When an applicant submits for a Demolition Permit to the Building Inspector, the SHC is notified within five days. The Demolition Delay Bylaw outlines procedures the SHC must follow in order to determine if the structure is historically significant and, if found to be, the process by which steps are taken for preservation, rehabilitation, or restoration. There are also procedures for emergency demolition of a building or structure which poses a serious and imminent threat to public health or safety.

#### Scenic Roads Bylaw

The purpose of the Scenic Roads Bylaw is to protect the scenic quality and character of the Town's roads. The objectives of the bylaw are:

- To maintain the natural beauty and scenic qualities along scenic roads in the Town of Sudbury.
- To enhance the rural character of scenic roads of the Town and encourage compatibility with existing roadside features.
- To implement more fully the provisions of the state Scenic Road Act, Massachusetts General Laws Chapter 40, Section 15C.

As noted above, the Planning Board is the local authority responsible for reviewing road repair, maintenance, construction, reconstruction, paving, or other alterations that will involve the cutting or removal of trees, or the tearing down or alteration of stone walls, or portions thereof on a scenic road. To designating a new road as scenic, the Planning Board will hold a public hearing that includes notification to the Select Board, Town Tree Warden, Director of Public Works, Conservation Commission, Historical Commission, and the Historic Districts Commission. A majority vote at Town Meeting is required for designation.

### Town Committees, Commissions, and Boards

#### Sudbury Historical Commission

The Sudbury Historical Commission was formed in 1968 by a Special Town Meeting vote. It advocates for the preservation, protection and development of historical and archaeological assets of the town, including town owned historic properties and sites, under Section 8D of Chapter 40 of the General Laws of Massachusetts..

The Historical Commission also administers the Town's Demolition Delay of Historically Significant Buildings, Structures, or Sites Bylaw. This covers buildings and structures outside of Local Historic Districts built before 1940, on the National Register or State Register, and/or in Sudbury's Historic Homes Survey which is the Town's record of historic structures and areas of historic interest. The intent of this bylaw is to provide an opportunity to develop preservation solutions for properties threatened with demolition for up to six months; and to allow the Sudbury Historical Commission and other appropriate Town departments time to find grants or some person or group willing to purchase, preserve, rehabilitate, or restore the building or structure.

The Historical Commission also serves as the contact in state and federal historic preservation review processes.

#### Sudbury Historic Districts Commission

The Sudbury Historic Districts Commission (HDC) was formed in 1962 after the Select Board modified the original group, which was the Historic District Study Committee, and after passage of the Special Act, Chapter 40 of the Acts of 1963. Today, the HDC operates under the mission of preserving and protecting buildings, places, and other areas of historical or architectural significance. The HDC is responsible for reviewing proposed alterations to the portions of buildings and structures open to view from the public way that are located within the Town's local historic districts including exterior architectural and color features of buildings, landscaping, stone walls, and signs. The HDC also studies proposed modifications to the Historic Districts Bylaw. The HDC consists of five members appointed by the Select Board as follows:

- One registered architect (if none available, a person the Select Board deem qualified)
- Three registered voters living in a Historic District (if possible)
- One (of two nominees) by the Historical Commission

#### Sudbury Planning Board

The Sudbury Planning Board is responsible for administering the Town's Scenic Roads Bylaw.

#### Community Preservation Committee

Sudbury was one of the first communities in the Commonwealth to adopt the Community Preservation Act (CPA) in 2002.<sup>28</sup> The CPA allows cities and towns to adopt a property tax surcharge with revenues from this surcharge (plus state matching funds) to be used for open space preservation, the creation of recreation opportunities, the creation of community housing, and the preservation of historic buildings and landscapes. The Community Preservation Committee reviews and recommends requests for CPA funds. Since the surcharge went into effect with the start of Fiscal Year 2003 on July 1, 2002, the Town has collected almost \$15 million in funding for historic preservation, land protection, and related efforts.

<sup>&</sup>lt;sup>28</sup> <u>Community Preservation Committee Report</u>

### Non-Profit and Community Organizations

#### Goodnow Library Trustees

The Goodnow Library curates the Local History Collection<sup>29</sup> which is intended to preserve, collect, describe, exhibit, and make publicly accessible materials that document the history of Sudbury and its inhabitants. Notable collections are:

- Barton Collection: Personal papers, publications, and artifacts from the estate of George H. Barton noted geologist, explorer, and professor at the Massachusetts Institute of Technology.
- Goodnow Collection: Includes publications from the Goodnow Family Association, biographical information, various genealogies, books, "Goodenow's Ghosts" dating from 1981 to present, and the key to John Goodnow's tomb.
- Loring Papers: Diaries, notes, and sermons of the Revered Israel Loring dating from 1748-1765. Transcriptions are available.
- Parmenter Collection: Diaries, books, photographs, and other items dating from the late 1800s to 1978 which belonged to Gilbert, John Robert, and Mary F. Parmenter. This collection highlights local life and three prominent families (Bent, Haynes, and Parmenter).
- Rice Collection: Includes publications from the Edmund Rice Association as well as copies of the Dunster papers from the Harvard University Archives.
- Vincent Collection: Native American artifacts from a cremation pit dating to approximately 1520 BC uncovered along Dudley Road in Sudbury.

Town documents are also available including Town Meeting records and reports dating back to 1644, official warrants from 1940, tax records from 1778, and Town bylaws from 1937 to 2001, among other documents. The Library's historical collections are available to the general public on a limited basis for research involving local, genealogical, and/or historical issues. In recent years Town Meeting has approved funding for digitizing local archives.

#### Sudbury Historical Society

The Sudbury Historical Society<sup>30</sup> is a non-profit organization dedicated to bringing the rich history of the Sudbury Plantation into the lives and activities of the people of Sudbury. It was founded in 1956 by history-minded citizens of Sudbury. In 1970, it absorbed the Goodman Society (founded in 1890) and its predecessor the Historical and Improvement Society. Since 1998, thanks to the generosity of the Town's Select Board, the Society has been headquartered on the second floor of the Sudbury Town Hall. The Society has moved next door to the Loring Parsonage where it will operate the new Sudbury Historic Center.

<sup>&</sup>lt;sup>29</sup> https://goodnowlibrary.org/resources/local-history-and-genealogy/

<sup>&</sup>lt;sup>30</sup> http://sudbury01776.org/

The Society achieves its mission by:

- Educating and raising the interest of citizens of Sudbury in a finer public spirit, through understanding of the traditions and history of the Town.
- Collecting, studying, and conserving artifacts and records relating to the history of Sudbury and its people.
- Providing public programs and events relevant to the local history of Sudbury.
- Providing age-appropriate educational materials, research, and tours related to the town's history for the Town's children and students.
- Assisting anyone looking for information on Sudbury history.
- Supporting academic research into the history of the Town.

#### Sudbury Foundation

The Sudbury Foundation<sup>31</sup> was established in 1952 by Herbert and Esther Atkinson as a vehicle for their personal philanthropy. Long-time residents of Sudbury (they lived in the former Babe Ruth house on Dutton Road), the couple operated the Sudbury Laboratory, a successful small business specializing in soil testing kits. As their business prospered the Atkinsons shared their good fortune with others, both directly and through the Foundation they created. The couple had no children and when they died, they left their entire estate to the Foundation to carry on their charitable work.

Today, the Foundation awards grants and scholarships in excess of \$1.3 million annually. Funding is designed to strengthen the Foundation's nonprofit partners who are working to solve some of the most pressing social issues. Among the many funding categories of the Foundation, it supports the preservation of the Town's natural, historic, and other cultural assets that celebrate the Town's history. The Foundation also manages the historic Grange Hall in Sudbury Town Center which has a conference room available as a community meeting space for Sudbury Town committees and local nonprofits.

#### Sudbury Valley Trustees

The Sudbury Valley Trustees (SVT) is a member-supported, 501(c)3 nonprofit organization that works in a 36-community region between Boston and Worcester. Its mission is to protect natural areas and farmland for wildlife and people in the 36 communities that surround the Sudbury, Assabet, and Concord Rivers. Through its conservation efforts it supports historic preservation by protecting important historic landscapes, such as farmland and open spaces, that contribute to the character of the communities it works in.

#### Wayside Inn Foundation

The Wayside Inn Foundation is a non-profit charitable Massachusetts corporation created in 1944 to own, operate, and maintain the Wayside Inn Historic Site, a campus of nine historic buildings and a heritage landscape of over 100 acres.

<sup>&</sup>lt;sup>31</sup> <u>https://sudburyfoundation.org/</u>

# **Cultural Resources**

In addition to a multitude of historical resources, Sudbury has many cultural opportunities that further contribute to its overall sense of place and community. Residents can enjoy Sudbury's small-town atmosphere and still have access to diverse experiences around the arts and other enriching opportunities. Civic and community organizations offer events, membership, and programming on a wide range of topics, giving residents places to learn and connect.

### Sudbury Cultural Council

The Sudbury Cultural Council (SCC)<sup>32</sup> was established in 1982 as a part of a statewide program to develop cultural programs in local communities. The SCC supports and promotes community originated projects and activities in the arts, humanities, and interpretive sciences to benefit the residents of Sudbury. Members are residents appointed by the Select Board to disperse public funding allocated by the Massachusetts Cultural Council (MCC), a state agency whose budget is determined annually by the state legislature in July of each year. MCC divides this funding to each Massachusetts community using a formula that includes population and economic status, although the Town is permitted to raise additional funds through donations and events. Applications are accepted by the SCC typically in October on an annual basis. The SCC also works collaboratively with organizations in the community, helping them develop ideas for programs and events.

### Local Arts & Cultural Organizations

There are many organizations outside of town government that support the arts and bring cultural experiences to Sudbury. Below is only a select list.

Religious Institutions	
Our Lady of Fatima	St. Anselm's Church
Congregation B'nai Torah	Sudbury United Methodist Church
Congregation Beth El	St. John Evangelical Lutheran Church
Presbyterian Church in Sudbury	First Parish of Sudbury (Unitarian Universalist)
St. Elizabeth's Episcopal Church	Memorial Congregational Church
New Church of Boston	Chabad Jewish Center of Sudbury
Fraternal Organizations	
Knights of Columbus	Sudbury Lions Club
Special Interest Organizations	
Sudbury Garden Club	Chinese American Association of Sudbury
Sudbury Historical Society	Goodnow Library Foundation
Sudbury Boy and Girl Scouts	Sudbury Savoyards
Sudbury Art Association	The Thursday Garden Club of Sudbury
Hope Sudbury	Friends of the Goodnow Library

<sup>&</sup>lt;sup>32</sup> <u>https://sudbury.ma.us/culturalcouncil/</u>

Wayside Inn Foundation

# Town Services

The Town of Sudbury offers services to residents and businesses that protect the health, safety, and welfare of the community. The local government provides public library services, infrastructure maintenance, and public safety, among other items. It also has a Park and Recreation Department with different facilities and programming as well as public schooling for children pre-kindergarten through high school.

# **Public Safety**

#### Police Department

The Police Department consists of 40 personnel: The Police Chief, two Lieutenants, six Sergeants, 19 Officers, one Student Officer, nine Civilian Dispatchers, and two Administrative Personnel.

The department is located in a 14,540 square-foot building at 75 Hudson Road (Map 12), newly constructed in 2015. It replaced the old station on Boston Post Road/Route 20, which was constructed in the late 1950s. In addition to the newly constructed building, the Police Department transitioned to a new record management system reported in the 2017 Annual Report. It was noted the new system allows the department to manage better, analyze, and interpret various forms of data to include accidents and crimes.

The department receives approximately 18,000 calls per year with a noticeable increase in identity theft calls. The most common incident reports are car break-ins. The Police Department has noted an increase in the opioid crisis in town. In 2018, there were five deaths related to opioids and the victims were all under 30 years old.

Year	911 Calls	Total Incidents	Motor vehicle accidents
2008	3,981	18,153	613
2009	3,501	18,812	526
2010	3,711	17,716	606
2011	3,646	15,140	580
2012	3,404	15,498	519
2013	3,098	16,036	521
2014	3,098	16,459	540
2015	3,117	17,136	474
2016	3,312	16,629	542
2017	n/a	13,802	560
2018	n/a	16,360	542

#### Table 38: Number of Police Department Calls, 2008-2018

Source: Sudbury Annual Town Reports



Map 12: Town Services & Facilities

The increase in mental health issues over the course of the year led the Police Department to develop the Jail Diversion Program as a tool to battle cases involving substance abuse, mental health crisis, and social welfare issues. Through the program a full-time clinician can respond alongside Police officers to calls involving people who are experiencing a mental health or substance use crisis. The goal of the clinician is to prevent an arrest and costly hospital visit through treatment-based alternatives. The Towns of Sudbury and Hudson currently share the clinician on a rotating basis.

In addition to protecting the community, the Sudbury Police Department is also committed to serving the community's youth. The department leads the STAR program (Students Thinking and Acting Responsibly in Sudbury) through which they collaborate with schools to address current challenges facing students.

#### Fire Department

As shown on Map 12, the Town has three full-time Fire Stations: Headquarters at 77 Hudson Road, Station #2 at 550 Boston Post Road/Route 20, and Station #3 at 268 North Road/Route 117. The Headquarters was constructed in 1992 and includes sleeping quarters, a dispatch room, a conference/ training room, and truck storage for six vehicles. Station #2 was built in 1961 and consists of a twoperson living quarter with one bunkroom, one bathroom, and two bay doors with space for fire equipment. The last major renovation was in 1997, which included a new roof. According to the 2017 Sudbury Annual Report, Station #2 needs to be expanded to allow for a second ALS ambulance to run from that station, adequate space for more staffing, and accommodations for female firefighters.

The Fire Department consists of 43 personnel: The Fire Chief, the Assistant Fire Chief, four Captains, four Lieutenants, 32 Firefighters, and one civilian Senior Admin/Financial Analyst. Of these 43 personnel, 26 are State Certified Paramedics, and 16 are State Certified Emergency Medical Technicians.

The Fire Department is responsible for the protection of multiple types of risks and services. On average, the Fire Department responds to 2,200 emergency calls and performs numerous fire prevention inspections each year.

Year	Total Calls	Medical	Fire	Year	Total Calls	Medical	Fire
2008	1,955	55%	45%	2014	2,025	57%	43%
2009	2,043	57%	43%	2015	2,260	56%	44%
2010	2,345	52%	48%	2016	2,207	58%	42%
2011	2,332	52%	n/a	2017	2,067	62%	38%
2012	2,063	57%	n/a	2018	2,282	59%	41%
2013	1,947	56%	44%	2019	2,332	60%	40%

#### Table 39: Number of Fire Department Calls, 2008-2019

Source: Sudbury Annual Town Reports

The Fire Department's responsibilities include, but are not limited to:

- Enforcing all fire prevention laws
- Enforcing the fire prevention regulations of the Commonwealth of Massachusetts
- Enforcing local bylaws related to public safety
- Inspecting smoke alarms in all new homes and homes being resold
- Inspecting carbon monoxide detectors in all homes being resold
- Inspecting oil burners and oil tank installations, underground/aboveground storage tanks that hold flammable liquids, and liquefied petroleum gas storage
- Inspection of commercial fire alarms and sprinklers systems
- Issuing permits for the storage of explosive materials (such as black or smokeless powders) and for open burning from January 15 May 1
- Monitoring blasting operations
- Organizing and leading the Fire Prevention Education Programs for children and senior adults

#### Public Safety Dispatch Center

There are nine Civilian Dispatchers in Town that handles calls. Sudbury Police and Fire Dispatch Centers were combined in the fall of 2012 to eliminate call transfers.<sup>33</sup> Additionally, as of March 2019, the Police Department started receiving cellular 911 calls directly. Prior to 2012, 911 medical calls were answered by the Massachusetts State Police Communications Center which identified the jurisdiction and then transferred the call to the relevant Police Department dispatcher. If the call was medical or fire-related, it would be transferred a second time to the Fire Department dispatcher. Local calls now reach the Sudbury Police and Fire Departments much faster and more efficiently.

### Community Emergency Response Team

The Sudbury Community Emergency Response Team (CERT) is a volunteer program that educates and trains citizens to be better prepared to respond to emergency situations in the community. During emergency situations, if needed, members of the CERT team are deployed at the direction of the Fire Chief to provide critical support to first responders, provide immediate assistance to victims, and organize volunteers at a disaster site.

According to the Fire Chief, 62% of calls are for Emergency Medical Services and the rest are fire-based calls. In 2018, there were a total of 2,300 calls. The most notable shift has been in calls originating from the Avalon Sudbury apartments which increased by 115 calls alone since July of 2018.

### Medical Reserve Corps (MRC)

Similar to CERT, the Medical Reserve Corps is comprised of volunteers. MRC is a system set up to organized volunteer groups that will be deployed during emergency times in town. The group was

<sup>&</sup>lt;sup>33</sup> Town Website, Public Safety Dispatch Center, <u>https://sudbury.ma.us/police/2012/09/19/public-safety-dispatch-center/</u>

established by the Select Board and Board of Health to help organize medical, public health, and other volunteer efforts in the community. The Sudbury Board of Health Nurse leads the group in activities such as volunteer drills, recruitment efforts, and shelter opening and planning.

# Public Works

The Department of Public Works (DPW) oversees the maintenance and operations of the Town's public infrastructure and services. The DPW has five divisions with a total of 34 employees: Engineering (four), Highway (19), Transfer Station/ Recycling Center (two), Tree and Cemetery (five), and Parks and Grounds (four).

#### Engineering

The Engineering Division consists of the Deputy Director of Public Works and four engineers.<sup>34</sup> The division provides engineering services to numerous Town boards and committees, Sudbury Public Schools, and Town departments (Police, Fire, Planning and Community Development, and Conservation) as well as the Sudbury Water District. The division provides the following services:

- Oversees plans, design, and construction of roadway projects.
- Assists with maintaining compliance with various state and federal programs such as the National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater Permit.
- Manages the Town's Street Opening Permits.
- Reviews development and redevelopment plans to ensure roadway and utility changes conform to the Town's construction standards.
- Inspects modifications and expansions to the roadway and stormwater networks.
- Maintains the municipal Geographical Information System (GIS).
- Guards a large collection of irreplaceable paper plans and documents.

#### Highway

The Highway Division is responsible for the maintenance and repair of the Town's roadway and sidewalk infrastructure, including:

- Drainage maintenance
- Pavement markings and management
- Granite and bituminous curbing
- Street and regulatory signage
- Snow plowing and sanding
- Street sweeping
- Stormwater utilities
- Traffic islands

<sup>&</sup>lt;sup>34</sup> <u>https://sudbury.ma.us/</u>

• Pothole, sign, and vandalism repair

Recent infrastructure improvements were made to improve water quality and meet the requirements of the Town's NPDES Phase II Stormwater Permit. In 2017, the Town along with contracted personnel designed, engineered, and installed a large, dual (3,000 gallon inside a 7,000 gallon) tight tank at the Fire Station to capture and contain wash water used to clean vehicles. The division also switched from a sand/salt mix to using straight salt and pre-treated salt for winter snow and ice treatment to minimize the amount of sand entering and further diminishing the capacity of the stormwater conveyance system.<sup>35</sup>

### Transfer Station/Recycling Center

The Transfer Station is a facility set up for Sudbury residents to properly dispose of and/or recycle common household items and non-hazardous waste. The division manages the collection of refuse and recycling from approximately 25% of the town. Items that can be recycled at this facility include newspapers, mixed paper, cardboard, glass, aluminum cans, plastic, automobile batteries, used motor oil, and scrap metal.

#### Tree & Cemetery

The Tree and Cemetery Division is responsible for the operation and maintenance of seven Town cemeteries: Mount Pleasant, New Town Cemetery, Old Town Cemetery, Revolutionary, St. Elizabeth's Memorial, Bay View Cemetery, and Wadsworth Cemetery. They also perform grave openings and interments.

### Parks & Grounds

The Parks and Grounds Division is responsible for the maintenance of athletic fields, buildings, open space, and conservation land owned and managed by the Town. The division's responsibilities include the following:

- Mowing
- Aerating
- Fertilizing
- Irrigation and System Maintenance
- Weed and Insect Control
- Litter Clean-Up

- Leaf Removal
- Leveling
- Grading and Marking Fields
- Fence and Vandalism Repairs
- Shrub and Tree Care
- Support of Town Offices and Civic Activities

#### Comprehensive Wastewater Management Plan

Since 1995, the Town of Sudbury has been studying wastewater options for the Boston Post Road/Route 20 business corridor. Currently, businesses use on-site treatment systems which limit the types of

<sup>&</sup>lt;sup>35</sup> <u>https://s3-us-west-2.amazonaws.com/cdn.sudbury.ma.us/wp-</u>

content/uploads/sites/342/2018/05/2017TownReport.pdf?version=0be9215c46e09a0e268d7bea5325834c

establishments allowed and their size. Finding a wastewater treatment solution will protect Sudbury's drinking water in the Boston Post Road/Route 20 aquifer area, assist businesses with their wastewater disposal, and open opportunities for economic development along the roadway. Without alternative wastewater disposal there is a risk of groundwater contamination and loss of business.

The DPW began working with Woodard and Curran in 2018 to develop a Comprehensive Wastewater Management Plan (CWMP). The CWMP will take all the wastewater planning the Town has done to date and combine into a single plan which can be used to assess needs comprehensively, evaluate alternatives, coordinate with local and regional planning goals, and develop a coordinated public outreach program to engage residents and businesses. The CWMP will give the Town a 20-year planning document to address wastewater needs and the leverage it needs to qualify for state grants and loans for a wastewater treatment system and facility.

In August 2018, the Town was approved to borrow up to \$500,000 from the State Revolving Fund (SRF). It is also eligible for a grant from the MassWorks Infrastructure Program which could offset SRF borrowing and lower individual costs for connecting to a new wastewater treatment system. In the spring of 2019, the DPW received Town Meeting approval to apply for SRF borrowing. Next steps are to complete the CWMP and submit an SRF loan application. Through the CWMP development process a recommended wastewater treatment solution will be determined. It is estimated construction of a new facility will take two years to complete.

# Sudbury Water District

The Sudbury Water District is an independent public body established in 1934 under Chapter 100 of the Massachusetts General Laws. The District is responsible for the treatment and delivery of clean water within the Town of Sudbury.<sup>36</sup> There are seven field personnel and three office staff.

Sudbury's water comes from three underground aquifers (Raymond Road, Hop Brook, and Great Meadow) and is pumped from nine gravel-packed wells located throughout town.<sup>37</sup> The District has four storage tanks located throughout the town with a storage capacity ranging from 0.35 to 3.0 million gallons, totaling 6.35 million gallons.

The Sudbury Water District has many projects lined up to continue improving water quality and serve the growing population. Its 2018 Annual Report lists the following recent and current capital improvements:

• New water main on Maynard Road installed; currently installing new service connections to property lines of residents.

<sup>&</sup>lt;sup>36</sup> <u>http://www.sudburywater.com/history/</u>

<sup>&</sup>lt;sup>37</sup> The 2017 Water Quality Report <u>http://www.sudburywater.com/wp-content/uploads/2018/06/SWD-2017-</u> Water-Quality.pdf

- Near completion of upgrades to Well Number 4, the highest quality water among all the wells, located off Warren Road.
- Improving the supply line from Well Number 7 to the treatment plant on Raymond Road.
- Improving the operation of the water storage tank off Bigelow Drive.
- Moving to a new administrative office, shop, and storage space on Raymond Road.

In addition to these projects, the Water District is developing a Water Master Plan.<sup>38</sup> The master plan will assess the existing infrastructure, develop risk and consequences of failure, and set priorities for infrastructure improvements.

# Park and Recreation

The Park and Recreation Department provides recreation activities, facilities, and general amenities to the public. The department also offers a wide range of programming for all ages and all interests, from educational instruction to sports to summer camps. The Park and Recreation Department is managed by six staff including a Director, an Administrative Assistant, an Aquatic Supervisor, an Aquatics Program Coordinator, a Recreation Program Coordinator, and a Youth and Teen Coordinator. Staff at Atkinson Pool also includes two aquatics staff, a lifeguard, and many part-time and seasonal employees. There are also five Park and Recreation Commission members.

The following are municipal recreational resources available in Sudbury (see Map 13).

- Cutting Field is used by many community groups for soccer and lacrosse.
- Davis Field has been the site for soccer, lacrosse, and other activities.
- Fairbank Community Center is home to the Atkinson Pool which consists of an eight-lane, 25yard lap pool and separate diving well. The pool is open to Sudbury residents and non-residents with the payment of a daily fee. The center also has a volleyball area, basketball courts, program rooms, and a gym.
- Featherland Park offers a softball field, pickleball courts, basketball courts, Little League baseball fields, public tennis courts, and an area for public ice-skating in the winter months, weather permitting.
- Feeley Park has areas for baseball, softball, pickleball, and tennis.
- Haskell Recreation Area, which is near the Fairbank Community Center, provides fields for soccer and lacrosse, Haskell Playground, a full-size baseball diamond, and a walking trail around the field.
- School fields are made available to the Park and Recreation Department during non-school hours and provide a further valuable recreational resource.
- Ti-Sales Field is used for Ultimate Frisbee teams.

<sup>&</sup>lt;sup>38</sup> Sudbury Water District 83<sup>rd</sup> Annual Report,

file:///H:/Projects/2018/18085%20Sudbury%20Master%20Plan/Background%20and%20Research/Town%20Servic es/Sudbury-Water-Annual-Report\_2018.pdf





# Health Department

The Health Department has eight staff members who are responsible for addressing the public health needs in Sudbury including the Department Director, Public Health Nurse (Board of Health), Social Worker, Mental Health Outreach Case Manager, and two social work interns as well as two administrative staff. In the department, community-based nursing services are provided by the Board of Health Nurse. Mental health-care services are provided through the Community Social Workers.

#### Environmental Health Issues

The Health Department conducts site evaluations for subsurface sewage disposal, and issues permit/licensing and inspections of food service establishments, public swimming pools, stables, septic installers and haulers, septic system and private well installations, and summer camps. It is also involved with other municipal departments addressing housing code violations, mosquito control, hazardous waste, animal/rabies control, public groundwater supplies, and emergency preparedness.

Over the past five years, the Health Department revised the Board of Health regulations to be more aligned with current environmental and public health goals and objectives. This was done by reevaluating regulations to determine those that were no longer relevant today and drafting new policies more consistent with current standards, technology, renewable energy, etc. This work also included coordination with the Conservation Office to ensure definitions of natural features were consistent.

Board of Health regulations recently revised or currently under review include:

- Tobacco Control Revised 2018
- Fee Schedule Revised 2016
- Stables and Keeping of Animals 2012 (In need of revisions)
- Commercial Refuse Hauler 2012
- Floor Drain 2011
- Outdoor Hydronic Heater 2011
- Sewage Disposal 1998 (Currently being revised)
- Domestic Water Supply-Potable Well 1981 (In need of revisions)

#### Community Social Worker

The Health Department is also responsible for the social service needs of the community. Its social workers focus on providing community education on public health issues through the Town's website, newsletter, TV, events, etc. They also collaborate with community groups and Town departments such as the Police and Fire Departments to address community needs and concerns and to strengthen community connections. Some of their services consist of:

- Providing referrals to services related to mental health, medical, parenting, housing, finances, basic needs, etc.
- Disseminating information on area resources and services for the elderly, individuals with disabilities, children and families, low-income individuals, and those with a variety of other specialized needs.
- Assisting the community by connecting residents with community supports to help complete applications for services such as food stamps, social security disability, fuel assistance, Department of Mental Health (DMH) and Mass Health programs, etc.
- Accepting and reviewing applications for the HOPE Sudbury Fund.
- Receiving and managing community donations.

To date, the social workers continue to provide services to address needs within the community and to increase overall wellbeing and self-sufficiency. These services were offered in part due to many volunteers. The annual Social Worker Stats shows an increase in many services in Town from 2017 to 2018, such as food pantry delivery, HOPE applications, and referrals. The overall number of individuals served also increased from 1,090 in 2017 to 1,634 in 2018, with the highest assistance occurring during the holiday season (November and December).

#### Board of Health Nurse

The Board of Health Nurse provides numerous community health services in town, such as:

- Investigates and reports all communicable diseases to the Massachusetts Department of Public Health for the Town of Sudbury.
- Facilitates educational activities throughout Town and partners with various departments and organizations.
- Provides flu clinics for town residents and Town employees in the fall.
- Offers blood pressure and glucose screening for all town residents at the Sudbury Senior Center, Goodnow Library, and at the Sudbury Housing Authority.
- Leads the Medical Reserve Corp volunteer drills and recruitment.
- Licensed and inspected all recreation camps in the town.

# School Facilities

### Sudbury Public School District

The Sudbury Public School District (SPS) serves the pre-K to grade 8 student population in town. It includes four elementary schools (grades pre-K to grade 5) and one middle school (grades 6 to 8) (See Map 13):

- Curtis Middle School
- Loring Elementary School
- Haynes Elementary School
- Noyes Elementary School
- Nixon Elementary School

For the past six years, the district has been seeing a slow decline in enrollment, as shown in Figure 32. In the 2018-2019 school year, enrollment was 2,653, a 12% decrease since the 2012-2013 school year which had 3,006 students.



Source: MA Department of Elementary and Secondary Education Demographics Study (2019)

Figure 32: Student Enrollment of Sudbury School District, 2012-2019

The Town has been working to improve the school facilities. According to the 2017 Capital Projects and Town Meeting Articles, funding was requested for improvements to school facilities including:

- Replacement of a rooftop HVAC unit at either the Curtis Middle School or the Loring School.
- Improvements to sidewalks and parking lots at all SPS schools, including a crosswalk at Nixon Elementary.
- Maintenance of school storage and shed buildings.
- Improvements to security and access control by installing electronic card access and exterior security cameras at all SPS schools.<sup>39</sup>

In 2018 SPS committed to modernizing school playgrounds by using the Universal Design concept, which allows for multigenerational recreational spaces and also makes all playgrounds compliant with the Americans with Disabilities Act (ADA) and the Massachusetts Architectural Access Board.<sup>40</sup>

<sup>&</sup>lt;sup>39</sup> Capital Project and Town Meeting Article FY 2017, <u>https://s3-us-west-</u> 2.amazonaws.com/cdn.sudbury.ma.us/wp-content/uploads/sites/290/2016/02/Capital-Projects-FY17.pdf?version=cc439ceea65474d208766cd4bf569f10

<sup>&</sup>lt;sup>40</sup> Town of Sudbury, Project Submission Form, *Playground Modernization for Sudbury Public Schools* <u>https://sudbury.ma.us/cpc/wp-content/uploads/sites/275/2017/09/FY18-STM-Project-Form-Playground-Modernization-for-Sudbury-Public-Schools.pdf?version=d283e95d19e03e7cde299b290034ae15</u>

### Lincoln-Sudbury School District

The Lincoln-Sudbury School District oversees the Lincoln-Sudbury Regional High School (LSRHS) where the majority of high school students in Sudbury and Lincoln attend. The school is located in Sudbury and serves grades 9 to 12. LSRHS is organized in a "house system" where students are divided into four houses. Each house is staffed by an associate principal, school guidance counselors, a clinical counselor, and a house assistant. Similar to the Sudbury School District, enrollment has been declining for the past five years, as shown in Figure 32. Since the 2013-2014 school year, enrollment has been declining slowly but has remained largely flat since 2017.



### Lincoln-Sudbury Adult Education

The Lincoln-Sudbury School District offers various courses and activities for adults. The adult education program aims to engage in activities to gain new forms of knowledge, skills, attitudes, or values leading to personal fulfillment as a lifelong learner.

### Minuteman Regional Vocational Technical High School District

Since its founding in 1971, Sudbury has been a member of the Minuteman Regional Vocational Technical High School District. The regional high school is located in Lexington and offers career and technical education in a variety of majors. The Minuteman district included 16 members communities, however, in 2016, that membership dropped to ten when Sudbury, along with five other towns — Boxborough, Carlisle, Lincoln, Wayland, and Weston — voted to leave the district.

The Select Board created the Vocational Education Options Committee on July 22, 2014 to generate, evaluate, and report on best options for the Town of Sudbury in selecting a vocational school for local students. The Select Board dissolved the committee on May 17, 2016.

In April 2016, Vocational Education Guidance Committee was established to evaluate the vocational high school choices for Sudbury students beginning in the school year 2017-2018 and to make a recommendation to the Town, Select Board, and stakeholders regarding the school for Sudbury.

# Goodnow Library

The Goodnow Library was the second free public library established in Massachusetts, opening on April 4, 1863. The library was bestowed on the Town by Sudbury native John Goodnow. It is managed by eight staff members, including a Library Director, Assistant Director, and many volunteers. Today, the library is home to more than 300,000 circulating items and is visited by about 175,000 patrons a year including about 26,000 children. The library has seen an increase in families with school-age children and older residents.

Goodnow Library offers many programs and services to the residents of Sudbury and nearby communities including book clubs, meeting rooms, museum passes, and technology. The library also provides:

- Children's Services weekly programs, diverse learning materials, holiday events, summer reading programs, and recreational materials.
- Adult Services and Summer Reading Program monthly writing workshop series and weekly hobby meet-ups for people with various interests. Home delivery is provided to the Town's older population.
- Teen Services programs including maker space, book clubs, crafts, robotics, computer, and gaming programs as well as college admission application assistance and 3D design. The library also has a teen room which offers a space for middle and high school students to talk, study, relax, and read.

The Goodnow Library also collaborates with various Town departments on community activities and services. The departments of Public Works, Police, and Fire collaborate with the library to bring Sudbury Truck Day every year. The family-friendly event allows kids to come and see a variety of trucks from each department. The event brings hundreds of families from Sudbury and nearby towns to the library. Additionally, the library also works the Sudbury Senior Center on homebound deliveries.

The Library uses its 2018-2022 Strategic Plan<sup>41</sup> to allocate resources and make decisions that address the needs of staff and the community as a whole.

# **Senior Services**

### Senior Center

The Sudbury Senior Center is located in the Fairbank Community Center. It was opened as an addition to the north side of the Fairbank building in 1990 serving about 1,625 residents. Today it is a focal point for Sudbury seniors by providing social, recreational, and educational activities, as well as support services such as shopping and medical transportation volunteers (FISH). In 2017, the Center reported serving an

<sup>&</sup>lt;sup>41</sup> <u>https://goodnowlibrary.org/wp-content/uploads/sites/380/2017/10/Goodnow-Library-Strategic-Plan-2018-2022.pdf</u>

estimated 3,929 residents,<sup>42</sup> and there are approximately 24,000 visits or service units per year. The center is operated by five staff including a Director, Program Coordinator, Administrative Coordinator, Outreach Information Specialist, and Volunteer Program Coordinator. The center also operates with the assistant of many volunteers.

The Senior Center collaborates with many organizations within the community including the Chinese American Association of Sudbury to bring people together and to enhance activities at the center. Programs and services offered at the center include nutrition, transportation, handyman, and health services.<sup>43</sup> In addition to these services the Center also offers the following programs for seniors:

- Art and Crafts Classes and Presentations
- Clinics and Health Sessions
- Fitness Classes
- LINC (Learning Intergenerational Community) Intergenerational Events
- Lifelong Learning
- Lunch and Learn
- Property Tax Work-Off Program
- Travel: Day trips and Extended Trips
- Social and Recreational Activities

One of the services the Senior Center offers that benefits not only seniors, but the Town as a whole is the Tax Work Off Program. Through the Senior Center eligible Sudbury seniors and veterans may be able to work in a Town department and "earn" a tax abatement for the following year. In the past years, there have been seniors and veterans working at the Town Clerk's office, the Sudbury Senior Center, the IT Department, the DPW, and the Sudbury Public Schools. In addition to working in the program, many of the participants also dedicate volunteer hours in their departments.

Volunteerism is very important at the Senior Center. Many of the programs and services rely heavily on people dedicating their time to help the center. In the 2017 Annual Report, the center logged 4,486.5 volunteer hours. The volunteer program includes activities such as shopping, lawn cleanup, health clinics, Friends in Service Helping (FISH) Drivers, home delivery meals, and more.

### Council on Aging

The Council on Aging (COA) is a nine-member volunteer board appointed by the Select Board to advocate for the needs of Sudbury's older residents. The mission of COA is to:

• Identify the needs of the older adult population.

<sup>&</sup>lt;sup>42</sup> https://s3-us-west-2.amazonaws.com/cdn.sudbury.ma.us/wp-

content/uploads/sites/342/2018/05/2017TownReport.pdf?version=0be9215c46e09a0e268d7bea5325834c
<sup>43</sup> <u>https://sudburyseniorcenter.org/</u>

- Educate the community.
- Design, promote, and implement services to fill needs of the older adult population.
- Coordinate existing services in the community.
- Encourage and support any programs that are designed to assist older adults in the community.<sup>44</sup>

The COA also works with the Commonwealth of Massachusetts Executive Office of Elder Affairs to stay abreast of all state and federal legislation concerning funding, information exchange, and program planning that may impact older adults.

As a recognition of the need to prepare for the aging population in Sudbury, the COA and the Senior Center spent time learning how to become a more "age and dementia-friendly" or "livable" town. In 2019, they released *Livable Sudbury: A Community Needs Assessment*. The report includes a self-assessment that identified areas needing improvement, and established goals and recommendations toward that end. The overall purpose of the research in the report is to inform Sudbury's effort to be "all-age" friendly and inclusive in pursuit of a more livable community for all residents.<sup>45</sup> It is an important document in the development of policies of the Sudbury Master Plan and other documents used by decision-makers.

# **Veterans Services**

The Veterans Agent Department is managed by two employees, a Veteran Agent, and Administrative Assistant. The department assists Sudbury residents in acquiring benefits through federal and state programs offered to veterans, active-duty personnel, and families. Programs provided for those who qualify address financial, burial, education, housing, and medical needs, among other services.

The Veterans' Agent gets assistance from the Veterans Advisory Committee. The mission of the fivemember committee is to advise the Agent and provide input as to the health of the veteran community and those specific areas of interest that most concern or impact the town's veterans.

# Energy Conservation and Renewable Energy

The Town has been working actively to promote energy savings and renewable energy generation.

### Energy and Sustainability Committee

In 2009, the Select Board created the Energy and Sustainability Committee to help develop and implement policies, programs, and projects that will promote energy savings, renewable energy generation, and sustainability planning. The Committee also provides energy efficiency consulting to Town committees, and the local and regional schools. The Committee collaborates with Town and school personnel to determine best approaches for improving the energy efficiency of Town and school

<sup>&</sup>lt;sup>44</sup> <u>https://sudbury.ma.us/councilonaging/members/</u>

<sup>&</sup>lt;sup>45</sup> <u>https://sudburyseniorcenter.org/wp-content/uploads/sites/381/2019/02/Livable-Sudbury-Report.pdf</u>

buildings and vehicles, investigates alternative energy technologies, and identifies funding opportunities to help the Town achieve its energy and sustainability goals.

### Massachusetts Green Communities

The Green Communities Designation and Grant Program is an initiative of the Massachusetts Department of Energy Resources (DOER) that provides a road map along with financial and technical support to municipalities that meet specific clean energy goals established by DOER.<sup>46</sup> In addition to receiving the title of "Green Community," a city or town that receives this designation is qualified for special energy efficiency and renewable energy initiatives and incentives offered by DOER.

In 2010, Sudbury was one of the first in a group of 35 municipalities to be designated as a Green Community.<sup>47</sup> The Town received incentives to fund energy conservation measures, lighting, weatherization, and rooftop unit replacement in municipal facilities including Goodnow Library, the DPW Building, the Public Safety Complex, Town Hall, and the Center Office Building.

### Renewable Energy – Solar

Since becoming a Green Community and with the help of the Energy and Sustainability Committee, the following renewable energy projects have been achieved.

On November 13, 2013, Sudbury officially launched a photovoltaic solar facility on the Town's closed landfill at 20 Boston Post Road. The solar array operates at no cost to the Town and has produced approximately \$700,000 in revenue and provided \$28,000 in Payment In Lieu of Taxes.

In May 2015, the Lincoln-Sudbury Regional High School Solar Canopy was installed over the school's primary parking lot. The 3,600-panel solar canopy is the first of its kind at a Massachusetts high school. This canopy saves the Lincoln-Sudbury Regional High School over \$100,000 per year in energy costs and the solar generation offsets over 1,000 tons of carbon dioxide equivalent (CO2e) annually.

In 2017, the Town of Sudbury approved a Town-Wide Electricity Aggregation Program for residents and businesses to purchase electricity from different renewable energy options. The primary goal of this program is to provide annual savings and rate stability. After a competitive bid process, Dynegy was selected as the Town's electricity supplier for 36 months effective August 2017 through August 2020.

<sup>&</sup>lt;sup>46</sup> <u>https://www.mass.gov/guides/becoming-a-designated-green-community</u>

<sup>&</sup>lt;sup>47</sup> <u>https://www.mass.gov/files/documents/2019/05/02/map-summary-green-communities-240.pdf</u>

# Town-Owned/Managed Communications

The Town of Sudbury recognizes the importance of disseminating information to its residents efficiently and effectively. The Town has worked to improve the line of communication by not only operating its Town website, but also including social media and Sudbury TV as ways to reach residents.

### Website

The inclusive Town website consists of information about Town departments, boards, commissions, committees, schools, and projects. Exploring the website, residents can find information about each topic in its designated web page. Also, on the website are job listings, community events, Town newsletters, and all other information relating to the Town.

### Sudbury TV

Founded in June of 2008 by members of Sudbury's Cable Committee, Sudbury TV provides local TV services to the Town. They connect people to important events in town such as:

- Town Government and Committee Meetings
- Locally produced programming including interviews, interest shows, Town and political forums, Senior Center, library, and other local organization presentations and events
- School events, graduation, musical presentations, and sports
- The HOPE Sudbury Telethon
- Publicly available shows of interest

### Volunteerism

Volunteering offers vital help to people in need while creating and cultivating a community that cares. In Sudbury, volunteerism is embedded in many components of the Town's operation. For example, the public safety component consists of paid staff and volunteers working collectively to keep residents safe and healthy. Volunteer groups such as Community Emergency Response Team and the Medical Reserve corps dedicate their time to ensure safety in the community, especially during emergencies.

The Health Department also relies on volunteers to achieve many of its department goals, especially its social service responsibilities. Along with the Town Social worker, volunteers help with food pantry delivery especially during the holiday seasons. In 2019, the Social Worker helped launched the Neighbor Brigade chapter in Sudbury. See below for more information.

The education component in Town consists of many volunteers as well. In the Sudbury school system, many of the schools have opportunities for parents to volunteer and be actively engaged in the school system. The Goodnow Library also relies on volunteers. The library utilizes teens and adult volunteers for various educational activities at the library.

# Neighbor Brigade (Sudbury Chapter)

Neighbor Brigade establishes community-specific networks of volunteers that can be mobilized to help Sudbury residents facing crisis manage day-to-day tasks. Residents in need can request assistance online for free services including:

- Meal Delivery
- Rides to Medical Appointments
- Basic Household Chores
- Dog Walking and Light Pet Care
# Open Space and Recreation

The Town owns and maintains recreation and open space land to meet diverse objectives including public access to nature, opportunities for active recreation, and protection of critical natural resources. These resources are managed primarily by the Park and Recreation Department and Conservation Coordinator. The Conservation Commission and Park and Recreation Commission also play key roles in developing policies and management strategies for these properties. Other entities own recreation and open space lands with public access in Sudbury, including federal and state agencies and non-profit organizations.

# **Open Space & Recreation Plan**

The Town uses its 2009-2013 Open Space and Recreation Plan (OSRP) to plan for recreation and open space needs. It outlines the Town's goals and objectives, and includes resource inventories, priorities for resource protection, needs of the community, and an action plan to meet those needs. It is intended to be updated every seven years. The OSRP is a companion to the Master Plan and much of the information is referenced and summarized here.

The goals identified in the plan are:

- 1. Preserve town character through the permanent protection of undeveloped land, surface water bodies and wetlands, agricultural lands and uses, publicly cherished viewscapes and historic sites.
- 2. Protect land areas and migration corridors for the well-being of indigenous flora and fauna.
- 3. Protect the quality and quantity of the Town's water supply, through both aquifer protection and water use education.
- 4. Protect and restore the quality of the town's ponds and waterways.
- 5. Provide and maintain a diversity of conservation and recreation land uses reflecting the interests and needs of the whole community, including opportunities for both active and passive recreation.
- 6. Develop and maintain trail linkages by connecting old or creating new walkways and trails for non-motorized recreational vehicles, such as bicycles.
- 7. Continue to provide outreach to increase awareness among residents of the range of the Town's open space and recreational assets, and their possible uses and entry points.

The OSRP is currently being updated.

# **Open Space and Recreation Land**

The term "Open Space" is defined in the Massachusetts Open Space and Recreation Plan Handbook (2008) as "conservation land, forested land, recreation land, agricultural land, corridor parks and amenities such as small parks, green buffers along roadways or any open area that is owned by an

agency or organization dedicated to conservation. However, the term can also refer to undeveloped land with particular conservation or recreation interest. This includes vacant lots and brownfields that can be redeveloped into recreation areas. Some open space can be used for passive activities such as walking, hiking, and nature study, while others are used for more active recreational uses including soccer, tennis, or baseball." Because open space land can be both public and private property, public access can vary.

In Sudbury, there is approximately 15,842 acres land area, 32% of which are conservation and recreational open space (Table 40). 53% of the conservation and recreational open space lands are protected under Article 97 (legal protection to ensure lands acquired for conservation purposes are not converted), while 44% are not, and 3% are unknown. The inventory includes properties that are owned by public, private, and non-profit entities, and have different levels of legal protection from future development. This inventory is depicted in Table 40. These numbers might change as the Town is currently updating its Open Space and Recreation Plan.

Landowner	Acreage
Private	647
Federal	1,364
State (Incl. Sudbury Water District)	726
Town	1,430
Sudbury Valley Trustees	673
Other (Lincoln-Sudbury Regional School District)	29
TOTAL	4,869

Table 40. Inventory of Recreation and Open Space Land (2019)

Source: MassGIS August 2019

### Recreational Resources

Recreation, as a municipal service, focuses on developed facilities such as playgrounds, baseball fields, and basketball courts as well as organized programming offered through the Sudbury Park and Recreation Department. Town facilities are also shown on Map 14 and include:

- Fairbanks Community Center is approximately 40,000 square feet and home to the Recreation Department (including Atkinson Pool), the Sudbury Senior Center, and the administrative offices of Sudbury Public Schools (see discussion of the senior center and schools in Town Services). The Recreation Department provides 690 programs serving 9,700 participants. In 2015, the pool had over 72,000 users. In addition to regular recreation programming, the Department hosts a teen center, preschool, summer camp, and increased programming on Wednesdays when Sudbury Public Schools have a half day.
- Feeley Park has areas for baseball, softball, pickleball, and tennis.
- Davis Field is used for soccer, lacrosse, and other activities.





- Haskell Recreation Area, which is near the Fairbank Community Center, provides fields for soccer and lacrosse, Haskell Playground, and a walking trail around the field.
- Featherland Park offers a softball field, pickleball courts, basketball courts, Little League baseball fields, public tennis courts, a softball diamond used by Lincoln-Sudbury Regional High School, and an area for public ice-skating in the winter months, weather permitting.
- Ti-Sales Field is used for Ultimate Frisbee teams.
- Cutting Field is used by many community groups for soccer and lacrosse and used by Lincoln-Sudbury Regional High School.
- Willis Pond is popular for boating and fishing. A Town-owned boat ramp and dock may be accessed from Lake Shore Drive on the southern shore. Milley Memorial Monument is located at the beach.
- Camp Sewataro is a summer day camp on approximately 46 acres.
- Public school fields are made available to the Park and Recreation Department during nonschool hours and provide a further valuable recreational resource. These include the community field, soccer and lacrosse turf fields, and softball field.

Lincoln-Sudbury High School teams frequently use town facilities, including:

- Baseball diamond at Haskell field
- Baseball diamond at Feeley field
- Softball diamond at Haskell field
- Tennis courts at Featherland field

In 2019, the Town added to its recreation resources with the purchase of Camp Sewatora and Broadacres Farm. The current use of the properties remained the same as the Town evaluate options for each site.

## Open Space Land

Open space land in Sudbury is both publicly and privately held and has different levels of public access and protection.

## Chapter Lands Tax Program

As of July 2018, the Town of Sudbury has a total of 1,019.26 acres of land in the Chapter 61, 61A, and 61B programs. The voluntary program offers a property tax break for landowners willing to commit to keeping some or all of their land undeveloped for a specified period. Table 41 shows the types of land and the number of acres in Town that are in the program. One property in Town has land that is designated as both Chapter 61 and 61B.

#### Table 41: Chapter 61 Properties

Туре	Program Acres
Chapter 61 (Forestry)	11.64
Chapter 61 A (Agriculture)	735.69
Chapter 61 B (Recreation)	233.63
Chapter 61 & 61B	38.3
Total	1,019.26

Source: Town of Sudbury Conservation Coordinator

### Public Land

There are approximately 3,417 acres of land dedicated to open space and recreation with public access, including Town recreation facilities, that are owned by different government entities. There are approximately 241 acres of areas without site names. Properties that were identified are shown in Table 42, as well as their protection status. Some of these lands are permanently protected and others are not.

#### Table 42: Public Land with Public Access

Barton Farms Conservation Area16TownYesBroadacres Farm34TownYesCamp Sewataro44TownYesCarding Mill Pond Conservation Area43TownYesCrystal Lake Parcel3TownYesDavis Farm Conservation Area61TownYesFlintlock Lane Conservation Area1TownYesForest Street Parcel4TownYesForest Street Parcel4TownYesFrost Farm Conservation Area46TownYesGreat Meadows National Wildlife Refuge891FederalNoHaynes Meadow22TownYesJohnson Farm Conservation Area3TownYesUonson Farm Conservation Area6TownYesUnknown43TownYesYesMato Drive Conservation Area6TownYesMahoney Farm7TownYesMarlborough-Sudbury State Forest240StateYesMineway Brook Parcel4TownYesNewfell Conservation Area3TownYesNewfell Conservation Area20TownYesNorse Road Conservation Area20TownYesNorse Road Conservation Area20TownYesNorse Road Conservation Area3TownYesNobscot Reservation Area3TownYesNorse Road Conservation Area20TownYes <th>Property</th> <th>Acres</th> <th>Owner</th> <th>Protection Status</th>	Property	Acres	Owner	Protection Status
Broadacres Farm34TownYesCamp Sewataro44TownYesCarding Mill Pond Conservation Area43TownYesCrystal Lake Parcel3TownYesDavis Farm Conservation Area61TownYesFlintlock Lane Conservation Area1TownYesForest Street Parcel4TownYesForest Street Parcel46TownYesGreat Meadows National Wildlife Refuge891FederalNoHaynes Meadow22TownYesJohnson Farm Conservation Area2TownYesJohnson Farm Conservation Area33TownYesManded Conservation Area2TownYesIncoln Meadows71TownYesMahoney Farm7TownYesMahoney Farm7TownYesManhoney Farm7TownYesManhoney Farm7TownYesMarlborough-Sudbury State Forest240StateYesMorse Road Conservation Area3TownYesMorse Road Conservation Area20TownYesNose Road Conservation Area20TownYesMarlborough-Sudbury State Forest240StateYesNose Road Conservation Area3TownYesNewfell Conservation Area3TownYesNose Road Conservation Area20TownYesNose Road Conservation A	Assabet River National Wildlife Refuge	473	Federal	No
Camp Sewataro44TownYesCarding Mill Pond Conservation Area43TownYesCrystal Lake Parcel3TownYesDavis Farm Conservation Area61TownYesFlintlock Lane Conservation Area1TownYesForest Street Parcel4TownYesForest Street Parcel4TownYesGreat Meadows National Wildlife Refuge891FederalNoHaynes Meadow22TownYesHopbrook Marsh Conservation Area2TownYesJohnson Farm Conservation Area2TownYesIunt Road Conservation Area33TownYesJohnson Farm Conservation Area6TownYesJohnson Farm Conservation Area6TownYesMahoney Farm7TownYesMahoney Farm7TownYesMarko Conservation Area3TownYesNonse Road Conservation Area240StateYesMarkor Parcel4TownYesMorse Road Conservation Area3TownYesNose Road Conservation Area3TownYesNose Road Conservation Area3TownYesNose Road Conservation Area3TownYesNorse Road Conservation Area20TownYesNewfell Conservation Area20TownYesNobscot Reservation108TownYes	Barton Farms Conservation Area	16	Town	Yes
Carding Mill Pond Conservation Area43TownYesCrystal Lake Parcel3TownYesDavis Farm Conservation Area61TownYesFlintlock Lane Conservation Area1TownYesForest Street Parcel4TownYesFrost Farm Conservation Area46TownYesGreat Meadows National Wildlife Refuge891FederalNoHaynes Meadow22TownYesHopbrook Marsh Conservation Land96TownYesJohnson Farm Conservation Area2TownYesJohnson Farm Conservation Area33TownUnknownKato Drive Conservation Area6TownYesLincoln Meadows71TownYesMahoney Farm7TownYesMarkborugh-Sudbury State Forest240StateYesMineway Brook Parcel4TownYesNewfell Conservation Area3TownYesNoney Farm7TownYesMarkook Parcel4TownYesMorse Road Conservation Area3TownYesNewfell Conservation Area20TownYesNose Road Conservation Area20TownYesNoscot Reservation108TownYesPantry Brook WMA403StateYes	Broadacres Farm	34	Town	Yes
Crystal Lake Parcel3TownYesDavis Farm Conservation Area61TownYesFlintlock Lane Conservation Area1TownYesForest Street Parcel4TownYesFrost Farm Conservation Area46TownYesGreat Meadows National Wildlife Refuge891FederalNoHaynes Meadow22TownYesHopbrook Marsh Conservation Land96TownYesJohnson Farm Conservation Area2TownYesJohnson Farm Conservation Area33TownUnknownKato Drive Conservation Area6TownYesLincoln Meadows71TownYesMahoney Farm7TownYesMarlborough-Sudbury State Forest240StateYesMineway Brook Parcel4TownYesNewfell Conservation Area3TownYesNose Road Conservation Area20TownYesNewfell Conservation Area20TownYesNewfell Conservation Area403StateYes	Camp Sewataro	44	Town	Yes
Davis Farm Conservation Area61TownYesFlintlock Lane Conservation Area1TownYesForest Street Parcel4TownYesFrost Farm Conservation Area46TownYesGreat Meadows National Wildlife Refuge891FederalNoHaynes Meadow22TownYesHopbrook Marsh Conservation Land96TownYesJohnson Farm Conservation Area2TownYesJohnson Farm Conservation Area33TownUnknownKato Drive Conservation Area6TownYesLincoln Meadows71TownYesMahoney Farm7TownYesMarlborough-Sudbury State Forest240StateYesMorse Road Conservation Area3TownYesMorse Road Conservation Area2TownYesManboury Farm7TownYesMarlborough-Sudbury State Forest240StateYesMorse Road Conservation Area3TownYesNewfell Conservation Area20TownYesNoscot Reservation108TownYesPantry Brook WMA403StateYes	Carding Mill Pond Conservation Area	43	Town	Yes
Flintlock Lane Conservation Area1TownYesForest Street Parcel4TownYesFrost Farm Conservation Area46TownYesGreat Meadows National Wildlife Refuge891FederalNoHaynes Meadow22TownYesHopbrook Marsh Conservation Land96TownYesJohnson Farm Conservation Area2TownYesJohnson Farm Conservation Area33TownUnknownKato Drive Conservation Area6TownYesLincoln Meadows71TownYesMahoney Farm7TownYesMalborough-Sudbury State Forest240StateYesMineway Brook Parcel4TownYesNorse Road Conservation Area3TownYesNobscot Reservation Area20TownYesPantry Brook WMA403StateYes	Crystal Lake Parcel	3	Town	Yes
Forest Street Parcel4TownYesForest Street Parcel46TownYesFrost Farm Conservation Area46TownYesGreat Meadows National Wildlife Refuge891FederalNoHaynes Meadow22TownYesHopbrook Marsh Conservation Land96TownYesJohnson Farm Conservation Area2TownYesJohnson Farm Conservation Area33TownUnknownKato Drive Conservation Area6TownYesLincoln Meadows71TownYesMahoney Farm7TownYesMarlborough-Sudbury State Forest240StateYesMorse Road Conservation Area3TownYesNonse Road Conservation Area3TownYesMarlborough-Sudbury State Forest20TownYesNoscot Reservation Area20TownYesNobscot Reservation Area108TownYesPantry Brook WMA403StateYes	Davis Farm Conservation Area	61	Town	Yes
Frost Farm Conservation Area46TownYesGreat Meadows National Wildlife Refuge891FederalNoHaynes Meadow22TownYesHopbrook Marsh Conservation Land96TownYesHunt Road Conservation Area2TownYesJohnson Farm Conservation Area33TownUnknownKato Drive Conservation Area6TownYesLincoln Meadows71TownYesMahoney Farm7TownYesMarlborough-Sudbury State Forest240StateYesMorse Road Conservation Area3TownYesNonse Road Conservation Area2TownYesMorse Road Conservation Area3TownYesNobscot Reservation Area20TownYesNobscot Reservation108TownYesPantry Brook WMA403StateYes	Flintlock Lane Conservation Area	1	Town	Yes
Great Meadows National Wildlife Refuge891FederalNoHaynes Meadow22TownYesHopbrook Marsh Conservation Land96TownYesHunt Road Conservation Area2TownYesJohnson Farm Conservation Area33TownUnknownKato Drive Conservation Area6TownYesLincoln Meadows71TownYesMahoney Farm7TownYesMarlborough-Sudbury State Forest240StateYesMineway Brook Parcel4TownYesNorse Road Conservation Area20TownYesNobscot Reservation Area20TownYesNobscot Reservation Area403StateYes	Forest Street Parcel	4	Town	Yes
Haynes Meadow22TownYesHopbrook Marsh Conservation Land96TownYesHunt Road Conservation Area2TownYesJohnson Farm Conservation Area33TownUnknownKato Drive Conservation Area6TownYesLincoln Meadows71TownYesMahoney Farm7TownYesMarlborough-Sudbury State Forest240StateYesMineway Brook Parcel4TownYesNewfell Conservation Area20TownYesNobscot Reservation Area108TownYesPantry Brook WMA403StateYes	Frost Farm Conservation Area	46	Town	Yes
Hopbrook Marsh Conservation Land96TownYesHunt Road Conservation Area2TownYesJohnson Farm Conservation Area33TownUnknownKato Drive Conservation Area6TownYesLincoln Meadows71TownYesMahoney Farm7TownYesMarlborough-Sudbury State Forest240StateYesMineway Brook Parcel4TownYesNorse Road Conservation Area3TownYesNewfell Conservation Area20TownYesNobscot Reservation108TownYesPantry Brook WMA403StateYes	Great Meadows National Wildlife Refuge	891	Federal	No
Hunt Road Conservation Area2TownYesJohnson Farm Conservation Area33TownUnknownKato Drive Conservation Area6TownYesLincoln Meadows71TownYesMahoney Farm7TownYesMarlborough-Sudbury State Forest240StateYesMineway Brook Parcel4TownYesMorse Road Conservation Area3TownYesNewfell Conservation Area20TownYesNobscot Reservation108TownYesPantry Brook WMA403StateYes	Haynes Meadow	22	Town	Yes
Johnson Farm Conservation Area33TownUnknownKato Drive Conservation Area6TownYesLincoln Meadows71TownYesMahoney Farm7TownYesMarlborough-Sudbury State Forest240StateYesMineway Brook Parcel4TownYesMorse Road Conservation Area3TownYesNewfell Conservation Area20TownYesNobscot Reservation108TownYesPantry Brook WMA403StateYes	Hopbrook Marsh Conservation Land	96	Town	Yes
Kato Drive Conservation Area6TownYesLincoln Meadows71TownYesMahoney Farm7TownYesMarlborough-Sudbury State Forest240StateYesMineway Brook Parcel4TownYesMorse Road Conservation Area3TownYesNewfell Conservation Area20TownYesNobscot Reservation108TownYesPantry Brook WMA403StateYes	Hunt Road Conservation Area	2	Town	Yes
Lincoln Meadows71TownYesMahoney Farm7TownYesMarlborough-Sudbury State Forest240StateYesMineway Brook Parcel4TownYesMorse Road Conservation Area3TownYesNewfell Conservation Area20TownYesNobscot Reservation108TownYesPantry Brook WMA403StateYes	Johnson Farm Conservation Area	33	Town	Unknown
Mahoney Farm7TownYesMarlborough-Sudbury State Forest240StateYesMineway Brook Parcel4TownYesMorse Road Conservation Area3TownYesNewfell Conservation Area20TownYesNobscot Reservation108TownYesPantry Brook WMA403StateYes	Kato Drive Conservation Area	6	Town	Yes
Marlborough-Sudbury State Forest240StateYesMineway Brook Parcel4TownYesMorse Road Conservation Area3TownYesNewfell Conservation Area20TownYesNobscot Reservation108TownYesPantry Brook WMA403StateYes	Lincoln Meadows	71	Town	Yes
Mineway Brook Parcel4TownYesMorse Road Conservation Area3TownYesNewfell Conservation Area20TownYesNobscot Reservation108TownYesPantry Brook WMA403StateYes	Mahoney Farm	7	Town	Yes
Morse Road Conservation Area3TownYesNewfell Conservation Area20TownYesNobscot Reservation108TownYesPantry Brook WMA403StateYes	Marlborough-Sudbury State Forest	240	State	Yes
Newfell Conservation Area20TownYesNobscot Reservation108TownYesPantry Brook WMA403StateYes	Mineway Brook Parcel	4	Town	Yes
Nobscot Reservation108TownYesPantry Brook WMA403StateYes	Morse Road Conservation Area	3	Town	Yes
Pantry Brook WMA 403 State Yes	Newfell Conservation Area	20	Town	Yes
	Nobscot Reservation	108	Town	Yes
Parcel Near Water Row 5 Town Yes	Pantry Brook WMA	403	State	Yes
	Parcel Near Water Row	5	Town	Yes

Property	Acres	Owner	Protection Status
Piper Farm Conservation Area	63	Town	Yes
Poor Farm Meadow Conservation Land	55	Town	Yes
Raymond Reservation	109	Town	Yes
Waite Parcel	7	Town	Yes
Wake Robin Conservation Area	49	Town	Yes
Wash Brook Parcel	29	Town	Yes
Total	2,948		

Source: MassGIS, May 2019, Town of Sudbury

### Non-Profit Land

The non-profit land includes properties owned the Sudbury Valley Trustees (SVT) and the Sudbury Water District. These two entities are dedicated to protecting natural resources in town. SVT is a non-profit conservation organization to conserving land and protecting wildlife habitat in the Concord, Assabet, and Sudbury River basins. The Sudbury Water District provides an adequate supply of high-quality water to all District consumers.

### Trails

Sudbury has an extensive trail network that connects many of the Town's conservation areas (



Map 15), including:

- Hop Brook Conservation Area
- Tippling Rock Conservation Area
- Barton Farm
- Nobscot Conservation Area
- Davis Farm
- Lincoln Meadow

- Haynes Meadow
- King Philip Woods
- Piper Farm
- Frost Farm
- Poor Farm Meadow
- Cutting Farm Conservation Land

The Conservation Commission offers programs and guided hikes.<sup>48</sup>

<sup>&</sup>lt;sup>48</sup> Information about these areas and permitted uses are available at the Conservation Commission's website: <u>https://sudbury.ma.us/conservation\_lands/</u>. The land use policy is found here: <u>https://s3-us-west-2.amazonaws.com/cdn.sudbury.ma.us/wp-</u> <u>content/uploads/sites/273/2014/08/conslandregs090713final.pdf?version=9f3bc00832b72481c6f31dcfdd1fc3e5</u>.



Map 15: Walking and Biking Trails in Sudbury

# **Recreation and Conservation Protection Tools**

### Town Committees and Local Organizations

### Park and Recreation Commission

The Park and Recreation Commission members are elected by residents. It is a policy-making board responsible for ensuring high-quality year-round indoor and outdoor recreation facilities for Sudbury residents of all ages. It works closely with the Park and Recreation Department.

### Sudbury Conservation Commission

The Conservation Commission was formed in 1962 to protect local natural resources and features. One of the Conservation Commission's most important responsibilities is protecting the ecological integrity of Sudbury's wetlands and the surrounding landscape. The Commission is also responsible for implementing and enforcing the Massachusetts Wetlands Protection Act and the Sudbury Wetlands Administration Bylaw. Its members work hard to educate Sudbury residents and businesses about living responsibly with wetlands, providing a homeowner's guide to wetlands, and information on the Town's Tree Removal Bylaw, among other resources.

### Land Acquisition Review Committee

The Land Acquisition Review Committee (LARC) is a committee appointed by the Select Board to evaluate properties as they become available to the Town for conservation, recreation, municipal use, or development. Properties may come to be reviewed by LARC for a variety of reasons, including outright offers to the Town for purchase or the Town's exercise of right-of-first-refusal on Chapter Program lands. Evaluations determine the appropriateness for purchase or preservation by the Town, considering the following needs of the community:

- To preserve the character of Sudbury so defined by the Master Plan.
- To provide alternative housing so defined by the Housing Plan.
- To preserve and protect open space for conservation and recreation purposes, utilizing the Open Space and Recreation Plan.
- To provide for community activities.
- To preserve for future town/school use.
- To enhance municipal revenue, including commercial potential of properties.
- To protect natural resources, including water resources.

### Sudbury Valley Trustees

The Sudbury Valley Trustees (SVT) is a 501(c)3 non-profit organization that focuses on protecting natural areas and farmland that surrounds the Sudbury, Assabet, and Concord Rivers. SVT and the Town of Sudbury collaborate to protect large and small tracts of land. SVT owns about 673 acres of land in town as of 2019.

### Program and Policies

### Conservation Easements and Restrictions

Conservation easements or restrictions are voluntary, legal agreements between the landowner and a conservation agency that permanently limits the development rights of the land but does not change the ownership of the land. Landowners retain many of their rights, including the right to own and use the land, sell it, and pass it on to their heirs. However, because the conservation easement or restriction is a legal document, all future owners of the property are required to abide by the easement stipulations.

Landowners can also participate in the Agricultural Preservation Restriction (APR) Program.<sup>49</sup> The program offers to pay farmland owners the difference between the "fair market value" and the "agricultural value" of their farms in exchange for a permanent deed restriction which keeps valuable farmland soil from being built on by development companies for non-agricultural purposes.

### Community Preservation Act (CPA)

The Town of Sudbury has been committed to protecting and preserving its open space and recreational land for years. Sudbury was one of the first communities in the Commonwealth to adopt the Community Preservation Act (CPA) in 2002.<sup>50</sup> CPA allows cities and towns to adopt a property tax surcharge with revenues from this surcharge (plus state matching funds) to be used for open space preservation, the creation of recreation opportunities, the creation of community housing, and preservation of historic buildings and landscapes. Since the surcharge went into effect with the start of Fiscal Year 2003 on July 1, 2002, the Town has collected almost \$15 million in funding for land protection and related efforts. In the same year the Town adopted CPA, it also formed the Community Preservation Committee. The committee consists of nine members who focus on:

- Studying the needs, possibilities, and resources of the Town regarding community preservation.
- Making recommendations to the legislative body for the acquisition, creation, and preservation of open space.
- Recommending funding allocations for preservation at Town Meetings.

### Chapter Land Tax Program

The Chapter Land Tax Program<sup>51</sup> is a special designated tax status that offers a property tax break for landowners willing to commit to keeping some or all their land undeveloped and in use for forestry, agriculture, or recreation for a specified period. Properties are disqualified for the program if their application is not renewed, the property use is developed, or the property is under agreement for sale. The Town has a right of first refusal to purchase enrolled properties if the sale or development of the property is proposed during the Chapter enrollment period.

<sup>&</sup>lt;sup>49</sup> <u>https://www.mass.gov/service-details/agricultural-preservation-restriction-apr-program-details</u>

<sup>&</sup>lt;sup>50</sup> <u>Community Preservation Committee Report</u>

<sup>&</sup>lt;sup>51</sup> <u>https://www.mass.gov/service-details/forest-tax-program-chapter-61</u>

### Article 97

To ensure clean water and undeveloped open space, Article 97 of the Amendments to the Massachusetts Constitution provides that property acquired for conservation purposes should be used for only conservation purposes only.

# Natural Resources

Much of Sudbury's character is shaped by its open spaces, historic landmarks, conservation trails, scenic roads, and residents' love of the land. Natural resources provide important environmental, social, and economic benefits, including habitat for plants and animals, flood protection, recreation, economic livelihood, and improved air and water quality. Protection and management of these areas are important for the long-term health of a community and its resilience in the face of a changing climate.

# Watersheds & Water Resources

### Watersheds

Sudbury is located within the Sudbury-Assabet-Concord (SuAsCo) River watershed, which can be divided into nine sub-watersheds as shown in Map 16.<sup>52</sup> These were established by the Ponds and Waterways Committee, and allowed it to focus on manageable areas and to develop plans that are unique to the ecology of each watershed. Apart from the Goodnow Watershed, all of the other watersheds cross into neighboring towns emphasizing the regional nature of this issue. Additionally, all watersheds drain into the Sudbury River except for the Cutting and Powder Mill watersheds which drain into the Assabet River.

Protecting Sudbury's water resources ensures residents have access to clean source water for drinking and recreation. Residents depend primarily on groundwater from public wells associated with the Sudbury Water District. Maintaining the health of the rivers and land throughout the watersheds optimizes Sudbury's water quality and quantity for current and future usage.

### Surface Water Resources

In total, there are reportedly 190 ponds and 45 streams in Sudbury. Approximately 36% of unnamed ponds are on public lands. Major water resources include the Sudbury River and five small water bodies: Willis Pond, Carding Mill Pond, Grist Mill Pond, Cutting Pond, and Stearn's Mill Pond.

### Sudbury River

The 29-mile-long Sudbury River was designated by Congress as a federally protected Wild and Scenic River in 1999 along with the Assabet and Concord Rivers. It is connected to the Great Meadow National Wildlife Refuge and is the largest body of water accessible in the town for numerous recreational uses such as hiking, birding, fishing, and boating.

<sup>&</sup>lt;sup>52</sup> Ponds and Waterways Master Plan 2010





Map 16: Watersheds & Surface Water

The Sudbury River has one of the most significant sediment contamination problems in the nation, especially mercury, which is prevalent in the region from historic industrial activity and also comes from atmospheric deposition. Over the years, nutrients have entered the river from point sources such as wastewater treatment plants and nonpoint sources such as stormwater runoff, which is not related to mercury, causing contamination of the water. Consequently, fish in the Sudbury River are unsafe for human consumption. The river also suffers from invasive species such as purple loosestrife and water chestnuts.<sup>53</sup>

### Willis Pond

The largest pond in Sudbury, Willis Pond, is shallow and weedy but provides some recreational opportunities such as fishing, boating, and ice skating. The pond is in the Wayside Watershed and its outlet flows into Hop Brook through Run Brook. The north shore of the pond is unpopulated wetland bordering on the Assabet River National Wild Refuge.

### Cutting Pond

Cutting Pond is privately owned and is located in the Cutting Watershed. The area offers public access through the Cutting Recreational Land. On the east side of the pond is recreational land, a parking area, a canoe launch, and a small picnic area. Many wetlands and wildlife habitat surround the pond.

While this area is protected from development as part of the Assabet River National Wildlife Refuge, it is still vulnerable to being affected by stormwater runoff from nearby developed areas.

### Stearns Mill Pond

Formed in the 1600s when a dam was constructed along Hop Brook for power generation. Stearn's Mill Pond is now a popular spot for recreational activities such as fishing.<sup>54</sup> The area around the pond has recently been purchased by the Town and is being developed with a small parking lot and picnic area. The area is primarily surrounded by private property.

### Carding Mill Pond

Carding Mill Pond, the second largest pond in Sudbury, is downstream from the Wayside Inn, the Grist Mill, and the Easterly Wastewater Treatment Plant (located in neighboring Marlborough). The pond is surrounded by private homes and a small, Town-owned, publicly accessible conservation area to the west. The pond<sup>55</sup> is vulnerable to nutrient pollution due to discharges from the treatment plant and has problems with weed growth.

<sup>&</sup>lt;sup>53</sup> Ponds and Waterways Master Plan 2010

<sup>&</sup>lt;sup>54</sup> Wayside Watershed Inventory,

file:///H:/Projects/2018/18085%20Sudbury%20Master%20Plan/Background%20and%20Research/Natural%20Reso urces/WaysideWatershedInventory.pdf

<sup>&</sup>lt;sup>55</sup> Sudbury Open Space Recreation Plan 2009-2013

### Grist Mill Pond

Located in the southwest corner of Sudbury, Grist Mill Pond offers fishing and bird watching.<sup>56</sup> Public trails touch the southern side of the pond through the Hop Brook property and the eastern side of the pond through the Wayside Inn property. The northern side is connected to private property. Much like the Carding Mill Pond, the Grist Mill Pond suffers from phosphorous-laden discharges from the Easterly Wastewater Treatment Plant in Marlborough.

### Wetlands

There are a variety of wetland types in Sudbury from forested and shrub swamps to deep water marshes to ponds, lakes, and streams (Map 17). All are important water resources in town, playing a critical role in flood control and water quality maintenance as well as providing visual variety, wildlife habitats, and support for a healthy environment.

The Town also has wooded wetlands which occur on the fringe of the river floodplain. Such areas are used as a shelter for deer and other mammals during the winter season. According to the 2009-2013 Open Space and Recreation Plan, about 30% of Sudbury is wetlands.

Great Meadows National Wildlife Refuge has 548 acres of wetlands and is the largest public open space area in Sudbury. The area is adjacent to upland along the Sudbury River and has many recreational opportunities.

### Floodplains

While rivers and streams provide valuable water resources, they can be prone to flooding during rain events. Floodplains are low-lying areas along rivers and streams that collect overflow. When periodic flooding occurs in these areas, sediments and nutrients are redistributed, creating rich soil deposits that often support unique plant life. Undeveloped floodplains are important in controlling erosion, buffering against catastrophic flooding, and serving as significant habitat for wildlife.

The largest floodplains in Sudbury are associated with the Sudbury River and its tributaries. The river's floodplain is a protected open space owned by the US Fish and Wildlife Service and the Massachusetts Department of Environmental Management. The river has been noted to raise more than twelve feet during certain times of the year. The surrounding floodplains serve as giant sponges that detain floodwaters and protect downstream areas more suitable for development from severe flooding.

The Federal Emergency Management Agency (FEMA) maps an area's potential flood risk on Flood Insurant Rate Maps (FIRMs). Shown on Map 17 are the primary risk classifications used in Sudbury which

<sup>&</sup>lt;sup>56</sup> Ponds and Waterways Committee, *Public Access to Water Bodies in Sudbury* <u>https://sudbury.ma.us/pwc/wp-content/uploads/sites/333/2015/01/Sudbury-Waterways-Public-Access.pdf</u>



are AE Zone (1% annual chance of flooding and the base flood elevation is known) and X Zone (.2% annual chance of flooding, 500-year floodplain).

### Vernal Pools

Vernal pools are temporary pools of water that provide habitat for distinctive plants and animals. They are generally small, shallow ponds characterized by lack of fish and by periods of dryness. Vernal pool habitat is extremely important to a variety of wildlife species for breeding, feeding, and other critical functions. Vernal pools receive certification by the Natural Heritage and Endangered Species Program (NHESP) according to the Guidelines for the Certification of Vernal Pool Habitat (Massachusetts Division of Fisheries & Wildlife, 2009), and are protected if they fall under the jurisdiction of the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00). Certified vernal pools are also afforded protection under the state Water Quality Certification regulations (401 Program), the state Title 5 regulations, and the Forest Cutting Practices Act regulations. As can be seen in Map 17, there are dozens of NHEPS Certified Vernal Pools spread all across Sudbury.

### Aquifers

Map 18 shows the groundwater resources in Sudbury. Sudbury Water District supplies public drinking water from gravel packed ground wells in three separate aquifers: Raymond Road, Hop Brook, and Great Meadow. While Sudbury generally has conditions suitable for public wells, five of the Town's nine public water wells are in aquifers with a high vulnerability to contamination and pollution, specifically from the Boston Post Road/Route 20 business corridor.

Each public water supply well has an associated Zone I and Zone II. Zone I is the area closest to a well. Per the Massachusetts Drinking Water Regulations (310 CMR 22.00) it should be owned or controlled by the water supplier and limited to water supply activities. Zone II consists of the primary recharge area for the aquifer as defined through a hydrogeologic study. Each well in Sudbury has a Zone I radius of 400 feet.<sup>57</sup>

<sup>&</sup>lt;sup>57</sup> 2017 Water Quality Report, <u>http://www.sudburywater.com/wp-content/uploads/2018/06/SWD-2017-Water-Quality.pdf</u>



### Impaired Waters

According to the Massachusetts Department of Environmental Protection about 40% of the lakes, ponds, rivers, wetlands, and coastal waters in the nation are listed as impaired waters due to pollution. Under the Clean Water Act, MassDEP assesses the quality of its water bodies and reports its findings to the U.S. Environmental Protection Agency periodically. If a water body is not meeting its designated uses (such as habitat for fish and wildlife, fish consumption, or recreational uses, among others), it is considered impaired, and MassDEP must develop a plan to improve water quality. MassDEP is required to develop a total maximum daily load (TMDL) which is a pollution "budget" that calculates the maximum amount of a pollutant that can occur in a waterbody. A TMDL is a tool used by states to reduce pollutants by allocating a portion of the maximum amount allowed to the various sources of the pollutant. In the impaired water assessment, each waterbody is categorized from 1 to 5 (most impaired).

In the Massachusetts Year 2016 Integrated List of Waters, Carding Mill Pond, Grist Mill Pond, and the majority of the Sudbury River were listed as category 5.<sup>58</sup> The categorization indicates the water to be impaired or threatened for one or more uses and requiring a TMDL. Willis Pond, Stearn's Mill Pond, and part of the Sudbury River were listed as category two which indicate waters that are supporting some uses but are not assessed for all other uses. Cutting Pond is not assessed. TMDLs have yet to be developed for impaired waters in Sudbury.

Waterbody	Category	Location of Impairment	Source of Impairment
Sudbury River	5	Outlet Saxonville Pond, Framingham to the	Mercury in Fish Tissue
		confluence with Hop Brook (the lower	
		portion of Hop Brook was identified as Wash	
		Brook on USGS quads prior to 1987), Wayland	
Sudbury River	5	Confluence with Hop Brook (the lower	Mercury in Fish Tissue
		portion of Hop Brook was identified as Wash	
		Brook on USGS quads prior to 1987), Wayland	
		to the confluence with Assabet River (forming	
		headwaters Concord River), Concord	
Sudbury River	5	From the Fruit Street bridge	Mercury in Fish Tissue
		Hopkinton/Westborough to the inlet of	
		Framingham Reservoir #2, Ashland (formerly	
		part of the segment MA82A-02).	
Sudbury River	5	Outlet Framingham Reservoir #1,	Mercury in Fish Tissue
		Framingham to the inlet of Saxonville Pond,	
		Framingham (formerly part of segment	
		MA82A-02).	

#### Table 43: Impaired Waterbodies in Sudbury

<sup>&</sup>lt;sup>58</sup> Massachusetts Year 2016 Integrated List of Waters, <u>https://www.mass.gov/files/documents/2017/08/zu/16ilwplist.pdf</u>

Waterbody	Category	Location of Impairment	Source of Impairment
Carding Mill Pond	5	In Sudbury	Dissolved oxygen saturation,
			Excess Algal Growth, Phosphorus,
			and Aquatic Plants
Grist Mill Pond	5	Sudbury/Marlborough	Dissolved oxygen saturation,
			Excess Algal Growth, Phosphorus,
			fecal coliform, and Aquatic Plants

Source: Massachusetts Year 2016 Integrated List of Waters

# **Forested Areas**

Sudbury forested areas provide habitat, biodiversity, and ecosystem protection as well as recreational opportunities such as hiking, bird watching, and viewing of woods, marshes, and wetlands. Most of the forested areas are wooded with a mixture of mixed oak, oak/white pine, white pine, and pitch pine forest types. The Town has worked hard to protect large wooded areas despite many new housing developments.

Large forested areas in the Town include:

- Nobscot Boy Scout Reservation
- Wayside Inn Historic District
- Sudbury Valley Trustees (SVT) Memorial Forest and Desert Natural Area
- Assabet River National Wildlife Refuge
- Great Meadows National Wildlife Refuge
- Pantry Brook Wildlife Management Area
- Davis Conservation Land
- Hop Brook Marsh Conservation Land
- SVT Round Hill Reservation and Lincoln Meadows Conservation Land
- Poor Farm Conservation Area (Meachen property)
- King Philip Conservation Area
- Weisblatt Conservation Area/Tipping Rock

Map 19 shows prime forest lands in Sudbury as determined primarily by the Department of Natural Resources Conservation at the University of Massachusetts at Amherst and MassGIS Soils data. Potentially forested land is divided into nine different categories based on potential average timber productivity. This map may help the Town prioritize future conservation of forested areas.



Map 19: Forested Land

# Rare, Threatened, & Endangered Species

Sudbury's wide variety of habitat types are the foundation for a rich diversity of wildlife. Map 20 shows priority habitat and natural communities. Priority Habitat is the geographical extent of habitat for all state-listed plant and animal species. The NHESP database lists 26 such species observed in Sudbury. The population status of rare animals is defined in the Massachusetts Endangered Species Act (MESA) as:

- *Special Concern Species* have either experienced a decline that could threaten the species without intervention, or whose populations are so small, localized, or dependent upon specialized habitats that they could become threatened.
- *Threatened Species* are likely to become endangered in the foreseeable future.
- Endangered Species are in danger of extirpation from Massachusetts.

Taxinomical			MESA	Most Recent
Group	Scientific Name	Common Name	Status	Observation
Vascular Plant	Carex tetanica	Fen Sedge	SC	1902
Vascular Plant	Eriophorum gracile	Slender Cottongrass	Т	1905
Vascular Plant	Listera cordata	Heartleaf Twayblade	E	1897
Vascular Plant	Nabalus serpentarius	Lion's Foot	E	1931
Vascular Plant	Platanthera dilatata	Leafy White Orchis	Т	Historic
Vascular Plant	Scheuchzeria palustris	Pod-grass	E	1896
Vascular Plant	Scirpus longii	Long's Bulrush	Т	2008
Vascular Plant	Scleria triglomerata	Tall Nut-sedge	E	1899
Vascular Plant	Sphenopholis pensylvanica	Swamp Oats	Т	1896
Vascular Plant	Viola brittoniana	Britton's Violet	Т	1931
Reptile	Emydoidea blandingii	Blanding's Turtle	Т	2008
Reptile	Glyptemys insculpta	Wood Turtle	SC	2018
Reptile	Terrapene carolina	Eastern Box Turtle	SC	2017
Butterfly/Moth	Catocala herodias gerhardi	Gerhard's Underwing	SC	2015
Butterfly/Moth	Zanclognatha martha	Pine Barrens Zanclognatha	SC	2015
Bird	Botaurus lentiginosus	American Bittern	E	2008
Bird	Caprimulgus vociferus	Eastern Whip-poor-will	SC	2015
Bird	Cistothorus platensis	Sedge Wren	E	1945
Bird	Gallinula chloropus	Common Moorhen	SC	2017
Bird	Ixobrychus exilis	Least Bittern	E	2009
Bird	Podilymbus podiceps	Pied-billed Grebe	E	2010
Beetle	Cicindela purpurea	Cow Path Tiger Beetle	SC	1923
Beetle	Cicindela rufiventris hentzii	Eastern Red-bellied Tiger Beetle	Т	Historic
Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC	2018
Amphibian	Ambystoma opacum	Marbled Salamander	Т	1896

#### Table 44: Rare species observed in Sudbury

T: Threatened; E: Endangered; SC: Special Concern

Source: National Heritage and Endangered Species Program, Rare Species by Town View

The "natural communities" depicted on Map 20 represent important groups of plants and associated animals classified and described by their dominant biological and physical features. Massachusetts gives conservation priority to types of natural communities that have limited distribution in the state and/or around the globe (together considered to be Priority Types of Natural Communities for Conservation or "Priority Natural Communities").

# Farmland

For many years much of the land in Sudbury was farmland. Today the Town has approximately 1,300 acres of prime agricultural soils, the majority of which are located on the north end of Sudbury between North Road/Route 117 and Concord Road (Map 21). There are other scattered fields along Lincoln Road, Horse Pond Road, Marlboro Road, Morse Road, and south of Boston Post Road/Route 20 on Nobscot Road. J.P. Bartlett's Wholesale Greenhouse on Boston Post Road/Route 20 and Cavicchio Greenhouses on Union Avenue are two of the largest agricultural operations in the Commonwealth of Massachusetts.

# **Protecting Natural Resources**

### Town Committees and Commissions

### Sudbury Ponds and Waterways Committee

The purpose of the Sudbury Ponds and Waterways Committee is to advise the Select Board on the condition of the Town's major ponds, waterways, and tributaries, and to recommend remediation strategies where necessary in order to enhance opportunities for both active and passive recreational use as appropriate. The Committee was formed in 2005 to study and establish strategies and options for the remediation and sustainability of all publicly owned ponds and waterways throughout the town. In 2010, the Committee completed its Master Plan to document its activities and plan for future efforts.

### Sudbury Conservation Commission

The Sudbury Conservation Commission was established in 1962 to protect local natural resources and features, and to act as stewards of the Town's conservation properties. One of its most important responsibilities is protecting the ecological integrity of Sudbury's wetlands and the surrounding landscape. The Commission is responsible for implementing and enforcing the Massachusetts Wetlands Protection Act and the Sudbury Wetlands Administration Bylaw.

## General and Zoning Bylaws

### Sudbury Wetlands Administration Bylaw

This bylaw aims to protect surface water by prohibiting filling, dredging, building upon, degrading, polluting, and discharging into surface water resources such as any freshwater wetlands, marshes, wet meadows, etc.





Map 21: Prime Farmland

### Stormwater Management Bylaw Regulations

Stormwater management regulations were set to protect, maintain, and enhance public health, safety, and environment. The rules set minimum requirements and procedures to control the adverse effects of soil erosion and sedimentation, construction site runoff, increased post-development stormwater runoff, decreased groundwater recharge, and nonpoint source pollution associated with new development, redevelopment, and other land alterations.

### Zoning Overlay Districts

On top of the general environmental performance standards woven throughout the bylaws, the Town has two specific zoning overlay districts designed to protect flood plains and water resources.

#### Flood Plain Overlay District

This overlay prohibits fill, new construction, substantial improvements, and other development that would increase the 100-year flood level within the Flood Plain Overlay District without a Special Permit from the Zoning Boards of Appeals.

#### Water Resource Protection Overlay District

This overlay controls development and land use within aquifers and their recharge areas to protect the available supply and quality of drinking water for the Town. Only water supply activities are allowed in Zone I. Zone II prohibits business, industrial, research, or institutional uses discharging more than 1,000 gallons per day per 40,000 square feet of lot area.<sup>59</sup>

### Subdivision Rules and Regulations: Low Impact Development

One of the management plans outlined in the Stormwater Management Bylaw Regulations is Low Impact Development (LID). LID is an ecosystem-based design approach to land development and managing stormwater runoff often referred to as "green infrastructure."<sup>60</sup> LID focuses on conservation and the use of on-site natural features to protect water quality.

### Open Space and Recreation Plan

The 2009-2013 Open Space and Recreation Plan, which is currently being updated, is used by the Town in preserving land and protecting open space. It inventories the Town's environmental, open space, and recreational resources; identifies resource protection, community, and resource management needs; and provides an action plan over the next seven years to meet those needs. The goals identified in the plan are:

 <sup>&</sup>lt;sup>59</sup> Zoning Bylaws, 2017, <u>https://s3-us-west-2.amazonaws.com/cdn.sudbury.ma.us/wp-</u>
 <u>content/uploads/sites/270/2017/08/2017-Zoning-Bylaw.pdf?version=fdcf73cffa742f47d98f673651763632</u>
 <sup>60</sup> Stormwater Management Bylaw Regulations, <u>http://www.mapc.org/wp-content/uploads/2017/11/Sudbury-</u>
 <u>Stormwater-Regulations-Final-Approved-2009.pdf</u>

- 1. Preserve Town's character through the permanent protection of undeveloped land, surface water bodies and wetlands, agricultural lands and uses, publicly cherished viewscapes and historic sites.
- 2. Protect land areas and migration corridors for the well-being of indigenous flora and fauna.
- 3. Protect the quality and quantity of the Town's water supply, through both aquifer protection and water use education.
- 4. Protect and restore the quality of the Town's ponds and waterways.
- 5. Provide and maintain a diversity of conservation and recreation land uses reflecting the interests and needs of the whole community, including opportunities for both active and passive recreation.
- 6. Develop and maintain trail linkages by connecting old or creating new walkways and trails for non-motorized recreational vehicles, such as bicycles.
- 7. Continue to provide outreach to increase awareness among residents of the range of the Town's open space and recreational assets, and their possible uses and entry points.

# Land Use

In a community Master Plan "land use" examines the physical characteristics of land across a community and the policies/regulations that will shape land use into the future. It looks at where certain activities occur and what they look like as it impacts where residents work, shop, live, and play. By assessing development trends and patterns, the community can identify assets to protect and determine areas suitable for development and redevelopment.

In many ways, this chapter synthesizes information from several other focus areas within the Baseline Report. This chapter provides an opportunity to step back from the very detailed inventories provided in other chapters to examine the Town from a "high altitude" perspective, looking at overall patterns and town-wide trends that affect how land will be used in the future.

# What Shapes Land Use?

The way land is used by the people or agencies that own it is shaped by a wide variety of factors, many of which lie outside the purview of the municipality (e.g., economic trends, financing, etc.). However, the municipality ultimately plays a major role in determining land use and the policies adopted at the local level are extremely important in determining the future of land use across the community. This section provides a brief overview of some of the items that affect municipal planning and decision-making relative to land use.

### Historic Development Patterns

New England represents one of the earliest areas in the country where European settlers established the first communities that would later emerge as cities and towns. Equally important as the settlements that were scattered across the region were the transportation routes that connected them. While connections were often established using rivers, routes over land were incredibly important to the survival and vitality of municipalities and shaped long-term land-use patterns over centuries. Most notably today in Sudbury, roads like Concord Road, Hudson Road, Maynard Road, and others illustrate the primary travel routes between village centers. These routes were the lifeblood of each village center they served and fostered the more compact mix of commercial, government, religious, and residential uses we still see today.

### Environmental Constraints

The development of land is directly shaped by a series of environmental constraints that may or may not be present. For example, the presence of wetlands, streams, or a high groundwater table can create challenges for stormwater management, site development (e.g., excavation), and wastewater disposal. As another example, steep slopes and bedrock outcrops may force developers to consider large-scale excavation or blasting in order to make a site developable. Aside from the physical challenges these conditions create, they are often accompanied by more stringent regulations designed to protect the natural environment as well as potential impacts on neighboring properties. One of the most important environmental constraints in Sudbury is the aquifer that supplies the Town's drinking water. The Town effectively uses the projected water quality standards associated with drinking water as a way to regulate land use activity through its Water Resource Protection Overlay District.

### Zoning and Local Regulations

The most direct and powerful influence on land use patterns in present-day Sudbury, and moving forward, is local land use regulation. Overall, the Town's Zoning Bylaw is the most influential document in local land use regulation. However, there is a collection of agencies and regulatory documents that have jurisdiction over a variety of issues in Sudbury (Table 45). The Zoning Bylaw is grounded in a community's Master Plan and generally reflects the Future Land Use Map contained in that document. This chapter provides a more detailed summary of Sudbury's Zoning Bylaw below.

Document	Primary Authority	Scope
Zoning Bylaw	Building Inspector, Planning	Primary document for what is allowed,
	Board, Zoning Board of	where it is allowed, and intensity of use.
	Appeals	
Rules and Regulations Governing	Planning Board	Rules for subdividing lots and establishing
the Subdivision of Land		roads.
Wetlands Bylaw	Conservation Commission	Protection of wetlands and surface waters.
Historic Districts Commission	Historic Districts Commission	Protection of historic resources in four
General Guidelines		districts.
Board of Health Regulations	Board of Health	Septic system approval. *

#### Table 45: Summary of Local Land Use Regulation in Sudbury

\*The role of the Board of Health goes well beyond approving septic systems. However, this responsibility represents its highest influence over land use.

### Infrastructure

The presence of infrastructure can facilitate larger, more intense development in areas designated for growth. It can also help to resolve some of the issues raised by environmental constraints. Most notably for land use, the presence of centralized water supply and/or sewer disposal. The Boston Post Road/Route 20 Corridor is an area in Sudbury designated for growth, but also exhibits constraints to development due to wastewater management needs. The 2001 and 2012 corridor studies noted commercial property owners are "increasingly having difficulty treating and disposing of wastewater in an economically feasible manner due to physical and regulatory constraints (e.g., soil conditions, depth to groundwater, aquifer protection, Title 5 regulations, etc.)."<sup>61</sup>

Since 1995, the Town of Sudbury has been studying wastewater options for the Boston Post Road/Route 20 business corridor. In the spring of 2019, the Department of Public Works (DPW) received Town Meeting approval to borrow up to \$500,000 from the State Revolving Fund (SRF) to complete the Comprehensive Wastewater Management Plan (CWMP). The CWMP will take all the wastewater

<sup>&</sup>lt;sup>61</sup> Report Town of Sudbury, *Project Evaluation Report*. 2001 and 2012

planning the Town has done to date and combine them into a single plan which can be used to assess needs comprehensively, evaluate alternatives, coordinate with local and regional planning goals, and develop a coordinated public outreach program to engage residents and businesses. The CWMP will give the Town a 20-year planning document to address wastewater needs and the leverage it needs to qualify for state grants and loans for a wastewater treatment system and facility. Through the CWMP development process, a recommended wastewater treatment solution will be determined. It is estimated construction of a new facility will take two years to complete. The next step for the Department of Public Works (DPW) in the process is to submit a State Revolving Fund (SRF) loan application.

# Recent Development Trends

Sudbury is primarily a residential community with large tracts of open land and an impressive inventory of natural resources (Map 22). A snapshot of land coverage today can be created with 2016 data available through the Massachusetts Bureau of Geographic Information (MassGIS).<sup>62</sup> These data detail what is happening on the ground (impervious surfaces like buildings or roadways, or natural areas such as wetlands and forest) and how the land is being used as classified by local tax assessors to categorize a use for an entire parcel (residential, commercial, etc.). A combination of these attributes gives us a picture of Sudbury's landscape. Most of the land is considered open space and natural resources (Table 46 and Map 22), making up approximately 87% of the Town's total land area. This includes forested areas (50.4%), forested and non-forested wetlands (22.8%), and developed open space (10.4%). Large natural resource systems are associated with the Assabet River National Wildlife Refuge to the west and the Great Meadows National Wildlife Refuge to the east along the Sudbury River. Forested and wetlands on private property also contribute to this significant number. Residential uses, predominately single-family homes, are found throughout Sudbury, and commercial and industrial uses are concentrated along Boston Post Road/Route 20.

<sup>&</sup>lt;sup>62</sup> It should be noted that the 2016 MassGIS data does not conform to the classification schemes and feature delineation of previous land use GIS data the agency prepared (1951-1999 and 2005); therefore, an analysis of changes in land uses over time with GIS data cannot be done with these data.



#### Table 46: Land Coverage Summary (2016)

0 / (	,	
		% of Total
Land Use	Acreage	Land Area
IMPERVIOUS*	62,828	9.8%
Residential - Single Family	2,259	0.4%
Residential - Multi-family	908	0.1%
Residential - Other	25,023	3.9%
Commercial	5,036	0.8%
Industrial	1,208	0.2%
Mixed Use	588	0.1%
Right-of-way	7,325	1.1%
Other Impervious	20,481	3.2%
AGRICULTURAL	19,207	3.1%
Agricultural	515	0.1%
Cultivated	9,363	1.5%
Pasture/Hay	9,329	1.5%
OPEN SPACE & NATURAL RESOURCES	559,076	87.2%
Developed Open Space	66,579	10.4%
Forest	323,136	50.4%
Grassland	9,848	1.5%
Scrub/Shrub	2,191	0.3%
Bare Land	1,763	0.3%
Forested Wetland	88,389	13.8%
Non-Forested Wetland	57,594	9.0%
Water	5,864	0.9%
Aquatic Bed	3,712	0.6%
TOTAL ACRES	641,111	-

\* Any type of surface that does not absorb rainfall. Source: MassGIS Land Use 2016

Since 2004, residential permit activity in Sudbury has fluctuated with national trends, with the housing boom in the mid 2000s, the recession that followed in 2008, and the steady growth into the late 2010s. Permits issued in 2018 matched those just before the 2008 recession at 59 (Figure 34). Details on the type of residential construction is most readily available from 209 and shows the majority of construction in the last ten years. Nearly 90% has been single-family homes and condominiums (Table 47).



Figure 34. Residential Permits Issued by Year, 2004-2018

Year	Single Family & Condo	Two Family	Multi Family (3+)	Total Permits
2009	13	0	0	13
2010	9	2	27	38
2011	15	2	2	19
2012	25	10	17	52
2013	25	0	17	42
2014	27	0	0	27
2015	26	2	0	28
2016	17	0	0	17
2017	26	2	30	58
2018	59	0	8	67
Total by Type	242	18	101	273

Table 47. Types of Residential Structured Permitted, 2009-2018

Source: Sudbury Building Department

# Land Use Regulations and Policies

### Zoning

The Sudbury Zoning Bylaw and Zoning Map are the primary tools the Town uses to direct development. Zoning regulations are set to promote the appropriate use of land throughout Sudbury as well as to preserve and protect the town's character. The regulations dictate where development happens, what it looks like, and other standards that must be met. Table 48 shows that 92% of the Town is zoned primarily for residential use, 5% for open space, and the remaining for industrial or research uses. Surface water bodies are not zoned. While not the Official Zoning Map, Map 23 shows the location of local zoning districts in Sudbury.

### **Overlay Districts**

Sudbury has seven zoning overlay districts shown on Map 24. Overlay districts are used by communities to impose either more stringent or less stringent standards than the underlying zoning district. More stringent standards may be required to protect drinking water quality or other critical natural resources. Less stringent standards may be applied to allow more flexibility in development requirements to encourage the desired type of project, development, or use in an area like the commercial corridor along the Boston Post Road/Route 20 and Union Avenue.

### Flood Plain Overlay District

The Flood Plain Overlay District is used to preserve and protect the town's streams and other watercourses, and adjoining land; the health and safety of persons and property against the hazards of flooding; and the community against the detrimental use and development of lands adjoining such watercourses. The district includes all "special flood hazard areas inundated by 100-year flood" within the town designated as Zones A and AE on the Middlesex County Flood Insurance Rate Map (FIRM), issued Federal Emergency Management Agency (FEMA). The areas in the overlay district are deemed to be vulnerable to seasonal or periodic flooding; therefore, the use of land in the district is considered to be dangerous to the health and safety of the occupants. Protection is achieved primarily with limitations on allowable uses, and compliance with state and local environmental policies.

### Water Resource Protection Overlay District

The purpose of the Water Resource Protection Overlay District is to protect, preserve, and maintain water resources in town against pollution and contamination, monitor water quality, and promote health and safety of the community. The district is established using the Massachusetts Department of Environmental Protection wellhead protection zones. Protection is achieved primarily with limitations on allowable uses and establishing performance standards for activities like storage of hazardous materials and stormwater management.

### Melone Smart Growth Overlay District

The purpose of this district is to encourage smart growth development in town with sustainable design and better transportation infrastructure. The district aims to improve housing choice in Sudbury and meet the goals of the Town's Housing Production Plan by providing affordable and multi-family unit projects with architecture and landscaping that fits the character of the community.

#### Table 48: Sudbury Zoning Bylaw Summary (2018)

District	Description of Uses <sup>1</sup>	Acreage	% of Total Land Area	Minimum Lot Size	Maximum Height
Single Residence A	Allows primarily single-family housing. Special Permits can	10,880	69.8%	40,000 SF	2.5 stories
	be issued for a variety of specialized residential uses				
	including Cluster Development, Incentive Senior				
	Development, and others.				
Single Residence C <sup>2</sup>	Allowable uses are the same as Single Residence A district.	2,291	14.7%	60,000 SF	2.5 stories
Wayside Inn Historic	Allows single-family housing and protects and preserves	1,166	7.5%	5 acres	2.5 stories
Preservation	historic resources.				
Business	Allows primarily commercial development and light	44	0.3%	-	2.5 stories
	manufacturing.				
Limited Business	Allows uses similar to the Business district, but also allows	53	0.3%	-	2.5 stories
	some forms of residential development by Special Permit				
	from the Zoning Board of Appeals.				
Village Business	Allows single-family housing, apartments on second/third	30	0.2%	-	2.5 stories
	floor, and some commercial uses.				
Industrial	Allows primarily industrial and institutional uses.	93	0.6%	-	2 stories
Limited Industrial	Allows industrial uses, institutional uses, and some forms of	143	0.9%	100,000 SF	2 stories
	retail and financial uses.				
Industrial Park	Allows industrial, and business or professional office uses.	7	0.04%	100,000 SF	2 stories
Research	Allows primarily commercial development and industrial	151	1.0%	8 acres	3 stories
	uses such as lab facilities.				
Open Space	Allows recreational activities such as boating and fishing, as	721	4.6%	-	2 stories
	well as forestry, grazing, and farming.				

<sup>1</sup> These descriptions provide the general focus of each district, and more detailed information is found in Appendix A of the Zoning Bylaw. As with many communities, municipal and institutional uses (e.g., facilities, schools, etc.) are allowed in many of the districts. Also, the exemptions from M.G.L. Chapter 40A, Section 3 apply.

<sup>2</sup> There is no Single Residence B District.





### Mixed-Used Overlay District

The purpose of the Mixed-Used Overlay District is to encourage redevelopment along the Boston Post Road/Route 20/Union Avenue commercial corridor to diversify and expand the town's commercial base and improve aesthetic character along the corridor. The district was used to permit the Meadow Walk Sudbury Master Development Plan in 2016. While there are many areas in town that are mixed-use, there are only two areas zoned for these types of uses.

### North Road Residential Overlay District

The North Road Residential Overlay District was created to encourage development along the North Road/Route 117 corridor and improve the aesthetic character of the area by revitalizing underutilized properties. The redevelopment aims to include multi-family, active streetscape, and enhance the vitality of businesses by diversifying and expanding the town's economy and local job opportunities.

#### Historic Districts

The purpose of the Historic Districts is to preserve and protect buildings, places, and districts of historical or architectural significance. While not part of the Zoning Bylaw, they are included in the Town's Official Zoning Map and highlighted in the Sudbury Zoning Bylaw for informational purposes. These districts include the Old Sudbury Historic District, Wayside Inn Historic Districts (No. 1 and 2), King Philip Historic District, and George Pitts Tavern Historic District.

#### Wireless Services Overlay District

The purpose of this overlay district is to provide wireless services with minimal harm to the public health, safety, and general welfare of the inhabitants of Sudbury, and to regulate the installation of such facilities. The Wireless Services Overlay District is not shown on Map 24, however, according to the Sudbury Bylaw, overlay district consists of the following parcels of land:

- Sudbury Landfill property, Assessor's Map No. K12, Parcel 002
- Former Melone property, Assessor's Map No. C12, parcel 100
- Sudbury Water District Borrow Pit, North Road, Assessor's Map No. C12, Parcel 004
- Raymond Road well field area, including Feeley Park and surrounding Town and Water District land, Assessor's Map Nos. L08, Parcels 001, 002, 008, 009, 010, 012 and M08, Parcel 021
- Highway Department property, Old Lancaster Road, Assessor's Map No. H08, Parcel 049
- All property and buildings owned by the Town of Sudbury, exclusive of school buildings, school properties and cemeteries.

It also includes all properties within Business, Limited Business, Village Business, Industrial, Limited Industrial, Industrial Park and Research districts.