

MASTER PLAN HANOVER

2018





Acknowledgements

Hanover 300 was a three-year collaborative effort to identify a community vision and create a long-term, comprehensive strategic plan for the Town of Hanover. The plan was made possible with funding from the Town of Hanover and MAPC. The Town would like to thank all Hanover citizens who participated in the process and acknowledge the **Master Plan Committee** members, who volunteered countless hours of time and energy to help create this plan:

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1. Introduction

What is a master plan?

Hanover 300 is the comprehensive master plan prepared by the Town of Hanover with the support of the Metropolitan Area Planning Council under the direction of the Hanover Master Plan Committee and the Planning Department. The master plan includes a strategic framework to guide the future physical and economic development within the Town of Hanover over the next 10 years. Hanover 300 is an action plan for positive change within the community. It provides:

- A town vision based on community input and priorities;
- strategies and actions to improve livability, opportunity, and sustainability;
- a land use plan to guide physical development in town;
- an implementation strategy to effectively achieve plan goals; and
- predictability for residents, businesses, and developers, and elected officials.

Developing a master plan is more than just researching and writing a report. It is an open, public process through which the people of Hanover decide future priorities to guide growth and development over the next decade. It was also an opportunity through which town residents and

business owners, and Town boards and committees talked to each other, listened to each other, and brought their visions for the town into alignment to achieve a set of shared goals.

Public Input

Public input is a critical component of a master planning process in any community. During the course of the Hanover 300 process, residents of all ages, business owners, elected and appointed representatives, and others were invited to weigh in on important issues facing our great town. There were many ways citizens participated: three public forums were held at the Hanover Town Hall; a project website at Hanover300.mapc.org; pop-ups at the Senior Center and Forge Pond Park; social media; drop-in interviews with business owners; and Master Plan Committee members and MAPC planners were present at Hanover Day.

This input, along with existing conditions findings, were synthesized by the Master Plan Committee with assistance from MAPC, then developed into a set of draft goals, strategies and actions for each master plan element, with an implementation strategy for each.

After considerable input, the plan was finalized and approved by the Planning Board. Hanover 300 will serve as the guiding planning document for the Town of Hanover over the next 10 years.

Implementing the Plan

The purpose of a plan is to prepare for action. Hanover 300 includes a detailed implementation plan setting out the what, how, who, and when for specific actions to achieve the goals of the plan. The Hanover Planning Board will serve as the stewards of the plan, advising town boards, committees, and other stakeholders on implementation as well as monitoring progress.

Hanover Today

The Hanover Today chapter takes a snapshot of Hanover’s existing demographic trends within a regional and statewide context. Understanding these trends will provide a baseline that informs the town and its residents on how to proactively plan for a community that will benefit all of its members.

Planning Context

Location and Access

The Town of Hanover, Massachusetts is a primarily residential community located about 25 miles southwest of Boston within Plymouth County. It is bordered by the Town of Norwell to the northeast, Hanson and Pembroke to the south, and Rockland to the west. Compared to other communities in Plymouth County, Hanover is one of the smaller towns with a total area of 15.7 square miles (the largest is Brockton with 1,093 square miles).

Hanover is regionally accessible via State highway routes 53, 123, and 139, all of which transect the town. Route 3, a limited-access highway, provides convenient access to both the Boston metropolitan area and Cape Cod. Running four miles north and south between Norwell and Pembroke, Route 53 was once the major route to Cape Cod and today continues to be the main commercial thoroughfare for the town. Routes 123 and 139 both

traverse Hanover in an east-west direction and also provide an assortment of business and professional establishments.

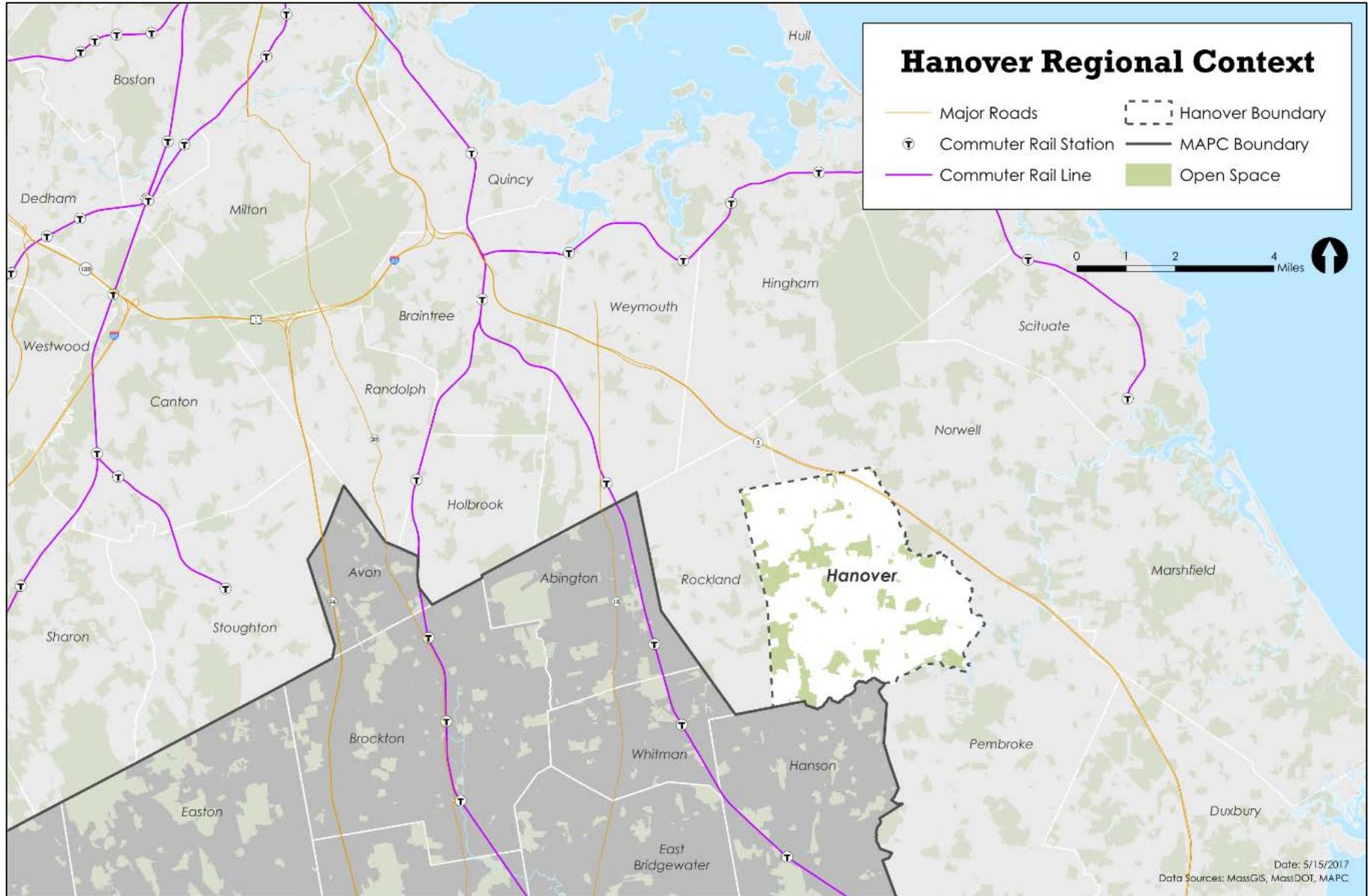
The nearest access to Massachusetts Bay Transit Authority (MBTA) commuter rail is the Abington station, approximately 10 minutes by car from Hanover. The Plymouth & Brockton Street Railway (known locally as the P & B Bus) provides weekday service from Rockland to the South Station, with a park-and-ride stop in Rockland. The Greater Attleboro Taunton Regional Transit Authority (GATRA) also offers regional transportation services.

Local Governance and Services

The Town of Hanover’s executive branch is made up of a five-member Board of Selectmen along with a Town Manager. The executive powers of the town—with the exception of the powers granted to the Town Manager—are vested in the Board of Selectmen. Each Selectman is elected for a term of three years. The Board is responsible for appointing the Town Manager as well as citizens to fill positions on Town commissions and committees.

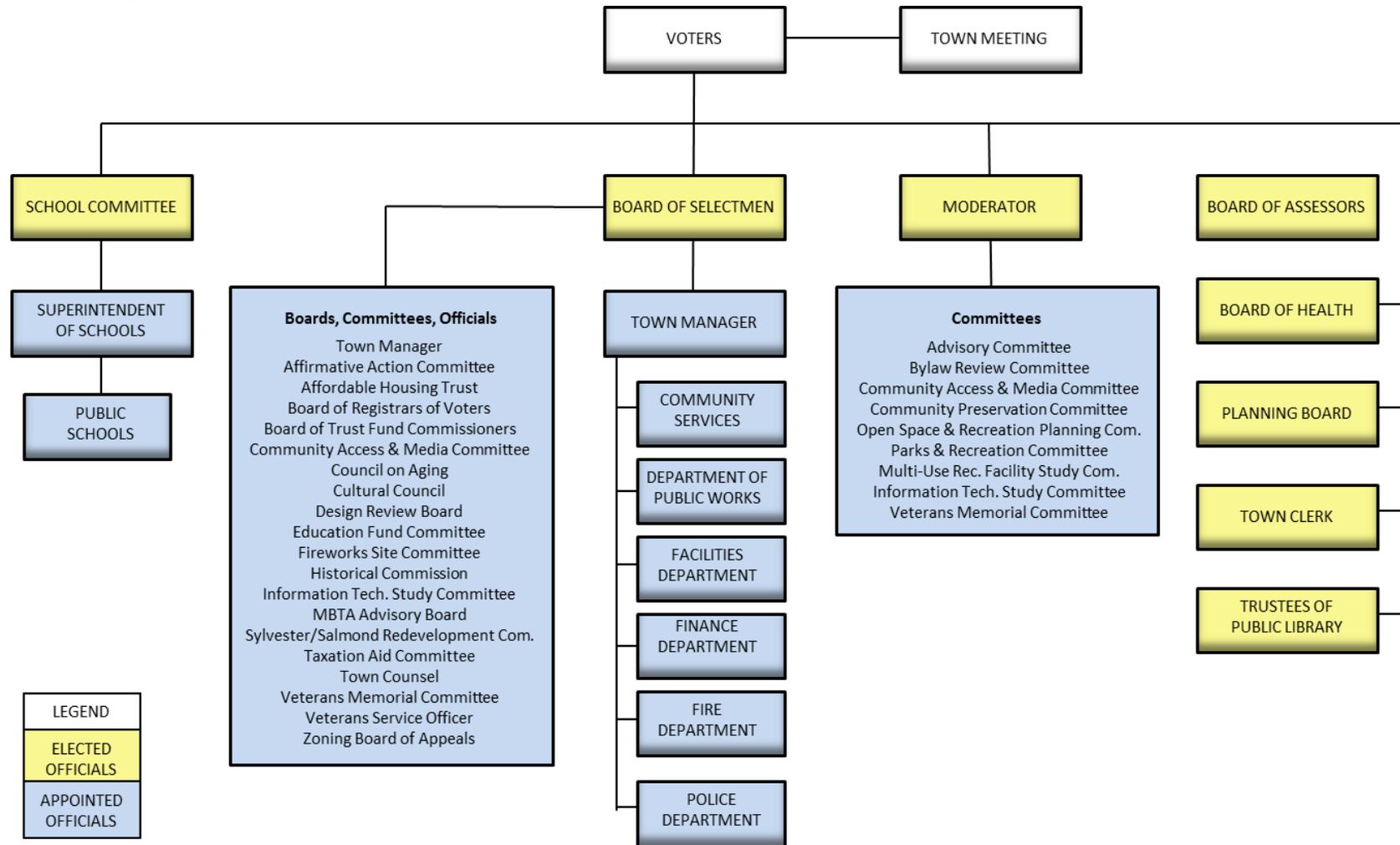
The Town Manager also serves a term of three years, though he or she may be appointed for successive terms of office. This position was established by Town Charter, Chapter 67 of the Acts of 2009. The Town Manager is the chief executive officer of Hanover and is charged with overall operation of the Town. He or she is supervised by the Board of Selectmen for the effective management of Town affairs and is charged with implementing the Town policies established by the Board.

Figure 1: Regional Context Map



The Town Manager has the authority to appoint or remove non-elected department heads and Town employees, with the exception of the School Department. In addition to supervising day-to-day operations and facilities in Hanover, the Town Manager prepares the town's budget, negotiates collective bargaining agreements, and acts as the chief procurement officer.

Figure 2: Town Organization Chart¹



¹ Town of Hanover FY2017 Annual Budget

Like many other communities in the Commonwealth, Hanover has an annual Town Meeting in the first week of May of each year. Special Town Meetings during other months of the year may also be called. Town Meeting represents the legislative branch of Hanover's government where all registered voter residents vote on the budget and other articles in the warrant. The Town Clerk maintains all town records and documents the votes and actions of the Town Meeting. The Town Moderator directs the progress of the meeting and appoints the Town's Advisory Committee, a group of nine registered voters in the town who help balance the budget and review all articles in the warrant.

Both the Town Clerk and Town Moderator are elected. Other elected officials in Hanover include members of the Board of Assessors, School Committee, Board of Health, Trustees of the Public Library, Planning Board, and Affordable Housing Trust. Elected members of the School Committee are responsible for the educational needs of Hanover's children. The School Superintendent carries out the day-to-day operational responsibilities of the school system.

Historical Context

The Town of Hanover was officially incorporated in 1727 with a population of approximately 300 people. At the time of its incorporation, Hanover consisted of about 11,000 acres of land, or 17 square miles. In 1754, about one-tenth of this land was annexed to Pembroke in an area that is now a part of Hanson.

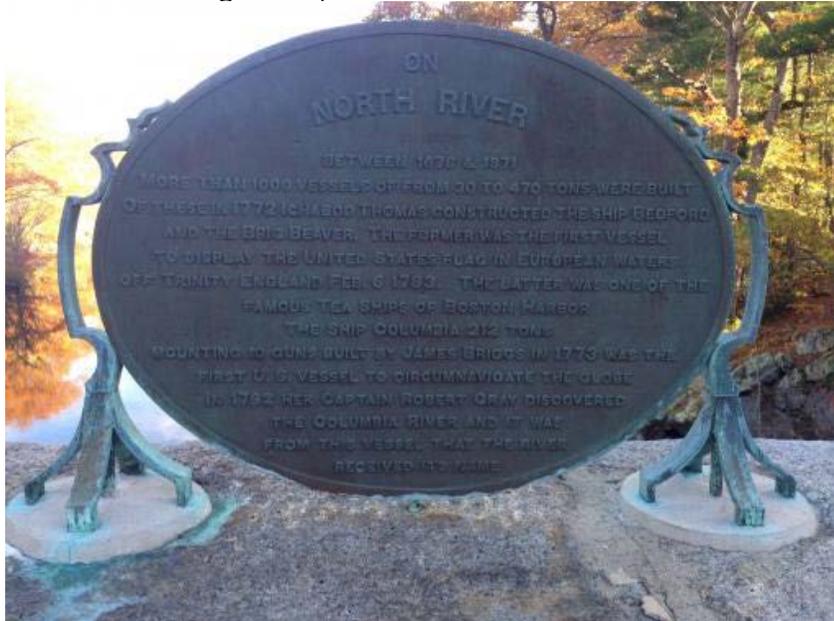
Evidence of Hanover's first settlers are dated as early as the mid-1600s. William Barstow is among Hanover's first settlers in 1649. Barstow is credited with constructing the first bridge across the North River, which runs along the southern limits of Hanover into Norwell, Marshfield, and Scituate before emptying into Massachusetts Bay. Prior to the arrival of European settlers, the natural waterways of Hanover served as fishing and hunting grounds for local Native Americans.

Like most towns in New England, Hanover's early economies were anchored by agriculture and lumbering, later expanding into industrialized sectors, specifically shipbuilding and manufacturing along the North River. By the end of the 19th century, many of the town's farmers were employed in shoe factories or the Clapp Rubber Mill. Hanover's population in 1900 grew to 2,152. The largest employer at the beginning of the 20th century was the National Fireworks Factory. Though many residents of Hanover were employed in factories at this time, the majority of the workforce still consisted of subsistence farmers. The anchor and plow seen in the Town Seal recognizes the town's agricultural roots and shipbuilding heritage.

Between 1864 and 1938, the Hanover Branch Railroad provided service from the Four Corners area, through South and then West Hanover, and eventually on to Boston. In addition, a trolley service ran through North Hanover from 1893 to 1921 which provided transportation for both workers and vacationers traveling to Nantasket. Freight service went to West Hanover until the late 1970s and early 1980s, though some of the tracks are now used

as walking trails. Construction of Route 53 began in 1930 as automobile use in the country continued to grow.

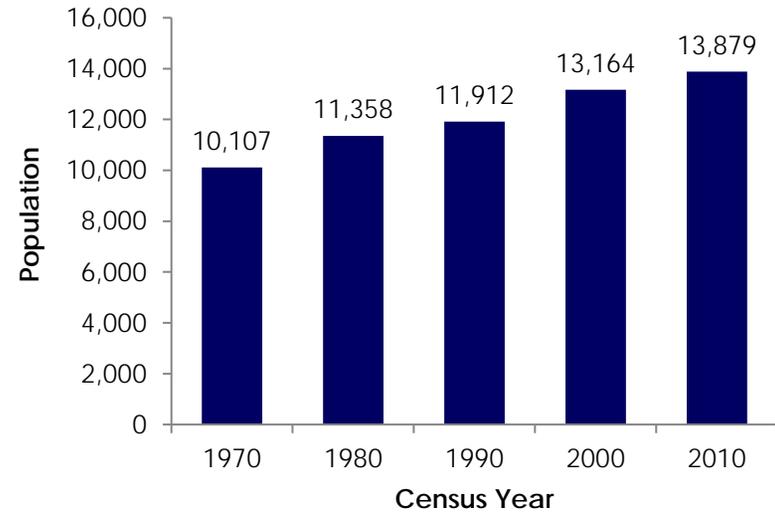
North River Bridge Plaque



Demographic Trends

Hanover's population as of the 2010 Census was 13,879, a 5% increase from 2000 (13,164). In comparison to nearby communities, Hanover's population is larger than Norwell's (10,506) and smaller than Hingham's (22,157). Overall, the town's population has grown steadily since 1970, but the pace of growth has slowed and projected to plateau in the coming decades.

Figure 3: Hanover Population, 1970-2010²



Age Trends

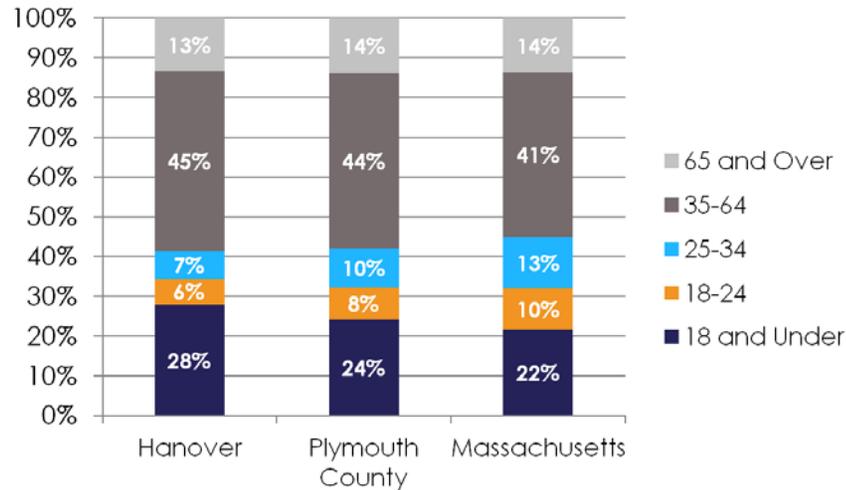
Compared to the rest of Plymouth County and Massachusetts, Hanover's population is relatively younger. The largest age cohort in Hanover is adults age between 35 and 64 years old, making up almost half (45%) of the population, followed by children age 18 and under (28%). This age composition reflects the large proportion of family households with children in Hanover.

Much like suburban communities in the state and country, Hanover has a significant and growing senior population (13%), or those age 65 or older. At the time of the 2000 Census, Hanover's median age was 37.5 years. By 2010, it had increased 11% to 41.8 years. While Hanover's

² U.S. Census Bureau

millennials (those between ages 18 and 34) have equal share of the town's total population as its seniors (13%), this younger segment is comparatively smaller than Plymouth County (18%) and Massachusetts (23%).

Figure 4: Population by Age³

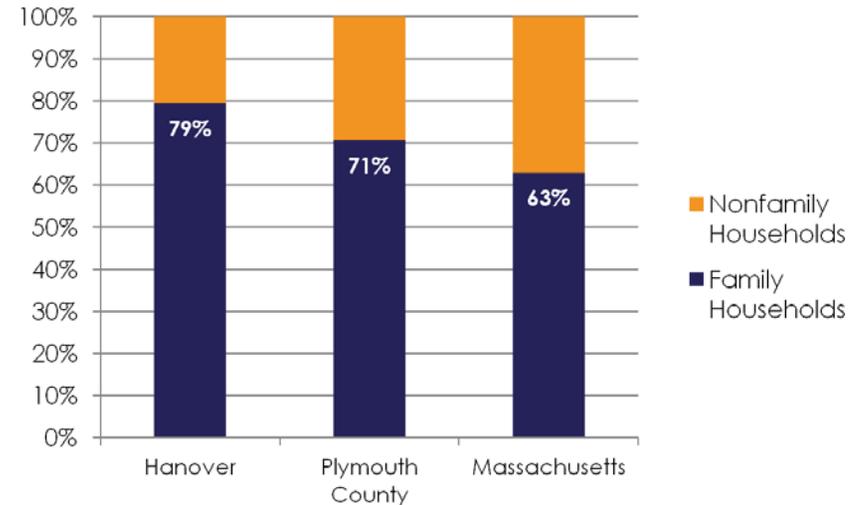


Household Trends

The number of households in Hanover remains virtually unchanged between the 2010 Census and the 2014 ACS 5-Year Estimates. As of the 2010 Census, Hanover had a total of 4,709 households. This represents an increase of 9.3% from the number of households in 2000. Concurrently, the town's population grew only 5% between 2000 and 2010, indicating that household growth is exceeding population growth in Hanover.

³ U.S. Census 2010

Figure 5: Households by Family Type⁴



The fact that the number of households increased faster than population is due mostly to declines in average household sizes. While the average household size in Hanover was 3.02 at the time of the 2000 Census, it decreased to 2.93 by 2010. These declines are likely driven by older couples transitioning to empty nesters and younger couples moving into town to start families.

Hanover is a family-oriented community. The majority (79%) of the town's households are families, half of which have school-aged children under 18. This rate is higher than in both Plymouth County and the Commonwealth, whose percentages of family households are 71% and 63%, respectively. However, Hanover's percentage of family households has decreased slightly from 2000 (82%).

⁴ *Ibid*

Local demand on housing and public services (including schools) will be most affected by these household trends. The increasing pace of household formation despite decrease of household size will drive housing demand for a variety of household types: singles, young couples, empty-nesters, and families with or without children. For instance, senior householders who want to downsize to smaller housing units while remaining in Hanover may be unable to find suitable options. Mobility and access to job centers for will be critical to maintaining a high quality of life.

Population Projections

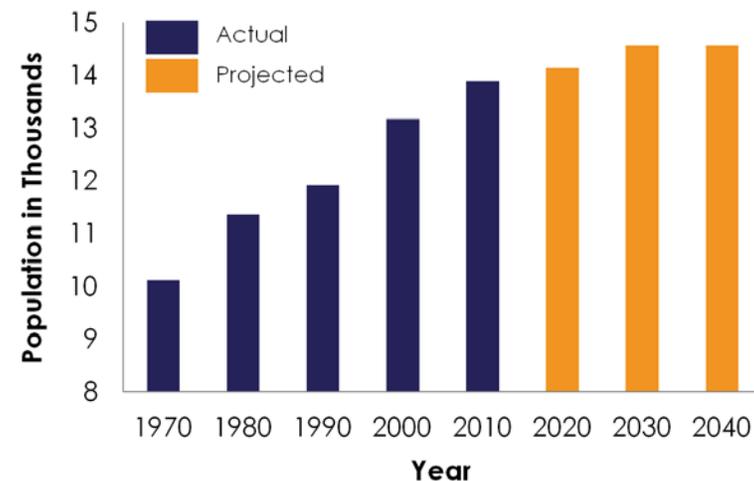
The Metropolitan Area Planning Council (MAPC) has prepared population projections through 2030 for the Metro Boston region. These projections are based on two scenarios: Status Quo (SQ), based on the continuation of existing rates of births, deaths, migration, and housing occupancy; and a Stronger Region (SR) that assumes higher population growth, greater housing demand, and a larger workforce.

According to MAPC's SR projections, Hanover's population growth is likely to slow and plateau by 2030. The town's population is expected to grow only 2% between 2010 and 2020, and 2.8% between 2020 and 2030. No growth is expected between 2030 and 2040.

Despite projected slowing of growth, the age composition of Hanover's population will undergo substantive changes. The senior population is expected to increase 48% by 2030 if current conditions persist. This segment will see the greatest population growth in town. At the same time, school age population is expected to decrease by 20%,

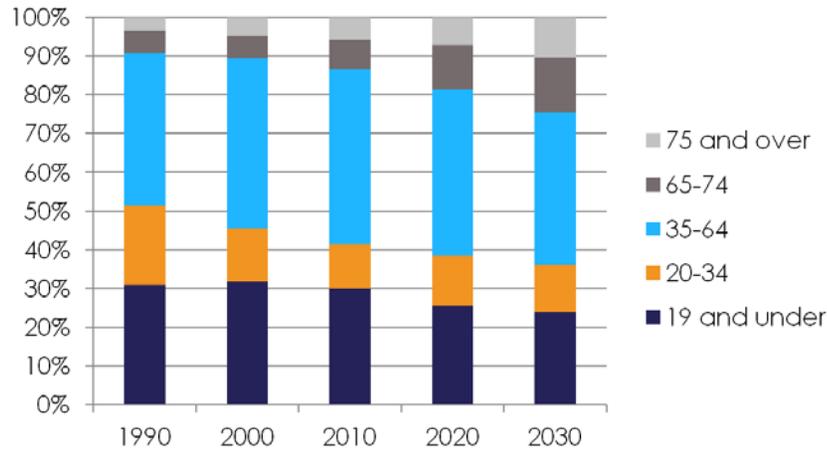
the population 20 to 34 will increase by 10%, and the population 35 to 64 will decrease by 9%. Further, the Massachusetts Department of Secondary Education's (MA DESE) enrollment data showed that Hanover's school district enrollment has experienced decline of approximately 2% since the 2012-2013 school year. Despite these trends, it is important to note that market factors, especially local housing market conditions, could have substantive influence over these demographic trends.

Figure 6: Hanover Population and Projections, 1970-2040⁵



⁵ U.S. Census and MAPC Stronger Region Projections (2014)

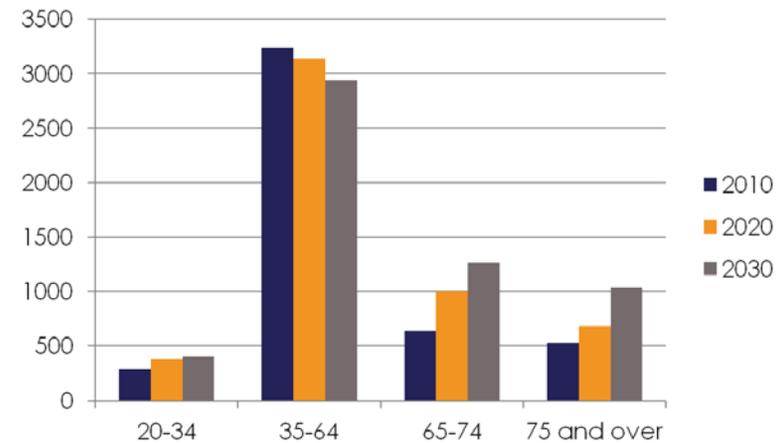
Figure 7: Population by Age and Projections, 1990-2030⁶



The number of households in Hanover is expected to increase substantially by 2030. According to MAPC SR projections, the number of households is expected to grow 20% by 2030 (based off a 2010 value of 4,709 households). This includes a growth of about 11% between 2010 and 2020 and a growth of 8% between 2020 and 2030. Between 2000 and 2030, the number of households with a householder 65 years old and above is expected to rise almost 50%. At the same time, the number of households with a householder 35 to 64 years old is expected to decline by 9%.

⁶ U.S. Census and MAPC Stronger Region Projections (2014)

Figure 8: Households by Age of Householder and Projections, 2010-2030⁷



School Population

During the 2015-2016 school year, 2,632 students were enrolled in the Hanover School District. There have only been slight fluctuations in this number over the past decade and it has remained consistent even as the town's population has increased. Of these students, about 6% come from economically disadvantaged families, compared to over 27% of students in the public school system throughout the state. Only 1.7% of Hanover students have a first language other than English, compared to 19% of students in the state.

The adjusted graduation rate (does not include transfers) for Hanover's 2015 cohort was 98.4%. For the 2014-2015 school year, the dropout rate for all grades was less than

⁷ *Ibid*

1%. Of students who graduated in 2013-2014, 87% went on to college or university. However, of the low-income student population, only 68% went on to pursue higher education.

Racial Composition

Hanover is less racially and ethnically diverse than the county and the state. The town is primarily White (96%), with a small percentage of Latino or Hispanic (1%), Black or African American (1%), Asian (1%), and multiracial (1%) residents. By comparison, Plymouth County is 85% White, 3% Latino or Hispanic, 7% Black or African American, 1% Asian, 2% multiracial, and 3% other. Massachusetts is more diverse overall at 76% White, 10% Latino or Hispanic, 6% Black or African American, 5% Asian, 2% multiracial, and 1% other.

While the majority of Hanover's population is White, the nonwhite percentage of the population increased slightly from 2.3% in 2000 to 4.2% in 2010.

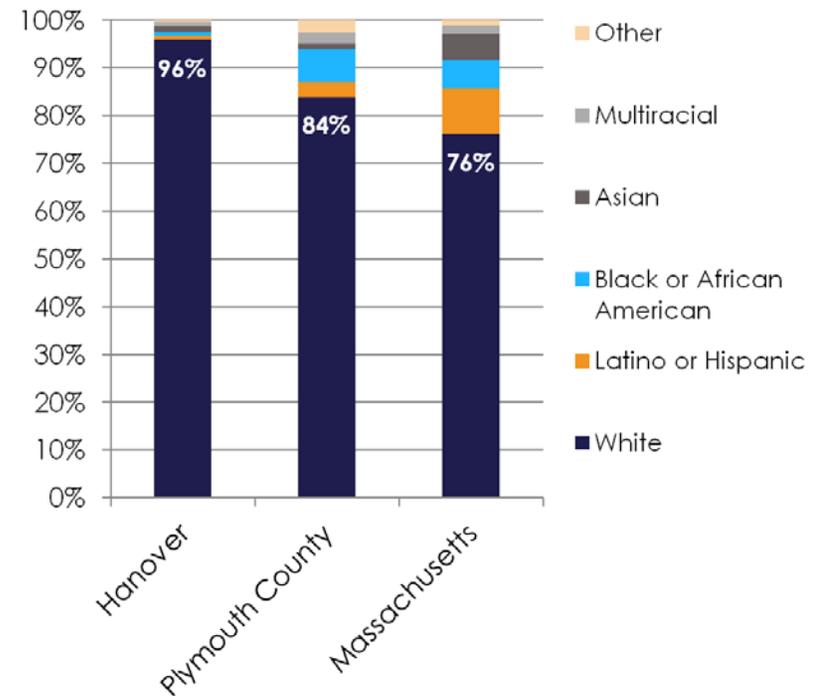
Income Profile

According to ACS 2014 5-Year Estimates, Hanover's median household income is much greater than the rest of Plymouth County and Massachusetts: \$98,750 per year for the town, \$75,816 for the county, and \$67,846 for the state. The town's median family income is \$120,398 a year, much higher than most families in the state who have a median of \$86,132.

Almost half (49.3%) of Hanover's households earn over \$100,000 per year while 33% of Plymouth County

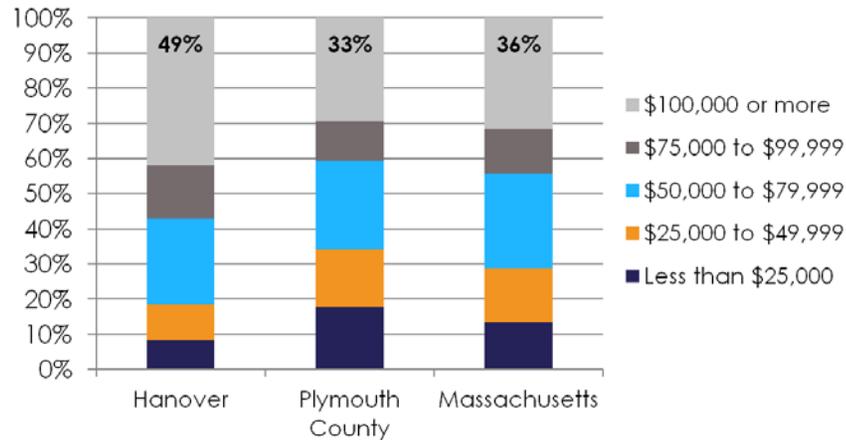
households and 36% of Massachusetts households earn that amount. Less than 10% of households in Hanover earn under \$25,000 a year, compared to 20% in the county and 15% in the state. Only 2.2% of Hanover families are living below the poverty line, half of the county's poverty rate for families and a quarter of the state's rate. Approximately 4% of all residents in Hanover are living in poverty.

Figure 9: Race and Ethnicity⁸



⁸ U.S. Census 2010

Figure 10: Household Income⁹



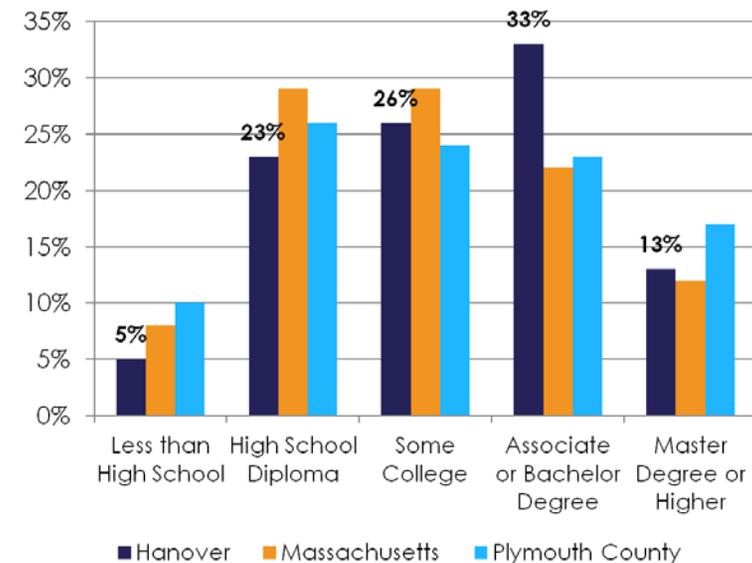
Educational Attainment

Higher incomes are often associated with high levels of educational attainment. Almost half (46%) of Hanover residents age 25 and older have completed college, with 33% obtaining an associate or bachelor degree and another 13% obtaining a master degree or higher. Within the rest of Plymouth County, 40% of residents age 25 and older have completed college. This figure is 34% for the state.

Hanover lags behind the rest of Plymouth County somewhat in terms of proportion of residents who have a master degree or higher. While 13% of Hanover residents age 25 and older have a master degree or higher, 17% of Plymouth County residents do.

⁹ ACS 2009-2014 5-Year Estimates

Figure 11: Educational Attainment¹⁰



¹⁰ Ibid

Housing

Introduction

Over the past half century, Hanover has continuously grown in population. More than half of the housing in Hanover has been built since 1960; making its housing much newer than in communities largely built up during the Colonial or Victorian eras. This is consistent with MAPC's definition of Hanover as a Developing Suburb under its Massachusetts Community Types classification system.

While population growth has slowed in Hanover, the number of households is growing and household growth is outpacing population growth. At the same time, average household size is declining, mirroring regional and nationwide trends. This means that more homes are needed, but that the number of people housed in each home is smaller than in years past. The population is also aging, and people over age 65 are expected to make up a quarter of the town's population by 2030. The number of children in the community is expected to decline by 2030.

In 2016, the median home sales price in Hanover was \$445,000; higher than many surrounding communities but 22% lower than the median home sales price in 2005 if adjusted for inflation. This means that while home prices have recovered substantially since the recession – the median home sales price dipped to \$401,979 in 2009 (adjusted to 2016 dollars) – housing prices in Hanover may

not be as inflated as in other communities in the MAPC region. The vacancy rate in Hanover is quite low; indicating that the relatively lower prices are not related to an oversupply of housing.

Given the changing demographics and continued high housing prices, strategic planning can help ensure Hanover remains a desirable place to live and work. In 2013, the Town of Hanover's Affordable Housing Trust developed the Town's Housing Production Plan (HPP) that was approved by the Commonwealth of Massachusetts' Department of Housing and Community Development as the guidance document for its affordable housing production goals. This chapter is an update of the HPP's findings and recommendations. For more details, please reference the full HPP.

Key Findings

- Hanover's population and household growth has slowed but continues to maintain a steady increase.
- The community will continue to age, and projections indicate the proportion of seniors will continue to increase, while the number of children will decrease.
- While household income in Hanover is higher than the county and the state, rising cost of already expensive housing will continue to place a burden on current and prospective homeowners.

- The low supply of workforce and housing appropriate for different life stages will have a real impact on the town's livability for its eldest residents and new families.

Existing Conditions

Demographics

Population Trends

The Town of Hanover experienced a building boom between 1950 and 1970 when the population tripled (see Figure 12). After that, the rate of population growth slowed, but in every decade from 1970 to 2010, the town's population continued to grow, and its population is projected to continue growing. Between the 2000 and 2010 Census, Hanover's population grew 5.4%.

Hanover's age distribution also experienced notable shifts (see Figure 13). In 1990, 9.5% of the town's population was 65 and older, increasing to 13% in 2010. By 2030, that age cohort will grow to 25% of the town's population. The median age increased from 37.5 years in 2000 to 41.8 in 2010. By 2030, it is projected to increase to 43.9. While the town's population continues to age, the school-age population remained roughly the same in recent decades and is projected to decline from 2010 to 2030.

Figure 12: Past and Projected Population of Hanover¹¹

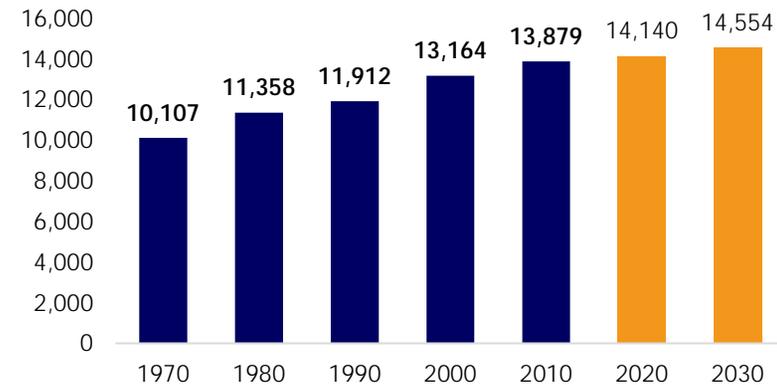
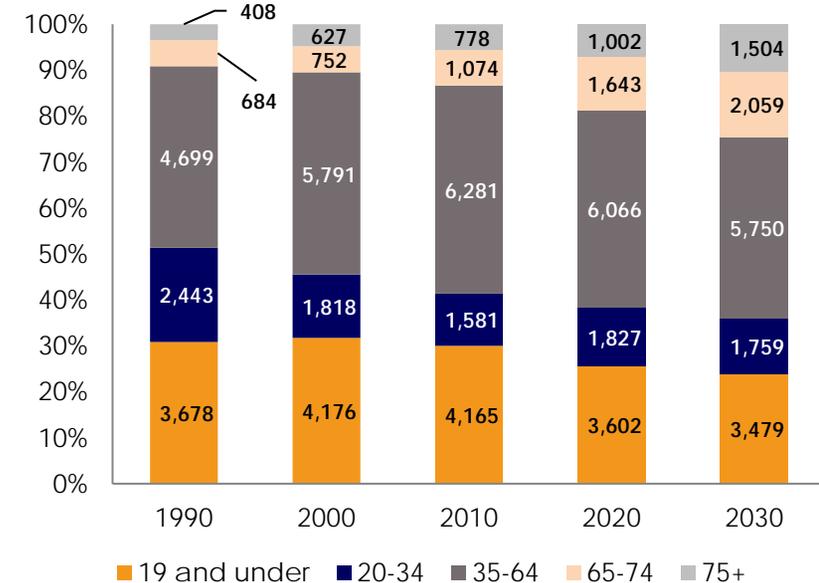


Figure 13: Population Projections by Age¹²



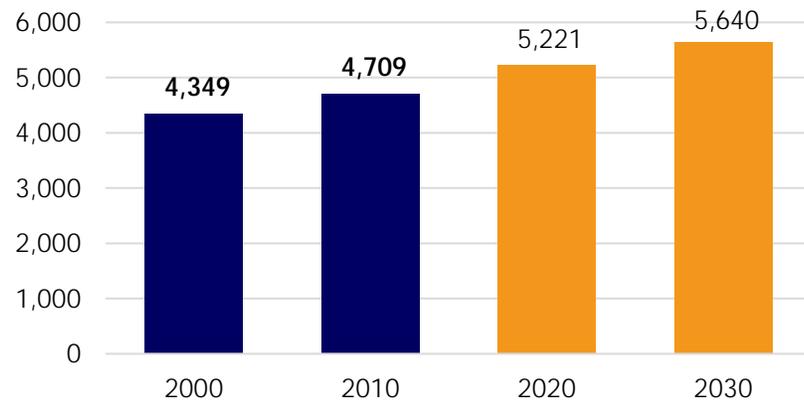
¹¹ US Census, MAPC Stronger Region Projections (2014)

¹² Ibid

Household Trends

Between 2000 and 2010, households grew by 8.3%, or 360 households (see Figure 14). Growth in the number of households outpaced population growth; likely attributed to declines in average household size. Between 2000 and 2010, the average household size during the same period decreased from 3.02 to 2.93 persons per household. These figures may be indicative of trends observed across the state and the rest of the United States: many families with children are transitioning to empty-nester households, and couples may be delaying having children or having fewer children.

Figure 14: Households in Hanover¹³

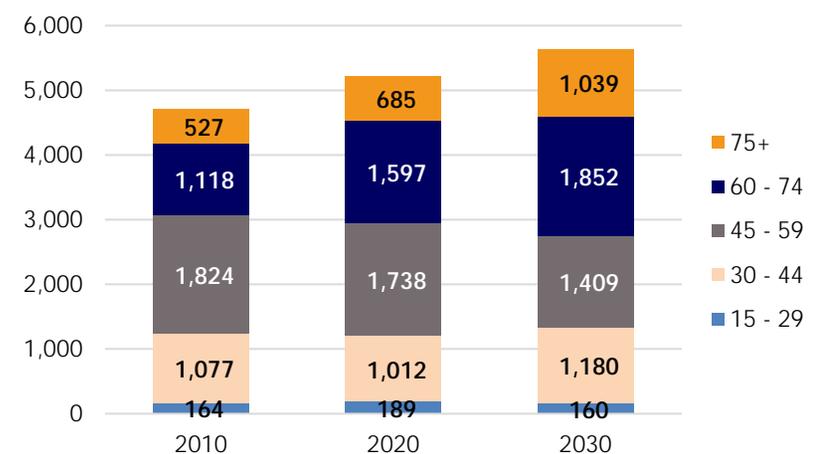


The majority of households continue to be family households (79.4%), which are households with at least one person present who is related to the householder by birth, marriage, or adoption. However, the proportion of family households have declined slightly since 2000, from 82%.

¹³ Ibid

Household growth is projected to continue in Hanover. MAPC projects that there will be 5,640 total households in Hanover by 2030, representing a 20% increase or 930 additional households compared to 2010 estimates, and well above the projected population growth of 5% during the same time period. In 2010, there were 1,645 householders in Hanover over the age of 60 (see Figure 15). This number is projected to increase to 2,282 in 2020 and to 2,891 in 2030. In 2030, over 51% of all households will have a householder over the age of 60, compared to 35% in 2010.

Figure 15: Household Projections by Age¹⁴



An increase in total households and an aging population will put pressure on the local housing supply. MAPC projects that there will be a net demand for 506 additional

¹⁴ Ibid

housing units (more specifically, 340 single family units and 166 multifamily units) in 2020 in Hanover.

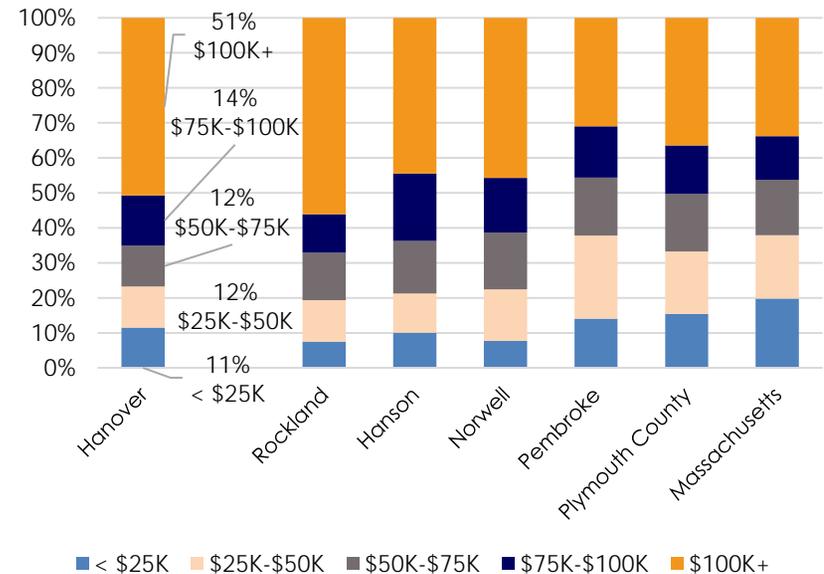
Race & Ethnicity

According to the 2010 Census, over 95% of Hanover’s population is white, but Hanover has become more diverse over the past two decades. The proportion of minority race and ethnicities increased from 1.7% in 2000 to 3.5% in 2010, with the largest subgroup identifying as Asian.

Educational Attainment & Income

Hanover residents are well-educated—nearly 60% of the population have completed an Associate Degree or higher level of education, compared to 48% of Massachusetts residents.

Figure 16: Household Income¹⁵



The town of Hanover is more affluent than the rest of Plymouth County and Massachusetts. According to the American Community Survey 5-Year Estimates 2011-2015, over half of the town’s population reported an annual household income of \$100K or more, similar to neighboring municipalities but comparatively higher than the county and the state (see Figure 16). The median household income in Hanover is \$101,823 compared to \$75,459 in Plymouth County, and \$68,563 in Massachusetts.

Housing Stock Profile

Housing construction in Hanover peaked between 1960 and 2000. Over 60% of the town’s housing stock, more than 2,900 housing units, were built between 1960 and 1999.

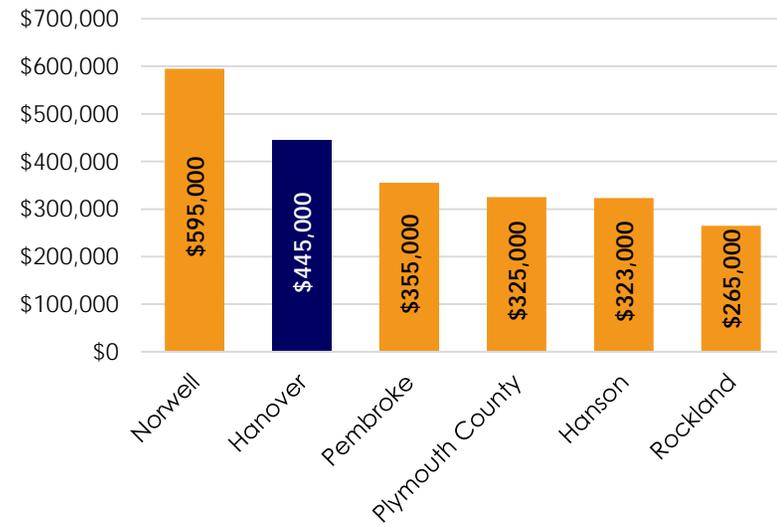
¹⁵ American Community Survey 5-Year Estimates, 2011-2015

Housing growth in Hanover has continued steadily in recent years. Since 2000, 519 new units of housing were developed, including a significant number of units that were added to the Subsidized Housing Inventory (SHI). The total number of housing units in Hanover is 4,862 with an occupancy rate of 97%. Homeownership levels in Hanover are comparatively higher than those of Plymouth County and the state. 84% of housing units are owner-occupied, while 16% are occupied by renters. Though the proportion of renter households is small compared to owner households, this represents an increase from 12.6% in 2010. This increase may be attributed to the high housing prices, and 40B projects developed since the 2013 HPP. The majority of the housing units are detached single family homes (85%).

Housing Market Conditions

The 2010 Census counted that Hanover’s housing vacancy rate stands at 2.9%, which indicates a very tight market. The tight market is compounded further by increasing housing costs, with the median sales price for both single family homes and condominiums at \$445,000 in 2016 (see Figure 18). The similarity in median sales price of condominiums compared to single family homes in recent years suggests that the condominiums on the market are of the higher-end variety. Further analysis finds that condominiums sold in 2016 were, on average, greater than 1,900 square feet. At \$445,000, Hanover has the second highest 2016 median sales price for all home types, relative to neighboring communities (see Figure 17).

Figure 17: 2016 Median Sales Price for All Home Sales¹⁶



¹⁶ The Warren Group

Figure 18: Median Sales Price Adjusted to 2016 Dollars¹⁷

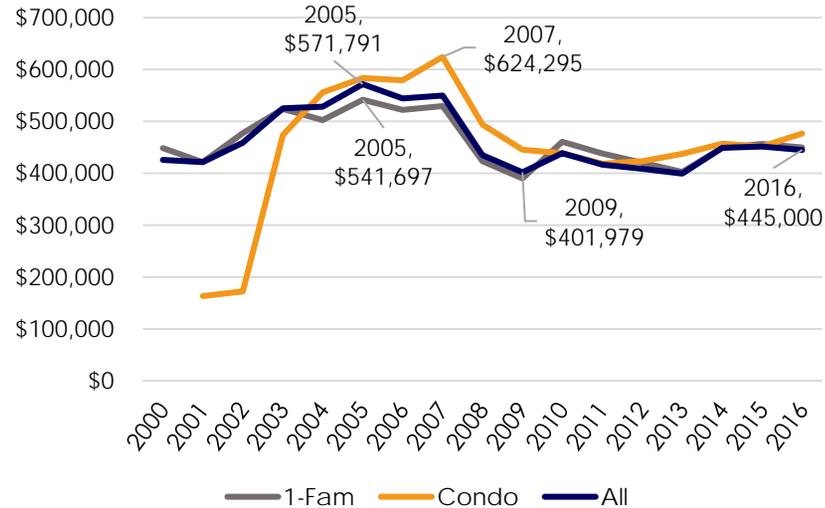
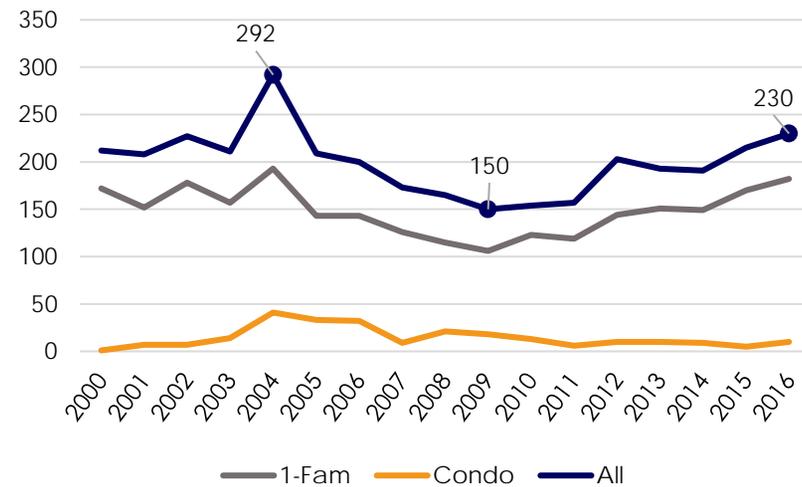


Figure 19: Number of Home Sales by Type¹⁸



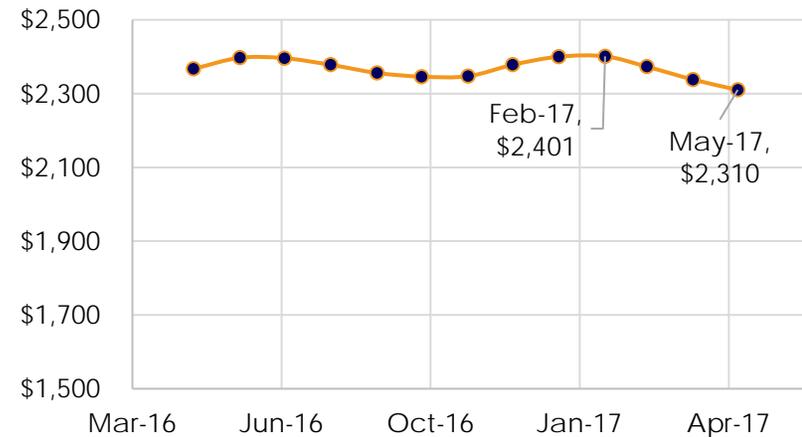
¹⁷ Ibid

¹⁸ Ibid

Volume of home sales varied between 2000 and 2016 and roughly coincide with economic conditions and the peaks and troughs for sales prices (see Figure 19). Home sales are dominated by single family homes, with condominiums making up only 5% of sales. During the years shown, the fewest homes were sold in 2009, when 150 homes were sold in Hanover, and the most were sold in 2004, 292 homes. However, 2016 saw the second highest number of homes sold during this time, at 230 homes.

Very few rental units are available in Hanover. As of July 2017, only 4 listings were available on Zillow.com. According to Zillow.com, Hanover has an overall median rent of \$2,310 as of May 2017 (the lowest in the last 12 months). The maximum estimate in the last 12 months is only slightly greater at \$2,401 recorded in February 2017 suggesting that rents are relatively consistent in Hanover (Figure 20).

Figure 20: Median Rent in Hanover, May 2016 – May 2017¹⁹



¹⁹ Zillow

The low vacancy rate, trends in home sales, and the limited rental units on the market, suggest that the supply of housing available on the market may be inadequate and housing options for prospective buyers and renters are limited.

Housing Affordability

Cost burden is a metric used by the US Department of Housing and Urban Development (HUD) that evaluates households' ability to pay for their housing costs based on their reported gross household income. Households that spend more than 30% of their income on housing are considered to be housing cost burdened, and those that spend more than 50% are considered to be severely cost burdened. In Hanover, roughly a third of all residents (33%) experience cost burden. Due to its relatively small population, estimates of Hanover's severely cost burdened households are not available. Figure 22 shows estimated percentage of cost-burdened households for Hanover and its surrounding communities. Hanover's rate of cost burdened households, 33%, which translates to roughly 1,600 households, is about average.

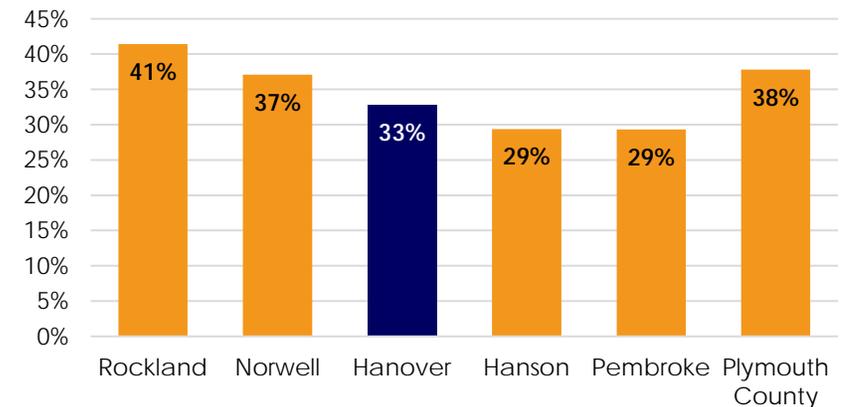
As it is possible for households of any income level to be cost burdened just by buying or leasing housing units somewhat beyond their means even if alternative, more affordable options are available, another metric to consider is the number of households eligible for housing assistance. Federal and state programs use Area Median Income (AMI), along with household size to identify these households. Typically, households at 80% of AMI and below qualify for housing assistance. According to HUD's

Comprehensive Housing Affordability Strategy (CHAS) analysis, roughly 20% of Hanover households are low-income and earn less than 80% of AMI.

Figure 21: Affordable Housing Income Limits, 80% AMI, Boston-Cambridge-Quincy, MA-NH HUD Metro FMR Area²⁰

Household Size	80% AMI
1 person	\$54,750
2 person	\$62,550
3 person	\$70,350
4 person	\$78,150
5 person	\$84,450
6 person	\$90,700
7 person	\$96,950
8 person	\$103,200

Figure 22: Estimated % of Cost-Burdened Households²¹



²⁰ US Department of Housing and Urban Development FY2017

²¹ American Community Survey, 2011-2015 5 Year Estimates

Another measure of housing affordability is whether local rents exceed Fair Market Rents (FMR), or maximum allowable rents, determined by HUD for subsidized units in a specific geographic area. Hanover’s overall median rent of \$2,310 is well above Fair Market Rents for all types of housing units in the greater Boston metropolitan area.

Under M.G.L. Chapter 40B, affordable housing units are defined as housing that is developed or operated by a public or private entity and reserved for income-eligible households earning at or below 80% of AMI. Units are secured by deed restriction to ensure affordability terms and rules. All marketing and placement efforts follow Affirmative Fair Housing Marketing guidelines per the Massachusetts Department of Housing and Community Development (DHCD).

Housing that meets these requirements, if approved by DHCD, is added to the SHI. Chapter 40B allows developers of low- and moderate-income housing to obtain a Comprehensive Permit to override local zoning and other restrictions if less than 10% of a community’s housing is included on the SHI or if less than 1.5% of the municipality’s land area is dedicated to affordable housing.

In 2013, DHCD approved Hanover’s five-year Housing Production Plan, setting an annual production goal of 216 affordable units. The Town has since made progress and is currently above the 10% threshold. According to the Chapter 40B SHI published by DHCD in October 2017, Hanover has 532 subsidized, which represents 11.01% out of 4,832 year-round housing units. Nevertheless, feedback solicited from the public (described in more detail in the next section) indicates that there still remains a sizable

population of those living in Hanover unable to find housing appropriate to their lifestyle or find affordable housing.

Figure 23: Town of Hanover Subsidized Housing Inventory as of October 2017²²

Project Name	Address	SHI Units	Ownership or Rental?
Cushing Residence Inc.	1 Elmwood Farm Drive	150	R
Hanover Legion Elderly Housing	Spring Street (or Legion Drive)	60	R
Hanover Woods	65 Frank’s Lane	60	R
North Pointe Apartments	511 Washington Street	74	R
DDS Group Homes	Confidential	43	R
Barstow Village	Off Spring St and Legion Drive	66	R
Walnut St	Walnut Street	1	O
Webster Village	295 Webster Street	76	R
Center Street	Center Street	2	O
369 Washington Street	369 Washington Street	37	R

²² Department of Housing and Community Development

Figure 24: Fair Market Rent, Boston-Cambridge-Quincy, MA-NH HUD Metro FMR Area²³



South Shore Chamber of Commerce

As part of its effort to build a stronger regional economy (South Shore 2030: Shaping Our Future), the South Shore Chamber of Commerce released a report on housing in the region in September 2017. The report acknowledges that if the region is to grow economically, it needs to provide a larger and more diverse housing stock over the next 10 – 15 years. The report emphasizes the need for “housing with smaller footprints built near walkable, vibrant neighborhoods...that will entice a young and diverse population to choose to build their lives here”. This includes a greater variety of housing types such as multi-family (ownership and rental), single-family homes on smaller lots, and different styles such as townhomes and duplexes. Moreover, the report calls for a greater range of price points that appeals to different levels of affordability. Additionally, it emphasizes the need for family housing in

²³ US Department of Housing and Urban Development FY 2016

order to attract a workforce that is willing to commit to the South Shore.

Public Input

Hanover 300 Community Visioning

From May to July 2016, Hanover 300 kicked off with a community visioning process. Throughout this community engagement process, nearly 1,000 residents participated through pop-up events, a website, and an online survey.

Housing stock diversity was a clear concern among the senior population in Hanover. During a pop-up visioning event at the senior center, an overwhelming number of seniors indicated that affordable options for seniors who wish to downsize are not found in Hanover.

Community Growth Open House

On September 19, 2016, Hanover 300 conducted a public forum called Community Growth Open House where residents can provide their ideas on the town’s future in housing, economic development, and transportation.

Participants at the open housing resoundingly agree that Hanover’s housing stock was catered to young families with or without kids, but older couples looking to downsize would be challenged in looking for suitable housing types to transition to within the community.

Participants also agreed that smaller, single family alternative units such as town houses and cottages are needed in Hanover, in addition to some multifamily rental and condominium units. Although residents are generally supportive of growth in age-appropriate housing, about a quarter surveyed indicated that more housing development is not needed in Hanover.

What type of housing is most needed?

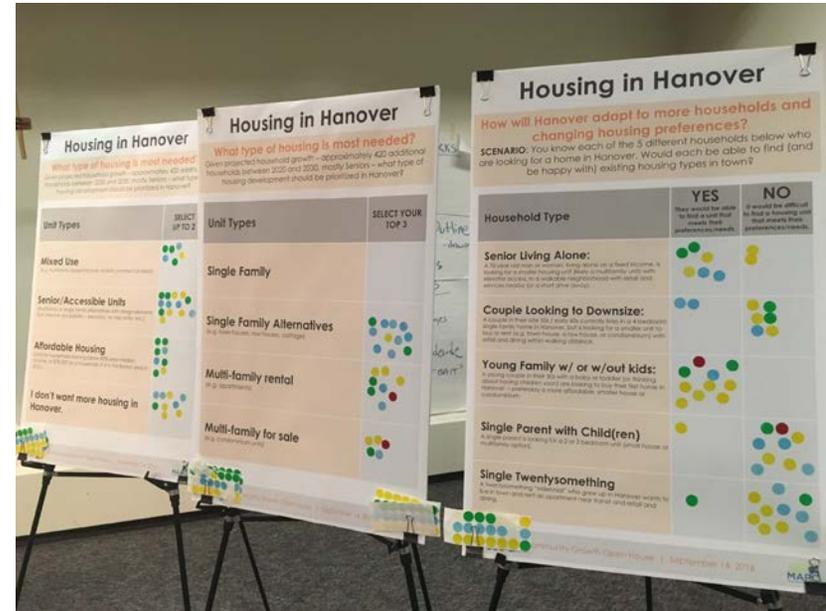
Given projected household growth – approximately 420 additional households between 2020 and 2030, mostly Seniors – what type of housing development should be prioritized in Hanover?

Unit Types	SELECT YOUR TOP 3
Single Family	0%
Single Family Alternatives <small>(e.g. town houses, row houses, cottage)</small>	41%
Multi-family rental <small>(e.g. apartments)</small>	37%
Multi-family for sale <small>(e.g. condominium units)</small>	22%

How will Hanover adapt to more households and changing housing preferences?

SCENARIO: You know each of the 5 different households below who are looking for a home in Hanover. Would each be able to find (and be happy with) existing housing types in town?

Household Type	YES They would be able to find a unit that meets their preferences/needs.	NO It would be difficult to find a housing unit that meets their preferences/needs.
Senior Living Alone: A 70-year old man or woman, living alone on a fixed income, is looking for a smaller housing unit (likely a multifamily unit) with elevator access, in a walkable neighborhood with retail and services nearby (or a short drive away).	60%	40%
Couple Looking to Downsize: A couple in their late 50s / early 60s currently lives in a 4-bedroom single family home in Hanover, but is looking for a smaller unit to buy or rent (e.g. town house, a row house, or condominium) with retail and dining within walking distance.	20%	80%
Young Family w/ or w/out kids: A young couple in their 30s with a baby or toddler (or thinking about having children soon) are looking to buy their first home in Hanover – preferably a more affordable, smaller house or condominium.	100%	0%
Single Parent with Child(ren) A single parent is looking for a 2 or 3 bedroom unit (small house or multifamily option).	9%	91%
Single Twentysomething A twentysomething "Millennial" who grew up in Hanover wants to live in town and rent an apartment near transit and retail and dining.	8%	92%



Recommendations

To address the current and future housing needs of Hanover, the following recommendations, a number of which were included in the 2013 HPP, are suggested:

Goal 1: Create opportunities to develop a diverse and affordable housing stock to meet the needs of a changing demographic profile in the town.

Strategy 1: Support the creation of housing units that are affordable to a broad range of incomes, including both rental units and owner units.

- Identify locations to encourage development of diversified affordable housing opportunities including infill housing and adaptive reuse of any abandoned, underutilized, or obsolete property.

Strategy 2: Encourage and maintain a mix of housing types by supporting development that provides for households at all income levels and encourages a diversity of age, households, and ability.

- The housing needs and demand assessment identified a significant number of senior households in need of potential housing assistance due to cost burdens and related issues with maintaining their homes.
- The Town should coordinate with the Council on Aging and other local senior advocates to help households in need get the support they deserve through local programs or improved living conditions.
- Ensure that at least 10% of new housing is accessible or adaptable to individuals with disabilities, including seniors, and/or include supportive services.
- Integrate or connect community supportive housing services into new development.
- Explore options to provide housing for veterans.

Goal 2: Leverage existing funding sources such as the Hanover Affordable Housing Trust and the Community preservation Act to meet existing and future housing needs.

Strategy 1: Support or create programs that support necessary home improvements including deleading and septic repairs for units occupied by low- and moderate-income households.

Strategy 2: Utilize Affordable Housing Trust Fund and Community Preservation Act funds for programs such as First Time Homebuyers Assistance and a Veteran's loan project.

Goal 3: Review and revise the Zoning Bylaw to remove barriers and create more incentives toward the production of affordable housing.

Generally speaking, local zoning bylaws can create barriers to fair access to housing, often unintended. Typically, this happens through policies that do not encourage certain types of residential development or by creating a complicated permitting process through site plan review and special permits. By reviewing and revising the Zoning Bylaw, an opportunity exists where the Town can proactively facilitate a more integrated and diverse housing stock. The Town should identify where by-right development of a diverse housing stock can be encouraged including mixed commercial and multi-family housing uses that allows for higher density housing in areas where the infrastructure can support such density.

Strategy 1: Study the Village Planned Unit Development (PUD) to see how Hanover can better encourage mixed-use development around common open space.

By limiting this development type to properties of 25 acres or more accessed from Route 53, the current bylaw

restricts the construction of a development type on properties of a smaller size in many locations in Hanover.

Strategy 2: In an effort to promote smart growth and mixed-use, mixed-income development, the Town should explore the adoption of a 40R Smart Growth Overlay District:

- Allow “as-of-right” residential development of minimum allowable densities;
- Provide that 20% of the units be affordable;
- Allow mixed-use and infill development

The Smart Growth Zoning Overlay District Act, M.G.L. Chapter 40R, encourages communities to create dense residential or mixed-use smart growth zoning districts, including a high percentage of affordable housing units, to be located near transit stations, in areas of concentrated development such as existing town centers, and in other highly suitable locations.

Projects must be developable under the community's smart growth zoning adopted under Chapter 40R, either as-of-right or through a limited plan review process akin to site plan review. The zoning must meet certain minimum density thresholds, require that 20% of the district be affordable homes, and it should allow “mixed use” - the combination of residential, office and retail within close proximity.

Strategy 3: Consider inclusionary zoning that requires a certain percentage of affordable housing be included in any new residential development.

As described in the Massachusetts Smart Growth/Smart Energy Toolkit, inclusionary zoning requires that a minimum percentage of lower and moderate income housing to be provided in new developments. Inclusionary programs are based on mandatory requirements or development incentives, such as density bonuses.

Strategy 4: Consider zoning for cottage-style housing, especially for over-55 housing.

Cottage housing is generally defined as a grouping of small, single family dwelling units clustered around a common area and developed with a coherent plan for the entire site. The shared common area and coordinated design may allow densities that are somewhat higher than typical in single-family neighborhoods while minimizing impacts on adjacent residential areas.²⁴

Goal 4: Encourage affordable housing development to achieve, exceed and maintain the Chapter 40B 10% goal.

Strategy 1: In addition to the recommendations focused on the production of new affordable housing, it is important to maintain the affordability of units currently on the Subsidized Housing Inventory.

The Town is at risk of losing up to 60 units that will expire in 2022 at Hanover Legion Elderly Housing. The Town should closely monitor these units and take steps to preserve

²⁴ Municipal Research and Services Center, <http://mrsc.org/Home/Explore-Topics/Planning/Specific-Planning-Subjects,-Plan-Elements/Cottage-Housing.aspx>



affordable units so that they remain on the SHI.
Additionally, after the 2020 Census new construction may further impact the percentage of units on the SHI.

Economic Development

Introduction

The Town of Hanover prides itself as a business-friendly community, boasting Route 53 as its main commercial corridor with many diverse options for retail, dining, and services. Many establishments along Route 53 draw regional patrons - the Hanover Mall, University Sports Complex, and South Shore YMCA are a few examples – but opportunities exist in Hanover for smaller commercial districts that reflect local heritage and flavor.

For a primarily residential community like Hanover, strengthening the commercial base and focusing on new growth in appropriate sectors will be critical in relieving the tax burden on local homeowners. Many residents value Hanover's close-knit community and its rich history, signaling the need for a “downtown” that allows residents to socialize, in addition to fulfilling retail and service needs.

Key Findings

- The Town of Hanover has a strong commercial base anchored by the retail industry, much of which is found along Route 53.

- The Town's industrial businesses are active and growing. They include large scale construction firms and specialized manufacturers.
- In addition to the Route 53 corridor, Hanover has several distinct commercial areas that could benefit from additional private investment.
- The Town has a reputation of being welcoming to new businesses, but more focus on business retention may be necessary, especially for smaller retail and dining places that add to the local flavor.

Existing Conditions

Workforce Profile

Labor Force

Participants in the labor force are aged 16 or older and employed or actively looking for work. Of Hanover's population 16 and older, 70% are in the labor force (7,718 workers). This figure is consistent with both Plymouth County and Massachusetts (both close to 68%). Hanover's unemployment rate is also consistent with Plymouth County and Massachusetts, all with rates between 7 and 8%.

Figure 25: Labor Force and Unemployment²⁵

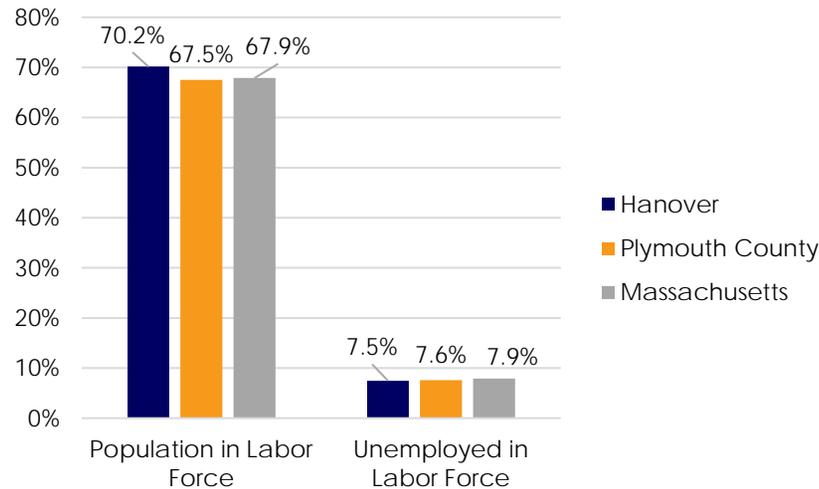
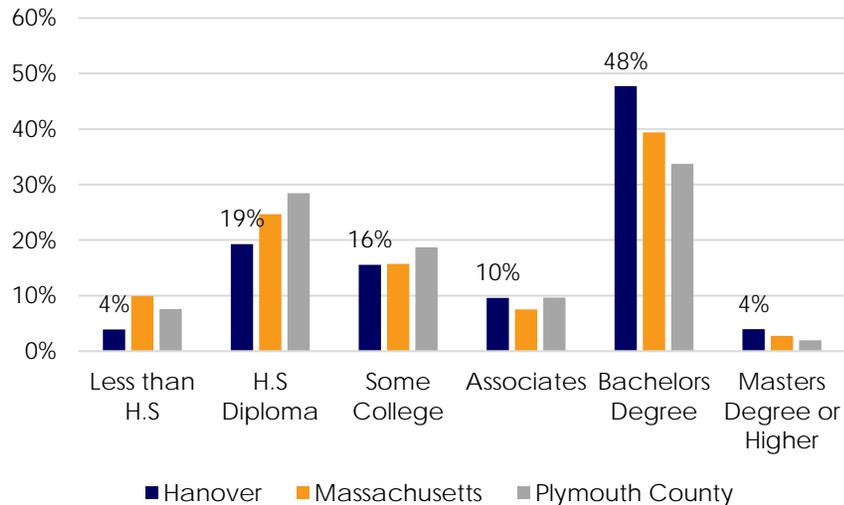
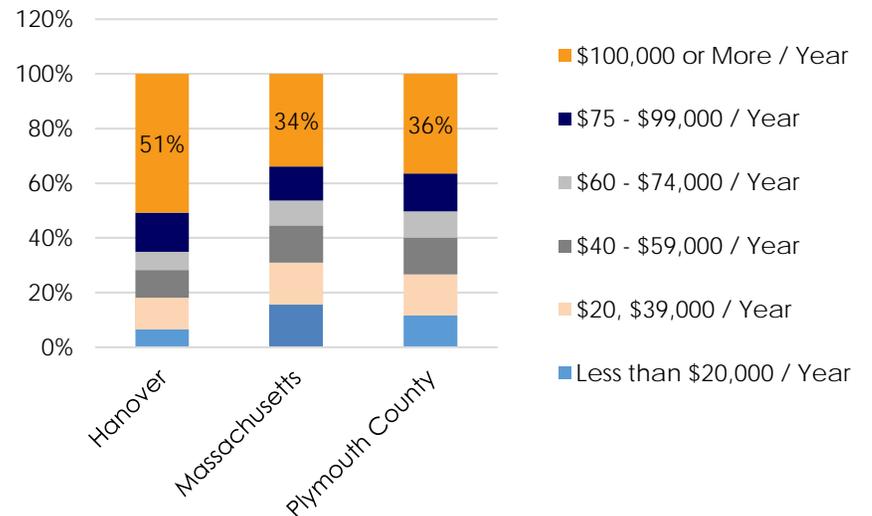


Figure 26: Education Attainment, Age 25+



For adults age 25 and older, almost half (48%) of Hanover's population have received a Bachelors or degree or higher educational attainment. This rate of education attainment is much higher than both Plymouth County and Massachusetts overall. High educational attainment is strongly associated with higher income, and this pattern is evident in Hanover's workforce. Working adults in Hanover have much higher incomes than those in the rest of the county and the state. The median household income for Hanover residents is \$98,750 per year while it is \$75,816 for Plymouth County and \$67,846 for Massachusetts. Hanover's median family income is \$120,398, compared to \$91,593 for the county and \$86,132 for the state.

Figure 27: Hanover Household Income



²⁵ Data in "Labor Force" section is from ACS 2011-2015 5-Year Estimates

Resident Occupations

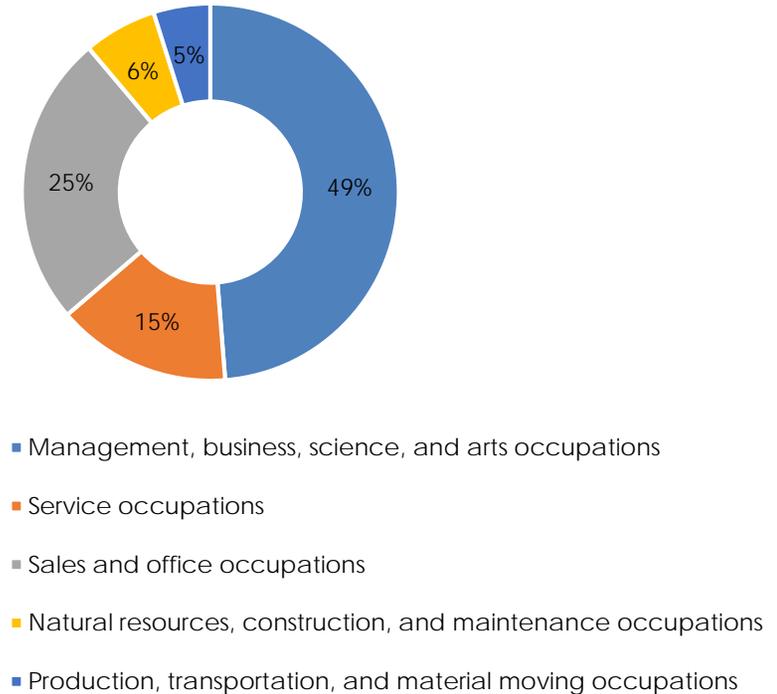
Many of Hanover’s residents are employed in high-skill jobs, a characteristic which reflects their high levels of educational attainment and higher incomes. Nearly half (49%) of Hanover’s working adults are employed in professional or management jobs.

About a quarter (23%) of Hanover residents work in educational, health care, and social services industries. Other industries where resident occupations are well-represented include professional, technical, and administrative (17%); finance, insurance, and real estate (13%); retail (11%); and construction and manufacturing (11%).

Nearly a quarter (24.3%) of Hanover residents commute to Boston for work. Quincy and Weymouth account for about an additional 11% of employment locations for Hanover residents.

Conversely, employees working in Hanover reside in many communities in the South Shore and Boston region, with Brockton being the home of the largest concentration of Hanover employees at 4.7%.²⁶

Figure 28: Hanover Resident Occupations



Industry Profile

An industry profile looks at the characteristics of local employment – the types of jobs and wages – that are located within a community. Although Hanover’s demographics and land use patterns are more typical of a suburban bedroom community and not an employment center, the town does have significant industries that provide many jobs. The town’s jobs-to-resident ratio is 1.0 - for every resident in the labor force, there is one job available in Hanover. In contrast, employment centers

²⁶ US Census Longitudinal Employer Household Dynamics, 2014

attract workers - Boston and Cambridge have jobs-to-resident ratios of greater than one: 1.5 and 1.7, respectively. Like other more affluent communities in the region, many of the jobs in Hanover are found in retail, accommodation, and food services industries — sectors that primarily support local and regional consumers' needs. As shown in Table 1, almost 30% of the town's jobs are within retail trade and 10% are within accommodation and food services. These jobs typically provide lower wages and require lower levels of educational attainment. Therefore, it is likely that these jobs are mostly filled by employees living outside of Hanover.

The average monthly employment in Hanover in 2015 was 6,784. These jobs are mostly found along Route 53, where most of Hanover's retail and dining establishments are located.

Wages

The average annual wage in 2015 (most recent data available) for all industries in Hanover combined is \$42,744. This somewhat low average annual wage is likely due to the concentration of retail and accommodation industries that typically offer lower wages. Industries that pay higher wages in town include construction (8% of local jobs, \$73,164 average yearly wage) and professional and technical services (6% of local jobs, \$72,228 average yearly wage).

Employers

About one-third of the largest employers in Hanover are companies that have up to 100 employees. However,

compared to other communities with a similar population size, Hanover has several large businesses. Two of the largest employers, the Cardinal Cushing School & Training Center and the YMCA, which falls within the Health Care and Social Assistance industry, each employs approximately 300 workers, making them among the largest employers in Hanover. Most of the other large companies in Hanover fall within the retail industry. They include Macy's, a department store, Target and Walmart, two big-box stores, McGee Toyota, a car dealership, and Shaw's Supermarket. PA Landers, Inc., a large-scale construction materials supplier and contractor employs approximately 225 workers in town.

Hanover is well-poised within its regional context as a desirable location for employers: the town is close to Boston and easily accessible via Route 3 and other State highways. Large employers typically locate their facilities next to regional transportation networks that offer access from multiple directions. This maximizes both employee convenience and provides convenient truck access for shipments. Recognizing the role that commercial and transportation infrastructure plays in terms of economic development, the Town of Hanover continues to advance the improvement such infrastructural systems. MassDOT recently completed the widening of Route 53 south from Route 3 and replaced the Route 53 overpass bridge.

Major Commercial Areas

Businesses in Hanover are currently concentrated within five major areas/corridors: Route 53, Four Corners, West Hanover Village, Crossroads, and the Fireworks District.

Figure 29: Hanover Major Employers²⁷

Company Name	Industry	Estimated # of Employees
Cardinal Cushing School & Training Center	Health Care and Social Assistance	300+
YMCA	Health Care and Social Assistance	300
PA Landers, Inc.	Construction	225
Macy's	Retail Trade	200
Target	Retail Trade	150
Walmart	Retail Trade	150
South Shore Vocational School	Educational Services	125
McGee Toyota	Retail Trade	100
Shaw's Supermarket	Retail Trade	100
Direct Finance Corporation	Finance and Insurance	100

Despite a wealth of commercial districts in town, none of these areas are considered Hanover's "downtown". The Town Center revolves around the Town Hall at 550 Hanover Street, which serves as a civic center where the public library and fire station are located.

²⁷ ESRI Business Analytics and Town of Hanover

The majority of Hanover's commercial areas are accessible only by car, but small, walkable neighborhood businesses can be found in Four Corners.

Route 53:

The most extensive commercial area in Hanover is along Route 53, starting at the northern town limit. Route 53 begins in Quincy, passing through Weymouth, Hingham, and the entire eastern length of Hanover, Pembroke, and ending in Duxbury.

The Route 53 retail landscape is dominated by big box stores, banks, fast food restaurants, and other national chain stores such as Michael's, PetSmart, and Target which provide a strong commercial tax base for Hanover. The northern gateway to Hanover is home to Assinippi Corner, where Merchants Row Shopping District and several auto dealerships are located. In addition there are some smaller, locally-owned retail and dining places such as the Toy Box and Epicurean Kitchen that can be found along the corridor.

Most of Hanover's professional service establishments are located along the Route 53 corridor and many people come from outside of Hanover to frequent these businesses.

The University Sports complex acts as a major attraction for Hanover. The complex hosts tournaments, major events, and local sporting activities for a broad audience. Its success has spurred on some additional activity on Route 53, but also has been known to cause traffic congestion during large events.

Figure 30: Hanover Jobs and Wages²⁸

Industry	Number of Jobs	% of Local Jobs	Number of Businesses	Average Yearly Wages (2015)
Retail Trade	2,109	28%	135	\$33,228
Other Services, Ex. Public Admin	875	11%	82	\$21,424
Accommodation and Food Services	730	10%	42	\$16,692
Construction	597	8%	84	\$72,332
Educational Services	583	8%	9	\$56,108
Manufacturing	532	7%	27	\$65,312
Health Care and Social Assistance	408	5%	66	\$41,444
Professional and Technical Services	403	5%	74	\$72,228
Management of Companies and Enterprises	255	3%	3	\$75,088
Wholesale Trade	164	2%	47	\$94,276
Administrative and Waste Services	160	2%	33	\$51,168
Real Estate and Rental and Leasing	156	2%	22	\$39,104
Finance and Insurance	151	2%	28	\$66,456
Arts, Entertainment, and Recreation	135	2%	12	\$14,352
Transportation and Warehousing	117	2%	9	\$38,064
Information	81	1%	8	\$52,260

²⁸ MA ES-202, 2015

Also located on Route 53 is the Hanover Mall, which includes a Macy's, Sears, Walmart, and Trader Joes. The mall was recently purchased by a national development firm PECO Real Estate Partners (PREP) and the project will be rebranded as Hanover Crossing. In June 2017, Hanover Town Meeting approved a Tax Increment Financing agreement with PREP to rebate taxes on its investment. Tax Increment Financing is an agreement between the Town and the developer to rebate a portion of the real estate taxes based on the value created for the term of the agreement, which is set at a minimum assessed value of \$39.5 million. The taxes are rebated at 100% for five years starting in 2022, 75% for the next five years, and 50% for the last three years (2032-2034). PREP is promising \$40 million in investment at the mall site to rehabilitate and modernize the development, which could increase the assessed value of the property at \$94 million. The investment is expected to generate a substantial number of new construction, retail jobs, and firms along Route 53.

Portions of Route 53 are straddled by the Aquifer Protection Zone and Well Protection Zone. Thus, any development in those areas must be conditioned to ensure protection of the water supply.

Non-corporate businesses operating on Route 53 have cited rising rents and tough competition with national chain stores as challenges to operation. In conversation, they also cited crossing Route 53 safely as a potential detriment to business.

Four Corners:

At the southern end of Route 53 in Hanover is the Four Corners business district. While this smaller commercial area also contains some chain stores and restaurants, it is home to a number of "mom and pop" establishments like Pottery Playce, Giuseppe's Cakes, and Hanover Lobster and Seafood.

New businesses have also begun to move into the Four Corners area including Abbey Knoll photographer and Ivy and Olives floral design.

West Hanover Village:

Another commercial corridor in Hanover is West Hanover Village, which runs along the western end of Hanover Street (Route 139). This area has a small shopping area at 1390 Hanover Street which includes Simmons and Sons Flooring, Boston Fire Sprinkler, DJ Meads Photography, New England Driving School, and Pasquale's Prints. Also along this corridor are a handful of hair salons (including one for canines), automotive services, a Dunkin' Donuts, and a local pizzeria.

The Rockland Rail Trail ends at the terminus of Circuit Street in West Hanover, very near the West Hanover commercial district, where a potential connection is feasible.

Crossroads:

The Crossroads commercial area is located at the intersection of Routes 53 and 139. In addition to the usual suspects such as a Shaw's, Tedeschi, and CVS, along with

a number of commercial banks, this district has a strong contingent of mom and pop retail and food establishments. These include the Crossroads Café and Deli, Good Health Natural Foods, Hanover House of Pizza, and Crossroads Music.

Fireworks District:

The legacy of Hanover's reputation as the nation's largest ammunition manufacturer is manifested in the Fireworks District - a large industrial business zone located in the southwestern part of town. The challenge with the Fireworks District is that much of the site is contaminated and is undergoing efforts toward remediation. Lead, mercury, and organic solvents, among other chemicals, were used in manufacturing operations at the site which was used for research, development, manufacture and testing of munitions and pyrotechnics.

The Town of Hanover owns approximately 132 acres of conservation land within the district, including Factory Pond and 4.1 miles of trails. As described in the Historic and Cultural resources element of this plan, there are a number of historic houses in the District.

In 2017, an imminent hazard to public safety from the munitions residing on the site was discovered, which launched an effort to identify the waste materials and have them removed. Additional sampling will be required to determine if all the materials have been removed, which will be followed by a full site clean-up. Completion of this work will open up the area to new economic development and open space opportunities.

The northern and eastern sides of the site is now home to an industrial park with an active and diverse cluster of businesses in the manufacturing, construction, repair, and wholesale trade sectors. These businesses include Anchor Excavating, Triangle Engineering, and PA Landers. The area has seen significant investment in the last decade, with several new buildings being constructed in recent years. There are still some vacant and underutilized sites in the district that could be activated and further grow this area as a large employment district for high skilled and high wage jobs.

Retail Opportunities

Since retail establishments hold a significant portion in Hanover's commercial base, a retail gap analysis can identify potential opportunities in this sector. A retail gap analysis looks at local supply and demand of certain goods. When goods and services must be purchased outside a given trade area, this is referred to as leakage (the positive green numbers in Figure 31), when estimated purchases by area residents exceed estimated sales. A surplus (the negative red numbers) occurs when estimated sales in a trade area exceed expenditures by residents, indicating that customers come from elsewhere to make purchases in the area. Leakages may point to the retail categories that have the greatest potential for growth.

At the industry group level, it appears that the greatest opportunities for growth are for health and personal care stores, as well as electronics and appliance stores. However, looking at the sub-industry groups reveals additional opportunities for growth within food and

beverage stores, general merchandise stores, and food services and drinking places.

For example, Hanover can support additional full-service restaurants, specialty food stores, liquor stores, and general stores like gift shops. These establishments can serve to fill a niche demand for more neighborhood stores and restaurants that are in demand by Hanover residents.

Figure 31: Retail Gap Analysis²⁹

Industry Group and Subgroups	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	# of Businesses
Motor Vehicle & Parts Dealers	\$64,844,250	\$185,155,720	-\$120,311,470	23
Furniture & Home Furnishings Stores	\$9,776,342	\$12,689,690	-\$2,913,348	16
Electronics & Appliance Stores	\$22,915,239	\$22,561,702	\$353,537	22
Bldg Materials, Garden Equip. & Supply Stores	\$13,966,725	\$35,013,049	-\$21,046,324	17
Food & Beverage Stores	\$58,537,797	\$67,003,373	-\$8,465,576	20
Grocery Stores	\$48,911,049	\$63,625,589	-\$14,714,540	12
Specialty Food Stores	\$4,288,186	\$1,668,810	\$2,619,376	5
Beer, Wine & Liquor Stores	\$5,338,562	\$1,708,974	\$3,629,588	3
Health & Personal Care Stores	\$21,538,071	\$10,674,149	\$10,863,922	10
Gasoline Stations	\$17,519,525	\$20,471,130	-\$2,951,605	9
Clothing & Clothing Accessories Stores	\$21,421,792	\$36,921,933	-\$15,500,141	40
Sporting Goods, Hobby, Book & Music Stores	\$9,534,333	\$29,305,124	-\$19,770,791	23
General Merchandise Stores	\$36,786,988	\$116,841,082	-\$80,054,094	8
Department Stores Excluding Leased Depts.	\$27,138,704	\$114,246,211	-\$87,107,507	5
Other General Merchandise Stores	\$9,648,284	\$2,594,871	\$7,053,413	3
Miscellaneous Store Retailers	\$10,496,672	\$30,663,000	-\$20,166,328	41
Nonstore Retailers	\$7,939,904	\$434,942	\$7,504,962	1
Electronic Shopping & Mail-Order Houses	\$5,511,419	\$0	\$5,511,419	0
Vending Machine Operators	\$261,263	\$0	\$261,263	0
Direct Selling Establishments	\$2,167,222	\$434,942	\$1,732,280	1
Food Services & Drinking Places	\$32,936,926	\$36,742,286	-\$3,805,360	58
Full-Service Restaurants	\$20,033,299	\$15,771,326	\$4,261,973	26
Limited-Service Eating Places	\$11,158,609	\$18,401,387	-\$7,242,778	27
Special Food Services	\$831,557	\$1,722,702	-\$891,145	4
Drinking Places - Alcoholic Beverages	\$913,461	\$846,871	\$66,590	1

²⁹ ESRI BAO 2-16

Other Opportunities

Non-Resident Market Segments:

Hanover's commercial establishments attract patrons from the region and beyond. For instance, sports tournaments held at the University Sports Complex draws attendees not just from other communities but also out of state. The South Shore YMCA is a popular destination for local and regional members alike. The town is well poised to capture spending from these visitors by targeting growth in specific industries, such as specialty retail and full-service dining.

As mentioned earlier, businesses in Hanover employ approximately 5,000 people that do not reside in Hanover. This daytime population represents a market segment that could be interested in local goods and services, such as lunchtime meals, dry cleaning, banking, shopping, etc.

Fiscal Conditions

Compared to neighboring communities Pembroke and Rockland who have very similar FY2016 total budgets, Hanover's Town revenue relies more heavily on property taxes. About 65% of Hanover's total budget comes from its residential tax levy, compared to 59% for Pembroke and 53% for Rockland. However, these other communities are much more dependent on state aid—about a quarter of Pembroke's (24%) and Rockland's (25%) budgets come from state aid, compared to 15% for Hanover.

As evident in Figure 32, Hanover has very similar tax rates for residential properties as for commercial/industrial

properties (CIP), though it technically has a split tax rate since they are different. The FY2016 tax rates in Hanover are \$16.86 per \$1,000 assessed value for residential properties and \$17.88 per \$1,000 assessed value for CIP. The communities immediately adjoining Hanover—Hanson, Norwell, Pembroke, and Rockland—all have the same residential and CIP tax rates for residential. Other communities in the area such as Braintree, Quincy, and Weymouth also have split tax rates, though in these communities the commercial rate is much higher than the residential rate. In these three cities, there were lower residential tax rates than in Hanover but substantially higher CIP rates.

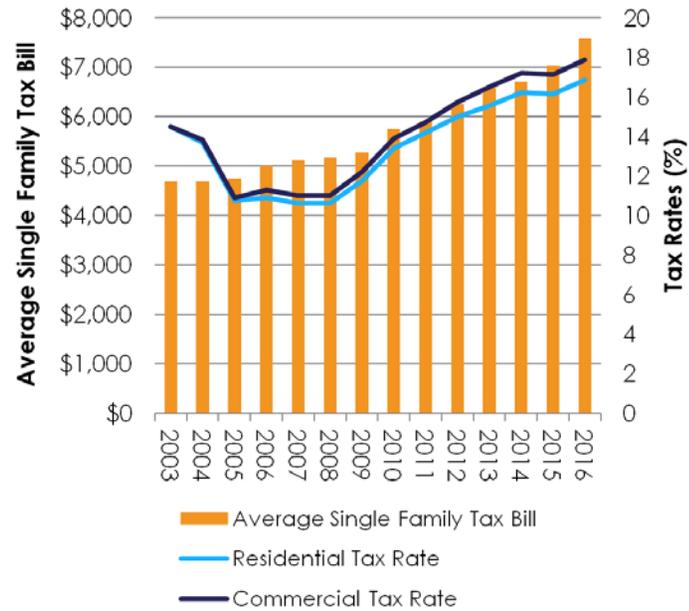
The CIP tax rate hit a low in Hanover during 2005. During that year, the CIP tax rate was \$10.89 per \$1,000 assessed value. Since then, the rate has increased by 64%. Hanover's residential tax rate hit a similar low during 2008 when it was \$10.61 per \$1,000 assessed value. It has since risen by about 69%.

In 2016, the average single-family tax bill for Hanover homeowners was \$7,581. The only nearby community with a higher average single-family tax bill is Norwell at \$9,495 a year, even though Hanover has slightly higher tax rates for both residential properties and CIP. Generally speaking, the tax bill for an average single-family home in Hanover is so high because of high average values for homes in town. The average for single family homes in Hanover is \$449,649.

There are often complaints from residents about high taxes. However, conversations with residents have revealed that there is a high level of distrust about how the government is spending their tax dollars. As such, the best

way to address this issue may be through greater transparency related to government spending.

Figure 32: Average Single Family Tax Bill vs. Tax Rates



Compared to other nearby communities in and around the South Shore, the Town of Hanover expends more general funds on General Government (9.8%) and Debt Service (10%). General Government refers to expenditures related to legislative operations, executive operations, financial administration, operations support, licensing and registration, land use, and development. Debt Service refers to periodic payments of principal and interest amounts made on local debt, either in the short- or long-term.

Figure 33: Tax Rates, Hanover and Nearby Communities³⁰

	2013 Population	2015 Avg. Single Family Tax Bill	2013 Income per Capita	2014 EQV per Capita	Average new property growth ('12-'14)
Hanover	14,280	\$7,038	\$45,776	\$166,913	1.33%
Hanson	10,324	\$4,556	\$31,241	\$111,691	1.13%
Norwell	10,723	\$9,183	\$79,043	\$219,745	0.84%
Pembroke	18,097	\$4,915	\$35,539	\$131,693	0.95%
Rockland	17,632	\$4,843	\$26,391	\$98,609	1.24%
Holliston	14,162	\$7,495	\$49,993	\$148,110	1.48%
Ipswich	13,574	\$6,179	\$48,231	\$183,580	1.27%
Medway	13,053	\$6,610	\$44,616	\$132,197	1.48%
Northborough	14,762	\$6,485	\$48,470	\$180,907	3.20%

Of all nearby communities, Hanover spends the least on Culture & Recreation; it makes up only 1% of Town expenditures. This may be leading to missed opportunities for quality of life improvements and economic development. Hanover also spends the least on Human Services. Along with the Town of Braintree, Hanover allocates 0.8% of funds to that expenditure. Human Services funds usually go to health inspection services,

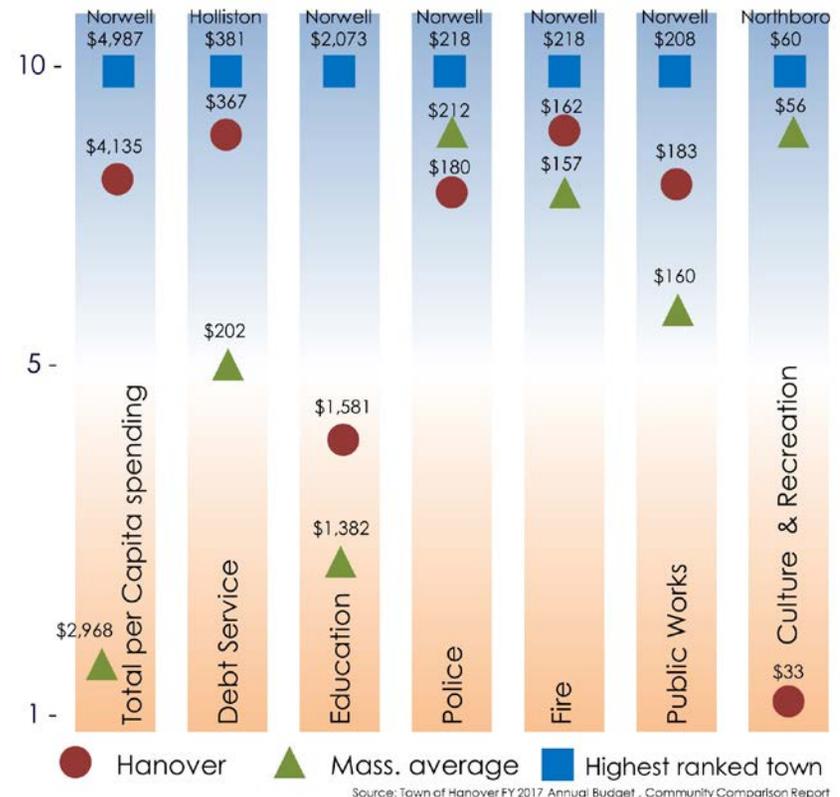
³⁰ For FY2015; the comparable communities were chosen because they are of similar size, income and demographics.

clinical services, public assistance, and special programs such as the Council on Aging and veterans services.

Municipal Role in Economic Development

Local economies are shaped by a complex interaction of factors that can include historic development patterns, infrastructure capacity, natural resources, access to markets, access to labor, financing availability and, in an increasingly interconnected world, global competitive pressures. However, local government also has a role in supporting and facilitating economic activity. This can involve activities such as provision of infrastructure (i.e. water, sewer, and transportation), assembly of land, adjusting land use regulations, investment in local businesses, or facilitating partnerships with institutional or private entities. In a most basic sense, local government's economic development initiatives should be aimed at reducing the costs to businesses of development or operation. Additionally, the provision of transportation options (connecting employees and customers to employment centers) can also be important in enhancing economic development opportunities. Hanover is somewhat constrained given the current lack of any significant mass transit options.

Figure 34: General Fund Expenditures Per Capita, Compared to Other Communities



Although the Town has several large businesses, it has seen a significant number of smaller businesses with fewer employees and generally lower wages. Nurturing these small businesses may provide a long-term means to support local job growth and diversify the local economy so that it becomes more resilient to potential shocks related to business cycles or changes in particular industries. The data also suggest that Hanover residents

have a higher level of educational attainment than the rest of Plymouth County and Massachusetts as a whole. In a region that is known for its high technology clusters, this may suggest that workforce skill development may be important for ensuring that residents can take full advantage of regional employment opportunities. Working with local businesses to determine their needs for skilled labor and partnering with nearby educational institutions can help to provide the type of workforce needed to fuel the economy.

The rapid improvement in communication technology has also changed the economic landscape. With an increased ability to coordinate teams or transact business remotely, the importance of some traditional business location criteria for certain types of firms may be reduced. Coupled with shifting generational preferences in where they want to live (e.g., younger generations are starting families later in life, tend to have smaller families, and are expressing a desire for smaller homes, but in more active and enriching communities), this suggests that quality of life and quality of community may become increasingly important determinants in business siting decisions.

To that end, the South Shore Chamber of Commerce has been working to address housing needs in the context of economic development. In a September 2017 report addresses the need for a diversified housing stock in the South Shore region in order to attract a sustainable and talented workforce if the area is to expand economically. It identifies a couple of key ways in which housing can enhance economic growth in a town like Hanover:

- Attracting young people who consume and spend more than the declining spending activity of the area's aging population.
- Downsizing baby boomers scale back but do not retire. Thus it will be important to provide housing to keep them in the area workforce.

Finally, it is important for the Town to identify barriers to economic development. Examples include zoning provisions that discourage development of certain types, unreasonable signage restrictions, or that otherwise restrict development through dimensional regulatory constraints. Another important consideration in Hanover is the Aquifer Protection District, which covers a large portion of the eastern section of town, including the Rt. 53 corridor.

Public Input

Hanover 300 Community Visioning

From May to July 2016, Hanover 300 kicked off with a community visioning process. Throughout this community engagement process, nearly 1,000 residents participated through pop-up events, a website, and an online survey. A significant portion of homeowners were concerned about taxes that are comparatively higher than nearby communities. Other recurring concerns included the physical landscape of Route 53 and the lack of a social/village center that serves as a "downtown."

Many residents are also acutely aware of underutilized properties in town, including vacant storefronts and

parcels in the town's many commercial areas. Generally, the community would like to see economic activity in existing opportunity sites, rather than new construction.

Interviews with Local Business Owners

As part of the existing conditions research, a group of local businesses owners and managers were interviewed to identify existing and potential barriers and opportunities for economic development in Hanover. Business owners easily arrive at the consensus that the Town is generally business-friendly, and the permitting process was streamlined and easy to navigate. In their experience, customer service at Town Hall was excellent and helpful – a factor that was often cited as a reason for owners to locate their businesses in town.

When asked about future growth in town, however, many businesses are unsure whether existing conditions would allow them to expand. For instance, small businesses on Route 53 compete against large, national chains and the car-oriented layout of the corridor poses a challenge for these “drive-by” businesses to attract new customers.

Community Growth Open House

On September 19, 2016, Hanover 300 conducted a public forum called Community Growth Open House where residents can provide their ideas on the town's future in housing, economic development, and transportation.

On the subject of economic development, participants were presented with information how the town's existing industry and workforce profiles, in addition to a breakdown of Hanover's most recent tax expenditures. According to feedback from participants, residents would like to see more neighborhood-oriented businesses, such as small specialty retail and full service restaurants. In regards to tax expenditure, participants agree that education remains the top priority, but would like to see the Town increase its expenditure on culture and recreation, public works, and human services.



Figure 35: Hanover General Fund Expenditures, FY2015

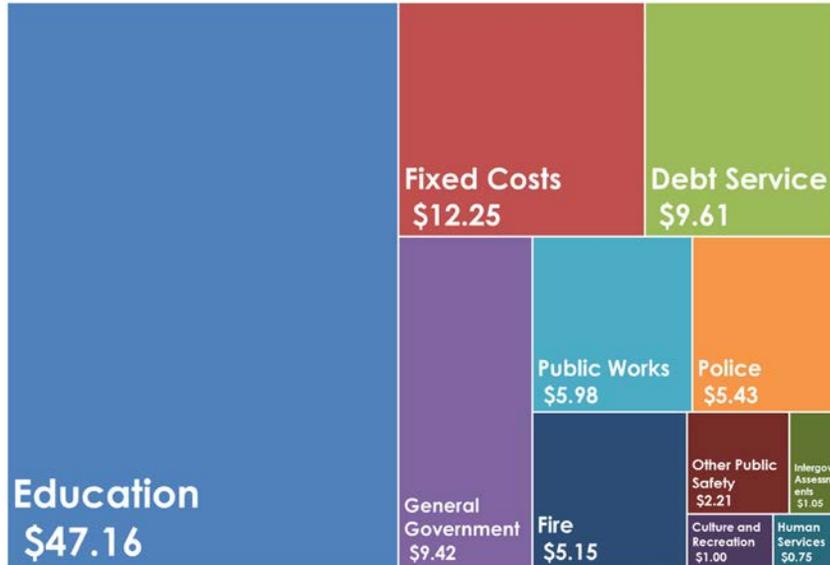
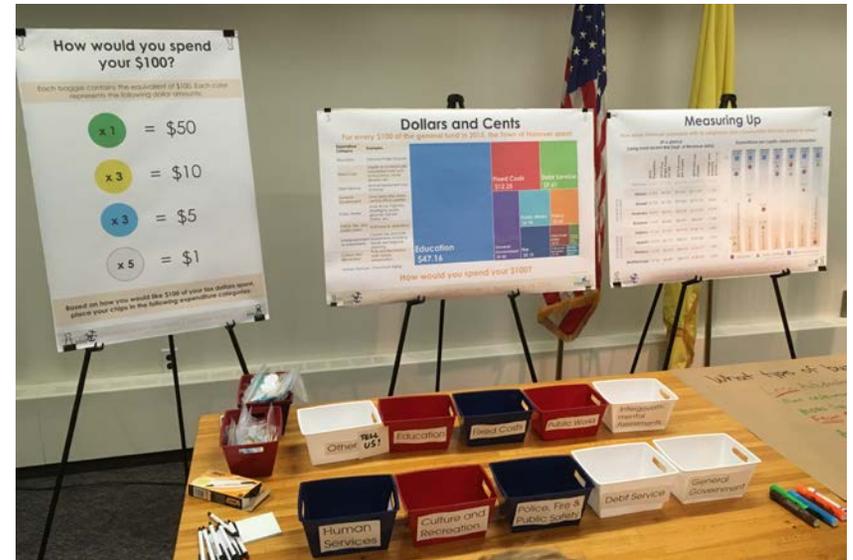


Figure 36: Community Growth Open House Participant Input on General Fund Expenditure Breakdown



Recommendations

Based on community input and interviews with area businesses we propose the following actions:

Goal 1: Work toward maximizing the potential of the Fireworks District.

Efforts should be made to invest in the Fireworks District, including completion of the remediation efforts for the on-site hazardous waste issues. The Fireworks District is an underutilized asset in the Town of Hanover and could benefit from investment and attention. The Town should aim to activate all currently vacant sites within the district. Steps to begin that process could include branding and



Economic Development

marketing the area to potential tenants. Investing in signage at the entrance to the industrial park as well as digital advertising could assist in defining the Fireworks District as a desirable and active job center. Several businesses in the park also expressed an interest in convening as a business committee to improve conditions inside the park itself. The Town of Hanover should actively engage with this process and assist the local businesses in their program development. The Town may also want to consider seeking state assistance for the area either through the MassWorks program to assist in installing high speed internet or the Mass Development Site Readiness program to prepare vacant sites for active and job intensive uses.

Strategy 1: Activate all currently vacant sites within the Fireworks District by defining it as a desirable and active job center.

Strategy 2: Improve conditions within the industrial park in the Fireworks District.

Strategy 3: Connect with workforce training and/or educational institutions.

Goal 2: Build organizational capacity to advocate for continued revitalization and stronger growth in Hanover's commercial areas.

Strategy 1: Work with local businesses to create a Business Committee and assist in program development. It was mentioned by several businesses that there may be opportunities and/or needs for connecting with workforce training and/or educational institutions.

Strategy 2: Activate vacant sites through rehabilitation and infill development to encourage the location of new business development. Market reuse and redevelopment opportunities and develop marketing strategies for the Town's five major commercial areas.

Strategy 3: Convene businesses to identify the most pertinent skills to meet the needs for a skilled workforce and work with area educational institutions to develop programs to meet those needs. Direct job-seekers to the available instructional resource or workforce training.

Strategy 4: Hold regular business owner workshops to develop stronger lines of communication between Town Hall and businesses to better identify and respond to business needs and interests.

Strategy 5: Enhance branding and marketing of the Town's commercial areas locally and regionally. Develop a comprehensive branding and marketing strategy for the Town of Hanover to attract private investments that bring new visitors and businesses. Promote existing cultural, open space and recreational amenities. Consider involving residents and business owners on the design of wayfinding and signage throughout town. Consider developing a website devoted to local economic development activities.

Goal 3: Develop a supportive infrastructure to enhance economic development.

Strategy 1: Review transportation networks impacts on businesses and customer attraction. The lack of sidewalks, bike paths, and pedestrian friendly areas was cited by

numerous businesses as a challenge to attracting customers. Businesses along the busy Rt. 53 especially feel the impacts of a lack of walkability which may discourage shoppers from visiting multiple businesses.

Strategy 2: The Town should invest in pedestrian friendly strategies to improve walkability and connect commercial areas by adding new sidewalks throughout town.

Strategy 3: Develop additional means of protection pedestrians from Route 53 traffic.

Strategy 4: Work with the developer of the Hanover Crossing to ensure proper implementation of the TIF agreement.

Goal 4: Promote downtown development of the Hanover Town Center.

Strategy 1: Consider strategies to create more of a cohesive Town Center beyond Town Hall and the library, including placemaking, design guidelines, and reduce auto dependency. Hanover lacks a cohesive town center beyond its Town Hall and library. The Town should:

- Consider zoning recommendations to enhance the Town Center including revisions to the Village Planned Unit Development (VPUD) and other means to encourage more mixed use and infill development.
- Explore use of a Chapter 40R Smart Growth Zoning Overlay to encourage residential and mixed-use development where appropriate in the Town Center.

Transportation & Circulation

Introduction

Beginning in 1864 through 1938, the Hanover Branch Railroad provided transportation through several neighborhoods within Hanover as well as to Rockland, Abington, and Boston. West Hanover had freight services until the late 1970s and early 1980s. Furthermore, North Hanover received trolley service until 1921. This trolley was a popular commuting option for workers, and also provided a connection to Nantucket for summer travelers.

Construction of Route 53 began in 1930, and today, Hanover remains a car-oriented community. While the corridor initially functioned as the main connector between Boston and Cape Cod, today it serves as the primary commercial corridor in Hanover.

Looking forward, the possible demands on Hanover's transportation system from residential growth and potential economic development activities could impact pedestrian/bicyclist safety, local aesthetics, and community visions of the Town. Thus, future land use decisions, economic development priorities, and transportation infrastructure enhancements should be made in a coordinated, multimodal, and sustainable manner.

This Transportation Element of the Hanover 300 Master Plan identifies the range of transportation issues, needs, and deficiencies and establishes goals and recommendations for physical enhancements and policies worth implementing.

Key Findings

- Traffic safety is a concern and the intersection of Routes 53 and 139 and Rt. 53 and Broadway have high crash rates.
- There are no transit options in Hanover.
- The lack of consistent sidewalks jeopardizes vulnerable populations trying to access schools, day care facilities, and senior centers.
- The Town's inadequate bicycle infrastructure endangers cyclists.

Existing Conditions

Roads

Given that most Hanover residents drive for their primary mode of transportation, ensuring that roadways are connected, well maintained, and safe for all users is crucial. The ability to travel by vehicle not only facilitates



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transportation within Hanover, but helps connect Hanover residents to the larger South Shore community and the greater Boston region as a whole. Investments in transportation support economic development efforts by linking residents to jobs, and facilitating mobility can lead to overall quality of life improvements.

Route 3, which is a limited-access highway that passes through the northeastern corner of the Town, connects Hanover with Boston and Cape Cod. This is the primary corridor that provides regional access to and from Hanover.

Route 53, which provides access to Route 3, runs north-south and serves as the Town's primary commercial corridor. This corridor is also the site of some of the main traffic safety concerns in town due to high traffic volumes, high speeds, and limited pedestrian infrastructure.

Other major corridors in Hanover include Routes 123 and 139. Both run east-west across town and provide access nearby communities, including Rockland, Norwell, and Pembroke.

Functional Classification of Roadways

There are about 85 miles of roadway in Hanover. The functional classification of the roadways demonstrates that while the majority of the roadways in Hanover are local roads, there are several corridors in the Town that provide key inter-municipal connections. Figure 38 depicts the functional classification of Hanover's roadways.

Figure 37: Average Daily Traffic Volume for Selected Roads³¹

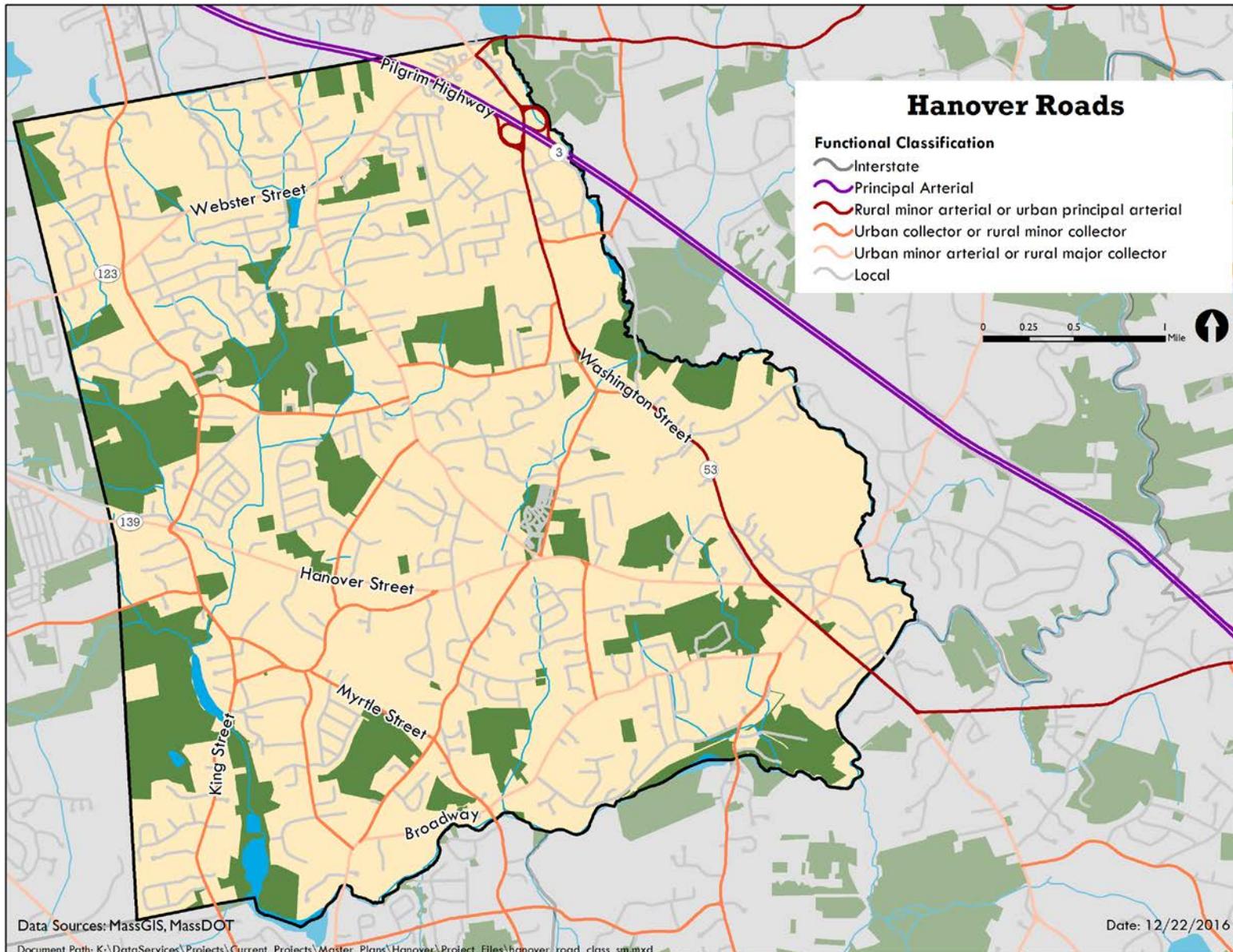
Location	Average Daily Traffic Volume	Year
Washington St. (Route 53) south Route 3	28,848	2006
Washington St. (Route 53), north of Route 3	23,760	2006
Rockland St. (Route 139), west of Columbia Rd. (Rte. 53)	13,940	2016
Route 53 & 123 ramp: Exit 13 Hanover Norwell (southbound)	12,393	2014
Hanover St. (Route 139), east of Pleasant St.	11,456	2014
On ramp from Rte. 53 to Rte. 3 N	11,314	2014
Whiting St., north of Cedar St.	9,683	2015
Pleasant St, south of Cedar St.	8,000	2015
Route 53 & 123 ramp: Exit 13 Hanover Norwell (northbound)	5,624	2014
On ramp from Rte. 53 to Rte. 3 S	4,837	2015
Cedar St., east of Whiting St.	2,107	2015

Traffic Volumes

Route 53 is the most heavily traveled corridor in Hanover, in part due to the access the corridor provides to Route 3. Not only is this corridor convenient for those traveling in to and out of Hanover, but the Hanover Crossing and other retail destinations along the corridor likely generate additional traffic.

³¹ MassDOT Transportation Data Management System

Figure 38: Functional Classification of Hanover Roads



On a smaller scale, Hanover Street (Route 139) is also a relatively heavily trafficked corridor. This may be due in part to residents who commute via the Commuter Rail driving to the Abington Commuter Rail station, which is about a 12 minute drive from Hanover Town Hall. Figure 37 notes additional busy corridors and intersections in Hanover.

Traffic Safety

The Route 53 Corridor Study completed by VHB in March 2015 reveals several traffic safety concerns. Route 53 at Rockland Street (Route 139) and Route 53 at Broadway were both identified as having crash rates greater than the average crash rates in MassDOT's District 5. The majority of the crashes at both of these locations were identified as angle and rear-end collisions.

At the Community Growth Open House, residents also identified Route 53 as being a top safety concern. In addition to the intersections highlighted in the VHB study, the entrance to the University Sports Complex, or the U, was noted as unsafe, given the amount of young people that frequent the facility. Furthermore, just south of the U is the Cardinal Cushing Center. It was noted that some residents of Cardinal Cushing work at the Shaw's across the street. The high vehicle speeds and lack of pedestrian infrastructure do not make for an accommodating commute for these workers.

In addition to concerns regarding Route 53, Main Street was also highlighted by several residents as a dangerous corridor. Main Street provides direct access to Cedar Street, which is where Hanover High School and Cedar

Elementary School are located. Several residents noted the limited sidewalks on the Main Street corridor coupled with the fast moving traffic make for an unsafe environment for students who are walking to school.

Finally, at the southern end of Main Street is a complex five-point intersection in front of Town Hall. Several residents noted similar safety concerns at this intersection, not only due to the limited pedestrian infrastructure and the fast moving traffic, but also due to the complex turning movements.

Public Transit

Although Hanover is within the Massachusetts Bay Transportation Authority's Service Area, the Town does not directly receive service. Hanover residents that make use of the nearby public transit options, including the Commuter Rail and the Plymouth and Brockton bus, often have to drive or carpool to the nearest station. Approximately 17% of Hanover residents who are employed commute to Boston, but only about 7% of Hanover residents make that commute via public transit.³²

Commuter Rail

The nearest Commuter Rail stations are located in Abington and Whitman. These stations are located on the Kingston/Plymouth line, which provide access to points north including South Weymouth, Braintree, JFK/UMass,

³² MassGIS, MassDOT, MBTA, American Community Survey 2010 5-Year Estimates MCD Flows.



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and South Station. Points south of Abington and Whitman include Hanson, Halifax, Kingston, and Plymouth. On weekdays, the Commuter Rail runs 12 inbound and 12 outbound trains on this line. On weekends, 8 trains are run in both directions.

As of November 2016, for Hanover residents commuting to Boston from Abington, the cost of a single ride is \$8.25, and monthly commuter rail pass is \$263.00. For residents commuting from Whitman, the single ride costs \$9.25 and it costs \$291.50 for a monthly pass. At both stations, the daily parking fee is \$4.00. As of April 2013, the Abington station saw an average of 625 weekday inbound boardings, whereas Whitman saw 563.³³

Bus

Like the Commuter Rail, there is no direct bus service in Hanover. The Plymouth and Brockton (P and B) bus provides weekday service from Marshfield to South Station in Boston, and some Hanover residents utilize the park-and-ride stop in Rockland. As of June 18, 2016, the P & B bus makes seven trips from Rockland to Boston from 5:30 am to 8:10 am, and eight trips from Boston to Rockland from 3:10 pm to 6:30 pm. A 10-ride commuter pass from Rockland to Boston costs \$60.00 as of November 2016.

The Greater Attleboro Taunton Regional Transit Authority (GATRA) has an agreement with the Town of Hanover to provide limited curbside van services to qualified Hanover seniors over 60 years of age through the Council

on Aging. The vans, which provide service on weekdays, transport seniors to certain medical facilities in Hanover, North Pembroke, South Norwell, Hingham and South Weymouth. In the afternoons, there are regular trips to the grocery store, and the vans have scheduled trips to Pembroke every Tuesday and Thursday. For other errands or medical appointments, the seniors can call the shuttle at-will. There is interest in expanding this service to the weekend and extending the hours of operations during the weekday. This service is free to seniors, and is funded jointly by GATRA and the Town.

The Town is also working with GATRA to extend bus service along Route 53. The proposed stops along the corridor include the Hanover Crossing, the YMCA, the U, Cardinal Cushing, the Legion Housing Complex, and the Planet Fitness Plaza. Once implemented, this extended bus service will greatly expand local public transit options in Hanover.

Pedestrian and Bicycle Facilities

On-Road Infrastructure

One of the most common concerns related to transportation articulated by Hanover residents is the lack of sidewalks. Gaps in the sidewalk network deter walking as a form of transportation, and jeopardize the safety of those who do choose to walk. Some residents who walk do so on the shoulder of the road. Sidewalks serve as a crucial buffer to keep pedestrians away from traffic, which is especially important on corridors with fast-moving traffic

³³ Massachusetts Bay Transportation Authority Ridership and Service Statistics, Fourteenth Edition 2014.



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and lots of destinations that would attract greater pedestrian traffic.

A robust pedestrian infrastructure is key in areas where there may be vulnerable populations walking to get to destinations such as schools, day care facilities, and senior centers. As noted, several residents have expressed interest in more sidewalks on Route 53 and Main Street, which experiences fast moving vehicular traffic as well as a relatively high volume of pedestrian traffic. Figure 39 demonstrates a sidewalk gap analysis, indicating where sidewalks may be most useful based on current travel patterns.

The lack of bicycling infrastructure in Hanover also jeopardizes the safety of cyclists. The Town does not have any bike lanes, although there are several roads wide enough that could potentially accommodate the addition. Like sidewalks, bike lanes would be most beneficial in areas most trafficked by cyclists, particularly near schools.

Off-Road Infrastructure

One way to improve biking infrastructure in Hanover would be to extend the rail trail that passes through nearby Rockland. The existing trail in Rockland is part of the LandLine Greenway Network, which was developed by MAPC in an effort to improve the connectivity of the region's bike and rail trails. The trail in Rockland ends at the Colby-Phillips property in West Hanover, and building on this connection could better link Hanover with neighboring municipalities.

The recently redeveloped Forge Pond Park also provides off-road walking and biking facilities for residents and visitors alike. The wooded area offers certain amenities, such as designated walking trails and benches, for those who frequent the park. While there are other smaller walking trails in Hanover, Forge Pond Park is one of the most popular. Figure 40 depicts the variety of walking trails available in Hanover, as well as the proposed rail trail route.

Complete Streets

A Complete Street is one that provides safe and accessible options for all travel modes - walking, biking, transit and vehicles - for people of all ages and abilities. Designing streets with these principles contributes toward the safety, health, economic viability and quality of life in a community by improving the pedestrian and vehicular environments. Providing safer, more accessible and comfortable means of travel between home, school, work, recreation and retail destinations helps promote more livable communities.

The Town is moving toward developing a Complete Streets Policy that can eventually lead to technical assistance and funding for Complete Streets projects, such as the construction of new roads or reconstruction of existing ones. The Town is working with MassDOT and recently completed Tier 1 of the program which includes training for municipal employees and committing to the adoption of a Complete Streets Policy. For the second tier of the program, Hanover will determine its Complete Streets needs and prioritize its Complete Streets infrastructure

projects through the development of a Complete Streets Prioritization Plan. This effort is currently underway.

Figure 39: Hanover Sidewalk Analysis

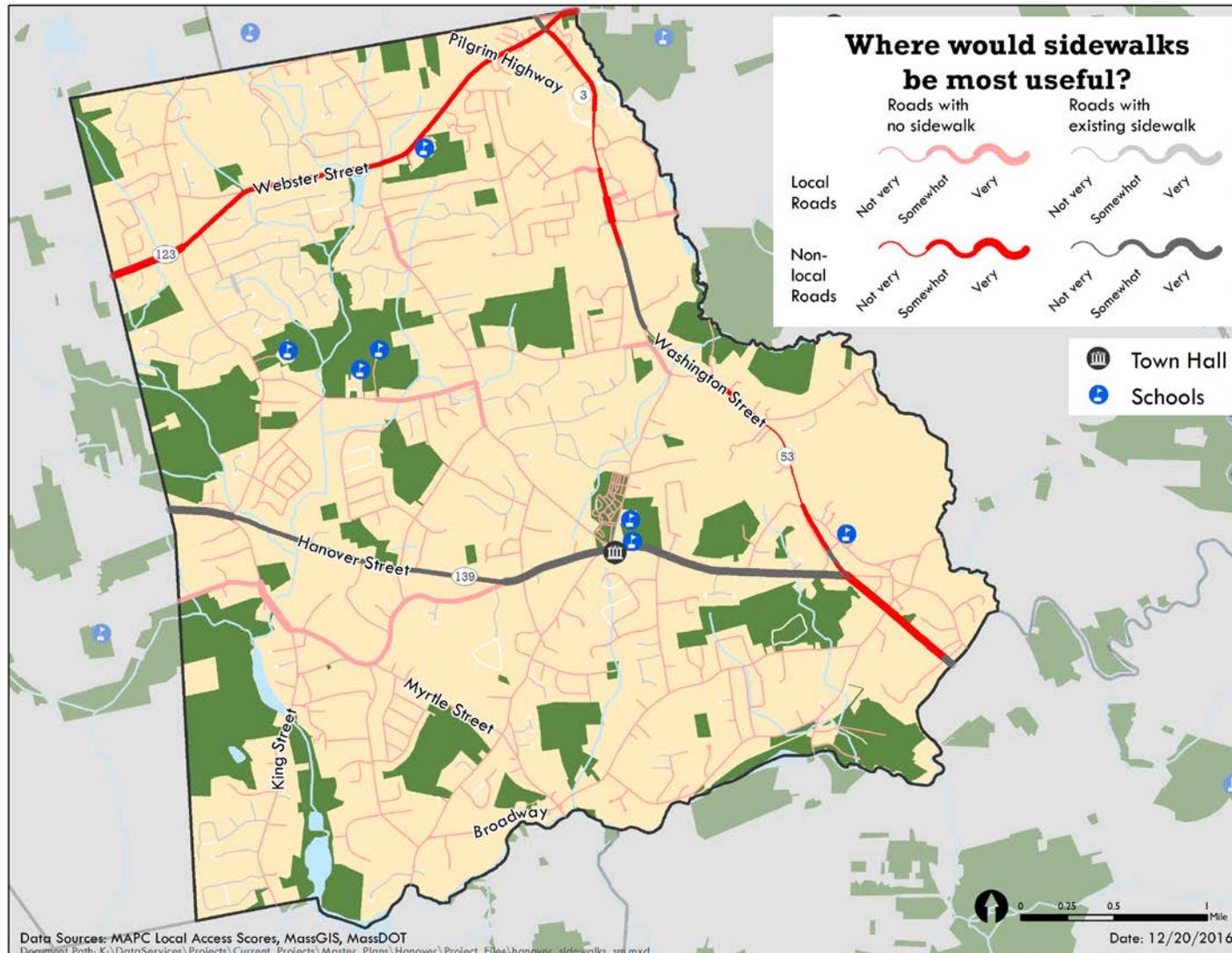
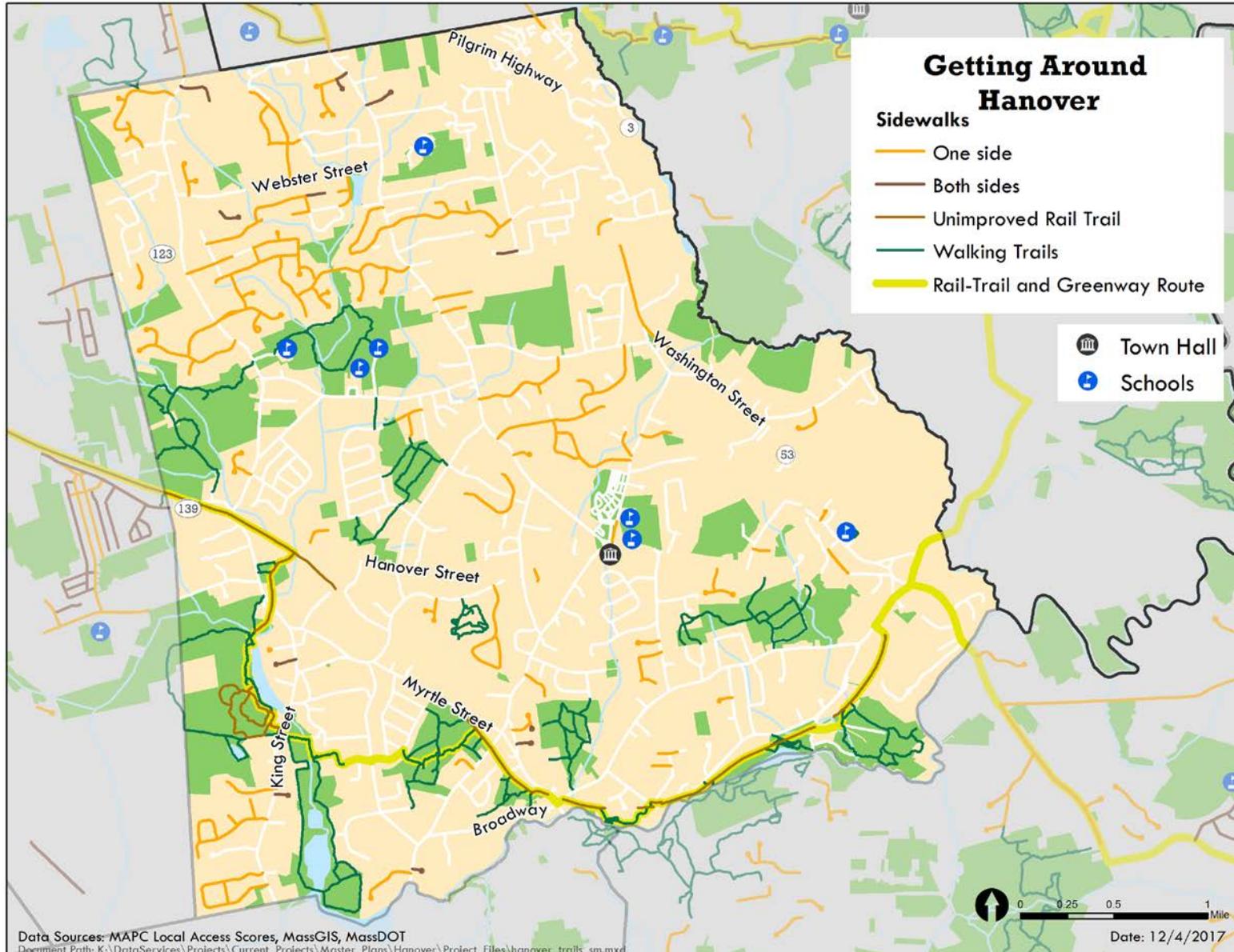


Figure 40: Hanover Walking Trails & Proposed Rail Trail Route



Parking

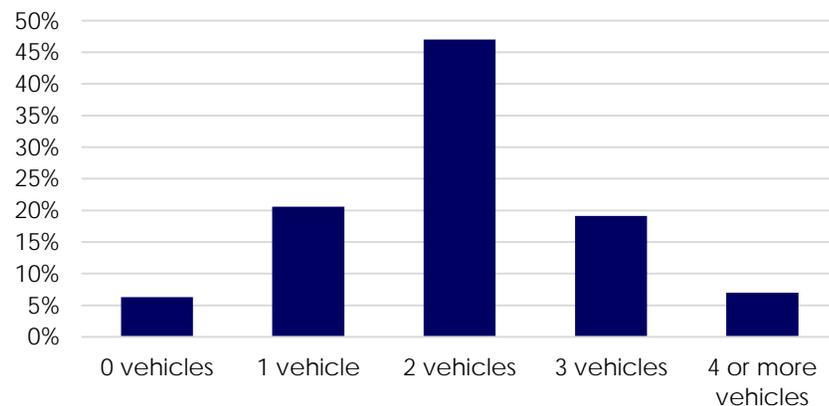
Given that Hanover is predominantly a car-oriented community, parking is plentiful. On-street parking is permitted, except for on major roadways. At the Community Growth Open House, few, if any, concerns about parking were articulated.

Commuting Characteristics

Vehicle Ownership

Most Hanover residents drive as their primary form of transportation. 93.7% of households own at least one vehicle, and there is an average of 2 vehicles per household (see Figure 41).

Figure 41: Number of Vehicles per Household in the Town of Hanover³⁴



³⁴ American Community Survey 2010-2014

Given the limited transit options in Hanover, it is not surprising that most residents rely on a car to get around. According to MAPC’s vehicle census data, the average passenger car registered in Hanover travelled 31 miles per day in 2014.

Journey to Work Data

Based on the vehicle ownership data, it is no surprise that the vast majority of commuters (87%) drive to work. 7% utilize public transit, which could include the Commuter Rail, P & B bus, or another mode. The remaining 6% work from home, walk or bike to work, or utilize another form of transportation. The data also demonstrates that the majority (53%) of Hanover residents who work have a commute of under 30 minutes. However, a sizeable amount (one in five) have a commute that is one hour or longer. Figures 42 and 43 depict these commuting trends.

Employment Concentrations and Connections³⁵

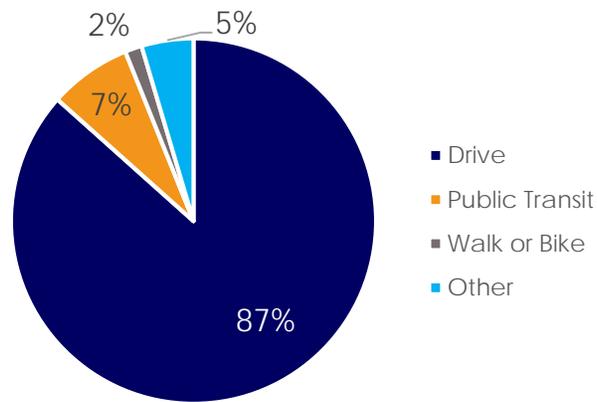
Nearly one in five (19%) of Hanover workers are employed in Hanover. Boston (17%) is also a popular place of employment for Hanover residents. Other common places of employment include several municipalities in between Hanover and Boston, such as Quincy, Braintree, Weymouth, Rockland, and Norwell.

The majority of the Hanover workforce comes from within the South Shore. While 16% are Hanover residents, other places of residence for Hanover employees include

³⁵ MassGIS, MassDOT, MBTA, American Community Survey 2010 5-Year Estimates MCD Flows.

Pembroke (9%), Marshfield (6%), Weymouth (6%), Rockland (5%), Whitman (5%), and Hanson (5%). More information about commuter flows is available in Figures 44 and 45.

Figure 42: Commute by Transit Mode³⁶



It is worth noting that even though 17% of Hanover workers are employed in Boston, only 7% commute via public transit. The limited use of public transit is likely due to several factors, including the fact that the vast majority of residents would need to drive to the nearest commuter rail station, and the high cost of the monthly passes.

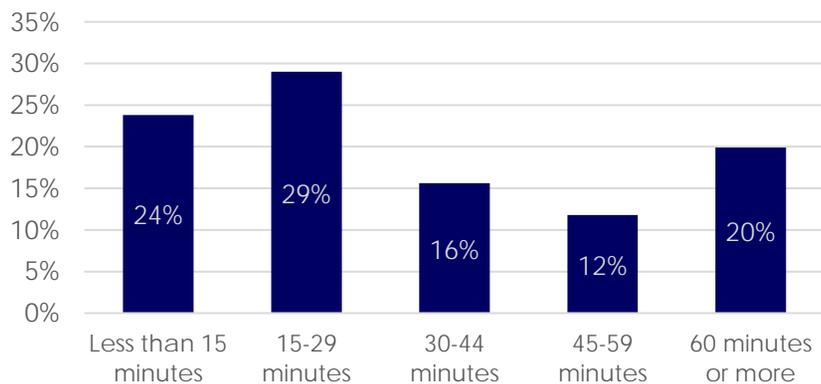
If the Town is interested in improving the accessibility of alternative modes of transit to coworkers, it is worthwhile to determine how partnerships with GATRA or the P & B bus can increase the number of riders commuting by public transit. The proposed additional GATRA bus stops may facilitate this shift.

Transportation Planning in Hanover

Local Planning

The Town of Hanover’s Planning Department consists of two staff, a planner and associate planner, and the department receives assistance from an intern in the summer. Both the planning staff and the Planning Board are instrumental to successful transportation planning in Hanover. The Planning Board’s responsibilities include creating the Zoning Bylaws and facilitating the public meetings necessary to inform such bylaws, acting as the Special Permit Granting Authority, and overseeing site plan review.

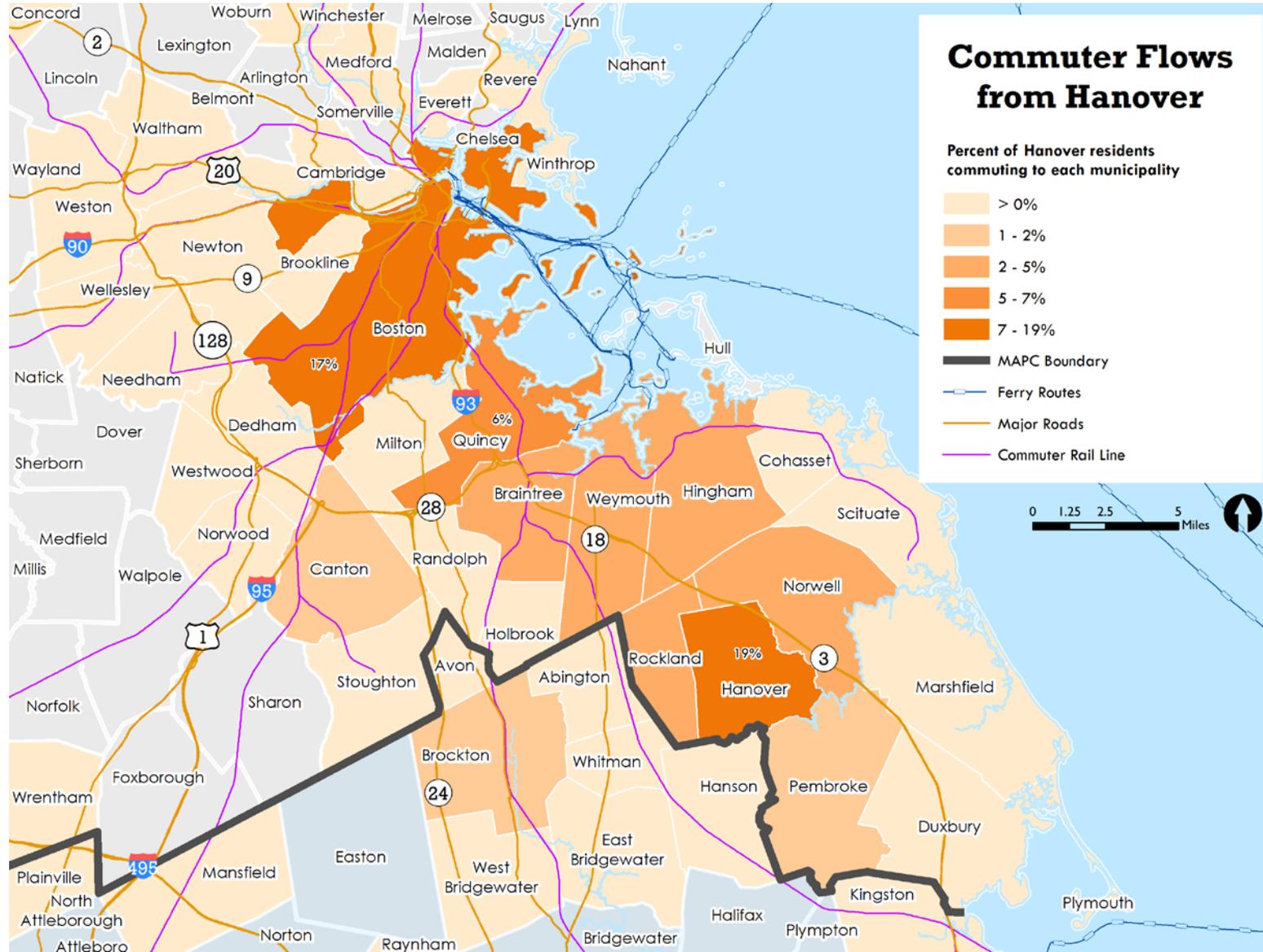
Figure 43: Length of Commute³⁷



³⁶ American Community Survey 2010-2014

³⁷ *Ibid*

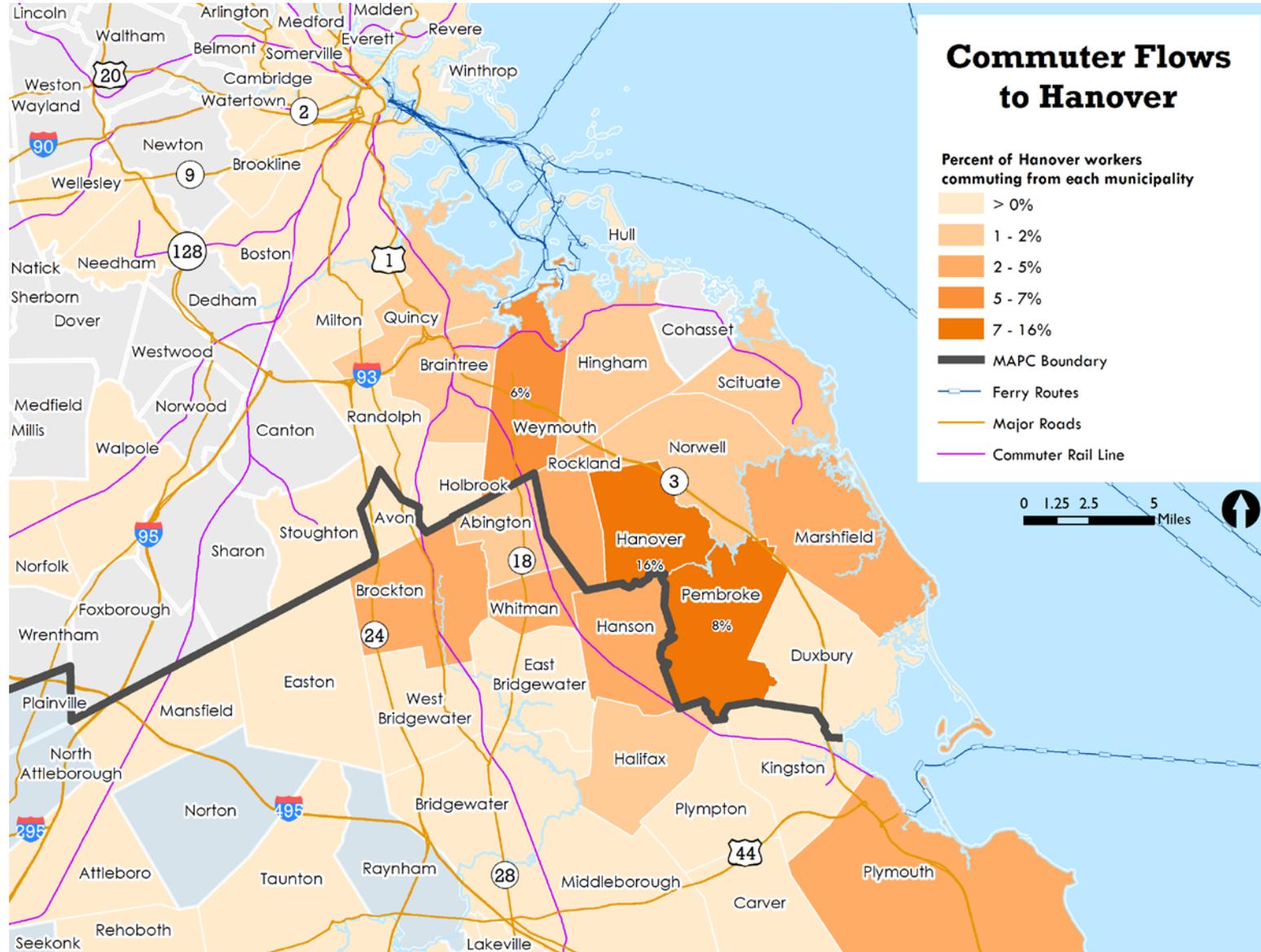
Figure 44: Percent of Hanover Residents Commuting to each Municipality



Data Sources: MassGIS, MassDOT, MBTA, ACS 2010 5-Year Estimates MCD Flows
Document Path: K:\DataServices\Projects\Current_Projects\Master_Plans\Hanover\Project_Files\hanover_resiflow_map_2017.mxd

Date: 1/11/2017

Figure 45: Percent of Hanover Employees Commuting from each Municipal



Data Sources: MassGIS, MassDOT, MBTA, ACS 2010 5-Year Estimates MCD Flows
Document Path: K:\DataServices\Projects\Current_Projects\Master_Plans\Hanover\Project_Files\hanover_wrkflow_map_2017v2.mxd

Date: 1/11/2017

Hanover's local transportation planning work is in part supported by state funds. MassDOT's Chapter 90 program provides municipalities with funds for the maintenance, repair, improvement, and construction of roadways, as well as projects that extend the life of the Town's capital facilities. In 2016, Hanover received nearly \$519,000 in Chapter 90 funding.³⁸

Regional Transportation Organizations

Hanover is a member of two regional planning agencies: The Metropolitan Area Planning Council (MAPC) and the Old Colony Planning Council (OCPC). The Town is a part of MAPC's South Shore Coalition, which includes nearby municipalities such as Rockland, Norwell, Pembroke, and others. MAPC's mission is to promote smart growth and regional collaboration, and provides communities with technical assistance and other resources to advance local, inter-municipal, and regional planning efforts.

OCPC carries out the federally mandated transportation planning processes for Hanover by allocating federal and state transportation dollars to communities within the region. The process for determining the funding for transportation projects is guided by a vision that informs three key documents that all metropolitan planning organizations (MPOs) must update at regular intervals—the Long-Range Transportation Plan, The Transportation Improvement Program (TIP), and the Unified Planning Work Program (UPWP).

³⁸www.massdot.state.ma.us/highway/DoingBusinessWithUs/LocalAidPrograms/Chapter90Program/Chapter90Apportionment.aspx

Upcoming Transportation Projects and Maintenance

Much of Hanover's ongoing transportation work involves improvements to the Route 53 corridor. According to the Project Need Form for Washington Street (Route 53) @ the University Sports Complex at Starland, congestion and traffic safety are two of the primary concerns along this corridor. To address some of these concerns, the Town is working with MassDOT to add a two-way center left-turn lane from the northern to the southern Starland Driveways. As of November 2016, the roadway widening project has been proposed to MassDOT and is awaiting final approval.

Public Input

At the Community Growth Open House held on September 14, 2016, participants had the opportunity to articulate transportation-related safety concerns they experience in Hanover, as well as places that would potentially benefit from transportation improvements. Open house attendees identified specific concerns on a map of Hanover. The primary areas in which residents identified as feeling unsafe included:

- The intersection of Main Street, Silver Street, Route 139, and Center Street just outside of Town Hall
- The entrance to the U on Route 53
- The Hanover Crossing

And potential ideas for improvement included:

- Sidewalks along Main Street
- Sidewalks and bike lanes along Route 53
- More pedestrian and bicyclist access points to several destinations including: Ellis Field, senior center near Town Hall, schools on Cedar Street, Hanover Crossing, and Assinippi Park

Overall, sidewalks emerged as one of the most desired transportation improvements in Hanover. The proposed rail trail linking Hanover to Rockland also received a lot of support. Safety improvements that prioritize the most vulnerable users, particularly children and seniors, were also highly desirable.

Recommendations

Goal 1: Invest in pedestrian infrastructure improvements that prioritize the safety of the most vulnerable populations, such as children and seniors.

Strategy 1: Improve quality and connectivity of pedestrian infrastructure at local schools.

Strategy 2: Make pedestrian safety improvements for Cardinal Cushing residents walking to Shaw's.

Strategy 3: Leverage additional funding to support new and improved infrastructure.

Goal 2: Address mobility and safety concerns on highly trafficked corridors and intersections.

Strategy 1: Prioritize infrastructure investments and safety improvements at intersections identified as particularly dangerous by residents and previously commissioned studies.

Strategy 2: Incorporate general traffic safety practices into ongoing and planned work.

Goal 3: Improve bicycle and pedestrian accessibility and connectivity.

Strategy 1: Extend rail trail from Rockland spur into Hanover.

Strategy 2: Ensure bicycle and pedestrian infrastructure is built as a network and links local destinations.

Strategy 3: Continue working toward adoption of a Complete Streets Policy.

Goal 4: Expand mass transit and shuttle services options to, from, and within Hanover.

Strategy 1: Partner with GATRA to expand upon existing shuttle and bus services that serve Hanover.

Strategy 2: Raise awareness among residents of shuttle services offered.

Goal 5: Leverage resources from new developments to secure additional funding for transportation improvements.

Strategy 1: Secure additional investments in transportation infrastructure as part of the development process.

Public Services & Facilities

Introduction

The public facilities and services element of a master plan helps to guide decisions and develop a plan relevant to public buildings, utilities, and infrastructure in order to meet future needs of the community. Public facilities make it possible for municipal employees and volunteers to provide services for the public good. The adequacy of Hanover's municipal facilities for the functions they serve is largely determined by four factors:

- The form, size, and organization of the Town's local government;
- Projected population and economic growth;
- The Town's land use pattern; and,
- The expectations of the Town's population.

The Town's ability to provide adequate facilities depends on effective capital planning and a commitment to implementation, asset management policies, and the amount of revenue available for local government operations. Hanover, like many other municipalities, receives very little funding from non-local sources and relies almost entirely on its own residents and businesses for financial support.

This chapter includes information about Town administration; services that keep the Town running including: Public Works, Facilities, Public Safety, and Community Services; properties owned by the Town of Hanover or the Hanover Public School District; and strategies for how the town can maintain and improve its public services and facilities.

Key Findings

- Since The Town has worked toward reorganizing Town Government and Departments to improve the delivery and oversight of public services, but could explore further collaboration between departments for better service delivery.
- The Department of Public Works and the Facilities Department are responsible for a wide range of tasks in maintaining the town's infrastructure, buildings, and equipment, but could use additional facilities and staffing resources.
- Public Safety Services, including Police and Fire, are functioning well, but could use facility improvements to enhance service delivery and coverage, especially since they operate 24 hours a day.
- The Town has made recent strides in improving their public facilities, including the renovations to Center Elementary and Town Hall and construction of the new high school, Senior Center, and Forge Pond Park, but facility renovation is needed and opportunities to reuse town-owned vacant or underutilized buildings remain.

Existing Conditions

Town Administration

Hanover General Bylaws

The area of Hanover was first settled in 1649 and was incorporated into the Town of Hanover in 1727. Pursuant to the Town's General Bylaws last amended at the 2016 May Town Meeting, Hanover is governed by the open town meeting form of government, and is led by a five member a Board of Selectmen. Hanover adopted a Town Manager form of government in 2009 by Special Act Charter, amended in 2013, whereby the Board of Selectmen appoints the Town Manager, who is responsible for the overall operation of the town.

The General Bylaws detail the Town Meeting Procedures, election of Town officials, and procedures for appointments to town boards and committees, outlines the powers of the elected Town Clerk, Board of Public Works, Board of Assessors, School Committee, Board of Health, Trustees of the Public Library, Planning Board, and Town Moderator, and states the Town's legislative, financial, and fiscal procedures.

Town Departments

Below is a list of existing Town departments in 2017. The Town Manager is responsible for appointing a Police Chief, Fire Chief, and other department managers. Most departments operate out of Hanover Town Hall at 550 Hanover Street. However, a number of departments

operate out of different facilities. These include: the School Department and Payroll/Benefits at 188 Broadway, the Library at 534 Hanover Street, the Council on Aging at 665 Center Street, the Fire Department's fire houses located at 32 Center Street and 925 Circuit Street, the Police Department at 129 Rockland Street, Public Works at 40 Pond Street, and Facilities at 273 Cedar Street.

In FY2017, the Town employed about 195 FTE positions, excluding School Department positions, in the following offices:

Figure 46: Town Offices

Accounting / Finance	Health Department
Affordable Housing Trust	Information Technology
Administrator	John Curtis Free Library
Assessors	Parks and Recreation
Board of Registrars	Passport Services
Board of Selectmen	Payroll/Benefits Office
Building/Inspectional Services	Personnel Department
Community Preservation	Police Department
Conservation	Town Clerk
Council on Aging	Town Manager
Department of Public Works	Treasurer/Collector
Emergency Management Agency	Veteran's Agent
Facilities	Visiting Nurse Association
Fire Department	Zoning Board of Appeals



Town Boards and Committees

The Board of Selectmen in Hanover consists of five elected members each with three-year terms. The Board of Selectmen acts as the “chief executive” for the town and is responsible for appointing the Town Manager. The Town Moderator is “the presiding officer” at Town Meeting and Special Town Meetings. The Board of Selectmen appoints citizens to fill positions on various advisory and decision-making committees and commissions vital to the operation of the town. The Town Moderator makes appointments to several other vital committees, including the Advisory Committee.

Most town board, commission, and committee members are appointed to their positions, though a few are elected. Some of these groups meet at least monthly, others meet on an as-needed basis. Some are convened for a temporary purpose and may be dissolved once the committee’s objectives have been met. Most of the committees are all volunteer while others have ex-officio Town Staff representatives and/or a Board of Selectmen Liaison. The following list is based on the town boards, commissions, and committees listed on the Town website in November 2016.

Figure 47: Elected Committees and Positions

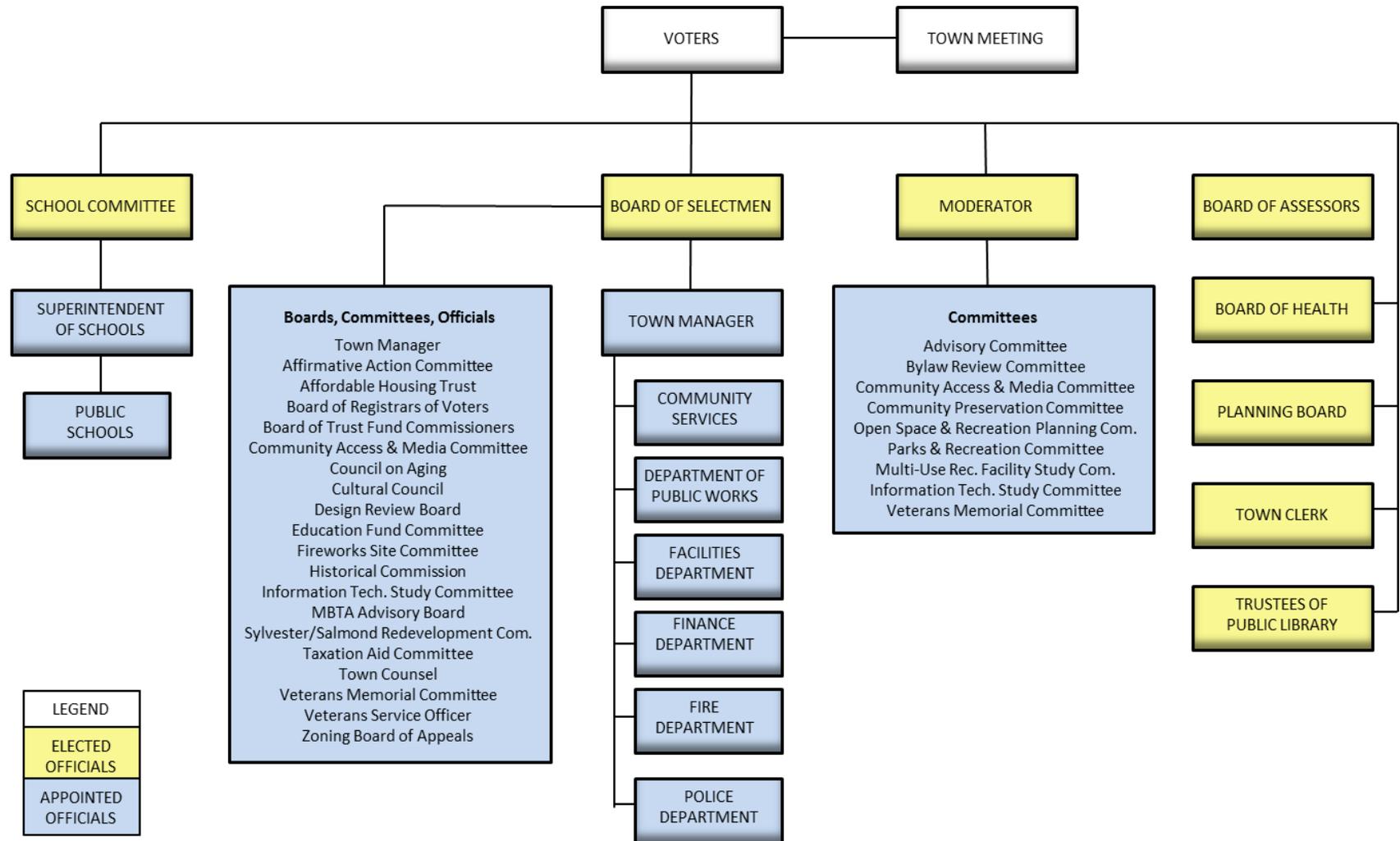
Board of Assessors	Planning Board
Board of Health	School Committee
Board of Selectmen	Town Moderator
Town Clerk	Trustees of the Public Library

Figure 48: Appointed Committees

Advisory Committee	Fireworks Site Focus Committee
Affirmative Action Committee	Hackett’s Pond Dam Study Committee
Affordable Housing Trust	Hanover 300 Master Plan Committee
Board of Overseers of the Stetson House	Historical Commission
Board of Registrars of Voters	Information Technology Study Committee
Board of Trust Fund Commissioners	Multi-Use Recreational Facility Study Committee
Center/Sylvester School Building Committee	Open Data Committee
Conservation Commission	Open Space Committee
Community Access & Media Committee	Parks & Recreation Committee
Community Preservation Committee	Route 53 Corridor Joint Study Committee
Council on Aging Advisory Board	Sylvester/Salmond School Redevelopment Committee
Cultural Council	Stetson House Board of Overseers
Design Review Board	Taxation Aid Committee
Dog Park Committee	Town Manager Act Review Committee
Education Fund Committee	Veteran’s Memorial Committee
Emergency Management Agency	Zoning Board of Appeals
Local Emergency Planning Committee	Fair Housing Commission

The following organization chart is accurate as of January 2016; it was included in the FY17 Town Budget.³⁹

Figure 49: Town of Hanover Organization Chart



³⁹ Town of Hanover, Annual Budget FY17

Largest Town Departments: Public Works & Facilities, Public Safety, and Community Services

Department of Public Works

The Hanover Department of Public Works' mission "is to protect, preserve, improve, and manage the Town's infrastructure, facilities and related assets." This infrastructure includes the Town's roadway and drainage networks, cemeteries and parks, transfer station, water distribution system, and water treatment plants. The DPW maintains its own website detailing its role and responsibilities and engages with the public via the YourGov web service and its Twitter handle @HanoverDPW.

The Public Works departmental headquarters are located at 40 Pond Street, which also houses the Pond Street Water Treatment Plant. The building systems are fully functional and in good operating order, but square footage is in short supply. The Department employs 37 full-time employees and nine (9) seasonal or part-time employees, as reported in the 2015 Annual Town Report. In FY2016 the DPW budget was \$3,635,096. The Director of Public Works, Victor Diniak, supervises the division and is assisted in the field by a Deputy Superintendent of Field Operations. The Director of Public Works is responsible for day to day operations of the entire department, including all planning, budgeting, payroll, purchasing, engineering, goal setting, and administrative services of the department and ensures that the policies, procedures, and goals of the Town are executed properly. As part of the change to a Town

Manager form of government in 2010, direction of the DPW was transferred to the Town Manager with the Board of Public Works assuming an advisory role with respect to DPW policies. The members of the Board are elected by the voters of Hanover to three year terms.

Public works employees are either working or on-call at all times throughout the year, in order to respond to any infrastructure related challenges that emerge. Due to the broad range of responsibilities overseen by the Department, the DPW is further organized into three operating groups, the Administrative Group, the Field Operations Group, and the Water Operations Group, with the Field and Water Operations Groups being further broken down into individual divisions. Each DPW division has a foreman and one or more crews who execute work orders and work toward achieving the goals of the various divisions that have been set by the Town Manager, Director, and supervisors.

The **Administration Group** provides administrative support for all DPW operations, including budgeting, planning, accounts payable, payroll, water billing, and public bidding. This division's staff is also the most public facing in the department, fielding telephone calls and emails from town residents, as well as maintaining and developing the DPW's web presence, including social media accounts. In FY17 the Town proposed transferring two financial support staff from the DPW to the Finance Department as part of an ongoing project to bring water billing, purchasing, and public works accounting under the Finance Department. However, the FY18 budget indicates that enhancements to internal software and processes within the DPW made the transfer no longer necessary, and the employees were



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moved back to the Water Department for FY2018. In addition to the Director of Public Works the Administration Group currently consists of two (2) full-time employees, the Deputy Superintendent of Field Operations and an Administrative Assistant, as well as one (1) part-time project manager.

The **Field Operations Group** contains the Highway Division, Public Grounds Division, and Solid Waste Division.

1. The Highway Division employs six (6) full-time employees and one (1) part-time employee to maintain the Town's 86 mile roadway network, including 65 miles of curbing, 35 miles of sidewalks, road signage, traffic markings, 11 bridges, and culverts. Using a variety of funding streams, including road bonds and Chapter 90, the division completes overlays of town's roads. The DPW Director, Deputy Superintendent, and Highway Foreman evaluate the condition of every town road in town every two to three years, rating them on a scale of 1-10, based number of factors. The roads are then mapped out using the Town's Geographic Information System (GIS) to develop a town-wide map of pavement condition, which is used along with other information, such as the condition of curbing and sidewalks, to develop the DPW's pavement plans. Streets in like condition in neighborhoods are grouped together where possible in order to maximize efficiency and ensure so that neighborhoods age at roughly the same rate.

The highway division also operates and maintains the Town's drainage network, including 2,800 catch basins, 1,300 manholes, and drainage pipes, ditches, rivers,

and streams, and the four Town dams and is responsible for stormwater management activities within the Town. Additional division duties include, providing fleet maintenance services for most town vehicles, excavation and trucking services for other DPW divisions, and operating the Town's centralized fuel management system. Finally, the highway division manages the Town's snow and ice control program, which includes adopting an annual snow and ice plan to ensure that the Town's roads and public facilities are safe for pedestrian and vehicular travel. Additionally, the Town Manager, acting on long standing policies of the Board of Public Works, has adopted a "black road" policy to aggressively fight winter storm events to keep roads passable during storms and to achieve roads that are black and wet within 4-6 hours after the end of the storm. To achieve this goal, the DPW utilizes nine sanders for the application of road salt and other anti-icing chemicals and 25-30 pieces of town-owned equipment and upwards of 40-45 pieces of rented equipment to remove snow from streets and sidewalks.

2. The Public Grounds Division consists of five (5) full-time employees and maintains the grounds of non-school Town facilities, including the Town's three cemeteries and six athletic complexes. The Public Grounds Division also maintains the Town's tree and roadside brush control program.

3. The Transfer Station Division operates the Town's Transfer Station and recycling operations located at 93 Rockland Street with the goal of offering cost effective means for handling the Town's solid waste needs. The division sends roughly 4,500 tons of waste a year to the



Southbridge landfill and sends 1,700 tons of recyclables to various vendors. The transfer station division operates with a staff of four (4) full-time employees and one (1) part-time employee.

The **Water Operations Group** contains the Water Treatment Division and the Water Distribution Division. Combined, the two Divisions employ 16 full-time employees and three (3) part-time employees.

1. The Water Treatment Division operates three drinking water treatment facilities, the Pond Street water treatment facility at 40 Pond Street, the Beal water treatment plant at 100 Riverside Drive, and the Broadway water treatment plant at 507 Broadway. Combined, these facilities treat approximately 520 million gallons of drinking water annually to ensure the delivery of water that meets all federal and state water quality standards. These plants typically operate up to 16 hours per day, 365 days per year. The Pond Street facility's was built in 1973 and received a major upgrade in 1992. The Beal facility was built in 1994 and the Broadway facility was built in 2001. The Water Treatment Division further monitors nine wells in four different well fields as well as monitoring the operation of three water storage tanks in Town. The Water Treatment Division operates with a staff of seven full-time employees and 1 part-time seasonal employee.
2. The Water Distribution Division operates and maintains the network of pipes and valves that deliver clean water to homes and businesses. This network includes approximately 110 miles of water main, 1,200 fire hydrants, 1,400 gate valves, 5,000 water services, and

300 backflow prevention devices. The Water Distribution Division is further charged with emergency repairs to water main breaks, installing and reading water meters, testing meters, backflow prevention devices, and other components of the water distribution system, and monitoring the work of contractors installing water main extensions into businesses and new subdivisions. As part of this work, the Water Distribution Division operates an ongoing water meter replacement program to install radio read water meters to improve billing efficiency as well as a Hydrant Flushing Program designed to exercise and test gate valves and hydrants as well as flush sediment out of the water mains.

The Town's groundwater drinking water sources consist of nine wells in four separate locations – Pond Street, Hanover Street, Broadway and Riverside Drive. According to the 2016 Drinking Water Quality Report, Hanover's wells are located in aquifers with high vulnerability to contamination due to the absence of hydrogeologic barriers (i.e. clay) that can prevent contaminant migration. As a result, Hanover's sources are considered highly susceptible to contamination from a variety of sources such as petroleum products, industrial solvents, fertilizers, and microbial contaminants. Susceptibility is a measure of a water supply's potential to become contaminated due to land uses and activities within its recharge area and does not imply poor water quality.

Goals and Objectives for the Department of Public Works include:



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- Updating the five year Priority Street repair list and performing Chapter 90 street resurfacing accordingly
- Evaluating the Forge Pond Dam and beginning the process of designing improvements to bring the structure up to current State dam safety standards
- Updating the stormwater management plan to comply with changes to Federal stormwater regulations
- Advancing near real-time reporting of solid waste operational data on website in accordance with Board of Selectmen goals
- Focus on water quality based on input from residents and businesses

Recent accomplishments for the Department include:

- Resurfacing Whiting Street, Pleasant Street, Silver Street, Woodland Drive, and portions of Circuit Street and Washington Street
- Reconstructing sidewalks on Silver Street and constructing new sidewalks on Washington Street
- Completing repairs to the Factory Pond Dam to bring the structure up to State dam safety standards
- Processing and transferring 6,900 tons of solid waste and recyclables
- Completing annual preventive maintenance to bridges
- Removal of the culvert and restoration of Brook Trout habitat on Iron Mine Brook (DPW was one of several partners that recently won the Healthy Rivers Award from the North & South Rivers Watershed Association)

Facility and Staffing Needs and Challenges:

- The DPW is working to make improvements to the Transfer Station facility and its operations, but the public

is protective of its current status and some proposed changes have received significant pushback

- The main DPW offices at 40 Pond Street include totally functional building systems, but the lack of space is constraining
- In recent years, the use level of parks and recreation facilities has increased, while the resources available to the DPW's Public Grounds Division have not. In the 2015 Annual Town Report, the Board of Public Works cautions that "without an increase in resources, whether that is through the tax rate or through user fees," the quality of provided service may suffer.⁴⁰

Facilities Department

The Facilities Department is a sister department to the DPW and works "to maintain the buildings of the town and the equipment therein at a high level of appearance and condition while extending each to its optimal life cycle design." The Facilities Department performs four (4) key functions for the Town. First and foremost, the Department is charged with the Facilities Maintenance, which includes the preventative maintenance, repair, and improvement of all Town facilities and equipment and the maintenance of school grounds. Second, Department is also responsible for providing and overseeing Custodial Services for all Town facilities. Third, the Department provides Facilities Management services for all Town facilities, which includes

⁴⁰ Open space areas, such as Luddam's Ford Park, have also experienced an increase in visitors and usage. However, open spaces are managed by the Conservation Commission and rely on volunteer networks for maintenance and upkeep, so their capacity to accommodate additional visitors is even more strained than property managed by the DPW.

procurement, contracting, capital planning, and project management for projects in Town owned facilities as well as the scheduling and management of 3rd party uses of school buildings and fields. To help do this the Department uses three modules of the SchoolDude facilities management software package to handle maintenance requests, project management direction, and facilities scheduling. Finally, the Department provides Energy Management services for Town-owned facilities, including utilities management, energy conservation, green communities activities, building energy management, and systems operations. In this vein the Department actively pursues energy savings by operating new Building Management Systems to control HVAC, obtaining economical third party contracts for electricity and natural gas, and annually replacing inefficient HVAC and lighting systems with high efficiency equipment funded through the state's Green Communities grants.

The Facilities Department is currently headquartered at 273 Cedar Street and is led by the Town's Facilities Engineering Manager, Robert F. Murray, PE, his Deputy Superintendent of Facilities, and a part-time project manager shared with other departments. The Department is further broken down into a Maintenance Division, which employs a foreman and three (3) skilled maintenance workers, and a Custodial Division, which employs a foreman and 20 full-time and seven (7) part-time custodians for a total of 24 full-time employees and 8 part-time employees.

Goals and objectives for the Facilities Department include:

- The continued development of the Town's preventive maintenance (PM) software program to refine PM

procedures and schedules and capture remaining equipment

- Upgrading capital project implementation, completing all funded pre-2016 projects, as well as developing and launching a Projects Update page on the town's web site providing status details on all funded projects
- Providing input and oversight to the Center School addition/renovation project
- Continuing Green Communities program efforts, seeking an additional \$200,000+ in grants for energy saving measures

Recent Departmental accomplishments include:

- Transitioning from being part of the DPW to an independent department
- Launching a preventive maintenance (PM) software program, issuing scheduled maintenance work orders with printed procedures and lifelong records for approximately 1,000 equipment items in 18 buildings
- Modernization of the Fire Headquarters kitchen, replacement of the emergency generator at the Fire Headquarters with a new generator carrying full building load, and the relocation and installation of special washer and dryer units for the washing of fire personnel turnout gear
- Installing door access control systems at schools and implementing new Building Management Systems for HVAC in three schools
- Town Hall renovations are ongoing with some interior work underway and additional exterior work scheduled for 2018
- Obtaining further Green Communities grants totaling in the hundreds of thousands of dollars for a variety of

energy savings projects, including replacing the heating boiler at the Fire Headquarters with a high-efficiency condensing boiler, LED lighting retrofits at the JC Library and Middle School, and HVAC improvements at the Middle School

- A subtle but important change involving the Deputy Superintendent position was made to the Facilities Department’s organizational structure. Following the departure of the former Deputy, the job description was revised to remove the Deputy from direct operational control of the maintenance and custodial staffs and in its place assign him direct responsibility for project management, ad hoc response to maintenance problems and improvements, and development of the capital plan

Facility and Staffing Needs and Challenges:

- The Facilities Department performs its function well, but its broad responsibilities can strain staff capacity.
 - Staff must balance corrective and preventive maintenance tasks with their daily responsibilities for maintaining all school grounds during the four seasons, mowing vast acres of lawns, maintaining playgrounds, grooming ball fields to MIAA standards, and snow plowing and sanding throughout the winter.
 - The Facilities Engineering Manager must perform a wide range of functions, including the submission of grant applications, procurement activities and vendor relations, and general project management. A recent change to the Deputy Superintendent position should help with the distribution of responsibilities.

Public Safety (Police and Fire Departments)

Police Department:

The Town of Hanover’s Police Department works to “prevent crime, preserve order, and to protect the rights, lives and property of the citizens of Hanover.” In partnership with community residents and institutions, the Department identifies and responds to dynamic social and cultural demands, while acting with integrity, fairness, and professionalism. Led by Police Chief Walter Sweeney, a Hanover native selected for the post in 2008, the Hanover Police Department includes 30 full time officers: eight commanding officers, two detectives, and twenty patrolmen. The Department also employs nine Communications staff, who operate the Town’s Emergency Communications Center (ECC), which is responsible for call taking and call dispatching for all Police, Fire, and EMS services in the Town. Counting the two civilian administrative staff members, part time, and alternate employees the department includes 42.50 Full-time Equivalents.

During FY15, the Police Department received 13,390 calls for service, as enumerated in the 2015 Annual Town Report. In addition to calls for service, the Hanover Police Department engages the community by providing various programs that enhance the quality of life of the Town’s citizens. Topic areas covered by offered programs include crime prevention, school safety, firearms training, and fish and game regulations. Officers also attend and perform outreach at events hosted at community gathering places, such as the Senior Center and YMCA. The Department has made a concerted effort to develop its



Public Services & Facilities

online presence, and has among the highest number of social media followers for a department of its size nationwide.

The Police Department operates out of its headquarters located at 129 Rockland Street, which was constructed in the late 1990s. Although the facility is not outdated, with a solid technology infrastructure and no major structural concerns, it has begun to show signs of aging. Due to the nature of the Department's responsibilities, which require 24/7 operation, building systems and materials tend to wear out more quickly than they would under less frequent use. Additionally, the building's HVAC system has been identified as a frequent cause and object of complaint; a 2011 municipal facilities assessment commissioned by the Town describes the station's HVAC system as "an 'annual budget buster,' meaning expensive to operate and maintain." And while not suffering from any big failures at this time, the station's roof is reaching the end of its lifespan and will likely need to be replaced in the coming years. The general public's interface with the Police Headquarters building is not limited to those who come to the police station in police custody or arrive independently in search of police assistance. The station also houses a public meeting room, which is used between 70 – 100 times per year by different community groups. The room can accommodate several dozen people, but a lack of excess parking at the site can limit usage capacity.

Police Department vehicles are replaced and equipped annually through the capital improvement request process, with an average annual cost of roughly \$115,000.

Goals and objectives for the Police Department include:

- Meeting the Commonwealth's recommended training requirements
- Continuing its role in a strong community oriented policing philosophy
- Actively supporting the newly formed Traffic Study Committee by addressing problem traffic areas and other motor vehicular public safety issues
- Devoting continued attention to quality of life issues and crime prevention

Recent Departmental accomplishments include:

- The successful implementation of the School Resource Officer assigned to the Hanover Public School District
- Members of the Department have benefitted significantly from the additional training made available from funding in the Public Safety training account. Joint training has been conducted with the Hanover Fire Department. Officers have attended classes sponsored by the FBI, the International Association of Chiefs of Police, and Massachusetts State Police, Municipal Police Training Committee and the Massachusetts Chiefs of Police.
- The department has increased its social media presence by earning recognition from the International Association of Chiefs of Police as being the 5th most followed police agency on the Twitter platform employing less than 49 officers.
- The Emergency Communications Center was funded for State E-911 grants and those funds were utilized to further the professional development for each dispatcher. Dispatch employees completed the mandatory 16 hours of continuing education.



Facility and Staffing Needs and Challenges:

- Due to the constant operations required by police work, the Hanover Police Station's building systems have aged more quickly than they were designed to. There are no critical deficiencies, but more preventive maintenance is required than would be needed at a comparably aged facility not in constant use.
- The Police Station has a public meeting room, which is used between 70 and 100 times per year by different community groups. However, limited parking for civilian vehicles at the Station can negatively impact the meeting room's utility for high attendance meetings.
- The building's HVAC system has been a frequent cause for complaint; it is expensive to operate and maintain, and there are routine issues related to imprecise air temperature control and occupant comfort.

Fire Department:

The Town of Hanover's Fire Department "is charged with the protection of life, property, and the natural environment," providing fire protection, Emergency Medical Services, and disaster response. Operating under the leadership of Fire Chief Jeffrey Blanchard, who assumed the position in 2011, the Fire Department includes 26 full time employees: Fire Chief, Deputy Fire Chief, 5 Captains, 18 Firefighters/EMT, and an Executive Assistant. Although the Department also retains 20 on call firefighters who work as needed, the FY17 Budget notes that the department needs to fill two vacancies for full time, career firefighter/paramedics. Maintaining full staffing is especially important in light of a sustained increase in the Department's call volume. Between July 2014 and June

2015 (FY2015), the Hanover Fire Department responded to 3058 incidents, the busiest calendar year in Department history; comparatively, in FY2010 the Department responded to a just over 2400 calls. The majority of incidents in FY2015 were in response to emergency medical incidents, which historically account for roughly 60% of total calls for service.

Although the general public has limited direct interaction with the Fire Department's facilities, the extremely time sensitive nature of the Department's services adds an essential importance to the location and use of their facilities. The Town has devoted direct attention to developing a long term facilities plan, with the 2005 Annual Town Meeting voting to form the Hanover Fire Station Study Committee. At peak, the Department owned and operated six separate facilities, including their Headquarters and a series of smaller sub-stations. By 2008, when the Fire Station Study Committee released its "Reports and Recommendations," the Department was maintaining four facilities, with Fire Headquarters serving as the only manned station and the three active satellite stations being used solely for vehicle and equipment storage. This arrangement leaves some areas of town outside of the six-minute response time window, the standard recommended by groups such as the National Fire Protection Association and the American Heart Association. The 2008 Fire Station Study recommended a new sub-station be constructed in North Hanover on the site of the former Curtis School, but Annual Town Meeting that year voted against moving forward with the plan.

A 2011 Municipal Facilities Assessment bolstered the recommendation of the Fire Station Study Committee that



a new Fire Station be constructed by concluding that the existing satellite stations were ill suited even as exclusively storage facilities, whether due to their size, location, or condition, and determined full scale renovations to be prohibitively expensive. The 2014 Annual Town Meeting approved funds to study replacing the outdated satellite stations with a newly constructed station in North Hanover. The following year Town Meeting approved funds to develop an architectural design for a fire station on Webster Street in North Hanover, a property targeted to be acquired by the Town through tax title foreclosure. The architectural design will include revised plans, elevations, site plans, building renderings, material selection a preliminary structural write up and estimate, or take any other action relative thereto. The FY18 Budget notes that “planned capital improvements for the new Fire Station continue to be in [the Town’s] plans,” but specific requests have been “postponed to provide the citizens and staff members working on the project more time to develop detailed and thoughtful proposals, and to finalize the tax title acquisition of the proposed property.” Although the finalization of the project’s location and details remain in process, a new station should be considered in the next few years if warranted as a result of new residential and commercial growth.

If a new station is constructed, the Fire Headquarters will remain the most important facility operated by the Department. To that end, there have been several capital improvements to the building in recent years, including a new heating system and generator, the renovation of the building’s kitchen, and insulation of the bay doors. The FY2018-2022 Capital Improvement Plan (CIP) projects the expense of \$500,000 in FY20 for the construction of a rear

addition at Fire HQ, including space for a new emergency operations center and an elevator, which would make the upper levels of the building accessible to individuals with physical disabilities.

In late 2016, the Fire Department made two of the three satellite stations – Stations #1 and #2 - surplus, which would allow the Town to sell the properties without affecting the Department’s operational abilities. On November 21, 2016, the Board of Selectmen voted to authorize the Town Manager to initiate the process to sell Fire Stations #1 and #2, although any final sale must be approved by a vote at Town Meeting. Fire Station 3 is still being used for storage, but the Department is working to develop a plan allowing for its consolidation with Fire Headquarters, which would lessen maintenance expenses and improve the efficiency of their callback procedures.

The changing facilities portfolio of the Fire Department also affects the Department’s vehicle capacity and needs. In addition to providing funds for the North Hanover station architectural design, the May 2015 Annual Town Meeting approved funds for a new fire pumping engine and a new ambulance. The purchase of a new engine and ambulance is in keeping with the Fire Department Fleet Replacement Plan developed in conjunction with the University of Massachusetts Edward J. Collins, Jr. Center for Public Management. Two older engines, a 1992 and a 1999, were authorized to be traded in towards the purchase of the new one. Ten years ago the department still had seven engines in its fleet. The high number was required to support the call fire department and the six village fire stations. During the past ten years the six individual call fire companies were consolidated into two.

Once the two older engines are traded in, the department will have four engines in the fleet. The reduction of engines will have a positive impact on the department's maintenance budget. The new ambulance will replace a 2004 model with more than 120,000 miles on it. The current ambulance replacement plan provides for the purchase of a new ambulance every 3 to 4 years. The newest ambulance is used as the primary unit. The second oldest ambulance (typically 4-8 years old) is used as the first back-up ambulance when there are multiple calls. The oldest ambulance (typically 8-11 years old) is used during multiple calls and as a mechanical spare while maintenance is being performed on the other two. In FY18, the Fire Department has requested funds to replace Ladder 1, a 1989 straight aerial ladder with a NFPA 1901 compliant tower ladder. The Town's responsibility for the total project cost - \$1,250,000 - will be significantly reduced as a result of the award of an Aid to Firefighters Grant (AFG) in the amount of \$932,381.

Goals and objectives provided by the Department include:

- Aggressively pursuing grant opportunities to help defray the cost of equipping and staffing the department
- Continuing to identify ways for the Fire Department to meet the nationally recommended response time of under six minutes
- Maintain adequate staffing levels appropriate to call volume levels
- Developing plans for consolidating Fire Station 3, located in West Hanover, with Fire Headquarters to improve the efficiency of the Department's callback system

- Continuing to develop and create training opportunities that foster multi-agency cooperation and participation

Recent Departmental accomplishments include:

- Providing numerous training opportunities for members through funding provided by the Public Safety Training account. Areas of training included hazardous materials, pump operations and first-line supervisor training.
- Collaborating with the Facilities Department during the installation of a fire sprinkler system in Fire Headquarters. Fifty percent of the cost of the project was obtained through the Assistance to Firefighters to Grant Program.
- Applying for and receiving grant funding to improve the Town's Emergency Operations Center, replace a firefighting vehicle, and purchase new CPR compressions devices and fire nozzles

Facility and Staffing Needs and Challenges:

- The Town's growth and the increased demand for services has resulted in a dramatic increase in the number of overlapping calls. This has increased the Fire Department's reliance on call-back and mutual aid from neighboring communities to ensure that all emergency calls are answered.
- Closing satellite facilities will improve callback efficiency and save on building maintenance costs, but storage capacity needs to be maintained or improved to allow for expansion with increased call volume.



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- Keeping the Department fully staffed with full-time firefighters and EMS is a challenge.
- The Department should look into establishing regional mutual aid agreements.

Emergency Management:

The Hanover Emergency Management Agency (HEMA) leads the Town in planning, preparedness, communication, response, and recovery for daily emergencies, large-scale town wide events and major disasters. HEMA is a vital link in emergency communications between the public and first responders, and provides key coordination and leadership to Town departments, stakeholders, residents, and visitors. The goal of HEMA is to make the Town of Hanover more aware of and prepared for potential hazards, ranging from extreme weather conditions mass casualty incidents. Members of HEMA meet quarterly to develop strategies towards creating resilience. Fire Chief Jeffery Blanchard also serves as the Director of the emergency Management Agency.

HEMA plays an active role in educating Hanover residents about how to prepare for and respond to emergency situations. Through the Community Emergency Response Team (CERT), HEMA provides training to interested residents who then become members of the CERT team. Team members staffed emergency shelter set up during the multiple blizzards of 2015.

The Hanover Police Department and Fire Department also engage in emergency preparedness and training for events such as active shooter scenarios, in partnership with Hanover Public Schools and Hanover Mall management.

The Town's Emergency Operations Center, where public safety leaders can gather to coordinate responses during states of emergency, was once housed in the Police Station but is currently located in Fire Headquarters. A proposed capital project at Fire Headquarters includes a request for funding a rear addition with space for a new Emergency Operations Center in FY20.

Community Services

The Community Services Department consists of four (4) primary divisions, the Department of Municipal Inspections, the John Curtis Library, the Council on Aging, and the Visiting Nurses Association and has a mission "to provide quality services, activities, programs and facilities for all of those who live, learn, work and play in the Town of Hanover." Additional departments within Community Services include Planning, Conservation, Computer Support, Veterans Services, Local Cable, and Parks & Recreation. As of FY17 the Community Services Department employs a total of 31.83 full-time equivalent (FTE) employees.

Department of Municipal Inspections:

The Department of Municipal Inspections (DMI) works to ensure that all projects planned and constructed in the Town move through the permitting and inspection process with ease, with the goal of helping applicants navigate the Town's Codes, Ordinances, Rules and Regulations and ensuring that residents and business owners are adequately protected. DMI is directed by the Building Commissioner, who oversees the Building, Electrical, Plumbing/Gas, and Weights & Measures Inspectors.

Additional departments within DMI include Planning, Conservation, and Health.

1. The Planning Department studies the needs and resources of the Town, particularly those conditions affecting public safety and welfare related to land use and development. The Department staffs the Planning Board, which is authorized to consider applications for site plan review and for reviewing applications pertaining to the Rules and Regulations Governing the Subdivision of Land in the Town of Hanover. The Planning Board is the “custodian” of the Town’s Zoning Bylaws. The Department has two staff planners (Planner and Assistant Planner) as well as administrative assistance.
2. The Conservation Commission is charged with administering and enforcing the Massachusetts Wetlands Protection Act and the local Wetlands Protection Bylaw. The Commission is aided by a two member staff comprised of the Conservation Agent and an administrative assistant. The main responsibility of the Conservation Agent is to obtain and disseminate information to the Commission to help them make informed and fair decisions on permitting and enforcement issues.
3. The Health Department and the Board of Health administer the Department of Environmental Protection and local rules and regulations in the areas of wastewater disposal, solid waste, noise, odor, and hazardous waste regulations. Additionally, it administers and enforces the Department of Public Health community sanitation program and Food and Drug

Administration food protection program. The Health Department has three employees – a Public Health Nurse, Title V Inspector, and Assistant Health Agent.

John Curtis Free Library:

The John Curtis Free Library provides residents with the resources for lifelong learning, public space for meeting and gathering, and resources for patrons to gain a better understanding of their personal heritage and the cultural heritage of others. The Library has over 6,000 registered patrons, directly houses over 80,000, has an annual circulation of over 120,000 items, and belongs to the 29 member Old Colony Library Network (OCLN).

The library’s meeting rooms are available for community organizations at no charge and may be reserved in the library or online at the library’s website. The Library also sponsors children’s, young adult, and adult programs, including the annual spelling bee, author talks and signings, travel slide presentations, movie nights, and piano and voice concerts. Additionally, the Library provides a number of museum passes that can be checked out. Library staff includes one (1) library director, three (3) full-time librarians, two full-time library technicians, one and a half (1.5) full-time equivalent library assistants, and one (1) part-time page.

Council on Aging:

The Council on Aging (COA) provides services, educational programs activities, and health related workshops to the Town’s Senior Citizens, the disabled and their families/caregivers and works to enhance and



Public Services & Facilities

promote senior citizens' quality of life, acting as the primary advocate of support services to seniors in Hanover and beyond. The COA operates at the Town's Center at 665 Center Street and works with the Greater Attleboro Taunton Regional Transit Authority (GATRA) to provide senior transit services for qualified individuals. Additional services include senior outreach and referral, operating a SHINE Program to assist seniors navigate the many areas of health insurance, providing wellness programs and classes, and conducting home visits and wellness checks. The COA employs one (1) full-time director, one (1) client service coordinator, one (1) full time transportation coordinator/programming assistant, one (1) full time volunteer coordinator/client services assistant, one (1) full-time driver, and one (1) part time driver.

The COA will be developing plans relating to updating its facility to include enlarging the kitchen, improved lighting, and addressing space needs in anticipation of a growing elderly population to ensure better utilization of the facility.

Visiting Nurses Association:

The Visiting Nurses Association (VNA) in Hanover works to promote health and to prevent and control disease within Town. The VNA provides clinical and compassionate care and works to coordinate medical, spiritual and social services with other private and public agencies to improve the health of the community. The VNA employs one (1) nurse administrator and one and a half (1.5) FTE nurses.

Veterans' Agent:

The Town's Veterans' Agent helps Hanover veterans and their dependents with applications for federal claims related to service-connected and non-service connected compensation and pensions. Additionally, this office assists with veteran health benefits and prescription drugs, business and education programs, and burial benefits. In particular, the Agent helps to arrange benefits for needy Veterans and families pursuant to Mass. General Laws Chapter 115.

Recent accomplishments of the Community Services Department include:

- Completing and distributing an economic development plan to local and national businesses
- Launching People GIS software to work towards long term goal of having all GIS layers under one platform
- Increasing nursing hours in the Visiting Nurses office to offer additional clinic hours, and increasing clinical visits and outreach using interns from local nursing schools
- Developing and implementing a more intensive senior outreach plan at the Council on Aging
- Completing the transition to online permitting in the Department of Municipal Inspections and filling the computer support position

Facility and Staffing Needs and Challenges:

- Relying on paper copies of public documents makes access labor intensive and requires significant dedicated storage space. The Department is working



to digitize public documents to increase ease of access and free up physical space in Town Hall.

- Parks and Recreation, which became part of the Community Services Department in 2015, was unable to afford the maintenance and operation of their former independent facility at 624 Circuit Street. Parks and Recreation must now work with other departments and institutions for programming space, although they may now be held in more accessible locations.

Schools

Hanover operates its own school system, with approximately 2,600 students enrolled across the District's five schools during the 2015-2016 School Year. There are three elementary school facilities: Cedar, Center, and Sylvester Elementary. The Cedar Elementary serves students from pre-kindergarten through fourth grade, and is located next to Hanover High School. The Center School and Sylvester School effectively operate as a single unit, using a split campus model; the Center School building contains class space for students from pre-kindergarten through second grade, while the Sylvester School serves third and fourth grade students. Hanover Middle School enrolls students from fifth through eighth grade, and Hanover High School houses students from ninth through twelfth grade.

The Town of Hanover is in the process of reconfiguring their elementary school facilities model, as well as the distribution of students within the school system. Due to its age, the Sylvester School building has approached the end of its utility as an educational facility, as it is

insufficiently ADA accessible and reliant on obsolete heating, plumbing, and electrical systems. Consequently, the Town is planning a major renovation and expansion of the Center Elementary building to absorb students in grades currently housed within the Sylvester School. The Sylvester School building is planned to be repurposed for an alternative use, with a Town committee charged with researching the need and feasibility of potential re-uses.

In October 2015, the Hanover School Committee unanimously voted to change the future grade level configuration of the Town's elementary schools with an implementation date of September 2019. The proposed configuration is anticipated to include Pre-K, Kindergarten, and first grade at the Cedar School. Grades two, three, and four will reside at the renovated and enlarged Center School, pending completion of the building project. Using a combination of grant money from the Massachusetts School Building Authority (MSBA) and Town funds (Hanover voters approved a debt-exclusion in October 2016), the Center School project is expected to be completed in fall of 2019.

Center Elementary School, Cedar Elementary School and Hanover Middle School each underwent renovation and additions in 2000. The following year, the Town narrowly voted against a property tax limit override intended to fund the construction of a new high school. A similar ballot question passed in 2007, and a new high school building with capacity for 800 students was constructed for \$51 million, with just under half of the funding provided by the MSBA. Upon its opening in September 2011, the new Hanover High School was credited as being among the most cutting edge schools in the state, with an airy, free

flowing design, movable learning centers, and top technology. All school buildings and grounds are maintained by the Town of Hanover Facilities Department.

For the 2015 cohort, Hanover's 4-year graduation rate was 97%, almost 10% higher than the State average of 87.3%. 82% of Hanover High School graduates in 2014-2015 reported plans to attend either a public or private 4-year college, with another 8% planning to attend a 2-year public college. The remaining percentage of students were split between pursuing other post-secondary education, joining the workforce, or were unsure of their future pursuits at the time of the survey. In the 2015-2016 school year, the Hanover Public Schools employed 208.5 teachers, maintaining a 12.6 to 1 student/teacher ratio.

Enrollment data reported by the Massachusetts Department of Elementary and Secondary Education (DESE) indicates that the District's student population approximately mirrors the Town's demographics as a whole. For example, while the White, Non-Hispanic town wide population reported by Census 2010 was 96.5%, in the 2015-2016 academic year White students comprised 95.6% of the district wide student population. The complete demographic data indicates that 0.8% of the student body is African American, 1.7% Asian, 1.5% Hispanic, and 0.4% multi-race, non-Hispanic.

The District is governed by an elected, five member school committee, which develops policies as a guide for administrative action and employs a superintendent who is charged with implementing those policies. The Hanover Public Schools Superintendent, Matthew Ferron, joined the

District in 2013. Hanover Public School's administrative offices are located in the Salmond School building.

South Shore Regional Vocational Technical School:

Hanover is also home to the South Shore Regional Vocational Technical School, which serves students from Hanover and the surrounding towns of Abington, Cohasset, Hanson, Norwell, Rockland, Scituate, and Whitman. During the 2015-2016 school year, Hanover had a total of 46 students attending the School, a decrease of two students from the previous year. Hanover's regional assessment for the School totaled \$741,712 in FY16.

A list of schools and school district properties can be found in Figure 50.

Figure 50: Schools and School District Properties

School Name	Grades	Total Enrollment, 2015-2016
Cedar Elementary	PK-4	434
Center Elementary	PK-2	326
Hanover High	9-12	808
Hanover Middle	5-8	821
Salmond School	Offices for School Administration	N/A
Sylvester Elementary	3-4	243

Town- and School District-Owned Buildings

Figure 51: Town-Owned Facilities Used for Town Services

Facility Name	Address	Year Built, Notes
Hanover Town Hall	550 Hanover Street	1862, with addition constructed in 1977. Major renovation and rehabilitation project begun in April 2016.
John Curtis Free Library	534 Hanover Street	Historic portion of building dates to 1907. Large new addition constructed in 2002
Senior Center	665 Center Street	2010
Police Station	129 Rockland Street	1999
Fire Headquarters, Station #4	32 Center Street	1987
Fire Station #3	925 Circuit Street	1962. Unmanned, used for vehicle and equipment storage.
DPW Office	40 Pond Street	
Ames Way DPW Garage	229 Ames Way	
Hanover Center Cemetery Garage	Main Street	
Water Distribution Garage	219 Winter Street	Roof collapsed in Winter 2015, insurance proceeds used to renovate the building and bring it up to code.
Forge Pond Park Pavilion	245 King Street	2014
Transfer Station	93 Rockland Street	

Figure 52: School District Buildings

Facility Name	Address	Year Built, Notes
Cedar Elementary	265 Cedar Street	1966, renovated in 2000
Center Elementary	65 Silver Street	1953, renovations and an addition completed in 2000. Special town meeting held in 2016 to appropriate funds for new addition. On 33 acre site shared with Sylvester Elementary.

Facility Name	Address	Year Built, Notes
Hanover High	287 Cedar Street	2011
Hanover Middle	45 Whiting Street	1972, renovations and addition completed in 2000
Salmond School	188 Broadway	1931
Sylvester Elementary	495 Hanover Street	1927, addition completed in 1960. On 33 acre site shared with Center Elementary, building will be repurposed as part of the Center Elementary expansion project.

Figure 53: Town-Owned Facilities Leased to Private Organizations

Facility Name	Address	Year Built, Notes
Stetson House	514 Hanover	1716. Restored and maintained for educational programming by Hanover Historical Society. On U.S. National Register of Historic Places.
Fire Station #5	1095 Broadway	1887. Decommissioned in 2000. Leased to Hanover Historical Society and run as Fire Museum.

Figure 54: Vacant Town-Owned Facilities

Facility Name	Address	Year Built, Notes
Fire Station #1	1160 Main Street	1969. Recently used only for storage, closed in late 2016. Expected to be disposed of soon, granted that Town Meeting votes to do so.
Fire Station #2	207 Broadway	1900, substantial renovations made in early 1990s. Recently used only for storage, closed in late 2016. Expected to be disposed of soon, granted that Town Meeting Votes to do so.
Fire Station #6	188 King Street	1966. Used as storage site for Parks and Recreation athletic equipment.
Curtis School		1896. Demolished in 2012.

Figure 55: Recently Disposed Properties

Facility Name	Address	Year Built, Notes
Parks and Recreation Center	624 Circuit Street	AKA King Street School, Grange Hall. Former Council on Aging Building, turned over to Parks and Rec in 2010. Town Meeting voted to sell in May 2016; sold in late 2016.

Figure 56: Parks and Cemeteries⁴¹

Facility Name	Address	Notes
Calvin J. Ellis Field	750 Circuit Street	12.50 Acres
Arthur Ceurvets Jr. Field	215 Myrtle Street	75.00 Acres. Formerly known as Myrtle Street Fields, renamed in 2008.
B. Everett Hall Field	495 Hanover Street	20.33 Acres. Located within the historic district near Town Center. Also referred to as Sylvester Field.
Amos Gallant Field	848 Main Street	2.74 Acres. On the same site as the former Curtis School.
Briggs Field	Hanover/Center Streets	1.17 Acres. Located within historic district near Town Center.
Forge Pond Park	245 King Street	46 Acres. Opened in 2014.
Hanover Center Cemetery		28.6 Acres. Located within Town Center historic district. Earliest burials date to 1727.
Union Cemetery		1.91 Acres. Founded in 1792. Also known as Assinippi Cemetery.
Darling Cemetery		0.10 Acre. Also known as West Hanover Cemetery.

⁴¹ The properties listed only include those actively managed by the Department of Public Works. Other open spaces managed by the Conservation Commission are detailed in the Open Space and Recreation chapter of this plan.



Maintenance, Acquisition, and Disposition of Facilities

Hanover has numerous Town-owned and School District-owned properties. The conditions of these properties ranges from recently constructed, state of the art buildings (e.g. Hanover High School, Senior Center); somewhat older, but well maintained, buildings in active use (e.g. Hanover Middle School, Fire Headquarters); and buildings whose age and condition have outstripped their current use and are expected to be disposed of for renovation and repurposing (Fire Stations #1 and #2, Sylvester School). The Town maintains a Five Year Capital Improvement Plan (CIP) to guide improvements to the Town's buildings, equipment and infrastructure, which is developed and updated annually by the Town Manager and Town Department heads, and submitted to the Selectmen and the Advisory Committee for feedback. In the last few years, the CIP has been funded to a greater extent than in the past, largely due to a reduction in the Town's reliance on free cash to support the operating budget, making more resources available for capital improvements. In addition, the Town continues to make annual contributions to the Capital Stabilization Fund, saving additional resources for use in future years.

While individual department heads are charged with submitting capital requests for their departmental needs, the Town's Facilities Engineering Manager, Robert Murray, develops the capital plan for all Town and School District owned buildings. Although the comprehensive Municipal Facilities Assessment published in 2011 serves as a guide for long term capital planning, the Town uses SchoolDude – an online work order request system – to order and track both regular and preventative maintenance throughout

the Town's facilities. The software's implementation has raised the Town's awareness of the condition of their buildings, and brought more needed improvements to light.

Over the last 20 years, the Town has developed and implemented an increased number of large capital projects, such as the Police Station, Senior Center, and Hanover High School. Projected expenses for municipal and school buildings in the FY17-FY21 Five Year Capital Plan total \$28,491,600, almost 75% of the total municipal capital requests. However, the bulk of the building capital requests are attributable to the anticipated new construction of buildings or additions: a new facility at the Water Distribution Garage site (219 Winter Street), the Center/Sylvester School project, and a new satellite fire station in North Hanover. However, the Town seeks to offset the cost of major construction projects through supplementary or alternative financing - e.g. State funds, insurance payouts - and disposing of properties made extraneous or obsolete by the new construction, saving the Town maintenance and utility costs while also adding property to the Town's tax rolls.

In order to dispose of real property, the Town must follow the procedure described in M.G.L. Chapter 30B, Section 16. After determining the value of the property, if the anticipated sale will exceed \$35,000, the property is declared surplus, and the Board of Selectmen authorizes the Town Manager to draft a bid package in anticipation of a public bidding process. However, Town Meeting must vote to authorize any final sale. Town Meeting annually votes to allow the Town Treasurer, with the approval of the



Board of Selectmen, to dispose of land taken by the town under Tax Title foreclosure.

Town Owned Facilities Used for Town Services (Figure 51):

Constructed in 1862, **Hanover Town Hall (550 Hanover Street)** has long anchored Hanover Center and remains among the most important pieces of civic architecture in Town. The last major change to the facility came in 1977, when a large rear addition was constructed. A 2011 Facilities Assessment describes the building as well maintained and in good condition. However, a powerful wind storm in 2014 damaged the building's cupola, causing it to be temporarily removed from the building for safety purposes. The Town subsequently decided to undertake a major restoration project in combination with the cupola repair. While the cupola project will be funded through an insurance claim, the broader restoration project – which will restore the historic façade, replace windows and siding, and make landscape improvements – will draw from the Town's Community Preservation Fund. Upon securing funding approval from Town Meeting in 2015, the restoration process began in April 2016. Interior work is currently underway and additional exterior work is scheduled for 2018.

The **John Curtis Library (534 Hanover Street)** building originally dates to 1907, but in 2002 a major rear addition was completed. The addition allowed for much needed expansion and offered a modern library facility for residents, while the design preserved the historic structure, incorporating it into the expanded facility.

The Hanover Fire Department's Headquarters, Station #4 (32 Center Street), originally built in 1987, is currently the only manned fire station in Hanover. The facility has undergone several key upgrades in the past few years, including a kitchen remodeling, the installation of a high efficiency boiler, and insulation for the bay doors. As the Department consolidates its property holdings, the Town anticipates expanding Fire HQ or constructing an additional equipment storage facility on site to compensate for reduced storage capacity off site. The FY2018-2022 Capital Improvement Plan projects the constructions of a rear addition at Fire HQ in FY20, including space for a new emergency operations center and an elevator, which would make the upper levels of the building accessible to individuals with physical disabilities.

The Police Department operates out of the **Hanover Police Station (129 Rockland Street)**, which was constructed in the late 1990s. Although the facility is not outdated, with a solid technology infrastructure and no major structural concerns, it has begun to show signs of aging. Due to the nature of the Department's responsibilities, which require 24/7 operation, building systems and materials tend to wear out more quickly than they would under less frequent use. However, at this stage, only routine maintenance is required, and no major facility improvements are needed or planned.

In 2010, the Council on Aging relocated to the newly constructed **Senior Center (655 Center Street)**, which offers space for Hanover's seniors to participate in recreational, educational, and wellness activities. The 7,000 sq. ft. building is roughly four times the size of their former facility,



allowing for greatly increased program attendance and participation.

The **Department of Public Works' Office (40 Pond Street)** is co-located with the Pond Street Water Treatment Plant. The Department also operates the **Ames Way DPW Garage (229 Ames Way)**, the **Hanover Center Cemetery Garage**, and the **Water Distribution Garage (219 Winter Street)**. The Town's FY17-FY21 Capital Plan had requested \$5 million for the construction of a new DPW facility at 219 Winter Street. However, a roof collapse caused by heavy snowfall in the winter of 2015 resulted in insurance proceeds becoming available, which allowed the Town to renovate the building and bring it up to code without using tax funding.

The Town currently owns and operates its own waste facility, the **Hanover Transfer Station (93 Rockland Street)**. A Town Meeting warrant article in 2014 proposed leasing the site to a private company, which would have upgraded the facility and opened the station to commercial waste from around the region. However, the article evoked a passionate response and was voted down. The Facilities Department has since completed some rehabilitation work on the facility, but no major upgrades are planned at this time.

School District Owned Buildings (Figure 52):

The Town of Hanover is in the process of reconfiguring their elementary school facilities model. Originally constructed in 1927 and expanded in 1960, the **Sylvester School (495 Hanover Street)** has approached the end of its utility as an educational facility; the building is insufficiently handicap accessible and reliant on obsolete heating, plumbing, and

electrical systems. While the Town explored the possibility of renovating Sylvester for continued educational use, the architectural consultant who completed the study concluded it would cost more than \$10 million simply to bring the building to code, work for which matching funds from the Massachusetts School Building Authority would not be available.

Consequently, the Town is planning a major renovation and expansion of the **Center Elementary School (65 Silver Street)** building, which shares a campus with the Sylvester School, to accommodate students currently attending the Sylvester School and allow for its closure. Built in 1953, Center Elementary has seen periodic renovations and additions, with the most recent addition – which added a gymnasium, classrooms, and music rooms – on the rear of the building completed in 2000. In addition to increased classroom space, the current project will create dedicated STEAM (Science, Technology, Engineering, Art & Math) space, update the building's technology infrastructure, and install a full air conditioning system. Using a combination of grant money from the Massachusetts School Building Authority (MSBA) and Town funds (Hanover voters approved a debt-exclusion in October 2016), the Center School project is expected to be completed in fall of 2019. The Board of Selectmen has established the Sylvester School Redevelopment Committee to study the need and feasibility of potential reuses of the Sylvester School, and provide advisory recommendations to the Board of Selectmen.

Cedar Elementary School (265 Cedar Street) and **Hanover Middle School (45 Whiting Street)** each underwent renovation and additions in 2000. Planned upcoming



capital projects at the school buildings include upgrading the kitchen equipment at both sites, the replacement of Cedar's carpeting with VCT tile, and the performance of mid-life maintenance and/or replacement of both buildings' roofs.

In 2001, the Town narrowly voted against a property tax limit override intended to fund the construction of a new high school. A similar ballot question passed in 2007, and a new high school building with capacity for 800 students was constructed for \$51 million, with just under half of the funding provided by the MSBA. Upon its opening in September 2011, the new **Hanover High School (287 Cedar Street)** was credited as being among the most cutting edge schools in the state, with an airy, free flowing design, movable learning centers, and top technology. All school buildings and grounds are maintained by the Town of Hanover Facilities Department.

The **Salmond School Building (188 Broadway)** was constructed in 1931 for use as an elementary school. The structure currently serves as the Hanover Public Schools Department Administration building. Although the building is overall in fair to poor condition, and suffers from some of the same deficiencies that have made the Sylvester School unsuitable as an education facility – e.g. limited accessibility – the building does not serve young children, so such issues are of less concern. In 2010, CPF funds were used to install a new boiler and adapt one of the buildings restrooms for ADA specification. In October 2016, the Sylvester School Redevelopment Committee unanimously approved a motion to request the Board of Selectmen expand the Committee's charter to include studying the potential for renovation or disposal of the Salmond School

building in the broader context of the Center/Sylvester School project. This building has been targeted for preservation by the Historical Society.

Town Owned Facilities Leased to Private Organizations (Figure 53):

The **Stetson House (514 Hanover Street)** is an historic house built in 1716 and located in the Hanover Center Historic District; the building itself is listed on the U.S. National Register of Historic Places. The 1716 Stetson House serves as a museum of Hanover history, with an extensive collection of furniture, artwork, clothing, textiles, and samplers. Members of the Hanover Historical Society provide tours of the Stetson House to the general public during its open hours. The property also benefits from support by the Hanover Historical Society. In addition to the 1716 Stetson House, the Historical Society also operates Hanover Fire Station #5 (1095 Broadway) as a firefighting museum. Although maintained by the Historical Society, both properties are Town owned.

Vacant Town-Owned Facilities (Figure 54):

The Hanover Board of Selectmen's FY2016 Strategic Goals identify the sale or re-use of town-owned properties as a targeted potential revenue opportunity, which in addition the sale price adds money to the Town's coffers by putting property back on tax rolls and saving on maintenance costs.

At peak operating out of six stations, the Hanover Fire Department is in the midst of consolidating facilities and divesting themselves of storage only satellite stations that

are costly to maintain and are structurally undersized and unable to accommodate modern firefighting apparatus. In late 2016, **Fire Station #1 (1160 Main Street)** and **Fire Station #2 (207 Broadway)** were made surplus by the department, which allowed the Board of Selectmen to vote to authorize the Town Manager to draft a bid package preparing for the properties' sale. Ownership of **Fire Station #6 (188 King Street)** was transferred to the Town of Hanover by the Drinkwater Firemen's Association following a 2010 Annual Town Meeting vote approving the Board to take the property by eminent domain. The building is currently used for the storage of athletic equipment by the Parks and Recreation department.

The **Curtis School (848 Main Street)**, originally constructed in 1896, was demolished in 2012. Despite its deteriorated condition and vacancy since the early 2000s, to many it remained an important piece of town history, and its demolition was hotly contested. In 2008, Hanover voters rejected a proposal that would have replaced the Curtis School with a new fire station. In 2011, Town Meeting voters agreed to allocate funds to demolish the structure, but the Hanover Historical Commission imposed a one year moratorium to explore the potential for adaptive re-use. No plans deemed workable for the building's re-use were put forward, and the structure was demolished the following year. The site is now operated as the Amos Gallant Field, which has a single Little League field located towards the back of the property as well as an outfield suitable for a small multipurpose field practice site. A long term plan for the site has yet to be decided.

Recently Disposed Properties (Figure 55):

Most recently used as the **Hanover Parks and Recreation Center (624 Circuit Street)**, the former King Street School was disposed of by the Town in late 2016. Also known as Grange Hall, the building had been vacated by Hanover's Council on Aging when the new Senior Center was completed in 2010. Although used for several years as the Parks and Recreation Center, the cost of maintaining and operating the building soon outstripped the budget of the Parks and Recreation department. Town Meeting approved the sale in a May 2016 Special Town Meeting. Despite failing to receive a qualifying bid by the originally decided cutoff date, a subsequent bidding process completed successfully and the building was sold in late 2016.

Parks and Cemeteries (Figure 56):

While the Facilities Department maintains the grounds and athletic fields on Hanover school sites, the Department of Public Works' Public Grounds Division retains primarily responsibility for the operation and maintenance of the Town's public athletic complexes and the three cemeteries. The public grounds division also maintains an active tree and roadside brush control program around town. All told the division operates and maintains approximately 88 acres of facilities with a staff of 5 employees and is assisted in its larger projects by employees of other DPW divisions.

The Town of Hanover operates six public athletic parks. The **B. Everett Hall Field**, established by a citizen's bequest of the property in 1926, served for years as the Town's



premiere recreational facility. Located within the historic Town Center, the area includes multiple athletic fields, a tennis court, basketball court, street hockey rink, volleyball area, and bandstand. A more recent addition to the Parks and Recreation properties, **Forge Pond Park**, which opened in 2014, was designed to attract tournament play and other high attendance sports events. In addition to playing fields, the Forge Pond Park includes over a mile of paved walking and biking trails, which tie into the Town's conservation land. A Pavilion with a snack bar and bathroom facilities is also located within the park, which the Facilities Department maintains with custodial services.

The largest park in the Town of Hanover, **Arthur Ceurvels Jr. Field** dates to 1961, when the Town purchased a 60 acre tract of land for the purpose of constructing a public playground. In the late 1990's, another four acres were added to the space, allowing for the construction of additional playing fields, an off-street parking area, and a picnic area. The name of the property was changed from Myrtle Street Fields in 2008, by vote of the Parks and Recreation Committee. The smallest park in Town, **Briggs Field**, just over 1 acre in size, is located directly across from Town Hall, and contains a 100 year old ball field, mainly used today for T-ball.

The Town of Hanover is home to many active and popular youth athletic programs, largely sponsored by the Hanover Youth Athletic Association. The popularity of their programs, and a high public demand for recreation space generally, has strained the capacity of the Town's parks and recreational facilities to meet the need. The **Amos Gallant Field**, located in North Hanover on the former Curtis School site, has in some ways become a flash point

for competing visions of municipal land use. Both a 2008 Fire Station Study Committee and a 2011 Municipal Facilities Assessment identified the Curtis School site as the ideal location for a new satellite fire station in North Hanover. However, at the 2013 Annual Town Meeting Hanover residents voted to turn possession of the athletic fields on site over to the Parks and Recreation Committee, in effect continuing the tradition of using the space for recreation and education. Yet the following year, residents narrowly voted against moving forward with plans to design a park for development on the property, retaining the possibility for its redevelopment for an alternative use.

While the number of parks and their usage has increased in recent years, the time and resources available to the DPW's Public Grounds Division have not. In the 2015 Annual Town Report, the Board of Public Works cautions that "without an increase in resources, whether that is through the tax rate or through user fees," the quality of provided service may suffer.

The **Hanover Center Cemetery** dates to 1727, and is located in the Hanover Center historic district, across from City Hall and behind the First Congregational Church. Since its founding, the cemetery has grown beyond the original five acre plot to include more than 30 acres, and remains in active use. The Town sold 58 graves in 27 lots during FY15, with cemetery staff accommodating 63 interments including cremations. The Department of Public Works maintains a garage on site to house the equipment needed to maintain the facility.

The **Union Cemetery**, also called the Union Assinippi Cemetery, was founded in in 1792 and the Town of Hanover assumed control of the property in the early

1920s. The **West Hanover Cemetery**, also referred to as the Darling Cemetery, is a small property (0.10 acre) founded as a family cemetery in the 1820s; the Town began caring for the property in the 1910s.

Throughout its history, the Town has done a careful job of maintaining the cemeteries under its care. However, by the 2000s, the cemeteries' significance as objects of historical importance motivated the Town to commission a comprehensive preservation plan, which was published in 2010. Using funds provided by the Community Preservation Act, the Town subsequently hired a cemetery conservator to document historic gravestones, tombs and other monuments in need of cleaning and repair, or other conservation treatments. Their work completed in 2015, and preservation reports documenting their activities are available on the Town's Community Preservation website.

Figure 57 summarizes the status of Hanover's facilities and any recommendations made by the 2011 Town Building Study.

Public Input

At the Community Assets Open House on February 15, 2017 participants were shown posters that provided an overview of town and school-owned buildings, including the town's accomplishments with these properties as well as their challenges. They were asked what their priorities are for town facilities and the town's acquisition/disposition process, and ideas for improvements to public services and facilities. Given the following list of 10 priorities for the town, this is what participants in the February 15, 2017 forum thought should be prioritized:

What should be prioritized?	# of Votes	% of Votes
1. Building state-of-the-art facilities:	0	0%
2. Renovating or repairing existing Town facilities:	5	13.9%
3. Putting underutilized Town properties back on the tax rolls:	5	13.9%
4. Preserving Town history:	2	5.6%
5. Meeting housing needs:	7	19.4%
6. Creating more open space (parks):	4	11.1%
7. Keeping assets in Town control:	1	2.8%
8. Maintaining neighborhood character:	4	11.1%
9. Informing public and ensuring they have voice in the decision making process:	5	13.9%
10. Other (specify):	3	8.3%
TOTAL PARTICIPANTS & VOTES	36	100%

Figure 57: 2011 Building Study Recommendations and Current Conditions

Property	2011 Town Building Study Recommendations	Status as of May 2018
Fire Station 1	Dispose of the property by selling on the open market as-is, for redevelopment as residential property.	The Fire Department has made the property surplus, and the Board of Selectmen has voted to authorize the Town Manager to begin the disposal process. Final sale was approved at the May 2018 Town Meeting.
Fire Station 2	Sell the property for conversion to single-family residential use, with a restricted deed to ensure that the historic appearance of the building is maintained by the new Owners.	The Fire Department has made the property surplus, and the Board of Selectmen has voted to authorize the Town Manager to begin the disposal process. Final sale pending approval by Town Meeting.
Fire Station 3	The site should be sold on the open market after demolition of the building and removal of any waste, for residential or commercial redevelopment.	The Fire Department continues to use the station as a storage site for vehicles and equipment. However, the Department is developing a plan to consolidate Fire Station 3 with Fire HQ, to improve the efficiency of the Department's callback system.
Fire Station 4 (Headquarters)	General on-going maintenance, following the immediate needs noted above.	In recent years, the Facilities Department has completed a number of improvement projects at Fire Headquarters, including a kitchen remodeling, emergency generator replacement, and the installation of insulated bay doors.
Center Elementary	Continue with normal building maintenance needs, following completion of immediate needs. Consider a major building addition to accommodate the students currently attending the Sylvester School.	In September 2016, a Special Town Meeting vote approved a major renovation and expansion of Center Elementary, which will provide a facility that is fully compliant with ADA requirements, building codes, and the educational needs of its students.
Cedar Elementary School	Continue with normal building maintenance following completion of immediate needs.	Building remains in overall good operating condition. Future capital planning includes parking lot paving and upgrades to the roof.
Hanover Middle School	General maintenance should continue, with particular attention to periodic inspection of the roof.	Building remains in overall good operating condition.

Property	2011 Town Building Study Recommendations	Status as of May 2018
Sylvester Elementary School	This building should no longer be used for grade school student education; at least not in its current configuration. A substantial renovation is required, which could exceed the cost of a replacement building.	When the Center Elementary renovation project completes, the Sylvester Elementary School will no longer be used as an educational facility. The details of its future adaptation or reuse are being considered by the Sylvester School Redevelopment Committee, which will submit their recommendations to the Board of Selectmen for consideration.
Salmond School Administration Building	Continue maintenance with minimal modification of the building, as needed to improve accessibility, energy savings, and life safety.	The building remains in use as the offices of the Hanover School District's Administration. However, the Sylvester School Redevelopment Committee has expanded their focus to include potential re-uses of the Salmond School building as a consideration.
Police Station	For the building envelope and interior construction, normal ongoing regular observations and maintenance is all this is needed.	Building remains in overall good operating condition.
Public Works Facility (219 Winter Street)	The only thing worth saving at this facility is the steel frame of the building and the foundation system. Even the foundation is suspect, in areas where oil material is soaked into the floors. If the oil condition cannot be cost effectively remedied, then the structure should be demolished and a new facility designed and constructed to meet the needs of the Town.	In the winter of 2015, heavy snowfall caused the building's roof to collapse. Insurance funds were used to construct a new facility as a replacement.
DPW Yard and Buildings (Ames Way Garage and Salt Shed)	<p>Highway Garage: Make necessary immediate-needs repairs. Expand building as needed to accommodate the full fleet of vehicles, to ensure longevity of expensive equipment.</p> <p>Salt Shed: Demolish and replace with new facility.</p>	Highway Garage building remains in active use and fair operating condition. The Salt Shed is still in use, but needs replacement.

Property	2011 Town Building Study Recommendations	Status as of May 2018
Town Hall	This building needs only general ongoing maintenance, in addition to some immediate needs.	Town Hall is undergoing a restoration and rehabilitation project designed to enhance energy efficiency, address worn conditions of the building, and remediate structural inadequacies. A second phase of the project will include landscape and accessibility improvements.
John Curtis Free Library	This building needs only general ongoing maintenance.	The building is in good operating condition.
Stetson House	This building needs only general ongoing maintenance.	The building is in good operating condition.
Curtis School	Based on evaluation of this building, there seem to be two viable options: The first option is to demolish the Curtis School Building with future development choices to be determined later. The second option is to salvage only the basic exterior historic envelope of this building and to restructure, redesign, and reconstruct the building to serve as a satellite fire station serving the north end of town.	The Curtis School was demolished in 2012. The future of the site remains contested.
Parks and Recreation (Grange Hall)	The building is in fair condition overall, but is not currently compliant with accessibility regulations. The Town needs to study the feasibility of adding an elevator, taking into consideration the historic value of the property. The Town should be prepared to spend a considerable sum on renovations.	The Town sold the property in late 2016.

Additionally, MAPC and Master Plan Committee members had conversation with participants about needs and also asked participants to write down comments about town service and facility needs. Comments, Concerns, and Suggestions expressed at the forum include:

- Merging or otherwise improving connections between individual building committees.
- Preserving the Town’s historical legacy through its facilities.
- Improving public meeting accessibility, including vision and hearing accommodations.
- Developing or repurposing Town properties into housing residents can downsize into.
- Ensuring Town utilities are sufficient to support continued growth.
- Exploring solar energy possibilities for Town facilities.

Recommendations

The Town of Hanover’s management of public facilities and services already meets a high standard. The Town’s creation of a centralized Facilities Department demonstrates their commitment to regular maintenance and strategic appraisal of capacity and need. However, the status of Town facilities and services is dynamic, and the processes guiding their development require continued commitment and attention. The recommendations below include encouragement to continue already established best practices and highlights priorities identified through public outreach and review of existing conditions. However, these are meant to serve as

a general guide; many specific decisions are reserved for Town residents to decide through Town meeting.

Goal 1: Ensure facilities meet community and departmental needs

Strategy 1: Develop new department facilities and infrastructure capable of meeting current service needs and projected future demand

- Consider a new fire station in the next few years if warranted as a result of new residential and commercial growth
- Continue the Center School expansion project
- Move forward with plan to develop a Town-wide Strategic Information Technology Plan

Strategy 2: Complete routine maintenance and renovations which allow host Departments to fulfill their missions

- Complete ongoing facility restoration of Town Hall and renovations to Fire HQ, Police HQ, Cedar Elementary and Hanover Middle School

Strategy 3: Establish or expand specific channels for feedback about facilities and services

- Ensure that all appropriate staff are sufficiently trained in the use of SchoolDude to highlight conditions of buildings and communicated needed improvements
- Explore the utility and feasibility of creating a 311 system for citizen feedback



Strategy 4: Continue renovations to increase facility accessibility

Strategy 5: Hold public hearings to collect resident feedback on current and future use of Town-owned facilities

Goal 2: Ensure adequate resources for Hanover's public services

Strategy 1: Ensure staffing levels are adequate to fulfill departmental duties, and resources are efficiently distributed

- Maintain adequate staffing levels appropriate to call volume levels
- Share staff responsibilities and costs of FTE between Departments where such cross departmental work enhances efficiency and does not overstretch individual or departmental capacity
- Improve internal communications and coordination between town boards, commissions and departments

Strategy 2: Ensure capital projects do not negatively impact departmental operational budgets

- Continue practice of decreasing the operating budget's dependence on free cash, leaving more resources available for capital projects
- Where possible, supplement funding for capital projects through grant programs, e.g. MSBA, Green Communities, and Assistance to Firefighters Grant Program

- Use proceeds from the disposal of property made extraneous or obsolete by new construction to directly offset construction expenses

Strategy 3: Explore regionalization opportunities for more efficient public service delivery

Goal 3: Ensure all Town owned buildings are fully and efficiently used

Strategy 1: When undertaking major facility constructions or expansions, consider Department's facilities portfolio holistically

- Expand the scope of the Sylvester School Redevelopment Committee to include consideration of potential re-uses of the Salmond School building as well

Strategy 2: Consider disposal or re-use of individual buildings in a strategic manner

- Develop a process for broadly advertising and expeditiously disposing of property being sold by Town to ensure competitive bidding
- Develop disposition RFP's with particular conditions for use, sensitive to such factors as historic preservation

Open Space & Recreation

Introduction

The Town of Hanover is a community that resonates with character from its history, open spaces, scenic views, and people who live in the community. As a semi-rural, suburban town only 25 miles from the City of Boston, it is an attractive place to live for many. Since land is a finite resource, competing needs between development and open space preservation exist. This has been exacerbated as Hanover has changed significantly through the years from a rural, bedroom community to a more suburban, developed town, with pockets of its original character spread throughout. Continuing to manage and guide growth, while also protecting natural resources and providing meaningful recreational opportunities, is a challenging but necessary task.

During the Hanover300 Master Plan process, the Metropolitan Area Planning Council (MAPC) also concurrently produced an Open Space and Recreation Plan (OSRP) for the Town of Hanover. The OSRP provides a comprehensive overview of the Town's cultural and natural history, a detailed inventory of all open space and recreational resources in Hanover, and recommendations for protecting and improving these resources. A Seven-Year Action Plan provides detailed steps for achieving the

plan's goals and objectives, including the relevant parties responsible, timeframe for achieving the action, and potential funding sources. This chapter of Hanover300 provides a summary of the recently-completed OSRP and highlights its key recommendations, particularly those that pertain to other Master Plan elements like transportation, housing, economic development, and land use.

Key Findings

- There are 2,206 acres of open space and park land in Hanover, most of which is permanently protected.
- Almost 80% of that land is owned and managed by the Town. The remaining open space land is owned by private entities, the state, or other municipalities.
- DPW has the primary responsibility for maintaining the Town's recreational facilities, including at the schools. More resources are needed to effectively manage o properties.
- Hanover could benefit from increased collaboration and coordination amongst the various actors working to improve open space and recreation opportunities.

Existing Conditions

Topography, Geology, and Soils

Hanover forms part of the coastal lowland section of the New England physiographic province and has the gently rolling to flat topography characteristic of this region. The elevation throughout the town ranges from around 10 feet above sea level at the headwaters of the North River to 177 feet at the top of Walnut Hill in the northeast corner of Hanover. Other major hills in Hanover are Water Tower Hill, Tumbledown Hill, and King Hill.

Other significant topographical features include several low hills found in the northeast and northwest sections of town, and low areas containing swamps. There is a former cranberry bog, Clark Bog, in the southeast section of town on the Clark Land. There is also a sand pit in the southern part of Hanover and a gravel pit by Silver Brook.

The bedrock geology of Hanover includes rocks of both igneous and sedimentary origin that have undergone low-grade metamorphic episodes. Predominately glacial sediments make up Hanover's surficial deposits, geological deposits above the bedrock (including soils). As the glaciers retreated northward at the end of the Wisconsin Ice Age, they left thick stratified drift deposits made up of well-sorted sands and gravels, and unstratified deposits made up of poorly sorted tills. More recently, organic matter has accumulated in the form of swamp deposits and alluvium has been deposited by present day streams and scattered throughout Hanover.

The most dominant soil type found in Hanover is the Hinckley-Windsor-Deerfield association. These soils are generally very deep and well-drained. While they are suitable for woodland, they are also well-suited to building and development projects. Other soil types found in Hanover, such as Freetown-Swansea-Scarboro soils, are less suited for development. This soil type mainly supports woodlands and scrub-shrub wetlands that can be used for cranberry production.

Water Resources

Hanover has a number of water resources and a varied natural landscape that includes streams, ponds, wetlands, and wildlife habitats. Hanover's eastern and southern borders are comprised of three main waterways: the North and Indian Head Rivers along the south and southeast, and the Third Herring Brook along the east. The latter two are both tributaries, and the town border is marked by their confluence. Hanover is located entirely in the North and South Rivers Watershed, one of 12 coastal river sub-watersheds in the South Coastal Watersheds Drainage Area of Massachusetts.

Surface Water

At approximately eight miles long, the North River is primarily a tidal river formed by the confluence of the Indian Head River and Herring Brook. The North River flows through Hanover, Pembroke, Norwell, Marshfield, and Scituate. Much of its bordering lands and marshes have been designated by the Natural Heritage and

Endangered Species Program (NHESP) as priority or estimated habitat for rare and endangered species.

North River at Washington Street⁴²



The North River was the first designated Scenic River in Massachusetts by the Massachusetts Department of Environmental Management pursuant to the Scenic and Recreational Rivers Act and the North River Commission Act of the Acts of 1978. Designation of this Outstanding Resource Water (ORW) under the Scenic River Act means that a 300-foot corridor is regulated by the North River Commission, which oversees development in the corridor. The North River has also been designated by the federal government as a natural National Landmark for its characteristics, which include a coastal estuary with freshwater tidal habitat.

⁴² Photo source: Bryan Jones, www.flickr.com/photos/55925788@N06/7957551800

In addition to the rivers that form Hanover’s borders, the Drinkwater River is a prominent river which meanders through the western side of town. Numerous streams also ramble across the town, including: Ben Mann Brook, Shinglemill Brook, Silver Brook, Molly’s Brook, Torrey Brook, Iron Mine Brook, Cushing Brook and Longwater Brook. There are also numerous ponds and swamps in Hanover, including: Forge Pond, Hacketts Pond, Shinglemill Pond, Peterson Pond, Mill Pond, Factory Pond (a tributary of the Indian Head River in the south of town), Pine Island Swamp, Wampum Swamp, Peg Swamp, Hell Swamp and a small portion of Beech Hill Swamp in the southwestern section of town (the majority lies in Rockland).

A number of opportunities exist for passive recreation along Hanover’s surface waterways. Trails and pathways run alongside the Drinkwater River and Longwater Brook in the Melzar Hatch Reservation and on the Hanover Middle/High School Fields, as well as along the Drinkwater River on the Fireworks Property. In addition to having trails adjacent to waterways in Forge Pond Park, Luddams Ford Park, and the Indian Head/Riverside Land, these three properties also each have a public canoe launch. Tindale Bog is used for ice skating when it freezes over in the winter. There are also fishing opportunities on Hacketts Pond and Luddams Ford Pond.

Wetlands

The streams, brooks, and rivers in Hanover support extensive wetlands systems which generally follow the dominant drainage patterns and waterways in town. The Drinkwater River system and contributing streams flank wetlands on the western side of Hanover. The Benn Mann



Open Space & Recreation

Brook, Shingle Mill Brook, Longwater Brook, Cushing Brook, French Stream, and Drinkwater River all have major wetland areas associated with the channeled waterways. Hanover's generally flat topography, with low, rolling hills, an abundance of water, and favorable soils, control the local hydrology and create several large open swamps.

Hell Swamp, Pine Island Swamp, Peg Swamp, and a section of Beech Hill Swamp are aligned across the center of the town. Each of these swamps eventually flows into the Drinkwater River System (even the Beech Hill Swamp, which first drains into Rockland and back into Hanover along French's Stream). Wetlands in the vicinity of Shingle Mill Brook and the northern section of Drinkwater River support certified vernal pools.

Hanover has a Wetlands Protection Bylaw to protect the wetlands, related water resources, and adjoining land areas in Hanover. The Bylaw requires that any activity within wetland resource areas, the 100-foot buffer around wetland resource areas, or within the 200-foot riverfront area obtain a permit from the Conservation Commission. It establishes additional standards and procedures stricter than those of the state Wetlands Protection Act and its regulations.

Flood Hazard Areas

Even though Hanover is not a coastal community, it still experiences flooding around its inland waterways. This flooding is typically exacerbated in the case of an extreme weather event. The Federal Emergency Management Agency (FEMA) has identified areas in Hanover that are predicted to be most prone to flooding. These are detailed

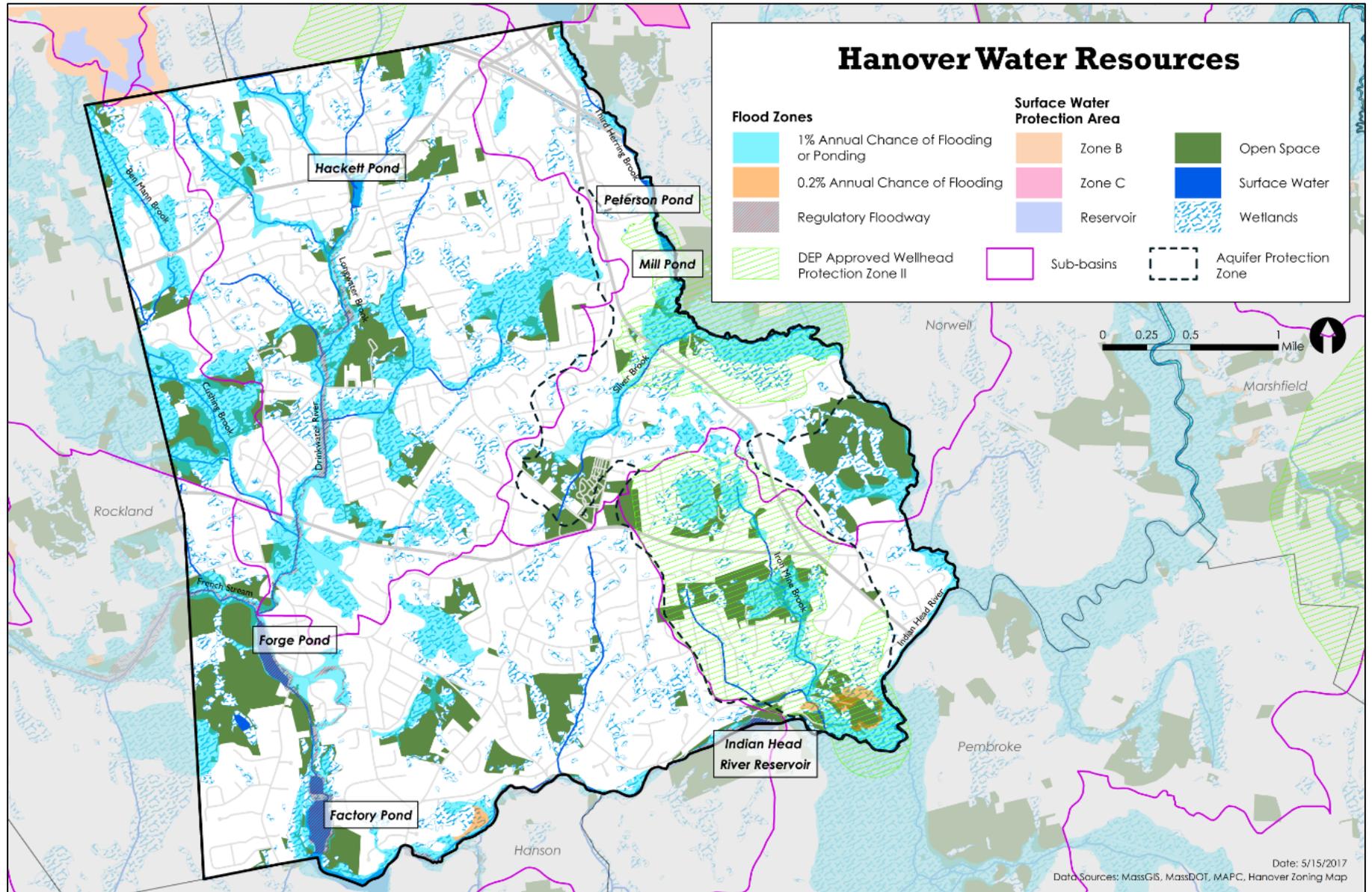
in Flood Insurance Rate Maps (FIRM) which were most recently updated in 2014.

Many areas in Hanover fall into Flood Zone A or AE, meaning that they are subject to a 1% annual chance flood hazard, also known as the 100-year flood. These areas closely correspond to the Town's waterways and wetlands. Because of the potential for flooding in these areas, few building structures exist in the flood zone. Most of Hanover's conservation properties have some part that is within Zone A or AE. Flood insurance purchase and floodplain management standards are mandatory for federally-backed or insured mortgages in this zone.

According to FEMA, a regulatory floodway is a "channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height." Regulating development in these floodways is key for ensuring that upstream flood elevations do not increase in the event of a storm. There is a regulatory floodway extending from Longwater Brook, to the Drinkwater River, and through Forge Pond and Factory Pond. Another regulatory floodway runs along the southern border of Hanover, from the Drinkwater River to where the Indian Head River meets Luddam's Ford Pond.

Two areas in the southern portion of Hanover, one in the Indian Head/Riverside Land, and another in a wetland above the Drinkwater River, are within Flood Zone X. These areas are subject to a 0.2% annual chance of flooding, which is known as the 500-year flood. Flooding in this zone is less likely than in Zone A.

Figure 58: Hanover Water Resources Map



Vegetation

Hanover is vegetated with a variety of plant species commonly found on well-drained upland soils throughout southeastern Massachusetts. Pine and oak forests dominate the upland forest and other common species include hemlock, swamp maple, hickory, cedar, wild cherry, and birch.

*Fireworks Property*⁴³



Hanover is fortunate to have large tracts of forestland throughout town. Much of these forests are within conservation land that is protected in perpetuity from development. Some of the largest forested conservation parcels in Hanover are the Colby-Phillips Property (130+

acres), Fireworks Property (130+ acres), and Clark Land (50+ acres). Trails maintained by the Town's Open Space Committee crisscross many of the conservation properties and provide access to Hanover's pristine woodland areas.

Rare Species

While Hanover lacks coastal wetlands due to its distance from the sea, it has an abundance of inland wetlands that support certain soils and vegetation. Of particular significance is the Freshwater Tidal Marsh located at the confluence of the Indian Head and North Rivers. According to a letter from the Massachusetts Natural Heritage & Endangered Species Program (NHESP), an official stated that, "Of the rare species currently known from Hanover, many are associated with the very uncommon Freshwater Tidal Marsh and the Indian Head and North Rivers. The plants are pretty much habitat specialists to Freshwater Tidal Marshes."

The two rare plant species found in Hanover are both listed as endangered species under the Massachusetts Endangered Species Act (MESA), though they are not federally listed. Parker's Pipewort, also known as Estuary Pipewort (*Eriocaulon parkeri*), is found within the Indian Head River Freshwater Tidal Marsh and is a small, delicate, and erect perennial last spotted in Hanover in 2008. The Estuary Beggar-ticks (*Bidens hyperborean*), a herbaceous plant with yellow daisy-like or button-like flowers and opposite leaves, is a plant that is characteristic of muddy margins and exposed banks of large tidal rivers. It was also last observed in 2008.

⁴³ Photo source: hanover.wickedlocal.com/news/20170426/hanover-still-waiting-for-national-fireworks-property-test-results

Wildlife

The Town of Hanover is home to a number of wildlife species frequently found in Eastern Massachusetts. Common mammals found are rabbits, possums, raccoons, foxes (red and gray), coyotes, deer, squirrels (red, gray, and flying), bats, chipmunks, moles, mice, river otters, beavers, minks, muskrats, skunks, and fishers. In terms of bird species, Hanover contains owls (great horned, barred, screech, and saw-whet), hawks, egrets, ospreys, ring neck pheasants, Canadian geese, mallards, swans, great blue herons, turkey vultures, crows, blue jays, cardinals, chickadees, grackles, starlings, English sparrows, mourning doves, and more.

Trout, shad, herring, chain pickerel, smallmouth and largemouth bass, yellow and white perch, sunfish, bluegill, suckers, minnows, and other small fish all inhabit Hanover's waterways. Since dams have been removed along Third Herring Brook, fish species once native to the area have returned. Areas of the North River downstream from Hanover provide an important habitat for the spawning and migration of alewife, American shad, white perch, rainbow smelt, and Atlantic cod fish species. Atlantic salmon also use this same area for migration. In addition, the outer estuary area of the North River contains shellfish growing waters for mussels and oysters.

Vernal Pools

Vernal pools serve as an important breeding ground and are home to a number of amphibians and invertebrate animals. Also known as ephemeral pools, autumnal pools, and temporary woodland ponds, these natural sites fill with

water in the fall or winter due to rain and rising groundwater. They stay ponded through the spring and into summer, but tend to dry completely by the middle or end of the summer. This occasional drying prevents fish from permanently populating the pools, allowing amphibians and invertebrate species to reproduce without being targeted by fish predators.⁴⁴

*Vernal Pool*⁴⁵



The Massachusetts Natural Heritage and Endangered Species Program has certified 24 vernal pools in Hanover as of 2015. Certified vernal pools can usually be protected from development and are afforded protection under a number of state regulations. There are another 50 potential

⁴⁴ "Vernal Pools," MA EOEEA,

www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/vernal-pools

⁴⁵ Photo source: vtecostudies.org/blog/vce-expands-vernal-pool-conservation-work

vernal pools in Hanover that have been identified, but not certified by NHESP. Hanover's Conservation Commission is working to identify and certify all potential vernal pools in town that meet the state requirements.

Hanover's vernal pools are scattered throughout town, with the largest cluster of certified pools in a wetland area around Spring Meadow Lane near Hanover Center. There is also a large cluster of potential vernal pools in northwest Hanover around Deerfield Lane. The clusters of certified and potential vernal pools provide extra habitat value for species that use them for breeding because each pool is different and provides alternate habitats in different years and seasons. Vernal pool clusters that are also in primary forests, such as in northwest Hanover, are particularly important for biodiversity and these areas should be prioritized for conservation.

Rare Species

Four wildlife species of special concern listed by MESA have been found in Hanover. Both the UMBER Shadowdragon and Spine-crowned Clubtail are two rare dragonfly species last spotted in Hanover in the early 2000s. Though their habitats differ somewhat, both dragonflies are water-dependent and are threatened by development and overuse of their habitats.

Two other species of special concern are the Eastern Box Turtle and Eastern Pondmussel. The small turtle is most typically found in woodlands, fields, or bogs, and it was last spotted in Hanover in 2010. Threats to the species include habitat destruction, road mortality, and collection for pets. Protecting their habitat, including ensuring that it does not

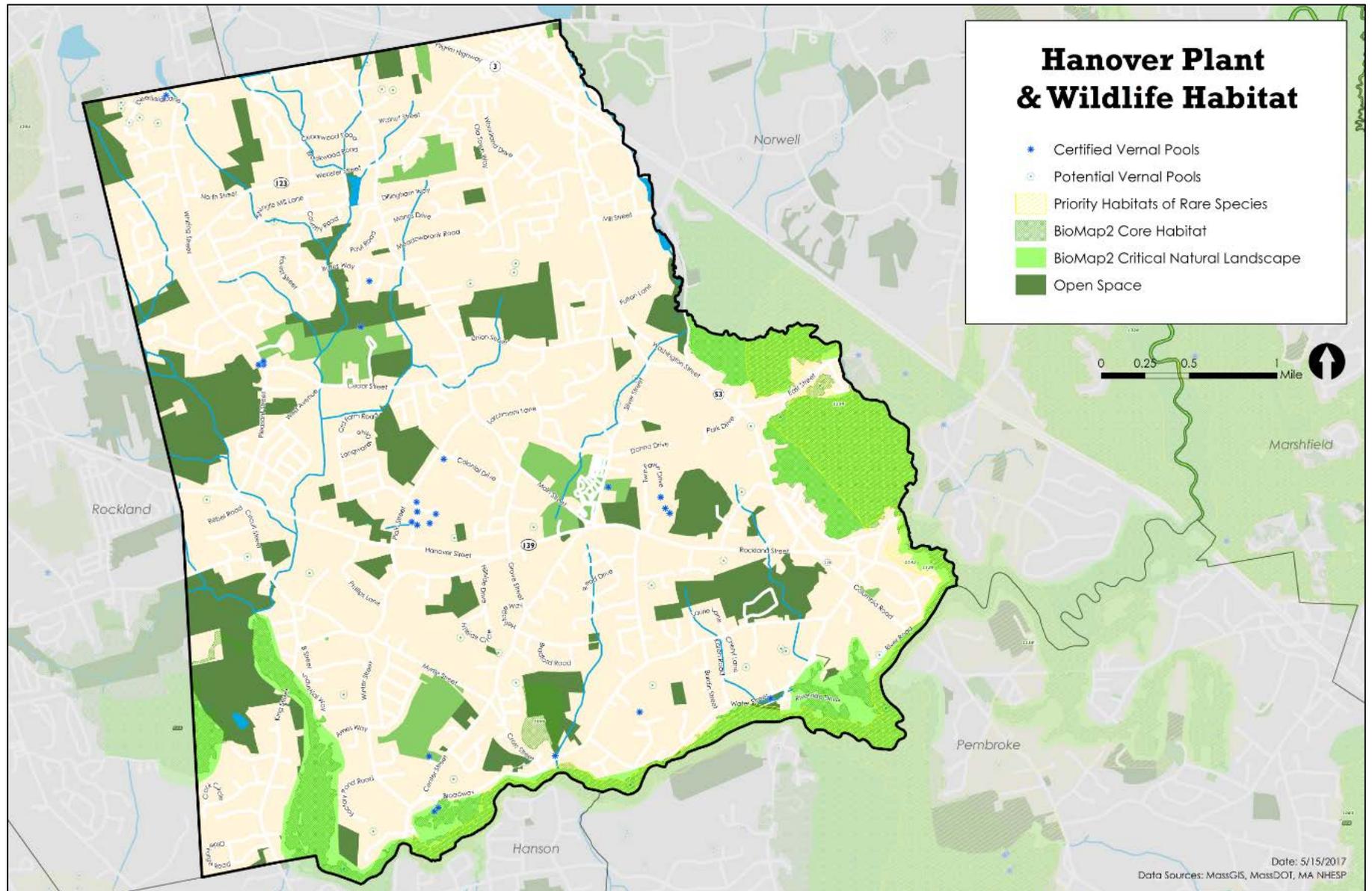
become fragmented, is important for the continuation of the species. A rare mussel, the Eastern Pondmussel, was last observed in Hanover in 1965. This freshwater mussel typically lives in protected areas of lakes and rivers as it is threatened by habitat alteration. Pollution that abuts aquatic habitat, runoff from hazardous materials, and gill damage to host fish by acid rain are all significant threats to this species.

*Spine-Crowned Clubtail*⁴⁶



⁴⁶ Photo source: bugguide.net/node/view/88355/bgpage

Figure 58: Hanover Plant & Wildlife Habitat Map



Environmental Challenges

Hazardous Waste Sites

A notorious hazardous waste site in Hanover is the former National Fireworks Site. Between 1907 and 1970, companies that operated on the site not only manufactured civilian fireworks, but also researched, developed, and manufactured munitions and pyrotechnics for the U.S. Military. The manufacturing process generated mercury, lead, and organic solvents which were disposed of in the southern portion of the 240-acre site. The improper disposal of these hazardous wastes impacted the area's soil, wetlands, groundwater, and Factory Pond.⁴⁷

In the 1970s, the Town of Hanover purchased about 130 acres of the former National Fireworks Site to be preserved as conservation land. An industrial park currently operates at the northern and eastern portions of the site. Since 1995, MassDEP has overseen all environmental investigations and remedial activities related to the site.⁴⁸ Remediation of the site is in "Phase III: Identification, Evaluation, and Selection of Comprehensive Remedial Action Alternatives and the Remedial Action Plan," where cleanup options are assessed and a cleanup plan is selected.⁴⁹

⁴⁷ "Environmental Update: The National Fireworks Site," Town of Hanover, www.hanover-ma.gov/sites/hanoverma/files/file/file/2012_newsletter.pdf

⁴⁸ *Ibid*

⁴⁹ "Definitions of Fields Listed in Search Results," MA EOEEA, www.mass.gov/eea/agencies/massdep/cleanup/sites/definitions-of-fields-listed-in-search-result.html

National Fireworks Site⁵⁰



Fortunately, the Massachusetts Department of Public Health determined that there is not an increased risk of developing cancer from living near the National Fireworks Site. It has also been determined that contamination from the site has not impacted the Town's drinking water supply. However, due to elevated concentrations of metals found in fish in the Drinkwater and Indian Head Rivers and Factory Pond, a Public Health Advisory for these waterbodies has been in place since the mid-1990s. While "Catch and Release" recreational fishing is permitted, a "Do Not Eat Fish" warning has been posted between Forge Pond Dam and Luddam's Ford Dam.⁵¹

⁵⁰ Photo source: www.patriotledger.com/article/20160402/NEWS/160409205

⁵¹ "Environmental Update: The National Fireworks Site"



Open Space & Recreation

The Massachusetts Department of Environmental Protection (MassDEP) maintains a database of sites in communities throughout the state where oil or other hazardous material has been released and reported. According to MassDEP's Reportable Release Lookup database, Hanover has 82 sites listed, including the National Fireworks Site.

Chronic Flooding

Stormwater in Hanover drains to a river network in the western portion of town, which then drains toward the North River. Due to this natural flow of water, there are two different types of flooding that typically occur. The first type is major flooding along the Drinkwater River and Forge Pond, which occurs about every 25 years during major storm events. The other type of flooding that occurs is more localized and where drainage networks empty into smaller rivers, streams, and ditches. This problem is exacerbated by the dumping of yard waste around town, which is a major factor in causing localized neighborhood flooding.

With continued increases in the amount of impervious surfaces in Hanover—from paved roads, driveways, parking lots, and roofs—and the removal of vegetation and trees, stormwater management is a critically important component in protecting the town's natural resources. With less vegetation to slow the flow of stormwater, promote infiltration to groundwater, and filter sediments and other pollutants, there will be more negative impacts to rivers, streams, drinking water supplies, wildlife habitats, and wetlands.

Low-Impact Development (LID) is a component of green infrastructure that can be utilized to control stormwater. Types of LID such as rain gardens, green roofs, and porous pavement implement small-scale hydrologic controls that mimic the natural hydrologic regime of watersheds while still allowing development to occur. For example, LID techniques have been utilized at the Target site since it was redeveloped, including pavement that allows water penetration and vegetated islands. The Town of Hanover is currently not utilizing LID techniques at a municipal level, though it could benefit from a Low-Impact Development Bylaw or Stormwater Bylaw, to help manage runoff, stormwater, and drainage issues.

Water Pollution

Finding a balance between growth and sustainability is a challenge for most Massachusetts communities. In Hanover, which is a residential community with a strong commercial base, there is the challenge of balancing both types of growth with the Town's capacity to service it. While encouraging commercial growth benefits the overall tax base, Hanover's major commercial area along Route 53 is located in the Town's Aquifer Protection District. As such, managing Hanover's water supply area with future growth will continue to be a challenge.

The Town of Hanover does not have a public sewer system. While several commercial properties have private wastewater treatment plants, in general, residential, commercial, and industrial properties have private septic systems. If septic systems fail, they can potentially contaminate surface and groundwater resources. Should a failure occur, it is important to address the problem as

quickly as possible in to prevent the effluent from entering the Hanover’s waterbodies. Currently, a failed system may not be permitted for repair, upgrade, or replacement for months.

A number of waterbodies in Hanover are considered by the U.S. Environmental Protection Agency to be impaired or threatened for one or more uses. Segments of Iron Mine Brook, Third Herring Brook, and the Drinkwater River are impaired to the presence of pathogens such as fecal coliform and E. coli bacteria. The suspected source for the pathogens in the Iron Mine Brook and Third Herring Brook is discharge from municipal separate storm sewer systems. The suspected sources for those in the Drinkwater River are stormwater, agricultural runoff, and discharge from the Rockland Wastewater Treatment Plan. The North River’s impairment is due to stormwater pollutants.

Scenic Resources

The Town of Hanover has a wealth of scenic resources and view sheds. Scenic resources need not be a specific view or location, but may be a combination of features that come together to create an aesthetically pleasing situation, such as a tree lined street, a rolling meadow, a hilltop, or an old farmhouse. The following places have been identified by residents as treasured scenic resources:

- Town Center
- Briggs Stable/Field
- Four Corners
- Luddams Ford
- Sylvester Field

- Cardinal Cushing Property
- Trail along the Indian Head River
- Old Stone Bridge on the Hanover/Pembroke line over the North River
- Forge Pond
- Old King Street School
- Vacant Doc Cook’s General Store

Hanover has a number of officially designated scenic roadways that are tree-lined and often dotted with old stone walls. These roads lack the strip malls seen along Route 53 and represent the more rural character of Hanover’s residential districts. Hanover’s designated scenic roads include Broadway, Center Street, Main Street, Silver Street, Union Street, Washington Street in the Four Corners area, and Whiting Street.

Briggs Stable⁵²



⁵² Photo source: www.briggsstable.com



Open Space and Recreation Land

Open Space

From walking the trail network through Hanover's forested areas to canoeing along its waterways, Hanover's varied natural landscape provides many opportunities for passive recreation. Most of these sites are permanently protected from future development and are under the care and control of the Hanover Conservation Commission. Having been deeded to the Conservation Commission, these areas are mainly protected via Article 97 of the Massachusetts Constitution.

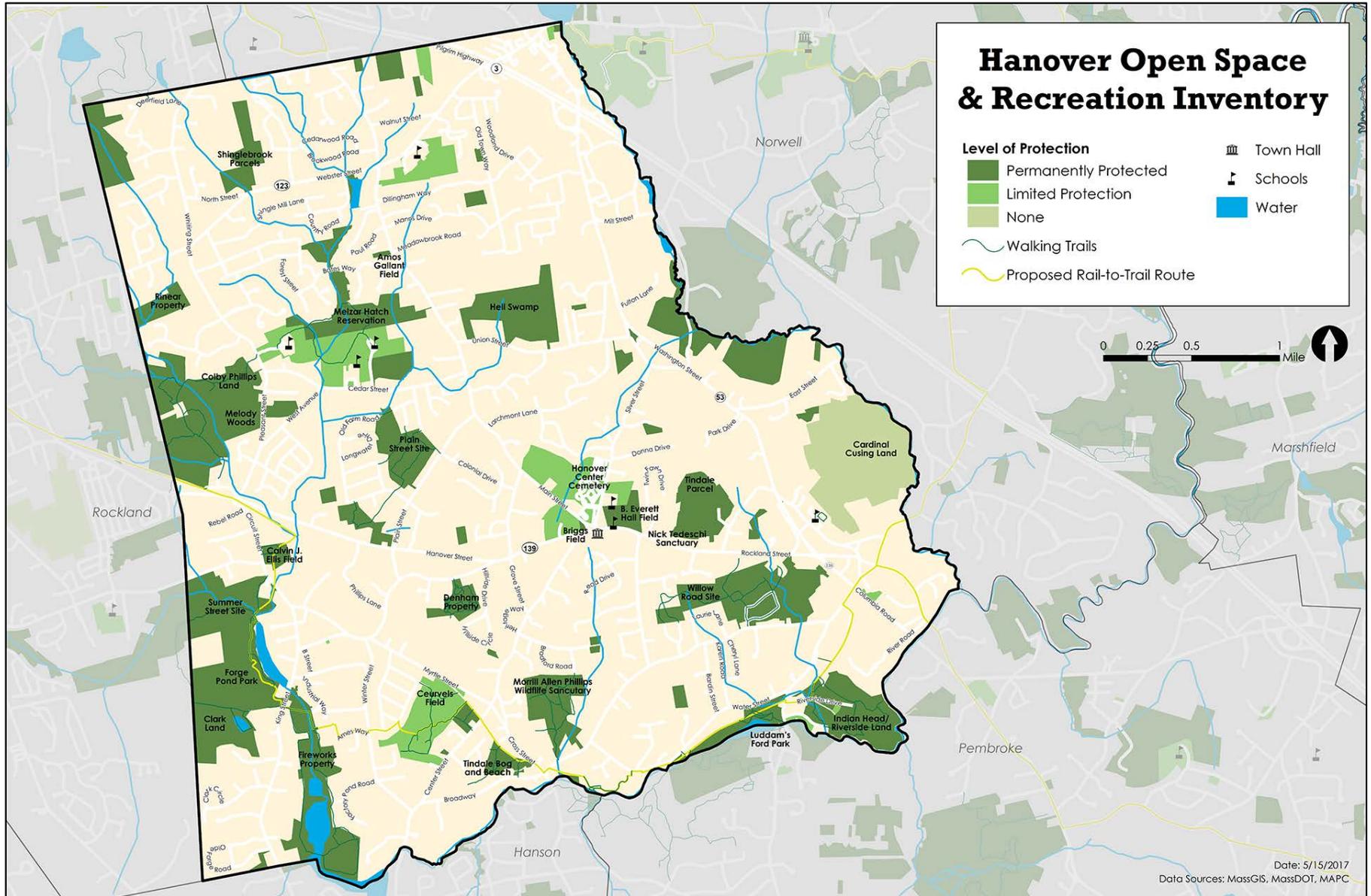
Other protected open spaces, particularly those that are owned by private groups or nonprofit organizations, are exempt from future development due to the presence of conservation restrictions. A conservation restriction is an agreement that is bound legally between a landowner and a grantee where the landowner agrees to limit the amount and/or use of a specific property in order to protect its unique or specific conservation values. A specified amount of time for the conservation restriction can be noted, or the conservation restriction can be in perpetuity. A conservation restriction is recorded at the Plymouth County Registry of Deeds. Any site financed with Community Preservation Act (CPA) funds is required to have conservation restriction.

In order to encourage the public to use and enjoy Hanover's open space resources and advocate for their preservation, the Hanover Historical Society created a comprehensive trail map of Hanover in 2014. The detailed map features historical buildings and landmarks, open space, and scenic roads, and has been widely distributed throughout town. This effort was funded through the Community Preservation Act and was done in consultation with Town boards and committees, particularly the Open Space Committee.

Luddam's Ford Park

This beautiful 19.5-acre park located on Elm Street at the Pembroke border, where the Indian Head River widens into a pond. This historic site was once the location of an 18th century forge and later the Clapp Rubber Company. Picnicking is possible in the open field and benches overlook the pond and river, which both provide popular spots for fishing and canoeing. Woodland trails follow the Indian Head River and old rail bed.

Figure 59: Open Space & Recreation Inventory Map



Luddam's Ford Park



Denham Property

This 20-acre parcel located on Circuit Street was purchased with CPA funds in 2011. A former well-managed forestry parcel, the property contains an easy wood-road trail through wooded uplands, and mostly dry footpaths through wetland areas. There are two vernal pools on the east side of the property. Denham Pond, a small dammed pond located at the entrance to the property, has been well loved by generations of neighborhood children for summer fishing and winter skating. A vintage street lamp, long-since disconnected, still recalls nighttime skating parties encouraged by the generous former owner, Kenneth Denham.

Colby-Phillips Property

The 135-acre Colby-Phillips Property contains 3.1 miles of walking trails, which can be accessed from Whiting or Circuit Streets. The Whiting Street entrance crosses a marsh via a 300-foot boardwalk and there is an observation deck at Cushing Brook Marsh. The trail winds through woodlands, crosses a bridge over Cushing Brook, and passes by the historic West Hanover Cemetery, before ending at Circuit Street.

Boardwalk at Colby-Phillips Property



Recreation

Hanover is fortunate to have a variety of high-quality, Town-owned recreation facilities. These sites range in size from small neighborhood parks and playgrounds, like Amos Gallant Field on the former Curtis School property, to the 75-acre Ceurvels Field located in South Hanover.

Forge Pond Park

Completed in summer 2014, Forge Pond Park contains more than 40 acres of active recreation opportunities, making it the largest recreational facility on the South Shore. The park includes three baseball fields, three softball fields, three soccer fields, bathrooms, and a concession stand. Paved paths surround the park and continue through the woods, with trails leading to the Clark Land and Bog. Forge Pond Park was designed to be a destination for tournaments and other high-attendance sports events.

The Town of Hanover initially purchased the 75-acre King Street/Cervelli Property, former farmland that Forge Pond Park was constructed on, in 2006 with a \$1.4 million Community Preservation Act (CPA) bond. Construction of Forge Pond Park was financed entirely with \$4.3 million in CPA funds. The active recreation facilities are under the jurisdiction of the Parks and Recreation Committee, while the passive lands are under that of the Open Space Committee.

Forge Pond Park⁵³



Ceurvels Field

Formerly known as Myrtle Field, Ceurvels Field is Hanover's largest park facility with 75 acres located on the south side of Myrtle Street and the west side of Center Street. It is used primarily for soccer, lacrosse, and spring baseball games. The heavily wooded area around the fields has trails for passive recreation. Ceurvels Field is adjacent to the Hanover Senior Center, which was newly constructed and opened in 2010.

⁵³ Photo source: <http://www.hanover-ma.gov/parks-and-recreation/pages/forge-pond-park>

B. Everett Hall Field

Managed by both the Board of Selectmen and Parks and Recreation, B. Everett Hall Field is a 20-acre multi-purpose facility that contains a playground, softball and baseball fields, basketball courts, and a tennis court. It is used for many different Town events and activities, including Hanover Day in June. The facility is referred to as “Sylvester Field” and it is adjacent to the Sylvester and Center Schools. In June 2016, South Shore Vocational Technical High School students constructed a new ADA-accessible bandstand at B. Everett Hall Field.

New Bandstand at B. Everett Hall Field⁵⁴



⁵⁴ Photo source: <http://www.patriotledger.com/news/20160617/south-shore-vo-tech-students-construct-hanover-bandstand>

Calvin J. Ellis Field

Calvin J. Ellis Field is a 12.5-acre site on Circuit Street in West Hanover. The facility is the premier site of Hanover Youth Athletic Association (HYAA) baseball and it is primarily used for Little League Baseball. Youth soccer occasionally practices and plays games in the outfields. Calvin J. Ellis Field is managed by Parks and Recreation.

Briggs Field

At just over one acre, Briggs Field is located directly across the street from Town Hall in the Town Center Historic District. It contains the beloved one hundred year old ball field mainly used today for T-ball. The Selectmen and Parks and Recreation currently manage Briggs Field.

Amos Gallant Field

Amos Gallant Field is a 2.74-acre property located on the site of the former Curtis School. The former elementary school was torn down in September 2012 as a result of the deteriorating condition of the building. It was originally built around the turn of the century with a gift from John Curtis, a Hanover philanthropist. The school building became Hanover’s police station in the 1950s, and later the school administration offices until they relocated in 2002. Amos Gallant Field currently has one Little League field and its potential for additional recreational facilities is being assessed.



Management and Resource Priorities

Town of Hanover Departments and Boards

The Town of Hanover is fortunate to have a number of active departments and boards who are working towards improving open space and recreation opportunities in the community. However, there has historically and presently been a lack of coordination and communication among the actors involved. This can be improved by holding regular meetings between the Open Space Committee and Parks and Recreation Department, the two entities in charge of implementing Hanover's most recent Open Space and Recreation Plan.

Open Space Committee

Hanover's Open Space Committee was chartered to ensure that the Town's rural character is maintained and enhanced both through protection of existing resources and acquisition of new properties. As such, important initiatives of the Committee include educating the public and working to preserve the character and charm of Hanover through land conservation. The Committee worked with the Hanover Historical Society in 2014 to create a comprehensive trail map of Hanover.

The Open Space Committee is active in creating and maintaining walking trails through conservation properties for enjoyment by residents and visitors alike. However,

upkeep of the Town's trails has become the most prevalent maintenance needs in Hanover. While the Open Space Committee does an excellent job maintaining trails, they are only a handful of volunteers.

Parks and Recreation

Hanover's Parks and Recreation Department oversees the majority of recreation facilities in town, with the exception of those on School Department land. It is guided by the seven-member Parks and Recreation Committee, which existed on its own for decades until the Committee hired its first paid staff member in 2005. Parks and Recreation staff and committee members work closely with the Department of Public Works, the entity tasked with maintaining all of the recreation properties. The Board of Selectmen are already in process with the committee and the summer recreation program is being run in partnership with the Office of Family and Community Engagement.

School Department

The School Department manages and programs the recreation facilities on its properties. These facilities include:

- Cedar School: multi-purpose field, playground
- High School: multi-purpose field, track, football, baseball, softball, tennis courts
- Middle School: multi-purpose field, playground, baseball
- Salmond School: softball, baseball



Open Space & Recreation

Conservation Commission

The Conservation Commission's mission is to protect the natural resources of the Town of Hanover based on Federal, State, and local laws. The Commission conducts site inspections and issues permits contingent on the type and extent of each project. Most of the Town's open space is deeded to the Conservation Commission and the group works with the Open Space Committee to oversee over 1,000 acres of protected public lands. The Commission is aided by a Conservation Agent whose role it is to obtain and disseminate accurate information to the Commission to help them make informed and fair decisions for their fellow residents.

Department of Public Works

The Department of Public Works (DPW) maintains all the recreation facilities in Hanover, including those on School Department properties. In past years, there was a need for better coordination between DPW and the School Department regarding facilities on properties owned and managed by the School Department. However, the Town created a Facilities Department in recent years that combined maintenance for the two entities, alleviating issues regarding coordination. Though the DPW's staff has increased in recent years, there is still a need for more manpower to maintain fields and other facilities.

Nonprofit and Private Organizations

While the majority of publicly-accessible open space is owned and managed by the Town of Hanover, there are

also hundreds of acres of privately-owned land in Hanover that the public can access. Much of this land is owned by nonprofit land trusts and environmental organizations with a land preservation mission, while some is owned by private landowners.

Wildlands Trust

The Wildlands Trust is a regional land trust that works throughout Southeastern Massachusetts to conserve and permanently protect native habitats, farmland, and lands of high ecological and scenic value.⁵⁵ Since its founding in 1973, the Wildlands Trust has helped to ensure the protection of nearly 10,000 acres of land. In Hanover, the nonprofit organization owns and manages over 75 acres between its land at Melzar Hatch Reservation and Longwater Brooks Preserve.

South Shore Natural Science Center

The South Shore Natural Science Center (SSNSC) is a nonprofit organization dedicated to educating the public about the natural and cultural environments of the South Shore.⁵⁶ While SSNSC's educational facility is located in neighboring Norwell, the organization owns three properties in Hanover that are protected through conservation restrictions: Melody Woods, Nick Tedeschi Sanctuary, and land around Hacketts Pond.

⁵⁵ "About Us," The Wildlands Trust, <http://wildlandstrust.org/about-us/>

⁵⁶ "About Us," South Shore Natural Science Center, <http://southshorenaturalsciencecenter.org/about-us/>



Open Space & Recreation

North & South Rivers Watershed Association

While not a Hanover landowner, the North & South Rivers Watershed Association (NSRWA) is an important open space stakeholder in town. The organization has enabled the permanent protection of hundreds of acres of land critical to the North & South Rivers Watershed, and raised millions of dollars to enable communities in the watershed to conserve land. NSRWA recently removed culverts from the Iron Mine Brook to the Indian Head River to restore a passage for fish populations. Their significant advocacy has also led to the removal of the Tack Factory Dam, owned by the Cardinal Cushing Centers, on the Third Herring Brook. Removing this dam opened up 8.4 miles of instream habitat in the Third Herring Brook system for river herring, American eel, sea lamprey, and more.⁵⁷

Cardinal Cushing Centers

Cardinal Cushing Centers is a nonprofit educational center for persons with intellectual and developmental disabilities. The facilities sit on over 200 acres of land along Third Herring Brook that is owned and managed by Cardinal Cushing Centers, Inc. Some of this land falls within the Town's Aquifer Protection District and much of it is environmentally sensitive. Hanover's Open Space Committee has a continued interest in working with Cardinal Cushing Centers, Inc. to permanently protect their land from future development.

⁵⁷ "Tack Factory Dam Removal Complete," NSRWA, www.nsrwa.org/tack-factory-dam-removal-open-8-4-miles-stream-habitat

Funding Sources

Community Preservation Act

The Town of Hanover passed the Community Preservation Act (CPA) at the 3% surcharge level during the May 2005 Town Meeting. CPA allows communities to create a local Community Preservation Fund for not only open space protection and outdoor recreation, but also historic preservation and affordable housing. The role of the Community Preservation Committee is to allocate funds acquired through the Community Preservation Act, which has been the largest source of grant funding for open space and recreation in Hanover since its inception.

Grant Opportunities

Having an Open Space and Recreation Plan that has been approved by the State's Division of Conservation Services makes Hanover eligible for State and Federal grants for open space and recreation. The Local Acquisitions for Natural Diversity (LAND) Grant Program helps communities acquire land for conservation and passive recreation purposes. The grants reimburse cities and towns for the acquisition of land in fee or for a conservation restriction. The general public must have reasonable access to land acquired through the LAND Program, and \$400,000 is the maximum grant award.⁵⁸ The Parkland Acquisitions and Renovations for Communities

⁵⁸ "Local Acquisitions for Natural Diversity (LAND) Grant Program", <https://www.mass.gov/service-details/local-acquisitions-for-natural-diversity-land-grant-program>



Open Space & Recreation

(PARC) Program was established to assist cities and towns in acquiring and developing land for park and outdoor recreation purposes. These grants can be used by municipalities to acquire parkland, build a new park, or to renovate an existing park.⁵⁹ Another program, the Federal Land & Water Conservation Fund, provides up to 50% of the total project cost for the acquisition of parkland or conservation land, creation of new parks, renovations to existing parks, and development of trails.⁶⁰

Public Input

Open Space and Recreation Plan Survey

As a part of the Open Space and Recreation Plan process, MAPC created an online survey to allow residents to voice their preferences and ideas regarding open space, natural resources, and recreational amenities in town. Over 270 residents completed the survey and offered their thoughts about open space and recreation in Hanover.

Almost everybody (97%) who completed the survey agreed that preserving Hanover's open space and natural areas is important to them. They also agreed that Hanover's existing open space contributes positively to overall quality of life, the Town needs to be proactive

⁵⁹ "Parkland Acquisitions and Renovations for Communities (PARC) Program", <https://www.mass.gov/service-details/parkland-acquisitions-and-renovations-for-communities-parc-grant-program>

⁶⁰ "Massachusetts Land and Water Conservation Fund Grant Program", <https://www.mass.gov/service-details/massachusetts-land-and-water-conservation-fund-grant-program>

about preserving what open space is left, and the Town should identify key parcels to preserve and remain undeveloped. Survey respondents felt that it is most important to preserve open space for protection of Hanover's water resources and drinking water, as well as for passive recreation like walking, hiking, and canoeing.

According to the survey results, Forge Pond Park is the most popular site for active recreation in Hanover; over 90% of respondents have visited at least once a year, and 58% visit at least 15 times a year. The next most popular site is B. Everett Hall/Sylvester Field, where 84% of respondents visit at least once a year. Use was much lower for other recreational facilities.

In terms of passive recreation opportunities, Forge Pond and French's Stream Trails are the most utilized (86% of respondents visit them at least once a year). Luddam's Ford Park and its trails followed as the most popular, with 71% of respondents visiting them at least once a year. Roughly half of respondents visit the Indian Head River and Trails, Fireworks Trails, and Colby-Phillips Property and Trails.

For respondents who do not visit or use Hanover's open space and recreational amenities, 84% say it is because they do not know about locations. Another 24% say it is because of a lack of parking and 16% say it is because of safety concerns. Respondents do not appear to be concerned about crowdedness, the poor condition of facilities, or a lack of convenience to travel to sites.

Almost 40% of survey respondents feel that their recreational needs are met in Hanover; another 50% feel that their needs are somewhat met. The most popular

activities that respondents and their families participate in, in order of popularity, are walking, hiking, bicycling, jogging, and soccer. Activities that respondents and their families want more of the most, in order of popularity, are ice skating on a pond, skating on an ice rink, swimming, playgrounds, and canoeing/kayaking.

Finally, the survey asked respondents to identify priorities for open space and recreation in Hanover. Almost 97% of respondents identified the maintenance of existing walking trails as either somewhat important, important, or very important to them. This was followed by the repair/maintenance of existing athletic fields at 92%. The other priorities, in order of importance, are:

- Create linkages for existing walking trails
- Improve informational/interpretive signage at trails and parks
- Acquisition of additional open space
- Bike paths, on-road
- Bike trails, off-road
- Addition of walking trails
- Addition of programming: camps, classes
- Construction of small neighborhood parks/playgrounds
- Create town gathering places
- Establish indoor community recreation center
- Construction of new playing fields
- Create community dog park
- Equestrian trail linkages

Recommendations

Goal 1: Improve coordination and collaboration among Town boards and departments and with conservation organizations to promote protection of critical areas in Hanover.

Strategy 1: Improve communication and coordination between the Open Space Committee and Conservation Commission on land protection and habitat restoration.

Strategy 2: Improve the working relationship with the Board of Selectmen and Town Manager. Keep them informed about planned activities and priorities for preservation and recreation.

Strategy 3: Continue collaboration with Hanover's Historical Commission, Historical Society, Community Preservation Committee, and outside conservation entities such as the Wildlands Trust and North & South Rivers Watershed Association on preservation and recreation projects.

Goal 2: Preserve and protect critical natural and scenic areas in Hanover.

Strategy 1: Review, update, and prioritize list of lands of interest for possible future protection.



Open Space & Recreation

Strategy 2: For properties that are already designated as open space, but have only limited or temporary protection, work to protect properties in perpetuity.

Goal 3: Encourage sustainable growth and development that is consistent with the character of Hanover.

Strategy 1: Update Hanover's land use and environmental bylaws and regulations (Zoning Bylaw, Wetlands Protection Bylaw, and Subdivision Rules & Regulations) to ensure that development is consistent with the town's rural character, encourages open space preservation, and is designed well.

Strategy 2: Encourage development that preserves open space by building at a somewhat higher density through the use of Open Space Design (OSD) or Natural Resource Protection Zoning (NRPZ).

Strategy 3: Amend Subdivision Rules & Regulations to promote low impact development (LID) techniques and green design.

Goal 4: Maintain and improve public access to conservation parcels and their recreational opportunities.

Strategy 1: Continue to focus on walking trail creation, maintenance, and informational outreach.

Strategy 2: Improve and create additional opportunities for recreation such as equestrian trails, bike trails, and water access.

Strategy 3: Review parking availability at each area, and work with the Department of Public Works to add parking where needed.

Strategy 4: Recruit additional volunteers for the maintenance of passive recreational facilities, especially walking trails. Improve relationship with the Department of Public Works to obtain assistance with upkeep of conservation parcels.

Strategy 5: Improve pedestrian safety around and between conservation and recreation sites by adding crosswalks and expanding the town's sidewalk network.

Goal 5: Establish a long-range strategy for protecting Hanover's drinking water supply.

Strategy 1: Prioritize protection of available land abutting or adjacent to the Water Resource Protection District to act as a buffer to prevent contamination.

Strategy 2: Work with neighboring towns and land trusts to protect remaining open land in the area around the Freshwater Tidal Marsh and Indian Head River.

Strategy 3: Ensure there is coordination regarding the protection of water quality and quantity (such as for permitting, constructing, and monitoring wells and septic systems).



Open Space & Recreation

Goal 6: Maintain and enhance recreational facilities for the enjoyment of Hanover residents and visitors of all ages, abilities, and interest.

Strategy 1: Repair and update existing sports fields.

Strategy 2: Maintain existing sports fields.

Strategy 3: Create small, local parks, like a playground or street hockey rink, in various areas of town, particularly in areas currently underserved by neighborhood recreational facilities.

Historic & Cultural Resources

Introduction

Since completion of the 2008 Master Plan, the Hanover Historical Society has implemented recommendations from the 2007 Historical Preservation Plan and 2010 Cemetery Preservation Plan, restoring the town's historic cemeteries and investing in the preservation of archival resources. The successful conversation of culturally significant and scenic open space resources has contributed to Hanover's beauty and to its residents' well-being.

In that time, however, increasing development pressure, particularly for new housing, has increased concern over the potential loss of the town's historic structures. The historic character and beauty of the town is enhanced by its numerous privately owned and well-preserved historic structures, many dating from the 18th century or earlier. In recent years, the Hanover Historical Commission has initiated demolition delay proceedings for three properties and was ultimately unsuccessful at preventing substantial demolition of those properties. As the master plan update winds down, the Commission is turning its attention to researching and evaluating the significance of the town's historic homes and commercial buildings. In the coming year, the Historical Commission will guide an update to its historic resources inventory to better document and

evaluate the character and significance of those resources.

Key Findings

- The Town of Hanover has demonstrated success in developing and implementing preservation plans to protect important historic resources.
- Restoration of Hanover Center and the Town's cemeteries has preserved the Town's historic civic assets.
- Efforts to update the town's inventory of historic structures will facilitate additional preservation, especially in the Four Corners commercial area.
- In addition to exploring a local historic district designation for Four Corners, Hanover should explore the use of planning and zoning to promote housing and commercial development to support the continued economic viability of historic village centers.
- Planning efforts for historic centers could target arts and cultural businesses and organizations as well as creative enterprises to mutually benefit these assets.

Existing Conditions

Historic Resources

Historic Buildings

According to Massachusetts Historical Commission’s (MHC) Massachusetts Cultural Resources Information System (MACRIS), there are 340 buildings and sites in Hanover estimated to be of historic and cultural significance. Of these, the following are listed on the State Register of Historic Places, which includes all properties in Hanover subject to preservation restrictions and all properties designated on National Register for Historic Places. If Hanover designates a local historic district, properties within that district will also be entered into the State Register. Currently, the following resources are included in the State Register, largely due to their location within and contribution to the Hanover Center Historic District:

*Stetson House*⁶¹



⁶¹ Photo source: Hanover Historical Commission

1716 Stetson House: The Stetson House, near Hanover Town Hall, was built by Samuel “Drummer” Stetson in the early 1700’s. Town Meetings and religious services were held in the house during its early years, and since 1979 the house has been listed on the National Register of Historic Places. The house is now owned by the town and is open for public tours under the direction of the Town appointed overseers. A citizens group, Friends of Stetson House Inc., and others aid in the preservation and upkeep of the property.⁶² Currently operated as a museum by the Hanover Historical Society, the Stetson House offers the Hanover community the opportunity to learn about Hanover’s history. Image courtesy of Hanover Historical Commission.

*First Congregational Church*⁶³



1863 First Congregational Church: The church was built in the style of a traditional Congregational Church to replace

⁶² Town of Hanover. 1979. Hanover Open Space Plan.

⁶³ Photo source: Hanover Historical Commission

an earlier church that burned down the previous year. It represents the centrality of the church to early town life, when religious and civic affairs were closely intertwined.⁶⁴ Both the Congregational Church and the Town Hall were destroyed in the fire and rebuilt in the same year, establishing the architectural and civic character of the Hanover Center Historic District.

*Hanover Town Hall*⁶⁵



1863 Hanover Town Hall: Built in the same year as the Congregational Church, the Town Hall mirrors the church's Italianate architectural style and the two buildings establish a unified physical character for the Hanover Center Historic District. Designed by architect Luther Briggs, II and expanded in 1893 by architect J. Williams Beal, the Town Hall has been a center of civic life in the town since its construction, housing the town's first high school and its

⁶⁴ MACRIS Inventory Sheet "First Congregational Church," Hanover Historical Commission, 1984.

⁶⁵ Photo source: Hanover Historical Commission

public library until 1907 in addition to the town's government. A \$1.1 million renovation of the Town Hall building to restore its historic façade, cupola, and portico was completed in June 2017, with plans for a second phase of restoration work underway.

*John Curtis Free Library*⁶⁶



1907 John Curtis Free Library: Designed by architect Edmund Q. Sylvester, the John Curtis Free Library is named for its benefactor, a fifth-generation resident of Hanover who built a successful clothing business and bequeathed both the funds for construction of a new public library and his personal book collection to the town. In addition to its books and archives, the library houses portraits by Hanover artist Edward H. Tindale and a grandfather clock made by John Bailey.⁶⁷

⁶⁶ Photo source: Hanover Historical Commission

⁶⁷ MACRIS Inventory Sheet "Curtis, John Free Library," Hanover Historical Commission, 1984.

Edmund Q. Sylvester High School⁶⁸



1927 Edmund Q. Sylvester High School: Named for its benefactor, Edmund Q. Sylvester – architect of the Curtis Free Library – the school’s design was intended to complement the library’s style and appearance. J. Williams Beal, the architectural firm responsible for designing the high school also designed the Town Hall’s 1893 addition, providing an additional connection among the Hanover Center civic buildings. Image courtesy of Hanover Historical Commission.

Additional buildings of historic importance sit outside the boundaries of the historic district. These include the following:

⁶⁸ Photo Source: Hanover Historical Commission

Line House⁶⁹



1759 “Line House” (5 Assinippi Avenue): The historic “Line House” in the Assinippi section of Hanover, which straddles the Hanover and Norwell town line, was built in the Federal Style as a residence for Elisha Jacobs, grandson of the man who dammed Jacob’s pond and owner of a brick factory. Elisha’s son was a Selectman and Postmaster in Hanover and under his ownership, the house functioned as a Post Office and Selectmen’s Office for Hanover. Since these offices were in the Norwell section of the building it was deemed to be illegal to conduct Hanover town business in another town. The dilemma was solved by renaming the area where the house was located as “neutral territory” with the name Assinippi. This Indian name translates to “rushing clear water” or “rocks over water” and commemorates a nearby Indian Meeting Ground on Third Herring Brook. This same area was also the crossroads of

⁶⁹ Photo Source: Hanover Historical Commission

two Indian Trails: Plymouth Path and Bay Path.⁷⁰ Image courtesy of Hanover Historical Commission.

Station Five Firefighting Museum⁷¹



1887 Station Five Firefighting Museum (1095 Broadway): The Hanover Historical Society also manages the Station Five Firefighting Museum building in South Hanover, preserving a building constructed in 1887 as a paint shop and purchased as headquarters for the South Hanover Fire Association in 1910. Owned by the town since 1959, the building is now run as a public museum with exhibits on Hanover’s firefighting history open once a month. The museum houses a 1908 fire wagon restored to its original condition using CPA funds in 2016.

Historic Schools

Hanover residents today are committed to supporting their public education system, and its commitment has a long

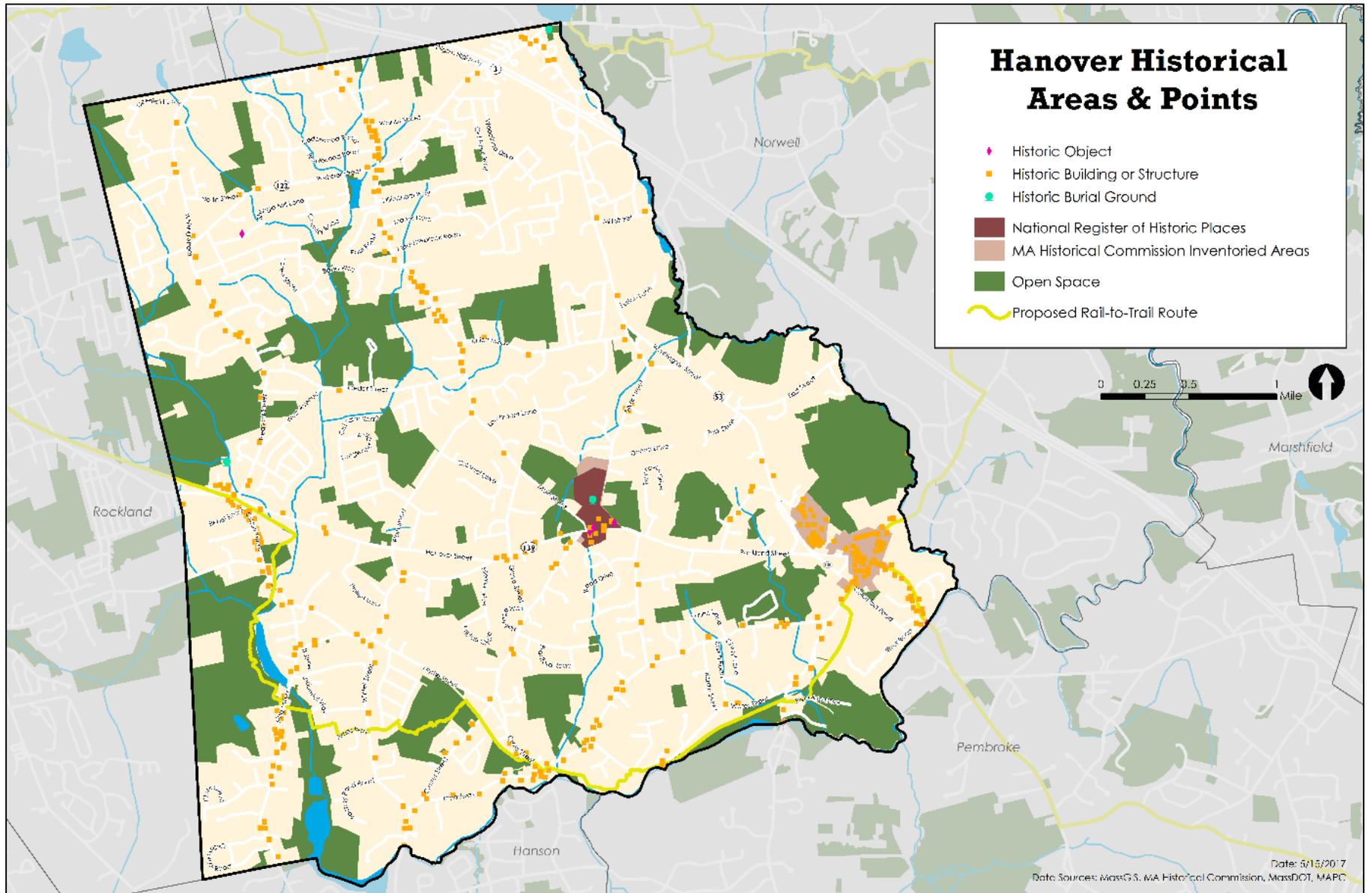
and enduring history embedded among the town’s historic buildings. The Hanover Academy building was constructed in 1850 as a private school in Four Corners serving the town’s wealthiest families. The building continues to occupy its original location but has been converted to commercial use and houses an antiques store. Old public school buildings are preserved today as private residences. The Whiting Street School, constructed in 1879, is the best documented of these buildings, many of which were moved to different locations, incorporated into other buildings, or expanded.

Changing education patterns in the 20th century generated a need for new schools. The Edmund Q. Sylvester High School was constructed in 1927 to accommodate the growth in students attending high school. Designed by J. Williams Beal and Sons Architects, the school is located within the Hanover Center Historic District and continues to function as part of the town’s public education system. It currently houses the third and fourth grades. The Salmond School, which currently houses administrative buildings for Hanover Public Schools, was constructed in 1931 after the original school building on the site was moved to another town. The building housed elementary grades 1 through 6 until 1978. The same firm that designed the Sylvester School also designed the Center School in 1953, and together the two schools reflect changes in architectural design in the middle of the twentieth century.

⁷⁰ 1996 Street Map and Guide. Hanover Chamber of Commerce.

⁷¹ Photo Source: Hanover Historical Society

Figure 60: Hanover Historical Areas & Points Map





Preservation Priorities

The Hanover Historical Society has identified fifteen additional resources they would like targeted for preservation,⁷² including:

- Briggs Stable, 623 Hanover Street
- Phoenix Masonic Lodge, 133 Broadway
- Former Hanover Academy, 195 Washington Street
- Salmond School, 188 Broadway
- Sylvester Co. Historic Barn, 283 Columbia Road
- Former fireworks headquarters, King Street
- Sullivan Funeral Home and the open fields, 551 Washington Street
- The Jacobs House, 2048 Washington Street
- St. Andrew's Episcopal Church, Church Street
- Sylvester Field, 113-165 Washington Street
- Town Pump, 584 Hanover Street
- Myette's Country Store, 1143 Broadway
- Tedeschi's Assinippi General Store, 2103 Washington Street

Research into the historic and architectural significance of these resources should be included in the update to the historic resources inventory. A full list of historic and cultural resources is included in the Appendix.

⁷² "The List: 15 Historic Places in Hanover," *Wicked Local Hanover*, November 25, 2015. (<http://hanover.wickedlocal.com/news/20151125/list-15-historic-places-in-hanover>)

Historic District

In late 1995, Massachusetts Historical Commission voted to nominate Hanover Center to the National Register of Historic Places (NRHP). On May 9, 1996, the district was approved by the NRHP and became a National Register District. The district is comprised of twenty properties in Hanover's town center. The district contains a well preserved grouping of buildings and sites, reflecting the historical and developmental core of the community. These buildings range in date from the Stetson House, circa 1716 to the Sylvester School, circa 1927. Other buildings within the district include the First Congregational Church, the founding body of the town; the parsonage of the church, circa 1855, from the Greek Revival period; the Town Hall designed by architect Luther Briggs II in 1863, and expanded in 1893 by well-known local architect J. Williams Beal; and the John Curtis Library designed by another Hanover architect, Edmund Q. Sylvester.

The Civil War Monument, a granite obelisk, designed by J. Williams Beal in 1878 at the age of 23 just after his graduation from Massachusetts Technological Institute, is located in the center of the cluster of buildings. The Hanover Cemetery, with earliest burials from 1727, contains a large number of early slate markers concentrated behind the church, and provides a back drop to the historic center along the north side of the district.

Listing of the Hanover Center Historic District provides recognition of the community's historic importance and assures protective review of projects that might adversely affect the character of the district. Listing in the National Register does not mean that preservation restrictions will



be placed on the properties by the Federal government. In Massachusetts, properties nominated to the National Register are automatically listed in the State Register of Historical Places. State Register properties owned by municipalities and nonprofit organizations may compete for state restoration funds.

Historic Areas

Cemeteries

The 2007 Historical Preservation Plan identified the three historic cemeteries in Hanover as priorities for rehabilitation and conservation. The Hanover Historical Commission successfully completed the rehabilitation of all three cemeteries in the spring of 2015. Headstones were excavated, documented, restored through cleaning and repair and reset in the ground. Conservation reports document the restoration work completed for each cemetery. This success highlights the value of the Historical Commission's leadership in planning for and executing targeted preservation strategies that leverage Community Preservation Act funds.

Trails and Waterways

From walking trails along the Hanover branch line of the Old Colony Railroad and threaded through the former site of the former National Fireworks Company factory, Hanover has successfully reclaimed its industrial land for recreational use and enjoyment. The Town has embedded its industrial past into some of its most scenic resources. Luddam's Ford, now a waterfront park, powered industrial

enterprises through the late 1800s, including: a saw mill (1693), Bardin Iron Works (1704), Curtis Anchor Works (1791), a grist mill (1832), a carding mill (1839), and the Clapp Rubber Company (1873). Interpretive signage informs visitors of this history.

Historic Commercial Centers

As traces of Hanover's industrial past are embedded in its natural landscapes, the traces of Hanover's origins as a farming community is embedded in its built landscape. Houses, schools, and commercial buildings dating from the eighteenth and nineteenth centuries concentrate along the town's major thoroughfares and historic village centers. Four Corners and South Hanover, formerly connected along the Hanover branch of the Old Colony Railroad, are particularly salient areas for communicating the story of Hanover's development from lands of the Wampanoag tribe to a colonial farming community, a mixed agricultural and industrial center, and finally a commuter suburb of Boston on the South Shore.

Four Corners: As restoration of the buildings and archival collections located within the Hanover Center Historic District near completion, the Hanover Historical Commission has identified the Four Corners area for its future preservation efforts. It has issued an RFP for a consultant to update the historic resources inventory conducted in the 1980s with additional research and documentation that will allow the Commission to better evaluate the historic significance of buildings slated for demolition. In addition, the Commission is exploring the option of establishing a local historic district in the Four

Corners area in order to preserve the historic character of one of the oldest sections of town.

Four Corners was the original terminus of the Hanover Branch of the Old Colony Railroad. It retains a cluster of buildings constructed before 1850. The recent demolition of the Sylvester Hardware Store at 283 Columbia Road has alerted the Town to the vulnerability of the area's other historic assets. These assets are listed in Figure 61.

The proximity of the older commercial core at the intersection of Washington and Broadway to the twentieth century commercial corridor of Route 53 along Columbia Road presents a challenge and opportunity in planning for preservation in the Four Corners area. Preserving both the physical structures along with the historic function of Four Corners as a neighborhood commercial center will require attention to the relationship between the auto-oriented commerce along Columbia Road and the smaller-scale retail at the historic village center of Four Corners. Drawing pedestrian traffic down Broadway from Columbia Road and developing complementary commercial uses at the two intersections may help promote continued business viability in the area.

Figure 61: Four Corners Historic Assets

Date	Building Name	Address
1693	Daniel Turner House	168 Broadway
1712	Percy Bonney Blacksmith Shop	20 Broadway
1727	Wales Tavern	199 Washington Street
1750	Barstow House (1750)	323 Washington Street

1771	Clark House	60 Broadway
1790	Hanover Academy Building	195 Washington Street
1800	Dr. Howes House	31 Church Street
1810	Jothan Cushing House	242-240 Washington Street
1811	Saint Andrews Church	17 Church Street
1849	Saint Andrews Church Rectory	288 Washington Street
1812	Albert Smith House	128 Washington Street
1827	Joseph Eells House	232 Washington Street
1853	Robert Dwelley House	178 Broadway
1865	Laphain House	53 Broadway
1909	Charles Gleason House	96 Broadway
1910	Hanover Fire Company No. 5	207 Broadway

Fireworks District: The Fireworks District features a cluster of historic houses dating from 1700 to 1881, including a former carding mill at 127 King Street. These assets could help to tell the story of Hanover's industrial past stretching back to the 18th and early 19th centuries. Efforts to highlight and preserve these historic resources could serve to establish a cultural identity and brand to promote economic development efforts in this district. A list of historic assets is included in Figure 62.

The Fireworks District represents an opportunity to preserve and promote the town's historic economic assets and

enterprises. This District continues to attract a variety of businesses, and future development that highlights its historic significance could enhance its value as an economic center and business destination.

Figure 62: Fireworks District Historic Assets

Date	Building Name	Address
1700	David Gardner House	590 King Street
1725	Hatch Farm	561 Circuit Street
1765	Stephen Bailey House	408 King Street
1770	Prince Stetson House	615 Circuit Street
1800	Amos Turner House	562 King Street
1800	Hanover Carding Mill	127 King Street
1816	George R. Josselyn House	160 King Street
1835	Hanover House	334 King Street
1860	Cyrus B. Josselyn House	113 King Street
1881	Charles Josselyn House	169 King Street

Historical Commission

The Hanover Historical Commission is preparing to upgrade their historical resources survey with particular attention to resources within the Four Corners area of town, which is under consideration for designation as a local historic district. Some of the town’s oldest structures are located in this area of town including a house dating from the 17th century. The Commission has identified 135 structures of particular interest for additional research and evaluation

for historic significance according the National Register criteria. For many decades the Historical Commission has provided leadership in planning for preservation and promotion of Hanover’s historic and cultural resources. Implementation of the Commission’s 2007 Historic Preservation Plan has resulted in the restoration and repair of many early headstones in the town’s three historic cemeteries.

Arts and Cultural Resources

In addition to historic and scenic resources, Hanover has events and organizations committed to supporting creativity and preserving the town’s cultural and historic heritage.

- **Briggs Stable and Big Bay Farm:** These two stables and the equestrian programs they run promote the agricultural roots and identity of the town.
- **Hanover Cultural Council:** The Cultural Council disburses grant money annually to support arts and cultural activities that serve the residents of Hanover. Grants fund programming at the Council on Aging, the Curtis Free Library, and the Hanover Historical Society among others.
- **Hanover Historical Society:** The Stetson House Museum and Historic Firefighting Museum provide event space and educational resources for learning about Hanover’s history.



Historic & Cultural Resources

- **Hanover Day:** Sponsored by the Hanover Cultural Council, Hanover Day is an annual event that brings the Hanover community together and features historical programming and educational activities, arts and cultural experiences including a juried art show, carnival amusements, and live musical performances including a battle of the bands. A basketball tournament and Red Sox showcase connects the town to the regional sports culture as well.
- **Hanover Garden Club:** Founded in 1929, the Garden Club organizes events and programs that promotes interest in gardening, flower arrangements. The club arranges creative programs including a fairy-house making activity at Hanover Day, seasonal decoration of the Stetson House, and participation in the Art in Bloom event with the Museum of Fine Arts.
- **Walnut Hill Garden Club:** Founded in 1967, the mission of the Walnut Hill Garden Club is to promote the advancement of gardening, concern for our environment, encouragement of individual creativity, and civic involvement through beautification and education. Volunteer beautification projects include landscaping and maintaining plantings at several Hanover War Memorials, Forge Pond Park, numerous traffic islands and a rain garden in cooperation with the Hanover Garden Club. Other activities include a garden therapy program for Hanover seniors, the inkjet cartridge and cell phone recycling program, Kindergarten seed planting in local schools, high school scholarships and public service lectures.
- **Creative Industries and Enterprises:** Despite the decline of its mill-based industrial activity, Hanover continues to support light industrial enterprises. It is also home to a collection of small-scale enterprises that support arts and cultural activity and creative expression. Among these businesses are:
 - Laura Center for the Arts: visual and performing arts for youth
 - American Folk Art and Craft Supply: fiber-based folk art supplies and classes
 - Ultrasound Productions: recording studio
 - Crossroads Music: guitar store and music instruction
 - St. Andrews Episcopal Church: adult and youth chorus music programs
 - Hanover Dance Workshop: dance instruction for youth
 - South Shore Ballet Theatre
 - South Shore Conservatory

Preservation Tools and Education

Education and Planning

The Hanover Historical Commission and the Hanover Historical Society are actively engaged in educating residents about the value of historic preservation and in planning and implementing preservation efforts. From exhibits and programming at the Stetson House and

Station Five Firefighting Museum to active involvement in Hanover Day celebrations, the organizations actively engage residents in learning about the town's history. The planning efforts of the Historical Commission have also helped the town to leverage funds through the Community Preservation Act to restore the town's many historic buildings, archives, and open space resources.

As the risk of demolition for aging structures in need of significant rehabilitation increases, new preservation strategies targeted at supporting private preservation efforts may be appropriate. For example, the Arlington Historical Commission provides residents with a web-portal with information about the role and function of the historical commission as well as links to an historic structures inventory, instructions on researching house histories, information on preservation loans, and links to external preservation resources. These education tools have the potential to have widespread impact as they lower the barriers to preservation for residents across the town. Because they do not concentrate preservation efforts in particular areas, they will not be sufficient to preserve clusters of privately-owned historic resources.

Local Historic District Designation

Preservation restrictions attached to local historic districts can be an effective strategy to preserve clusters of historic buildings and the historic character of particular areas of a municipality. The Massachusetts Historical Commission highlights that "local historic districts provide a regulatory review process for all changes to exterior architectural

features visible from a public way."⁷³ The district is created through passage of a bylaw by the municipal legislative body. The bylaw should:

- Designate the historic resources to be protected
- Establish protections for those historic resources
- Establish a local historic district commission, and
- Adopt procedures for administering the district⁷⁴

Financial Incentives

In addition to preservation restrictions, some municipalities create financial incentives to promote preservation among private property owners. Massachusetts offers tax-credits for historic preservation to owners of income-generating properties as well as preservation loans. Use of these incentives requires that properties be listed on the National Register or eligible for listing on the National Register. Thorough research and documentation of locally significant buildings that are priorities for preservation is important for making these financial incentives available to property owners and developers.

Recognizing Preservation

Preservation Awards

Recognizing and celebrating excellent preservation done by private property owners helps to foster a culture of

⁷³ "Establishing Local Historic Districts." Massachusetts Historical Commission, June 2003, reprinted 2007.

⁷⁴ *Ibid*



Historic & Cultural Resources

preservation. The Massachusetts Historical Society recognizes excellence in historic preservation across the state, and a few municipalities have initiated local awards to recognize the best preservation work in their communities. For example, Cambridge Historical Commission presents annual awards in the areas of “restoration, rehabilitation, adaptive use, neighborhood conservation, landscape preservation, archaeology, and education/outreach.” Criteria include historic and architectural significance, project quality, extent of preservation, and impact of the project on city-wide preservation efforts. The Chatham Historic Commission also runs a local preservation awards program in partnership with the Historic Business District Commission and the Chatham Historical Society.

Historic House Tours

Another method for recognizing local history is through historic house tours. The Hingham Historical Society conducts one of the longest-running historic house tours in the country as the signature fund-raising event for the society.

Preservation Partnerships

Municipality and Historical Society

Municipalities and local historical societies are critical partners in the preservation of local historical assets. Historic preservation and conservation efforts in Hanover are heavily dependent on efforts of the Town of Hanover

(including the Hanover Historic Commission) and the Hanover Historical Society. These two entities account for most of the acquisition and maintenance required to preserve Hanover’s historically significant properties.

Commonwealth of Massachusetts

In addition to preservation strategies through the municipality and local historical society, other communities also have lands conserved and managed through the Massachusetts Department of Conservation and Recreation as state parks. The Massachusetts Historical Commission is also an important partner for local preservation activities, and has been an active partner for the Town of Hanover.

Independent Non-Profit

In some cases, independent non-profit organizations have launched for the long-term preservation of historic assets. An example of this is the John and Priscilla Alden Family Sites organization formed by descendants of the Alden family to preserve the Alden homestead as a museum and educational facility.

Land Trust

Land trusts can be helpful partners in crafting conservation restrictions and privately managed conservation and preservation. The Wildlands Trust of Southeastern Massachusetts has partnered with private land owners to ensure the long-term conservation of open space, trails, and farmland. According the Wildland’s Trust, since 2011,



“Landowners with eligible land may qualify for up to \$75,000 in refundable tax credits from Massachusetts, in addition to federal deductions cited above, for land gifts, conservation restrictions and charitable sales.”

Zoning Strategies

Zoning strategies can complement local preservation efforts in two ways:

1. Incentivizing new development projects in areas that are not deemed to contribute to the historic character of the town will lower development pressures on historically significant areas.
2. Adopting form-based zoning codes in areas where infill development can strengthen an historic core by promoting new development that is harmonious with the surrounding historic properties.

As Hanover explores opportunities for preserving the Four Corners area and other historic nodes, these strategies can strengthen its preservation efforts.

Zoning and design guidelines that establish a coherent visual identity through infill development can help to strengthen historic assets. Housing developed within walking distance of Hanover’s historic village centers, mixed with adequate pedestrian infrastructure could reinvigorate small-scale, locally owned businesses and preserve the historic building form that gives Hanover its distinctive character.

Recommendations

Based on research into Hanover’s historic assets, the Town’s preservation priorities, and the larger goals of this master plan, the following recommendations are made.

Goal 1: Preserve and protect critical historic and cultural resources in Hanover.

Strategy 1: Analyze economic development needs for Four Corners district to complement the ongoing historic asset inventory and local historic district study.

Strategy 2: Explore potential for developing additional housing in Four Corners area to support and encourage local business and cultural activities.

Strategy 3: Extend rail trail from West Hanover to Luddam’s Ford Park.

Strategy 4: Consider extending the demolition delay bylaw from one year to two years.

Strategy 5: Educate property owners, particularly farms and stables about conservation restrictions and the Wildlands Trust of Southeastern Massachusetts.



Historic & Cultural Resources

Strategy 6: Explore options for recognizing private preservation efforts including historic house tours and historic preservation awards.

Strategy 7: Develop a protocol to safeguard historic documents for preservation for future generations.

Goal 2: Improve public awareness of and education about Hanover's historic and cultural assets.

Strategy 1: Develop online portal for homeowners interested in preserving their homes with information about loan programs and tax incentives.

Strategy 2: Engage arts and cultural business community in planning for historic village centers.

Clean Energy

Introduction

Energy use is a critical component of municipal operations and community planning because of the costs associated with its financial, public health, and climate impacts. Reducing use of fossil fuel energy sources and increasing use of renewable, non-emitting, energy sources creates public health benefits by improving air quality. In the context of a changing global climate, local actions to reduce consumption of fossil fuel energy sources and increasing production of renewable energy sources are becoming increasingly important.

Energy issues are closely linked to other chapters of Hanover 300, including housing, economic development, land use, transportation, and public facilities and services. The clean energy recommendations included in this chapter inform how new housing stock or commercial development should be constructed in an efficient way. Investing in clean energy improvements can provide economic benefits of improving the quality and marketability of local building stock. Additionally land use and transportation planning efforts interact with the Town's transition to cleaner energy sources and greener modes of transportation.

This chapter of the Hanover 300 summarizes the Town's successes related to energy efficiency and renewable

energy to date, and outlines goals and recommendations to build on this progress and ensure the Town continues on the path toward relying on clean and efficient energy.

Key Findings

- Since 2010, Hanover has received \$1,047,153 in Green Communities grants from the Massachusetts Department of Energy Resources to implement energy conservation measures.
- Hanover's buildings are responsible for 70 percent of municipal energy consumption.
- Operational solar capacity in Hanover has grown from approximately 5 kW in 2010 to 1.9 MW in 2016.
- Vehicles in the municipal fleet present opportunities for Hanover to lead by example in the transition to cleaner fuel vehicles necessary across all sectors.

Existing Conditions

Municipal Energy Profile

The Town of Hanover has demonstrated a commitment to advancing clean energy and leading by example through energy efficiency projects in municipal buildings and the pursuit of solar projects.

Figure 63: Energy Reference Table

<p>Kilowatt hour (kWh): Unit measuring electricity use.</p> <p>Kilowatt (kW): Unit measuring power, i.e. the rate at which energy is generated or used.</p> <p>Nameplate capacity: the manufacturer’s rated capacity; the maximum output of a generation system.</p> <p>Therms: Unit measuring natural gas use or power produced by burning a 100 cubic feet of gas.</p> <p>British Thermal Unit (BTU): Unit measuring power. MMBTU = 1 Million BTU.</p>

Green Communities Designation

The Town was designated a Green Community in 2010 through the Massachusetts Department of Energy Resources (DOER) Green Communities Program. The Town achieved Green Communities designation by demonstrating fulfillment of the five criteria for designation:

1. Provided as-of-right siting for renewable energy.
2. Adopted expedited application and permitting processes for renewable energy installations.
3. Established an energy use baseline of Fiscal Year 2008 and developed an energy reduction action plan to achieve a 20 percent reduction in energy consumption within five years (i.e. through June 2013).

4. Committed to purchase only fuel-efficient vehicles for the Town’s fleet.
5. Adopted the Massachusetts Stretch Energy Code to minimize the lifecycle energy costs for new construction across all sectors.

As a designated Green Community, the Town was eligible to receive designation funding to implement energy conservation projects, as well as annual competitive grant funds of up to \$250,000 to assist the Town in achieving its 20 percent reduction. In the seven years since designation, the Town has successfully secured six Green Communities grants totaling to \$1,047,153 (See Figure 64 for details on annual grant amounts and projects completed).

Energy Management

Energy efficiency and renewable energy work at the municipal level is overseen and implemented by the Town’s Facilities Manager. This department is charged with the maintenance of municipal buildings and equipment (see the Public Services and Facilities chapter of this plan). Without a staff person dedicated to energy-related work or a formally established volunteer clean energy committee, the Town’s capacity to advance community wide clean energy initiatives has been limited. In particular, the Facilities Manager noted that the capacity challenges limit the amount of follow up on projects to measure and verify energy savings or make operational adjustments. This added level of energy management is critical for strategic implementation of new clean energy projects to help the Town achieve the 20 percent reduction in energy consumption.

Figure 64: Green Communities Grant Awards to Hanover

Year	Grant Amount	Projects
2010	\$148,598	<ul style="list-style-type: none"> • Hybrid public safety command vehicle • An energy staff person • Replacement of steam traps at the Salmond School • High efficiency condensing boiler at the Town Hall • New external doors to weatherize the Fire Station #4 Headquarters
2013	\$194,058	<ul style="list-style-type: none"> • Walk-in freezer/cooler controls retrofits at the Cedar Elementary, Center Elementary, and Middle School • Retro commissioning projects at Cedar Elementary and Middle School • Exterior lighting retrofit at Fire Station #4 Headquarters, Police Headquarters, Salmond School, Cedar Elementary, Center Elementary, Sylvester Elementary, and Middle School • Building envelope improvements at the John Curtis Public Library, Fire Station #4 Headquarters, Cedar Elementary, Center Elementary, and Middle School
2014	\$183,041	<ul style="list-style-type: none"> • Energy conservation measures in Cedar Elementary, Sylvester Elementary, Middle School, and Salmond Administration Building
2015	\$158,936	<ul style="list-style-type: none"> • Building operator certification training • High efficiency boiler at the Fire Station #4 Headquarters • Boiler controls at the Water Treatment Plant • Interior lighting retrofits at the Senior Center, Public Works, Highway Department, Cedar Elementary, Center Elementary, Middle School, and High School
2016	\$135,748	<ul style="list-style-type: none"> • Demand Control Ventilation upgrade and LED lighting retrofit at the Middle School • LED lighting retrofit at the John Curtis Public Library
2017	\$226,772	<ul style="list-style-type: none"> • Interior storm windows at the Salmond School • Retro commissioning and LED lighting retrofit at the Middle School • Energy analytics at the High School • LED lighting retrofits at the Police Headquarters and Fire Station #4 Headquarters • Grant management assistance
TOTAL	\$1,047,153	

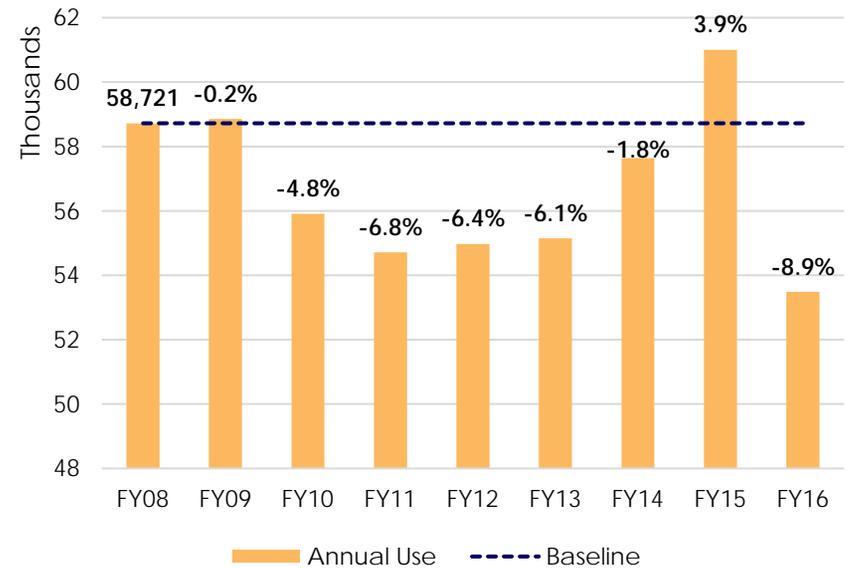
Municipal Energy Consumption

The Town uses Mass Energy Insight (MEI), an online tool provided by DOER, to track municipal energy consumption. The following information on energy consumption is reported in Fiscal Years (FY) because the Town set its energy consumption baseline as FY2008 (June 2007 – July 2008) in the energy reduction plan for their Green Communities designation.

In the baseline year of FY08, the Town’s total energy usage was 58,721 MMBTUs of energy. The Town has worked tirelessly to implement energy conservation projects throughout the municipal building stock to progress toward achieving the 20 percent reduction in energy consumption. As of FY16, the Town has reduced total energy consumption by 8.9 percent from the FY08 energy consumption baseline, as is illustrated in Figure 65.

The variability in progress can be explained in part by Town specific and Massachusetts specific events. After FY11, the energy consumption begins to trend upward with a peak in FY15. This can be partially credited to the retirement of the Town’s High School building and the construction of a new High School building in FY11. The new High School, while efficient, is the largest energy consuming building out of all the municipal buildings in Hanover. Additionally, in FY15, the Town’s consumption spikes up over FY08 levels. This is a very common data trend for all municipalities in Massachusetts for FY15 due to the severe winter experienced across New England in 2014 which required intensive use of building heating systems and municipal snow removal vehicles.

Figure 65: Annual Reduction in Total Energy Consumption from FY08 Baseline (MMBTU)



Building Energy Efficiency

Buildings are the Town’s largest energy consumer, accounting for 70 percent of total municipal energy consumption in FY16 (see Figure 66). Over the past seven years, the Town has completed over 30 energy conservation measures across twelve municipal buildings. The projects have encompassed upgrades touching building systems including: lighting, HVAC, building controls, retro commissioning, weatherization, and refrigeration.

Figure 66: Municipal Energy Consumption in FY16 by Facility Type (MMBTU)



The Town has strategically implemented energy efficiency measures in several buildings which are both the highest energy users and the most inefficient buildings. Figure 67 highlights the Town’s top fifteen largest energy users and top fifteen most inefficient buildings. Energy efficiency is determined based on the building’s energy use intensity, or how efficiently the building consumes energy per square foot.

Figure 67: Top Five Energy Consuming & Inefficient Buildings in FY16

Energy Use			Inefficient Buildings		
	Building	Use (MMBTU)		Building	kBTU/sf
1	High School	8,825	1	Police Headquarters	155
2	Middle School	6,549	2	Salmond School/School Administration	113
3	Cedar Elementary	5,085	3	Fire Station #3	110
4	Center Elementary	4,615	4	Cedar Elementary	81
5	Broadway Water Treatment Plant	2,757	5	Center Elementary	76
6	Police Headquarters	1,812	6	Fire Station #1	68
7	Sylvester Elementary	1,754	7	Fire Station #4 Headquarters	68
8	Salmond School/Sch. Admin.	1,490	8	Town Hall	65
9	John Curtis Public Library	1,221	9	Senior Center	60
10	Town Hall	1,133	10	John Curtis Public Library	58
11	Fire Station #4 Headquarters	977	11	Highway Dept. Building	57
12	Senior Center	439	12	High School	56
13	Highway Dept. Building	386	13	Sylvester Elementary	53
14	Water Dept. Building	364	14	Middle School	49
15	Fire Station #1	157	15	Water Dept. Building	17

High School: The Town's High School is a good example of a building that consumes the most energy overall, but has been constructed to be highly efficient. Table X illustrates how the Town successfully designed a high efficiency building when the new High School was constructed in 2011 to replace the old High School. The new High School building also hosts a solar PV array that generates a portion of the building's energy. The Town's planned implementation of energy analytics at the High School in 2017/2018 will help the Town to ensure that the efficient systems are fully optimized and achieving the savings intended through the buildings design.

Police Department Headquarters: The Police Department Headquarters is the sixth largest energy consumer and the most inefficient municipal building. The building underwent an exterior lighting retrofit in 2013, and the Town plans to retrofit the interior lighting to LEDs in 2017/2018. The Public Services and Facilities Chapter highlights the frequent issues experienced with the HVAC system. Occupants reported both ineffective temperature regulation and difficulties with operations and maintenance of the system. The HVAC issues also highlight an opportunity to improve the buildings energy efficiency by optimizing the system's controls. The Town could implement a targeted project to upgrade the HVAC equipment to a high efficiency system and install building controls that would improve temperature regulation for both occupant comfort and energy savings.

Salmond School/School Administrative Building: While not the largest energy consumer, Salmond School is the second most inefficient building in the Town's building stock. The Town implemented measures in this building in

both 2010 and 2014, and has plans to replace the interior storm windows in 2017/2018. Salmond School is another example of how the Town consistently demonstrates strategic project selection by tackling the biggest energy hogs in their building portfolio.

Cedar Elementary: Cedar Elementary is both a high energy consumer and an inefficient building compared to the High School. To date, the Town has implemented six energy conservation measures on multiple systems in the building. However, the building's energy use has not been reduced since the implementation of these measures. This building could benefit from the implementation of energy analytics to better understand the nuances of the inefficiencies occurring in the buildings energy systems.

Changes in Building Stock: The Town should make sure to integrate best practices in building energy efficiency and explore opportunities to demonstrate net zero building design. Additionally, in the planned renovation of Center Elementary to accommodate the repurposing of Sylvester Elementary, the Town should ensure that building efficiency standards push the envelope to continue decreasing the building's energy consumption.

Streetlights

The Town intends to move forward with a community-wide retrofit of the Town's streetlights to high efficiency LED fixtures. LED streetlight retrofits provide both economic and environmental benefits, while also reducing operations and maintenance costs.

Renewable Energy

The Town has successfully implemented two municipal renewable energy projects. In 2011, the Town completed the installation of a 30 kW rooftop solar PV array at the Hanover High School on 287 Cedar Street. In 2016, the Town completed construction of a 225 kW wind turbine at the Hanover Water Treatment Plant on 40 Pond Street. A project to put a solar PV array on the capped landfill in the Town is under way.

Municipal Fleet Vehicles

While buildings are responsible for a majority of the Town’s energy use, municipal fleet vehicles are the second largest consumer responsible for 16 percent of municipal energy consumption in FY16 (see Figure 68). In 2010, the Town received Green Communities funding as a part of designation to cover the incremental cost of a hybrid public safety command vehicle. The Town has not purchased additional clean fuel vehicles since this initial acquisition.

Within the Town’s current vehicle fleet there are several opportunities to explore the replacement of diesel and gasoline fueled vehicles with those that run on cleaner alternative fuels such as electricity, propane, and natural gas. The larger more predominant vehicle types such as dump trucks, pickup trucks, and various maintenance vehicles could be candidates for aftermarket conversion technology. Other passenger vehicles such as the police cruisers and sedans are candidates for replacement with full battery electric and hybrid electric vehicle options.

Figure 68: Municipal Fleet Vehicles by Vehicle Type⁷⁵

Vehicle Type	# of Vehicles
Dump Truck	16
Pickup Truck	16
Maintenance Vehicles	13
Police Cruiser	10
SUV	9
Fire Truck	7
Heavy Truck	7
Van	6
Sedan	4
Ambulance	3
Motorcycle	2
Hybrid SUV	1
Total Fleet	94

Community-Wide Energy Profile

Municipal energy use represents a small portion of the Town’s potential role in mitigating climate change through clean energy initiatives. Tackling community-wide energy use requires an understanding of the characteristics of the residents, housing stock, land use, and community transportation system.

⁷⁵ 2016 Green Communities Vehicle Inventory, from Annual Report filed with the Department of Energy Resources

Residential, Small Businesses, and Commercial and Industrial Energy Consumption

The Town is served by National Grid for electricity and Columbia Gas for natural gas. Figure 69 shows a comparison of electricity and natural gas consumption in FY16 for the residential, small business, commercial, and industrial, and municipal sectors. Reducing energy consumption community-wide in Hanover requires strategic attention to both the residential and commercial sectors of the economy.

As illustrated in Figure , the small business, commercial, and industrial sector makes up 50 percent of the Town’s total electricity consumption. However, for natural gas consumption the residential sector is the largest consumer, with 56 percent of total consumption. In both cases, the municipal consumption is less than six percent. For the Town to play a significant role in reducing community wide energy use and greenhouse gas emissions, energy efficiency and renewable energy initiatives that target the commercial, industrial, and residential sectors will be critical to achieving these goals.

Residential Energy Efficiency: More than half of the Town’s housing stock was built before 1970, making the residential sector a good target market for low-hanging energy efficiency and weatherization upgrades. A majority of the Town’s housing is owner-occupied (84%) and a majority of the housing available are single-family detached homes (85%). The provision of home energy services is more straightforward where owner-occupied, single-family homes are abundant. The Town could consider carrying out a residential energy efficiency outreach program to

effectively connect residents of Hanover with the utility’s MassSave Home Energy Services program and available incentives.

Figure 69: FY16 Electricity and Natural Gas Use by Sector

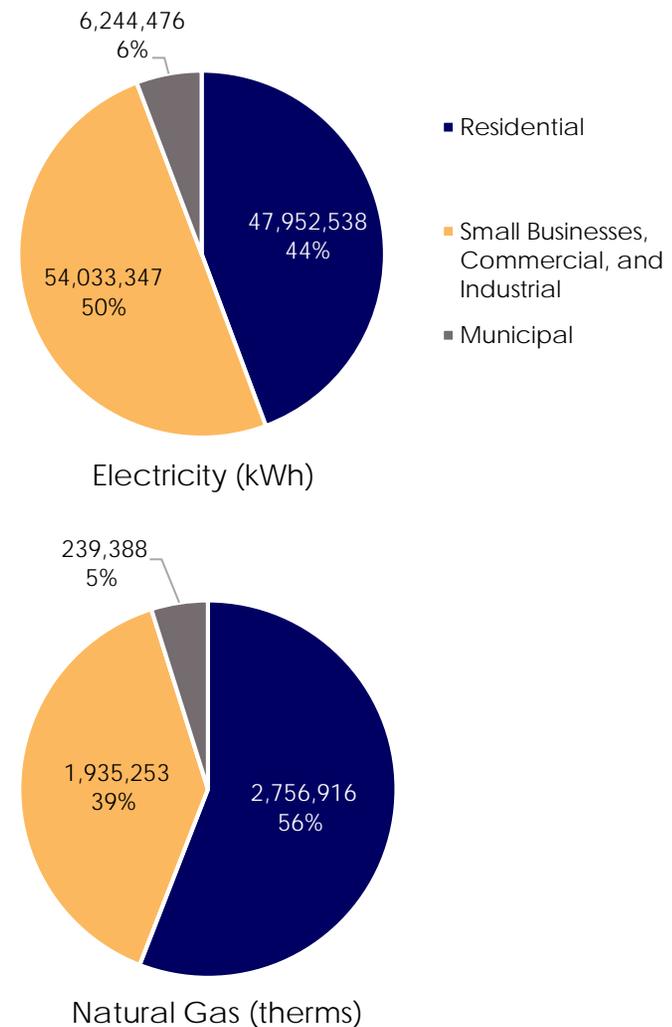


Figure 70: Electric Consumption in Hanover from FY12-FY16

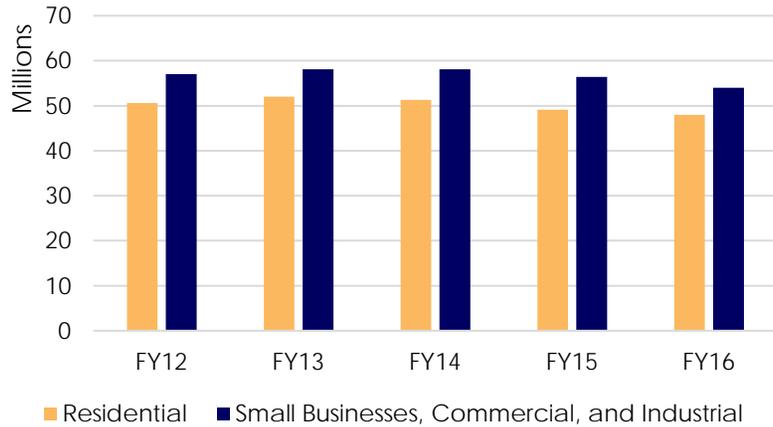
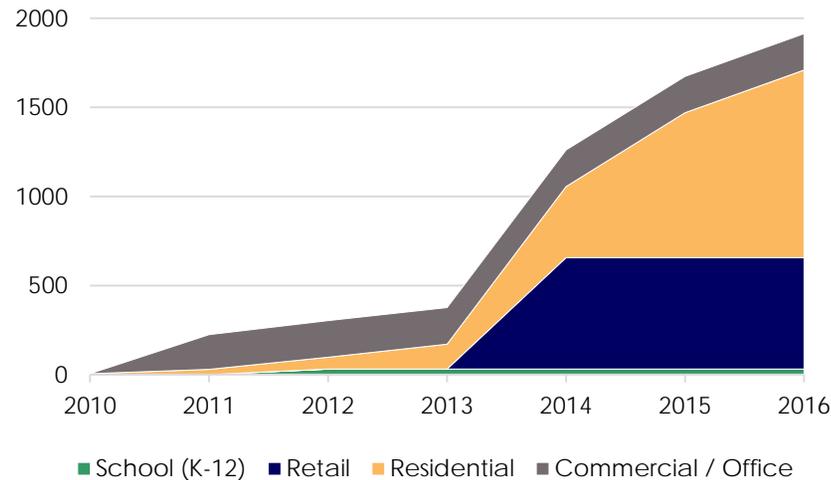


Figure 71: Growth in Solar Nameplate Capacity from 2010 to 2016, by Sector (kW)



Small Businesses, Commercial, and Industrial Energy Efficiency: The potential redevelopment of the Hanover Mall under a new owner offers an opportunity to improve the energy efficiency of the largest commercial hub within the Town.

Renewable Energy

The residents of Hanover have demonstrated a commitment to clean energy, independent of any specific municipal initiative to encourage the installation of solar photovoltaics (PV). In the past three years, the Town has noticed an increase in the number of permits issued for residential solar installations. The growth in reported operational solar nameplate capacity in Hanover reflects this anecdote, with the local capacity increasing approximately 5 kW in 2010 to 1.9 MW in 2016 (Figure 71).⁷⁶

To bolster continued development of residential and commercial solar PV, the Town could consider implementing a Solarize program to help interested residents achieve reduced costs through incremental bulk purchasing of residential rooftop solar systems. Potential changes to the state solar incentive program structure and the unpredictability of net metering policy present potential challenges in the coming years to residential solar. These challenges make local support for residents interested in transitioning to clean energy sources even more important.

⁷⁶ Solar Carve-Out I and II Qualified Units, as reported by the Massachusetts Department of Energy Resources on June 23, 2016. <http://www.mass.gov/eea/energy-utilities-clean-tech/renewable-energy/rps-aps/qualified-generation-units.html>

Green Municipal Aggregation (also known as Community Choice Aggregation) is another community-wide strategy to consider to both reduce energy costs for residents and increase the amount of renewable energy used locally. Municipal aggregation is when a city or town decides, on behalf of their residents and businesses, to purchase from an alternative electricity supplier, typically to pursue lower costs than provided through their electric utility. Municipalities can also use aggregation to facilitate the purchase of additional local renewable energy. For example, communities who elect to participate MAPC's Green Municipal Aggregation program commit to purchase five percent above the state's minimum requirement for renewable energy – helping to build more local renewable energy by increasing demand.

Clean Transportation

Reducing emissions from the transportation sector is one area where the Transportation goals and Clean Energy goals work together. While the Transportation chapter encourages the development of cleaner modes of transportation such as public transit, biking, and walking, the Clean Energy chapter prioritizes the transition of both municipal, commercial, and privately owned vehicles from high emitting fuels, such as diesel and gasoline, to cleaner fuels such as electricity. The Town can support the community in transitioning to cleaner fuels by providing the necessary public fueling infrastructure and publicizing opportunities for clean fuel vehicle incentives and rebates.

As of July 2017, the Town of Hanover has three public electric vehicle charging stations located in Town.⁷⁷ One way the Town could lead by example in clean fuel transportation would be to install public electric vehicle charging stations at high traffic municipal parking lots that have long dwell times (i.e. locations where vehicles typically park for three or more hours at a time) such as at one of the Town's schools or at the Town Hall.

Recommendations

Goal 1: Reduce municipal energy use by 20 percent in accordance with the Town's Energy Reduction Plan.

Strategy 1: Build energy management capacity to implement innovative clean energy projects.

- Evaluate opportunities to establish a volunteer energy committee to assist with project management and opportunity identification.
- Consider establishing a part-time position with responsibilities for municipal and community-wide clean energy initiatives.
- Carry out quarterly review of municipal energy data in MassEnergyInsight to ensure data consistency and track progress toward the Town's goal.
- Communicate projects underway and progress toward achieving the energy reduction goal to the Board of Selectmen on an annual basis.

⁷⁷ "Alternative Fuel Station Locator," Alternative Fuels Data Center, U.S. Department of Energy Clean Cities Program, accessed July 14, 2017.

Strategy 2: Implement energy conservation strategies targeting the Town's highest energy users and least efficient buildings.

- Evaluate options to implement a behavioral program at Hanover's public schools to improve building operational efficiency and engage students on clean energy issues.
- Implement energy analytics at the Cedar Elementary School to better understand the buildings energy consumption and identify strategies to optimize building efficiency.
- Evaluate HVAC system at the Police Department Headquarters building for upgrades that improve building efficiency and occupant comfort.
- Incorporate high efficiency standards into the plans for any new or renovated facility.

Strategy 3: Improve municipal fleet vehicle fuel efficiency.

- Create a capital plan for replacement of gasoline fueled passenger vehicles with electric vehicles, in line with current vehicle replacement plan.
- Install level II electric vehicle charging stations for both Town employee and resident use.
- Evaluate opportunities to retrofit medium and heavy duty vehicles currently in the Town's fleet and up-fit new acquisitions to hybrid electric or hydraulic electric fuel systems.
- Explore feasibility of purchasing fuel use tracking software or fleet telematics to better understand vehicle drive cycles and identify opportunities for fleet right-sizing.

Strategy 4: Continue to seek funding opportunities to support municipal clean energy efforts.

- Leverage all available funding and incentives for energy efficiency through the MassSave program and for emerging clean technologies through MassCEC.
- Apply for Municipal Energy Technical Assistance grant funding from the Massachusetts Department of Energy Resources to support clean energy initiatives.
- Implement a community-wide LED streetlight retrofit, leveraging funding available through the Metropolitan Area Planning Council and Massachusetts Department of Energy Resources.
- Apply for funds through the Massachusetts Department of Environmental Protection's Electric Vehicle Incentive Program (EVIP) to support the acquisition of electric and hybrid-electric vehicles and installation of electric vehicle charging stations.
- Evaluate the feasibility of establishing a municipal clean energy revolving fund.
- Continue the Town's involvement in the DOER Green Communities Program.

Goal 2: Implement local initiatives and policies to support reduction of both residential and commercial energy use and increase deployment of renewable energy sources.

Strategy 1: Create initiatives to support residential and commercial reduction of energy consumption and reduce energy costs for residents and businesses.

- Evaluate third-party providers to implement a residential energy efficiency outreach program to encourage homeowner utilization of the MassSave home energy audit and energy conservation measure incentives.
- Explore opportunities to implement a residential solar outreach program (e.g. Solarize Mass) to support continued growth of residential solar capacity.
- Adopt a local bylaw to enable businesses to finance energy efficiency and renewable energy projects through MassDevelopment's Commercial Property Assessed Clean Energy program (to be released in 2017).
- Consider implementing a Green Municipal Aggregation program to reduce electric rates and increase the amount of local renewable energy used by the Town.
- Make annual data request for usage and efficiency from National Grid to track progress in the residential and commercial sectors.

Strategy 2: Create programs to build community identity and buy-in to the Town's clean energy goals.

- Consider potential for community programming to engage residents on the topics of energy efficiency and renewable energy. (ex. Community Green Day or Sustainability Fair)

Strategy 3: Integrate innovative codes and policy approaches to support the implementation of energy efficiency and deployment of renewable energy.

- Assess barriers to renewable energy deployment in the zoning code and adopt progressive standards and appropriate incentives.
- Explore the potential for more rigorous energy efficiency and clean energy requirements for new development.
- Review permitting best practices for supporting solar deployment (e.g. SolSmart program standards).

Goal 3: Develop a plan to reduce community-wide greenhouse gas emissions.

Strategy 1: Establish a community-wide greenhouse gas emissions baseline.

- Establish scope for a community-wide greenhouse gas inventory, consider adhering to nationally and globally accepted methods such as the ICLEI U.S. Community Protocol.
- Acquire relevant data from Town departments and utilities, use MAPC as a resource to inform this process.
- Analyze and consolidate data to establish an informed greenhouse gas emissions baseline.
- Communicate the greenhouse gas emissions baseline to Board of Selectmen, Town Meeting, and community-at-large.

Strategy 2: Establish a community-wide greenhouse gas emissions reduction goal.

- Use greenhouse gas emissions baseline to determine appropriate near-term, interim, and long-term reduction goals, consider setting sector specific targets to achieve these goals.
- Research and consider aligning reduction goals with state, national, and global commitments where applicable.
- Evaluate the feasibility of adopting a net zero and/or 100 percent renewables goal.
- Create a climate action plan or net zero plan of strategies to achieve the greenhouse gas emissions reduction goal.

Land Use & Zoning

Introduction

The Town of Hanover is a community that resonates with character from its history, open spaces, scenic views, and people who live in the community. As a semi-rural, suburban town only 25 miles from the City of Boston, it is an attractive place to live for many. It is bordered by the Town of Norwell to the northeast, Hanson and Pembroke to the south, and Rockland to the west. Compared to other communities in Plymouth County, Hanover is one of the smaller towns with a total area of 15.7 square miles (the largest is Plymouth with 134 square miles).

Hanover is regionally accessible via State highway routes 53, 123, and 139, all of which transect the town. Route 3, a limited-access highway, provides convenient access to both the Boston metropolitan area and Cape Cod. Running four miles north and south between Norwell and Pembroke, Route 53 was once the major route to Cape Cod and today continues to be the main commercial thoroughfare for the town. Routes 123 and 139 both traverse Hanover in an east-west direction and also provide an assortment of business and professional establishments. Since land is a finite resource, competing needs between development and open space preservation exist.⁷⁸

The Land Use element of this Master Plan provides additional focus for the Town's efforts on overall land use policies. Land use refers to the development character of land within a municipality from the amount, types, and intensity of development of commercial, industrial, residential and institutional as well as open space and key natural resources features. Land use patterns are influenced by numerous factors including historical development patterns, population and economic growth over time, infrastructure investment, transportation access, natural resources and environmental constraints, and quality of life. Importantly, land use is not permanent – it can and often does change over time.

This chapter provides an analysis of overall land use and zoning policies within the Town of Hanover and includes strategies for specific areas in town as well as town-wide policy recommendations, some of which may be elaborated on in more detail in other plan elements such as housing and economic development.

Key Findings

- The vast majority of Hanover's land is dedicated to residential development, most of which consist of single-family homes.
- Commercial development is the predominant land use along the Rt. 53 corridor, although there are other distinct commercial areas along Rt. 139.

⁷⁸ Hanover Open Space and Recreation Plan, 2017-2018 Update

- Hanover Center, which encompasses the Hanover Center Historic District, features mostly municipal buildings, but no commercial activity.
- The Zoning Bylaw should be recodified and updated.

Existing Conditions

Hanover's land use is dominated by single-family properties, which make up almost half of the town's total land area. Scattered throughout the town are a few two-family and multifamily properties. Together Hanover's commercial properties, both retail and office, make up about 15% of the town's total land area and are mostly clustered along the Route 53 corridor. Less than 4% of the total land area is dedicated to industrial uses. Figure 72 below shows current land use in Hanover.

Almost a quarter of land in Hanover is tax-exempt because it is either publicly-owned by a government entity or owned by a nonprofit, tax-exempt institution. The latter applies to private educational facilities, religious congregations, or charitable organizations like hospitals and museums. The vast majority of the town's tax-exempt land consists of parks and open spaces.

Around 5% of Hanover's land area is developable or potentially developable for residential or commercial purposes. This is all privately owned and does not include any land being used for open space and recreation. Another 4% of land is undevelopable, mostly due to

environmental constraints, such as difficult topography, or a lack of access.⁷⁹

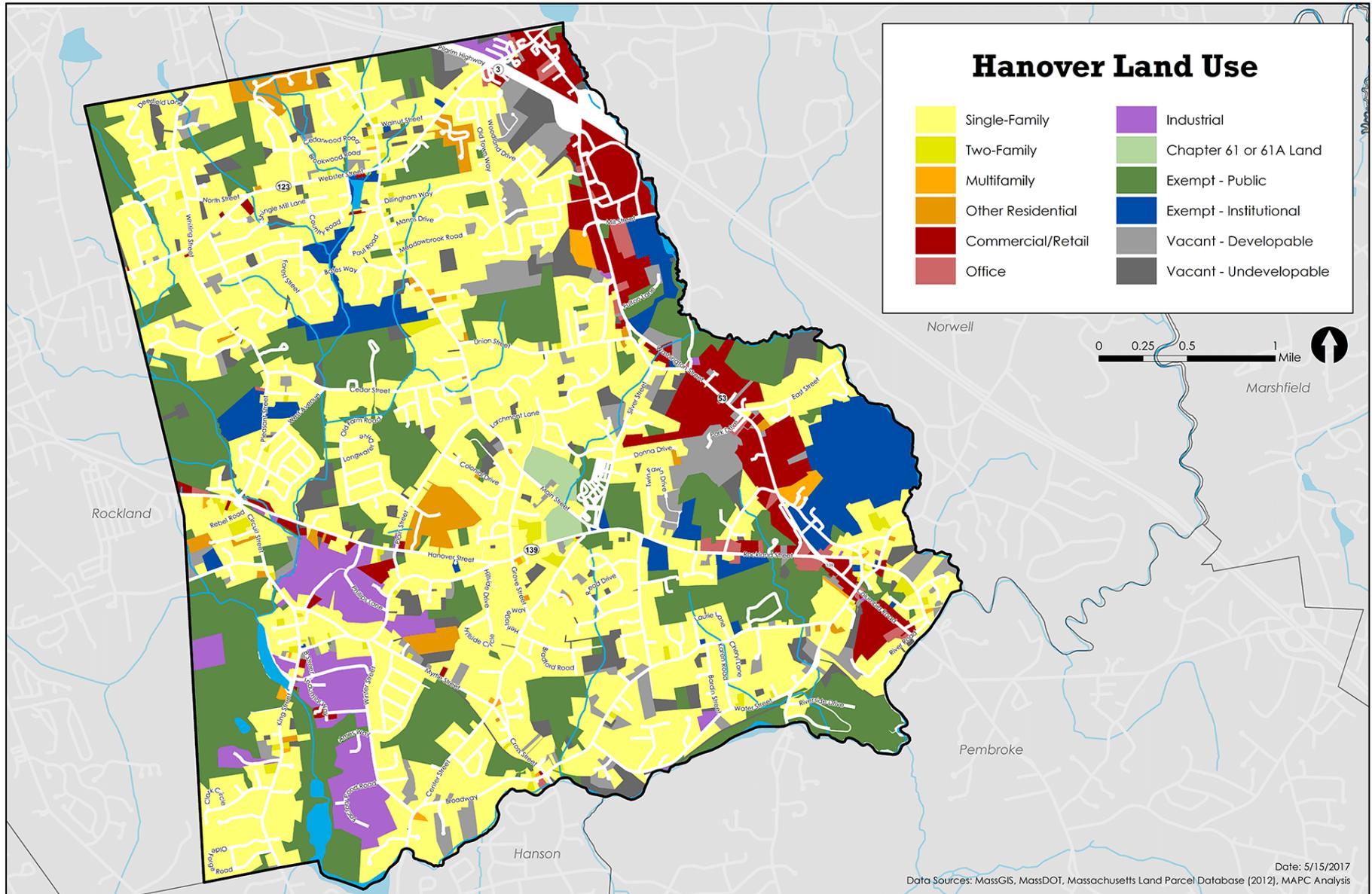
Growth and Development Patterns

Hanover's early settlers were clustered around six distinct villages: Hanover Center, Four Corners, Assinippi, North Hanover, West Hanover, and South Hanover. Hanover Center is located at the current convergence of Main Street, Center Street, Silver Street, and Hanover Street (Route 139). This area, which is recognized as a National Historic District, has remained largely unchanged for the last 100 years.

The Town's initial European settlement occurred in Four Corners, near where Washington Street (Route 53) turns into Columbia Road and connects with Hanover Street and Broadway. This area is adjacent to parts of the North River where William Barstow built the North River Bridge in 1657 and where Hanover's early shipbuilding yards were formed. Though the shipbuilding industry only lasted until the middle of the 1800s when natural resources were depleted and the winding river prevented the building of larger ships, Four Corners continued to be a bustling area. This was mainly due to the arrival of the Hanover Branch Railroad in 1864, which transported goods and passengers to and from Boston until 1938.

⁷⁹ Ibid.

Figure 72: Hanover Land Use Map



Prior to European Settlement, the Village of Assinippi was home to a small population of Wampanoag Native Americans. This historic village was located northeast of what is now Route 3 and at a point where an old Native American trail crossed west from the coast. In 1730, brothers Joshua and Joseph Jacobs established Jacob's Mill on Jacobs Pond, an area now in present day Norwell. Adjacent to Rocky Swamp (the current site of the Hanover Mall), this village was quite rural until the 1950s when the area was zoned for commercial purposes. At that time, many of the buildings changed to accommodate business uses. The Hanover Mall, a one-story enclosed shopping mall with 80 stores and restaurants, was built in 1971.

North Hanover was an agricultural village centered on farming. North Hanover, the area around today's intersection of Main Street and Webster Street (Route 123), still retains many examples of early New England cape and farmhouse architecture. Before refrigeration, ice was harvested on Hackett's Pond and stored until summer in an ice house on the shore. While West Hanover, the area south of Hanover Street along Circuit and King Streets, also started as a farming community, its iron industry began as early as the Revolutionary War by using water from Forge Pond. This area was home to the Drinkwater Iron Works, which was later occupied by the National Fireworks Factory, and the Lot Phillips Box Factory, which was in operation from 1872 to 1969.

Lastly, South Hanover was located along the Indian Head River in the southern portion of the town, as its name implies. This was also an area where the iron industry prospered due to the water power of the river. For example, the current site of Luddam's Ford Park was once

the Bardin's Iron Works, which began operation in 1704. The Center of South Hanover Village was the general store, with its Post Office, at Cross Street and Broadway. The route of the Hanover Branch Railroad through South Hanover now provides walking paths along the river.

While Hanover once consisted of distinct, separate villages, population growth and the accompanying development have filled in the gaps between the villages. Today, the town can be categorized as a bedroom community where many residents commute to the City of Boston for employment. Expansion of metropolitan Boston southeastward along the "South Shore" has been rapid since 1940, when towns consisted of small centers with a business zone along the principal road network. Since Hanover is not well served by public transportation, most residents rely on automobile transportation to get to work and around town. Like many other communities in the Boston region, Hanover has been somewhat of a victim of "suburban sprawl," notably marked by the heightened reliance on the personal motor vehicle since World War II.

Hanover Zoning Bylaw

The Town of Hanover Zoning Bylaw was first adopted in 1955. Numerous additions and amendments have been made over the years, with the latest revisions having occurred at the 2016 Annual Town Meeting.

The Zoning Bylaw establish eight districts (including the Floodplain District) and six overlay districts. Most of the

Town is zoned as Residence A. There are three business districts:

- The Commercial District can be found at the intersection of Rts. 53 and 123, along sections of Rt. 53, and two small pockets on Hanover Street.
- The Planned Shopping Center District is on Rt. 53 and essentially covers the Hanover Crossing site.

Additionally, there are three industrial zoning districts:

- The Limited Industrial District is off Rt. 53
- The Industrial District is located on the southern side of Hanover Street and along Winter Street down to the town line with Hanson
- The Fireworks District covers the Fireworks site and overlays part of the Industrial District.

The overlay districts include:

- Interchange District
- Wireless Telecommunications District
- Aquifer Protection Zone
- Well Protection Zone
- Adult Use District
- Medical Marijuana District

Portions of both the Aquifer Protection and Well Protection Zones overlay both residential and commercially zoned land. See Figure 73 for a map of the zoning districts.

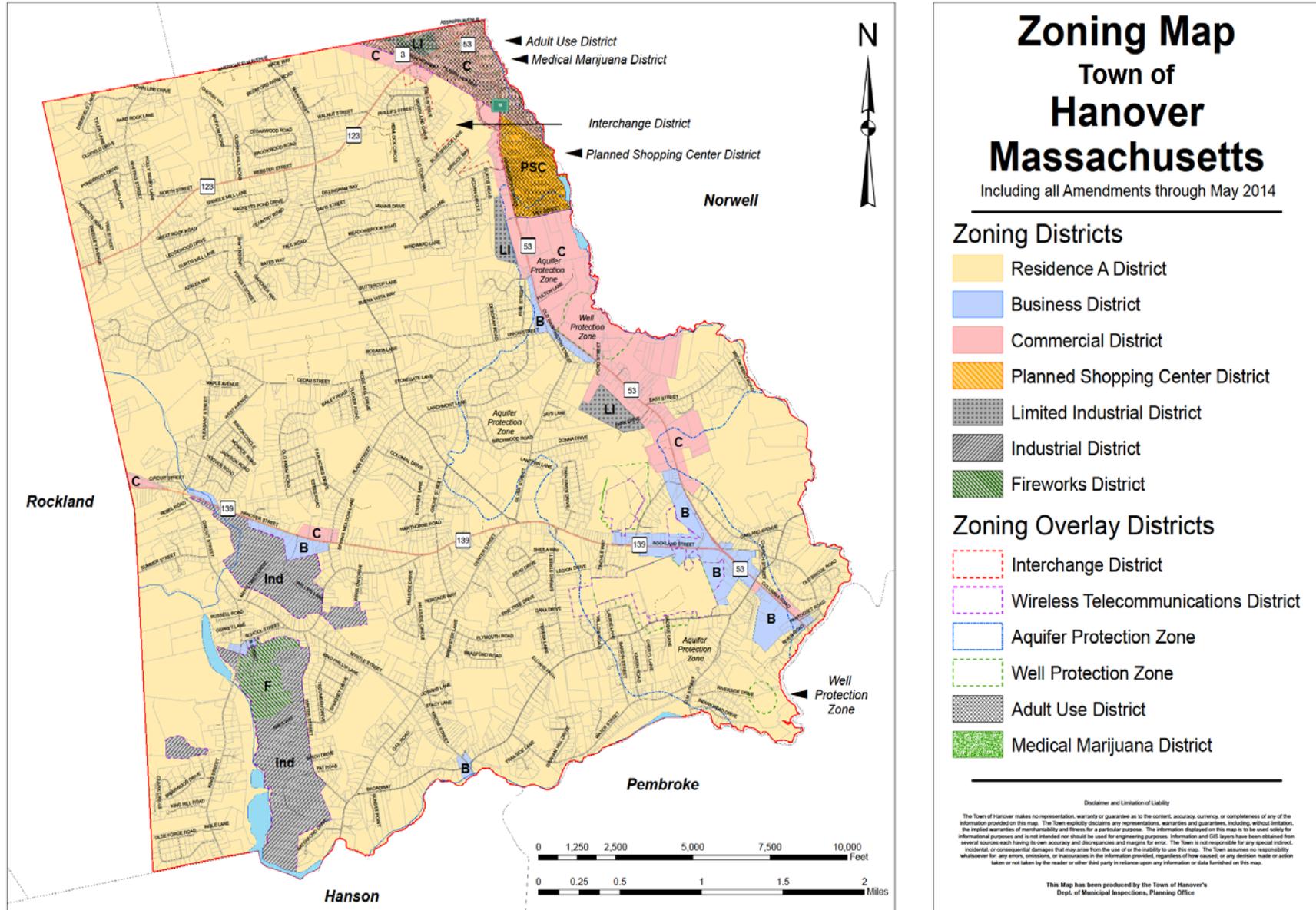
Residential Zoning

From a residential development perspective, the Residence A District only allows single-family dwellings on a single lot by right. The minimum lot size is 30,000 sq. ft. with a 30% maximum lot coverage. Accessory dwelling units are allowed by Special Permit granted by the Zoning Board of Appeals (ZBA), but occupancy in such units are limited to “one or more persons related to the primary owner-occupant by blood, marriage, or legal adoption”. Home occupations are also allowed through a ZBA Special Permit.

Planned Residential Development for Seniors (PRDS) is allowed with the issuance of a Special Permit and Site Plan Approval from the Planning Board. The purpose of a PRDS is to provide alternative housing for residents who are 55 years in age or older. The minimum acreage for such a development is twenty acres, ten of which should not include wetland resources. Five acres are to be set aside for open space. Single-family homes, duplexes, and town houses are allowed and the development must provide at least 11,000 sq. ft. for each dwelling unit.

The bylaw contains a rate of development provision that is designed to ensure that there is adequate infrastructure to support new growth. That section of the bylaw requires subdivisions in excess of 50 lots to be built out over at least a five-year period. Subdivisions that contain less than 50 lots are also spread out over five years but no more than ten lots can be developed in any single year.

Figure 73: Hanover Zoning Map



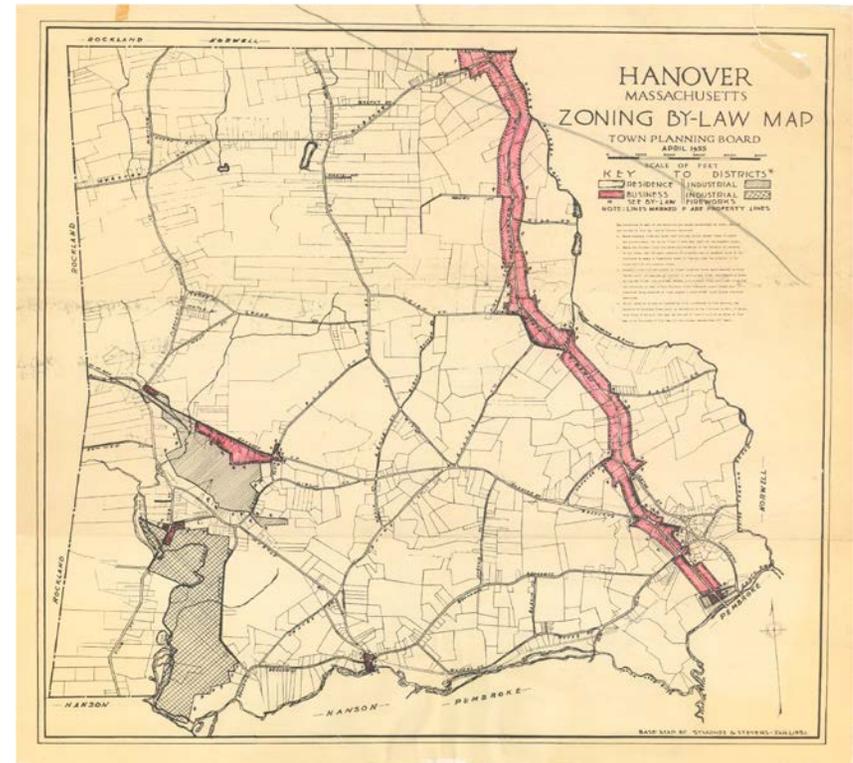
Commercial Zoning

In the Business District, the following uses are permitted by right: retail stores and service establishments; professional offices; banks; restaurants, catering services and other places where food is served for consumption on the premises; parking areas or garages; and medical uses. The ZBA may allow single-family dwelling uses by Special Permit. The Planning Board may issue Special Permits for the following uses: uses permitted in the Limited Industrial District, subject to certain conditions; multiple-use buildings, containing one or more business facilities (but only one residential unit); PRDS; and drive-in windows for businesses allowed in the district, except restaurants. The minimum lot size in this district is 44,000 sq. ft. with a maximum lot coverage of 60%.

The Commercial District is similar to the Business District and includes all uses allowed by right with the addition of museums and gift shops. Uses allowed through a Planning Board issued Special Permit is more expansive than the Business District and includes such uses as hotels, motels and boarding houses; restaurants; salesrooms for bicycles, boats, farm equipment and the like; membership clubs; contractors' yards and storage yards; funeral homes; passenger terminals; utility structures and warehouses; theaters and other indoor entertainment establishments; uses permitted in the Limited Industrial District, subject to certain conditions; PRDS; and drive-in windows for businesses allowed in the district, including restaurants. Additionally some uses are allowed by Special Permit and Site Plan Approval such as gas stations subject to the standards set forth in the bylaw. The minimum lot size in this

district is 44,000 sq. ft. with a maximum lot coverage of 60%.

Figure 74: First Zoning Map for Hanover – 1955



According to the Zoning Bylaw “[t]he purpose of the Planned Shopping Center District is to provide for the orderly maintenance, development and growth of the district as an area shopping center which provides goods and services at retail for residents, transients and tourists and to assure that shopping centers in the district are allowed to evolve and change in a commercially competitive manner consistent with current industry

standards for area shopping centers, while avoiding commercial blight and protecting the Town from adverse impacts associated with unplanned development.” This district encompasses Hanover Mall which is under new ownership and will be undergoing a \$40 million makeover and become Hanover Crossing featuring a contemporary-style, open retail style development. For more detail on the redevelopment of Hanover Mall, see the Economic Development chapter of this plan.

Industrial Zoning

In the Limited Industrial District, single story⁸⁰ business and/or professional office buildings are allowed by right. Special permit uses, if approved by the Planning Board include research laboratories; manufacturing enterprises; building materials salesrooms, utility structures, contractors' yards, storage warehouses and buildings and wholesale distribution plants; printing or publishing establishments, photographic studios, medical or dental laboratories; business and/or professional office buildings that exceed one story; and PRDS. Environmental standards that regulate odor, dust smoke and noise apply for development in this district. The minimum lot size in this district is 44,000 sq. ft. with a maximum lot coverage of 60%.

The Industrial District is similar to the Limited Industrial District, including the dimensional regulations. However, there is a provision that allows for a Special Permit to be

⁸⁰ Note that the overall height restriction for all districts is 35 feet or three stories.

issued by the Planning Board for increases to the maximum building and lot coverage.

The Fireworks District was established “to accommodate the existing uses and structures in that district and to promote the redevelopment of older industrial areas in a way which is beneficial to current and potential businesses”. Single story business and/or professional office buildings are allowed in the district. Additionally, renewable or alternative energy research and development facilities, and renewable or alternative energy manufacturing facilities, subject to Site Plan Review by the Planning Board. The minimum lot size in this district is 44,000 sq. ft. with a maximum lot coverage of 60%. For more detail on the Fireworks District, see the Economic Development chapter of this plan.

Overlay Districts

The Water Resource Protection District includes all areas designated on the Zoning Map as either Well Protection Zones or the Aquifer Protection Zone. The Special Permit Granting Authority in this district is the Planning Board. This section of the bylaw includes a list of uses that are deemed to be hazardous to the Town’s water supply and are prohibited. Allowed uses include those associated with the expansion, maintenance and upkeep existing residential uses; new residential development if allowed in the underlying zone; agriculture; wood lot management; outdoor recreation; and emergency repairs. New residential development would be allowed if permitted in the underlying zone with a minimum lot size of 60,000 sq. ft. Special permit uses include a one-time expansion of an

existing use; a new access drive or roadway; any use not otherwise allowed which can satisfy the requirements of the regulations; a single-family house on a lot with at least 30,000 sq. ft. exclusive of wetland resources⁸¹; and PRDS if certain conditions are met.

The Interchange District is an overlay that was created to encourage projects that are regional in nature and would benefit from a location adjacent to the highway interchange (Rts. 3 and 53). The uses allowed by right or by Special Permit in the underlying district apply. Additional uses include hotels, convention center, office park, restaurants, retail and service establishments, and garage. Residential uses along with warehouses and automobile sales and related uses are prohibited. The height for any building in this overlay district cannot exceed 60 feet or five stories.

The Zoning Bylaw also provides for a Village Planned Unit Development (VPUD) by Special Permit and Site Plan Approval from the Planning Board. As described in the bylaw, the purpose is to “promote the planning and development of projects that are characterized by economically viable mixed-uses, including housing alternatives to typical detached single family residential subdivisions, a variety of building types in village-style settings, and the creation of areas with distinct visual character consistent with traditional New England style development on parcels of land in proximity to Route 53”. A VPUD requires a minimum area of 25 acres, of which at least ten acres are exclusive of any wetland resource

⁸¹ Existing or the expansion of a home that retains less than 40% of the lot in its natural state or that results in lot coverage exceeding 15% may also be permitted by Special Permit.

areas. At least 20% of the parcel is to be set aside as open space. It is intended that a VPUD would include a mix of one, two and three bedroom units. No more than 20% of the parcel can be used for non-residential purposes if it is located in the Residence A zone and not more than 20% of the parcel can be used for residential development outside of the residence A zone. Single- and multi-family dwellings are allowed as well as any use allowed in the Business District.

Recommendations

As land use and zoning are intimately tied to a community’s growth and development, a number of land use recommendations have been made throughout this Master Plan. See the Housing, Economic Development, and Transportation chapters for additional detailed recommendations.

Goal 1: Ensure that the current Zoning Bylaw and any future zoning changes are consistent with and support the goals and objectives stated in the Master Plan.

Strategy 1: Conduct a thorough zoning audit of the bylaw to identify specific recommendations for revisions and updates.

Strategy 2: Consider undertaking a comprehensive revision and recodification of the Zoning Bylaw. The purpose of such a revision would be to modernize the bylaw, provide better organization (e.g. add a use table rather than a narrative description), adding illustrations, maintain internal

consistency with the bylaw’s provisions, and ensure that the bylaw conforms with applicable statutory and case law.

Strategy 3: Consider specific revisions to the Zoning Bylaw including:

- Definitions should be added for a number of land uses that are currently not defined (e.g. multi-family, multi-use)
- Update the use regulations to include uses that are currently not included such as mixed-use
- Assigning the Planning Board as the Special Permit Granting Authority rather than the ZBA for certain types of Special Permits
- Update the Zoning Map to ensure that it is consistent with the Zoning Bylaw.
- Review the Rate of Development section to determine whether it is necessary and effective. Seek a legal opinion for this provision since it is currently open ended and does not expire, which may contradict case law.
- Review parking standards to determine whether they are current

Strategy 4: Study the Village Planned Unit Development section to see how Hanover can better encourage mixed-use development around common open space. See the Housing element recommendations.

Strategy 5: Study the Planned Residential Development for Seniors to determine how Hanover can encourage this type of development where appropriate. For example, the 25 acre minimum area for PRDS may act as a disincentive

to developers and many communities have encouraged this type of development on smaller parcels.

Goal 2: Encourage the balance between residential, commercial and industrial development to ensure the Town continues to prosper while protecting the character of the community.

Strategy 1: Develop an Open Space Residential Design (OSRD) bylaw, without an age restriction.

OSRD is a tool to protect natural resources and open space. It includes elements of conservation subdivision regulations and cluster development bylaws and is used to regulate new subdivisions of land in a manner that maximizes the protection of natural resources (wetlands, forests, agriculture lands, open space) while providing for new construction and adequately compensating landowners.⁸² To encourage OSRD, the Town can consider allowing density bonuses (above underlying zoning) where additional affordable housing is created, where additional open space is preserved, or where additional public amenities are provided.

Strategy 2: Revise the Zoning Bylaw to include incentivized traditional New England “village-style” mixed-use development where appropriate along Rt. 53 as a way to discourage sprawl and traffic congestion. Additionally, smaller scale mixed-use development can be considered in historic village centers.

⁸² Executive Office of Energy and Environmental Affairs Smart growth Toolkit, <https://www.mass.gov/service-details/smart-growth-smart-energy-toolkit-modules-open-space-design-osdnatural-resource>

Implementation

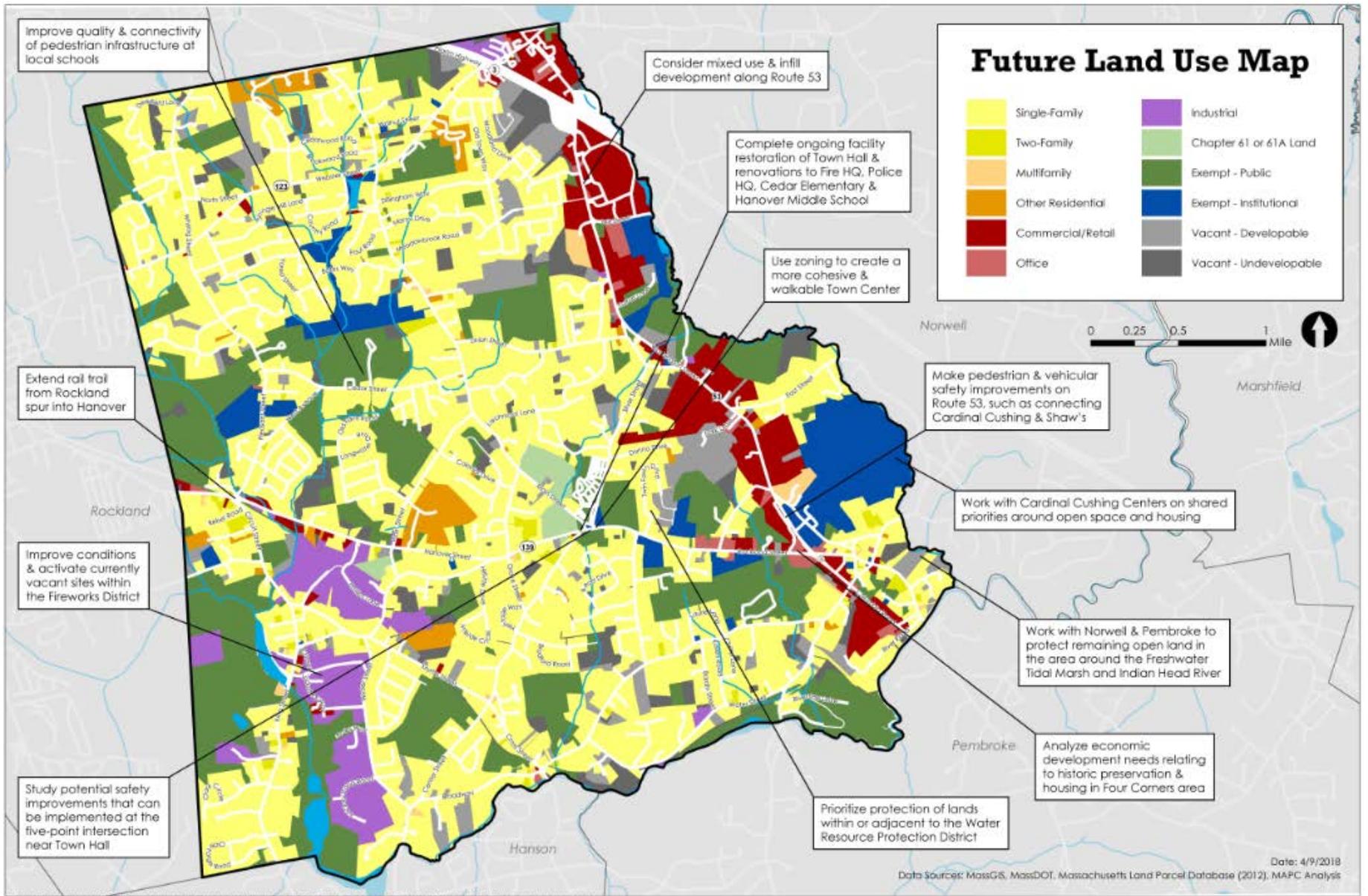
The implementation element is based on the goals and objectives of this Master Plan and the data that was collected and analyzed. All planning elements will be initiated by the Planning Board. The Board of Selectmen and other Town Boards, Commissions and Committees with the assistance of the Town staff should use this Master Plan as a guidance and policy document for the period of 2017 to 2030.

It is important to note that planning is a dynamic process and priorities can shift over time. Additionally, the Town's capacity to implement the Plan may shift over time due to changes in staffing, for example. A consistent review process allows for these issues to be acknowledged while keeping each specific recommendation on the table unless a situation dictates that it be reconsidered. A regular evaluation or follow-up procedure will at least indicate how a particular action item was ultimately addressed, or it calls out those that still need attention.

An overarching goal of the plan is to improve internal communications between municipal departments, boards, and committees, as well as externally with residents of the Town. Better communication, transparency, and coordination of activities will go a long way toward implementation of this Master Plan any other planning efforts undertaken by the Town. Hanover should continue to disseminate information on town processes through all channels of communication including the Town website and should communicate capital improvement plans more widely and visibly.

In order to ensure follow-through on the recommendations of this plan and provide some "accountability" for plan implementation, the Town should consider some mechanism for reporting on progress on a regular basis. It is important to make sure that the Town makes progress toward implementing the plan and highlighting accomplishments over time. This reporting should include updates on progress and achievements, but should also address barriers to implementation that have been identified and how they may be overcome. Some communities provide this information in annual reports to the Board of Selectmen or Town Meeting. Others have developed a follow-up evaluation form that specifically lists each action item and asks for responses. The appointment of a Master Plan Implementation Committee could assist in the oversight and coordination of the plan's implementation.

The implementation plan intends to deliver on the promise of the goals and objectives expressed throughout this process, with a program of tangible steps for the Town to take over the next ten years and beyond. There is a high level of activity on these issues, based upon the input received during the planning process.



Housing

<p>Goal 1: Create opportunities to develop a diverse and affordable housing stock to meet the needs of a changing demographic profile in the town.</p>			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
<p>Strategy: Support the creation of housing units that are affordable to a broad range of incomes, including both rental units and owner units.</p>			
Action: Identify locations to encourage development of diversified affordable housing opportunities.	AHT, TP	Short-term	Affordable Housing Trust Fund, Community Preservation Act (CPA)
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
<p>Strategy: Encourage and maintain a mix of housing types by supporting development that provides for households at all income levels and encourages a diversity of age, households, and ability.</p>			
Action: The Town should coordinate with the Council on Aging and other local senior advocates to help households in need get the support they deserve through local programs or improved living conditions.	COA	Ongoing	Affordable Housing Trust Fund, CPA
Action: Ensure that at least 10% of new housing is accessible or adaptable to individuals with disabilities and/or include supportive services.	AHT	Ongoing	Affordable Housing Trust Fund, CPA
Action: Explore options for providing housing for veterans.	Vet	Ongoing	Affordable Housing Trust Fund, CPA
<p>Goal 2: Leverage existing funding sources such as the Hanover Affordable Housing Trust and the Community Preservation Act to meet existing and future housing needs.</p>			

Housing

Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Provide financial and other supportive services to assist homeowners.			
Action: Support or create programs that support necessary home improvements including deleading and septic repairs for units occupied by low- and moderate-income households.	AHT, TP	Ongoing	Affordable Housing Trust Fund, Community Preservation Act (CPA)
Action: Utilize Affordable Housing Trust Fund and Community Preservation Act funds for programs such as First Time Homebuyers Assistance and a Veteran's loan project.	AHT, TP	Ongoing	Affordable Housing Trust Fund, Community Preservation Act (CPA)
Goal 3: Review and revise the Zoning Bylaw to remove barriers and create more incentives toward the production of affordable housing.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Amend the Zoning Bylaw to assist in the creation of new housing units.			
Action: Study the Village Planned Unit Development (PUD) to see how Hanover can better encourage mixed-use development around common open space	TP, PB	Short-term	N/A
Action: Explore use of a Chapter 40R Smart Growth Zoning Overlay.	TP, PB	Medium-term	N/A
Action: Consider inclusionary zoning that requires a certain percentage of affordable housing be included in any new residential development.	TP, PB	Medium-term	N/A

Housing

Action: Consider zoning for cottage-style housing, especially for over-55 housing.	TP, PB	Medium-term	N/A
Goal 4: Encourage affordable housing development to achieve, exceed and maintain the Chapter 40B 10% goal.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Maintain affordability of units currently on the Subsidized Housing Inventory.			
Action: The Town should closely monitor these units and take steps to preserve affordable units so that they remain on the SHI.	AHT	Medium-term	N/A

Economic Development

Goal 1: Invest in the Fireworks District.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Activate all currently vacant sites within the Fireworks District by defining it as a desirable and active job center.			
Action: Brand the area and market it to potential tenants.	Private	Ongoing	N/A
Action: Invest in signage for the entrance to the industrial park.	Private	Ongoing	N/A
Action: Utilize digital advertising to market the Fireworks District.	Private	Ongoing	N/A

Economic Development

Strategy: Improve conditions within the industrial park in the Fireworks District.			
Action: Work with local businesses in the industrial park to create a Business Committee and assist in their program development.	BOS	Short-term	N/A
Action: Consider seeking State assistance for the area through the MassWorks program to assist in installing high-speed internet.	TP	Short-term	MassWorks
Action: Consider seeking State assistance through the Mass Development Site Readiness Program to prepare vacant sites for active uses.	TP	Medium-term	MassDevelopment
Strategy: Connect with workforce training and/or educational institutions.			
Action: Work with local business to identify the most pertinent skills to meet local industry needs and direct job-seekers to the available instructional resource or workforce training.	TP	Ongoing	N/A
Goal 2: Build organizational capacity to advocate for continued revitalization and stronger growth in Hanover's commercial areas.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Work with local businesses to identify and meet local economic needs.			
Action: Work with local businesses to create a Business Committee and assist in program development.	TM	Ongoing	N/A

Economic Development

Action: Activate vacant sites through rehabilitation and infill development to encourage the location of new business development.	TP	Ongoing	N/A
Action: Convene businesses to identify the most pertinent skills to meet the needs for a skilled workforce and work with area educational institutions to develop programs.	Private	Ongoing	N/A
Action: Hold regular business owner workshops to develop stronger lines of communication between Town Hall and businesses to better identify and respond to business needs and interests.	TM	Ongoing	N/A
Action: Enhance branding and marketing of the Town's commercial areas locally and regionally.	Private	Ongoing	N/A
Goal 3: Develop a supportive infrastructure to enhance economic development.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Invest in pedestrian friendly strategies to improve walkability and connect commercial areas.			
Action: Review transportation networks impacts on businesses and customer attraction.	TP, DPW	Ongoing	Ch. 90
Action: The Town should invest in pedestrian friendly strategies to improve walkability and connect commercial areas by adding new sidewalks throughout town.	TP, DPW	Ongoing	Ch. 90
Action: Work with the developer of the Hanover Crossing to ensure proper implementation of the TIF agreement.	TP, BOS, PB	Ongoing	N/A

Economic Development

Goal 4: Promote downtown development of the Hanover Town Center.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Consider strategies to create more of a cohesive Town Center beyond Town Hall and the library, including placemaking, design guidelines, and reduce auto dependency.			
Action: Consider zoning recommendations to enhance the Town Center including revisions to the Village Planned Unit Development (PUD) and other means to encourage more mixed use and infill development.	TP, PB	Short-term	N/A
Action: Explore use of a Chapter 40R Smart Growth Zoning Overlay.	TP, PB	Medium-term	N/A

Transportation & Circulation

Goal 1: Invest in pedestrian infrastructure improvements that prioritize the safety of the most vulnerable populations, such as children and seniors.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Improve quality and connectivity of pedestrian infrastructure at local schools.			
Action: Construct sidewalks on both sides of Cedar Street.	DPW	Medium-term	Ch. 90, town funds, Complete Streets funds

Transportation & Circulation

Action: Extend the sidewalks on both sides of street along Main Street, Whiting Street/Pleasant Street, and West Avenue to create a more complete pedestrian network.	DPW	Medium-term	Ch. 90, town funds, Complete Streets funds
Action: Update signage to improve visibility.	DPW	Ongoing	Town funds, Complete Streets funds
Strategy: Make pedestrian safety improvements for Cardinal Cushing residents walking to Shaw's.			
Action: Construct sidewalks on both sides of Columbia Road between Hanover Street and Rockland Street.	DPW	Medium-term	Ch. 90, town funds, Complete Streets funds
Action: Paint a crosswalk and install a push button pedestrian signal for pedestrians to cross Columbia Road.	DPW	Short-term	Ch. 90, town funds, Complete Streets funds
Strategy: Leverage additional funding to support new infrastructure and infrastructure improvements.			
Action: As part of a Complete Street Policy, create a sidewalk mitigation fund to which developers must contribute if they choose not to build sidewalks.	DPW	Short-term	Developer funded
Goal 2: Address mobility and safety concerns on highly trafficked corridors and intersections.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Prioritize infrastructure investments and safety improvements at intersections identified as particularly dangerous by residents and previously commissioned studies.			

Transportation & Circulation

Action: Implement the signal timing and phasing improvements outlined in VHB's study for safety improvements at the intersection of Route 53 and Route 139, and Route 53 and Broadway.	DPW	Medium-term	MassDOT, Ch. 90
Action: Paint a crosswalk and install a push button pedestrian signal for those crossing Route 53 at the entrance to the University Sports Complex.	DPW	Short-term	Ch. 90, town funds, Complete Streets funds
Action: Commission a study to review potential safety improvements that can be implemented at the five-point intersection near Town Hall. This intersection includes Main Street, Silver Street, Hanover Street, and Center Street.	BOS, TM	Short-term	Town funds
Strategy: Incorporate general traffic safety practices into ongoing and planned work.			
Action: Slow vehicle speeds by narrowing travel lanes and adding bicycle lanes.	DPW	Ongoing	Ch. 90, town funds, Complete Streets funds
Action: Increase visibility and shorten crossing distance for pedestrians by installing curb bump-outs at priority intersections.	DPW	Medium-term	Ch. 90
Action: Implement safety improvements during already scheduled infrastructure upgrades to minimize construction time and travel disruption.	DPW	Ongoing	N/A
Goal 3: Improve bicycle and pedestrian accessibility and connectivity.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Extend rail trail from Rockland spur into Hanover.			

Transportation & Circulation

Action: Connect to existing open space, walking trails, and other destinations.	TP, OSC, BOS	Ongoing	RTP, LWCF, CPA
Action: Facilitate development by building on existing right of way.	TP, OSC, BOS, TM	Medium-term	N/A
Action: Generate community support and involvement in planning and implementation by offering public meetings and volunteer opportunities.	OSC, BOS, TP, TM	Ongoing	N/A
Strategy: Ensure bicycle and pedestrian infrastructure is built as a network and links local destinations.			
Action: Develop a Bicycle and Pedestrian Plan to identify areas of concern and to outline specific desired town-wide improvements.	TP, DPW, OSC	Short-term	N/A
Action: Host pilots to showcase potential improvements to residents and build community support.	TP, DPW, OSC	Ongoing	N/A
Strategy: Adopt a Complete Streets Policy.			
Action: Work with MAPC to adopt a Complete Streets policy – roads that cater to all users including automobile, transit, pedestrian and bicyclists – tailored to the needs of the town. Passing a Complete Streets bylaw will make the town eligible to receive funds from the state for roadway safety improvements.	DPW	Short-term	MAPC Technical Assistance
Goal 4: Expand mass transit and shuttle services options to, from, and within Hanover.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source

Transportation & Circulation

Strategy: Partner with GATRA to expand upon existing shuttle and bus services that serve Hanover.			
Action: With Hanover's Council on Aging, determine how shuttle service would be expanded, both in terms of hours of operation as well as destinations offered.	COA	Ongoing	GATRA, town funds
Action: As part of GATRA's service expansion to the Hanover Crossing, determine if it is possible to extend the service area to other desired locations, including nearby commuter rail stations.	GATRA	Short-term	GATRA, town funds
Strategy: Raise awareness among residents of shuttle services offered.			
Action: Implement a public awareness campaign that provides information about shuttle, bus, and other mass transit options available to Hanover residents, including the P & B bus, GATRA services, and the shuttle to Logan Airport.	TM	Short-term	N/A
Goal 5: Leverage resources from new developments to secure additional funding for transportation improvements.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Secure additional investments in transportation infrastructure as part of the development process.			
Action: Advocate for transit-improvements as part of the Hanover Mall redevelopment project. Some of the safety concerns on Route 53 may be able to be addressed through this process.	PB, TP	Short-term	N/A

Transportation & Circulation

Action: Institute a transportation demand management (TDM) program that requires developers to invest in transit improvements based on projected development impact.	PB, TP	Short-term	N/A
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Public Services & Facilities

Goal 1: Ensure facilities meet community and departmental needs.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Develop new department facilities and infrastructure capable of meeting current service needs and projected future demand.			
Action: Consider a new fire station in the next few years if warranted as a result of new residential and commercial growth.	FD	Long-term	Town capital funds
Action: Continue the Center School expansion project.	SD	Short-term	Town capital funds
Action: Move forward with plan to develop a Town-wide Strategic Information Technology Plan.	BOS	Short-term	N/A
Strategy: Complete routine maintenance and renovations which allow host Departments to fulfill their missions.			
Action: Complete ongoing facility restoration of Town Hall and renovations to Fire HQ, Police HQ, Cedar Elementary and Hanover Middle School.	BOS, FD, PD, SD	Short-term	Town capital funds

Public Services & Facilities

Strategy: Establish or expand specific channels for feedback about facilities and services.			
Action: Ensure that all appropriate staff are sufficiently trained in the use of SchoolDude to highlight conditions of buildings and communicated needed improvements.	BOS	Ongoing	N/A
Action: Explore the utility and feasibility of creating a 311 system for citizen feedback.	BOS	Short-term	Town funds
Action: Continue renovations to increase facility accessibility.	TM	Ongoing	Town capital funds
Action: Hold public hearings to collect resident feedback on current and future use of Town-owned facilities	BOS	Ongoing	N/A
Goal 2: Ensure adequate resources for Hanover's public services.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Ensure staffing levels are adequate to fulfill departmental duties, and resources are efficiently distributed.			
Action: Maintain adequate staffing levels appropriate to call volume levels.	BOS, TM, FD	Ongoing	Town funds, Staffing for Adequate Fire and Emergency Response (SAFER) grants
Action: Share staff responsibilities and costs of FTE between Departments where such cross departmental work enhances efficiency and does not overstretch individual or departmental capacity.	BOS, TM	Ongoing	N/A

Public Services & Facilities

Strategy: Ensure capital projects do not negatively impact departmental operational budgets.			
Action: Continue practice of decreasing the operating budget's dependence on free cash, leaving more resources available for capital projects.	BOS, TM	Ongoing	N/A
Action: Where possible, supplement funding for capital projects through grant programs, e.g. MSBA, Green Communities, and Assistance to Firefighters Grant Program.	BOS, TM	Ongoing	Grant funds as noted
Action: Use proceeds from the disposal of property made extraneous or obsolete by new construction to directly offset construction expenses.	BOS, TM	Ongoing	N/A
Action: Explore regionalization opportunities for more efficient public service delivery.	BOS, TM	Ongoing	N/A
Goal 3: Ensure all Town-owned buildings are fully and efficiently used			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: When undertaking major facility constructions or expansions, consider Department's facilities portfolio holistically.			
Action: Expand the scope of the Sylvester School Redevelopment Committee to include consideration of potential re-uses of the Salmond School building as well.	BOS	Short-term	N/A
Strategy: Consider disposal or re-use of individual buildings in a strategic manner.			

Public Services & Facilities

Action: Develop a process for broadly advertising and expeditiously disposing of property being sold by Town to ensure competitive bidding.	BOS , TM	Ongoing	N/A
Action: Develop disposition RFP's with particular conditions for use, sensitive to such factors as historic preservation.	BOS , TM, HC	Ongoing	N/A

Open Space & Recreation

Goal 1: Improve coordination and collaboration among Town boards and departments and with conservation organizations to promote protection of critical areas in Hanover.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Improve communication and coordination between the Open Space Committee and Conservation Commission on land protection and habitat restoration.			
Action: Jointly work to identify key parcels for acquisition/preservation that can be brought under Conservation Commission control.	CA , OSC, CC	Ongoing	N/A
Strategy: Improve the working relationship with the Board of Selectmen and Town Manager. Keep them informed about planned activities and priorities for preservation and recreation.			
Action: Work with the Town Manager to identify priority parcels for acquisition and/or permanent protection.	OSC , CA, CC, TM, TP	Ongoing	Local Acquisitions for Natural Diversity (LAND) grant, Land and Water Conservation Fund (LWCF)

Open Space & Recreation

<p>Strategy: Continue collaboration with Hanover’s Historical Commission, Historical Society, Community Preservation Committee, and outside conservation entities such as the Wildlands Trust and North & South Rivers Watershed Association on preservation and recreation projects.</p>			
<p>Action: Work with the Community Preservation Committee to identify suitable parcels for acquisition with Community Preservation Act funds.</p>	<p>OSC, CC, CPC, TP</p>	<p>Ongoing</p>	<p>CPA</p>
<p>Action: Work with local nonprofit organizations, such as the Wildlands Trust, to apply for grant funding for land acquisition in Hanover.</p>	<p>OSC, CA, CC, TP</p>	<p>Ongoing</p>	<p>Conservation Partnership Grant (CPG)</p>
<p>Goal 2: Preserve and protect critical natural and scenic areas in Hanover.</p>			
<p>Strategy/Action:</p>	<p>Parties Responsible</p>	<p>Timeframe</p>	<p>Funding Source</p>
<p>Strategy: Review, update, and prioritize list of lands of interest for possible future protection.</p>			
<p>Action: Update inventory of parcels that are of interest to the Town for acquisition and are currently undeveloped or desirable to purchase.</p>	<p>OSC, CC</p>	<p>Ongoing</p>	<p>N/A</p>
<p>Action: Prioritize inventory using the “Land Acquisition Worksheet” and other tools such as “Mapping and Prioritizing Parcels for Resilience” by Mass Audubon and Nature Conservancy.</p>	<p>OSC, CC</p>	<p>Ongoing</p>	<p>N/A</p>
<p>Strategy: For properties that are already designated as open space, but have only limited or temporary protection, work to protect properties in perpetuity.</p>			
<p>Action: Add conservation restrictions to as many designated open space parcels as possible.</p>	<p>CC, CA</p>	<p>Ongoing</p>	<p>N/A</p>

Open Space & Recreation

<p>Goal 3: Encourage sustainable growth and development that is consistent with the character of Hanover.</p>			
<p>Strategy/Action:</p>	<p>Parties Responsible</p>	<p>Timeframe</p>	<p>Funding Source</p>
<p>Strategy: Update Hanover’s land use and environmental bylaws and regulations (Zoning Bylaw, Wetlands Protection Bylaw, and Subdivision Rules & Regulations) to ensure that development is consistent with the town’s rural character, encourages open space preservation, and is designed well.</p>			
<p>Action: Adopt a Scenic Road Bylaw to formalize the application and review process of projects along designated scenic roads.</p>	<p>PB, TP</p>	<p>Short-term</p>	<p>N/A</p>
<p>Strategy: Encourage development that preserves open space by building at a somewhat higher density through the use of Open Space Design (OSD) or Natural Resource Protection Zoning (NRPZ).</p>			
<p>Action: Develop an Open Space Design or Natural Resource Protection Zoning Bylaw.</p>	<p>PB, TP, CC</p>	<p>Medium-term</p>	<p>N/A</p>
<p>Strategy: Amend Subdivision Rules & Regulations to promote low impact development (LID) techniques and green design.</p>			
<p>Action: Investigate the potential of further utilizing Low Impact Development techniques and/or developing a Low Impact Development Bylaw.</p>	<p>PB, TP</p>	<p>Medium-term</p>	<p>N/A</p>
<p>Goal 4: Maintain and improve public access to conservation parcels and their recreational opportunities.</p>			
<p>Strategy/Action:</p>	<p>Parties Responsible</p>	<p>Timeframe</p>	<p>Funding Source</p>
<p>Strategy: Continue to focus on walking trail creation, maintenance, and informational outreach.</p>			

Open Space & Recreation

Action: Work with the Conservation Commission to review placement of new trails in order to avoid impacts to important natural resources, including wetlands and rare species.	OSC, CA, CC	Ongoing	N/A
Strategy: Improve and create additional opportunities for recreation such as equestrian trails, bike trails, and water access.			
Action: Assist with any "rail-to-trail" initiative assembling a through bike trail in Hanover on the former railroad bed and nearby lands.	CA, OSC, BOS, TP	Ongoing	Recreational Trails Program (RTP), LWCF, CPA
Strategy: Review parking availability at each area, and work with the Department of Public Works to add parking where needed.			
Action: Identify conservation lands and trails lacking safe parking and add additional parking where it is needed/appropriate.	CC, OSC, DPW, TP	Medium-term	Town capital funds
Strategy: Recruit additional volunteers for the maintenance of passive recreational facilities, especially walking trails. Improve relationship with the Department of Public Works to obtain assistance with upkeep of conservation parcels.			
Action: Establish a group of volunteers responsible for creating and maintaining trails.	OSC	Short-term	N/A
Strategy: Improve pedestrian safety around and between conservation and recreation sites by adding crosswalks and expanding the town's sidewalk network.			
Action: Develop a plan for adding sidewalks to key roadways in town, specifically in areas where trails do not connect.	TP, DPW	Medium-term	Town capital funds
Action: Seek funding for the construction of additional sidewalks in Hanover.	TP, DPW	Medium-term and long-term	Chapter 90 and TIP funds
Goal 5: Establish a long-range strategy for protecting Hanover's drinking water supply.			

Open Space & Recreation

Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Prioritize protection of available land abutting or adjacent to the Water Resource Protection District to act as a buffer to prevent contamination.			
Action: Acquire land that comes available in or near the Water Resource Protection District.	CA, OSC, CC, TP, DPW	Ongoing	LAND, LWCF
Action: Work with the North & South Rivers Watershed Association to identify priority parcels for protection of Hanover's drinking water.	CA, OSC, CC	Ongoing	CPG, MA Environmental Trust (MET)
Strategy: Work with neighboring towns and land trusts to protect remaining open land in the area around the Freshwater Tidal Marsh and Indian Head River.			
Action: Work with Pembroke and Norwell to nominate an area surrounding a portion of the North River/Indian Head River as an Area of Critical Environmental Concern.	OSC, CC, TP	Medium-term	CPA
Strategy: Ensure there is coordination regarding the protection of water quality and quantity (such as for permitting, constructing, and monitoring wells and septic systems).			
Action: Review the existing system for addressing failing septic systems and identify ways in which it can be improved.	CC, BOH	Short-term	Town capital funds
Action: Investigate the potential of using another substance besides sand/salt on the roadways during the winter as a way to further protect drinking water.	CC, DPW	Medium-term	MET
Goal 6: Maintain and enhance recreational facilities for the enjoyment of Hanover residents and visitors of all ages, abilities, and interest.			

Open Space & Recreation

Strategy: Repair and update existing sports fields.			
Action: Update the Parks and Recreation Master Plan from 2007 to address current recreational facility needs in Hanover.	PRC, TP, BOS	Medium-term	Town capital funds
Strategy: Maintain existing sports fields.			
Action: Create a maintenance plan for sports fields in town.	PRC, DPW, TP, BOS	Medium-term	Town capital funds
Strategy: Create small, local parks, like a playground or street hockey rink, in various areas of town, particularly in areas currently underserved by neighborhood recreational facilities.			
Action: Investigate the potential of adding small, local parks in areas where there are no recreation amenities, such as the northern portion of town.	PRC, CPC, TP	Ongoing	CPA, Parkland Acquisitions and Renovations (PARC) grant, LWCF

Historic & Cultural Resources

Goal 1: Preserve and protect critical historic and cultural resources in Hanover.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Action: Analyze economic development needs for Four Corners district to complement historic asset inventory and local historic district study.	TP, HC	Short-term	CPA
Action: Explore potential for developing additional housing in Four Corners area to support local business activity.	TP	Short-term	CPA

Historic & Cultural Resources

Action: Extend rail trail from South Hanover to Four Corners.	CA, OSC, BOS, TP	Medium-term	RTP, CPA
Action: Consider extending the demolition delay bylaw from one year to two years.	HC	Short-term	N/A
Action: Educate property owners, particularly farms and stables about conservation restrictions and the Wildlands Trust of Southeastern Massachusetts.	CC	Ongoing	N/A
Action: Explore options for recognizing private preservation efforts including historic house tours and historic preservation awards.	HC	Medium-term	N/A
Action: Develop a protocol to safeguard historic documents for preservation for future generations.	HC	Ongoing	N/A
Goal 2: Improve public awareness of and education about Hanover's historic and cultural assets.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Action: Develop online portal for homeowners interested in preserving their homes with information about loan programs and tax incentives.	HC	Short-term	CPA
Action: Engage arts and cultural business community in planning for historic village centers.	HCC, HC	Ongoing	N/A

Clean Energy

Goal 1: Reduce municipal energy use by 20 percent in accordance with the Town's Energy Reduction Plan.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Build energy management capacity to implement innovative clean energy projects.			
Action: Evaluate opportunities to establish a volunteer energy committee to assist with project management and opportunity identification.	BOS, TM	Short-term	N/A
Action: Consider adding a part-time employee responsible for municipal and community-wide clean energy initiatives.	BOS, TM	Long-term	Town funds
Action: Carry out quarterly review of municipal energy data in MassEnergyInsight to ensure data consistency and track progress toward the Town's goal.	Fac	Ongoing	N/A
Action: Communicate projects underway and progress toward achieving the energy reduction goal to the Board of Selectmen on an annual basis.	Fac	Ongoing	N/A
Strategy: Implement energy conservation strategies targeting the Town's highest energy users and least efficient buildings.			
Action: Evaluate options to implement a behavioral program at Hanover's public schools to improve building operational efficiency and engage students on clean energy issues.	SD	Ongoing	N/A

Clean Energy

Action: Implement energy analytics at the Cedar Elementary School to better understand the buildings energy consumption and identify strategies to optimize building efficiency.	SD	Short-term	Town funds
Action: Evaluate HVAC system at the Police Department Headquarters building for upgrades that improve building efficiency and occupant comfort.	PD	Short-term	Green Communities grant
Action: Incorporate high efficiency standards into the plans for the new Fire Station and for any new or renovated facility.	Fac	Short-term	Town capital funds
Strategy: Improve municipal fleet vehicle fuel efficiency.			
Action: Create a capital plan for replacement of gasoline fueled passenger vehicles with electric vehicles, in line with current vehicle replacement plan.	BOS, Fac	Medium- to long-term	Town capital funds, Green Communities grant
Action: Install level II electric vehicle charging stations for both Town employee and resident use.	Fac	Short-term	Town capital funds, Electric Vehicle Incentive Program (EVIP)
Action: Evaluate opportunities to retrofit medium and heavy duty vehicles currently in the Town's fleet and up-fit new acquisitions to hybrid electric or hydraulic electric fuel systems.	BOS, Fac	Medium- to long-term	Town capital funds, Green Communities grant
Action: Explore feasibility of purchasing fuel use tracking software or fleet telematics to better understand vehicle drive cycles and identify opportunities for fleet right-sizing.	BOS, Fac	Medium- to long-term	Town capital funds

Clean Energy

Strategy: Continue to seek funding opportunities to support municipal clean energy efforts.			
Action: Continue involvement in the Green Communities Program.	BOS	Ongoing	N/A
Action: Leverage all available funding and incentives for energy efficiency through the MassSave program and for emerging clean technologies through MassCEC.	Fac	Ongoing	MassSave, MassCEC program-0 (Clean Energy Center)
Action: Apply for Municipal Energy Technical Assistance grant funding from the Massachusetts Department of Energy Resources to support clean energy initiatives.	TM, BOS	Ongoing	N/A
Action: Implement a community-wide LED streetlight retrofit, leveraging funding available through the Metropolitan Area Planning Council and Massachusetts Department of Energy Resources.	TM, BOS	Short-term	MAPC, DOER
Action: Apply for funds through the Massachusetts Department of Environmental Protection's Electric Vehicle Incentive Program (EVIP) to support the acquisition of electric and hybrid-electric vehicles and installation of electric vehicle charging stations.	TM, BOS	Short-term	EVIP
Action: Evaluate the feasibility of establishing a municipal clean energy revolving fund.	BOS	Medium-term	N/A
Goal 2: Implement local initiatives and policies to support reduction of both residential and commercial energy use and increase deployment of renewable energy sources.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source

Clean Energy

Strategy: Create initiatives to support residential and commercial reduction of energy consumption and reduce energy costs for residents and businesses.			
Action: Evaluate third-party providers to implement a residential energy efficiency outreach program to encourage homeowner utilization of the MassSave home energy audit and energy conservation measure incentives.	BOS	Medium- to long-term	Town capital funds
Action: Explore opportunities to implement a residential solar outreach program (e.g. Solarize Mass) to support continued growth of residential solar capacity.	BOS	Long-term	Town capital funds, MassCEC program
Action: Adopt a local bylaw to enable businesses to finance energy efficiency and renewable energy projects through MassDevelopment's Commercial Property Assessed Clean Energy program (to be released in 2017).	BOS	Short-term	N/A
Action: Consider implementing a Green Municipal Aggregation program to reduce electric rates and increase the amount of local renewable energy used by the Town.	BOS	Short-term	N/A
Action: Make annual data request for usage and efficiency from National Grid to track progress in the residential and commercial sectors.	BOS	Ongoing	N/A
Strategy: Create programs to build community identity and buy-in to the Town's clean energy goals.			

Clean Energy

Action: Consider potential for community programming to engage residents on the topics of energy efficiency and renewable energy (ex. Community Green Day or Sustainability Fair).	BOS, HCC	Ongoing	N/A
Strategy: Integrate innovative codes and policy approaches to support the implementation of energy efficiency and deployment of renewable energy.			
Action: Assess barriers to renewable energy deployment in the zoning code and adopt progressive standards and appropriate incentives.	TP, PB	Short-term	N/A
Action: Explore the potential for more rigorous energy efficiency and clean energy requirements for new development.	TP, PB	Short-term	N/A
Action: Review permitting best practices for supporting solar deployment (e.g. SolSmart program standards).	TP, PB	Short-term	N/A
Goal 3: Develop a plan to reduce community-wide greenhouse gas emissions.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Establish a community-wide greenhouse gas emissions baseline.			
Action: Establish scope for a community-wide greenhouse gas inventory, consider adhering to nationally and globally accepted methods such as the ICLEI U.S. Community Protocol.	TM	Medium-term	Town capital funds

Clean Energy

Action: Acquire relevant data from Town departments and utilities, and use MAPC as a resource to inform this process.	TM	Medium-term	Town funds
Action: Analyze and consolidate data to establish an informed greenhouse gas emissions baseline.	TM	Medium-term	Town capital funds
Action: Communicate the greenhouse gas emissions baseline to Board of Selectmen, Town Meeting, and community-at-large.	TM , BOS	Medium-term	N/A
Strategy: Establish a community-wide greenhouse gas emissions reduction goal.			
Action: Use greenhouse gas emissions baseline to determine appropriate near-term, interim, and long-term reduction goals, consider setting sector specific targets to achieve these goals.	TM	Medium-term	N/A
Action: Research and consider aligning reduction goals with state, national, and global commitments where applicable.	TM	Medium-term	N/A
Action: Evaluate the feasibility of adopting a net zero and/or 100 percent renewables goal.	TM , BOS	Medium-term	N/A
Action: Create a climate action plan or net zero plan of strategies to achieve the greenhouse gas emissions reduction goal.	TM , TP	Medium-term	Town capital funds

Land Use & Zoning

<p>Goal 1: Ensure that the current Zoning Bylaw and any future zoning changes are consistent with and support the goals and objectives stated in the Master Plan.</p>			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
<p>Strategy: Create a Zoning Bylaw that implements the recommendations of the Master Plan.</p>			
<p>Action: Conduct a thorough zoning audit of the bylaw to identify specific recommendations for revisions and updates.</p>	TP, PB	Short-term	Town
<p>Action: Consider undertaking a comprehensive revision and recodification of the Zoning Bylaw.</p>	TP, PB	Short-term	Town
<p>Action: Consider specific revisions to the Zoning Bylaw including:</p> <ul style="list-style-type: none"> • New definitions • Update the use regulations to include uses that are currently not included such as mixed-use • Assigning the Planning Board as the Special Permit Granting Authority • Update the Zoning Map to ensure that it is consistent with the Zoning Bylaw. • Review the Rate of Development section to determine whether it is necessary and effective. • Review parking standards to determine whether they are current 	TP, PB	Short-term	N/A

Land Use & Zoning

Action: Study the Village Planned Unit Development. See Housing element.	TP, PB	Short-term	N/A
Action: Study the Planned Residential Development for Seniors to determine how to encourage this type of development where appropriate.	TP, PB, COA	Short-term	N/A
Goal 2: Encourage the balance between residential, commercial and industrial development to ensure the Town continues to prosper while protecting the character of the community.			
Strategy/Action:	Parties Responsible	Timeframe	Funding Source
Strategy: Update the Zoning Bylaw to provide for more flexible zoning techniques.			
Action: Develop an Open Space Residential Design (OSRD) bylaw, without an age restriction.	TP, PB, CC	Short-term	N/A
Action: Revise the Zoning Bylaw to include incentivized traditional New England "village-style" mixed-use development	TP, PB	Short-term	N/A

Appendix

Historic Resources List

The table below lists most of the locally significant historical buildings and sites in Hanover.

Historic Name	Street Number	Location
Elisha Jacobs "Line" House	5 Assinippi Avenue	Assinippi
Percy Bonney Blacksmith Shop	20 Broadway	Four Corners
Laphain House	53 Broadway	Four Corners
Clark House	60 Broadway	Four Corners
Charles Gleason House	96 Broadway	Four Corners
Daniel Turner House	168 Broadway	Four Corners
Robert Dwelley House	178 Broadway	Four Corners
Hanover Fire Company No. 5	207 Broadway	Four Corners
Broadoak Farm	336 Broadway	Hanover
Benjamin Stetson House	519 Broadway	Hanover
Joseph Josselyn House	607 Broadway	Hanover
Thomas Merritt House	677 Broadway	Hanover
Isacc Buck House	741 Broadway	Hanover
Saint Mary's Catholic Church	758 Broadway	South Hanover
Elijah Sylvester House	839 Broadway	South Hanover
J. Sylvester House	887 Broadway	South Hanover
Thomas Josselyn House	1003 Broadway	South Hanover
Station Five Fire Fighting Museum	1095 Broadway	South Hanover
South Hanover General Store	1143 Broadway	South Hanover

Historic Name	Street Number	Location
Broadway Bridge Over Indian Head River	Broadway	South Hanover
Hoxia House	119 Center Street	Hanover Center
Timothy Robbins House	271 Center Street	Hanover Center
Shuble Munroe House	339 Center Street	Hanover Center
Seth Bates House	553 Center Street	Hanover Center
Saint Andrews Church	17 Church Street	Hanover
Dr. Howes House	31 Church Street	Hanover
Hatch Farm	561 Circuit Street	Fireworks
Prince Stetson House	615 Circuit Street	Fireworks
King Street Grammar	625 Circuit Street	West Hanover
Mordecai Ellis House	676 Circuit Street	West Hanover
Ellis Pratt House	939 Circuit Street	West Hanover
Darling Cemetery	959 Circuit Street	West Hanover`
David Darling House	969 Circuit Street	West Hanover
Clapp Rubber Factory Worker Housing	8 Clapp Road	South Hanover
Columbia Road Bridge over North River	Columbia Road	Hanover
Cardinal Cushing Center - Portincula Chapel	Columbia Road	Hanover
South Hanover Train Station	172 Cross Street	South Hanover
Philips Tack Factory Stetson House	Cross Street	South Hanover
Abner Dwelley House	48 Elm Street	Hanover
Bailey - Donnell House	250 Elm Street	Curtis Crossing
Absaloms Rock	Great Rock Road	North Hanover
Theophilus Witherell House	49 Grove Street	Hanover Center

Historic Name	Street Number	Location
Nathaniel Stetson House	118 Hanover Street	Hanover
Congregation Church Parsonage	515 Hanover Street	Hanover Center
John Curtis Free Library	534 Hanover Street	Hanover Center
First Congregational Church	547 Hanover Street	Hanover Center
Hanover Town Hall	550 Hanover Street	Hanover Center
Jashua Staples House	623 Hanover Street	Hanover Center
Edward Briscoe House	715 Hanover Street	Hanover Center
David Torrey House	769 Hanover Street	Hanover Center
Library Hall	1206 Hanover Street	West Hanover
Mill Philips	1390 Hanover Street	West Hanover
Josselyn Store-West Hanover Post Office	1452-145 Hanover Street	West Hanover
Mordecai Ellis House	1566 Hanover Street	West Hanover
Cyrus B. Josselyn House	113 King Street	Fireworks
Hanover Carding Mill	127 King Street	Fireworks
George R. Josselyn House	160 King Street	Fireworks
Charles Josselyn House	169 King Street	Fireworks
Hanover House	334 King Street	Fireworks
Stephen Bailey House	408 King Street	Fireworks
Amos Turner House	562 King Street	Fireworks
David Gardner House	590 King Street	Fireworks
Sylvester House	402 Main Street	
Win Stockbridge House	429 Main Street	
Alms Hanover House	506 Main Street	Mercer Square
Jacob Bailey House	526 Main Street	Mercer Square

Historic Name	Street Number	Location
Benjamin Curtis House	569 Main Street	Mercer Square
Arthur Bailey House	633 Main Street	North Hanover
Benjamin Stetson House	646 Main Street	North Hanover
John Curtis House	702 Main Street	North Hanover
Slop Shop	714 Main Street	Mercer Square
Ezra Whiting House	715 Main Street	North Hanover
Col. John Bailey House	733 Main Street	North Hanover
Curtis School	848 Main Street	North Hanover
Whiting Curtis House	894 Main Street	North Hanover
Jesse Curtis House	912 Main Street	North Hanover
Baptist Church Meeting House	992 Main Street	North Hanover
Hanover Baptist Church Parsonage	1024 Main Street	North Hanover
Thomas Hatch	1041 Main Street	North Hanover
C.G. Mann Store	1044 Main Street	North Hanover
Benjamin Mann House	1078 Main Street	North Hanover
Benjamin Mann House	1095 Main Street	North Hanover
Levi Mann House	1137 Main Street	North Hanover
John Brooks Store	1152 Main Street	North Hanover
Abner Curtis House	1264 Main Street	North Hanover
Jonathan Turner	1271 Main Street	North Hanover
Seth Curtis House	1305 Main Street	North Hanover
Civil War Monument	Main Street	North Hanover
John Studley House	134 Old Washington Street	North Hanover

Historic Name	Street Number	Location
Old Washington Street Bridge over North River	Old Washington Street	Hanover
Benjamin Studley House	146 Pleasant Street	Hanover
James Whiting	324 Pleasant Street	Hanover
Cyrus Josselyn House	112 School Street	Fireworks
Drinkwater Hall Firemans Association	School Street	Fireworks
Melzar Curtis House	294 Silver Street	Hanover Center
Hanover Cemetery	Silver Street	Hanover Center
Josselyn - Bates House	74 Spring Street	Hanover Center
Joseph Curtis House	66 Union Street	Mercer Square
Benjamin Curtis House	179 Union Street	Mercer Square
Turner and Whitman Law Offices	25 Washington Street	Hanover
Builder Sylvester House	40 Washington Street	Hanover
Edward G. Sylvester House	65 Washington Street	Hanover
Albert Smith House	128 Washington Street	Four Corners
Hanover Academy Building	195 Washington Street	Four Corners
Wales Tavern	199 Washington Street	Four Corners
Joseph Eells House	232 Washington Street	Four Corners
Jothan Cushing House	242-240 Washington Street	Four Corners
Saint Andrews Church Rectory	288 Washington Street	Four Corners
Barstow House	323 Washington Street	Four Corners
Henchman Sylvester House (Cardinal Cushing Center Sisters' Inn)	346 Washington Street	Hanover
Robert Sylvester House	417 Washington Street	Hanover

Historic Name	Street Number	Location
Brooks and Young General Store	2108-2111 Washington Street	Hanover
Watermans House	330 Water Street	South Hanover
Watermans Tack Factory	360 Water Street	South Hanover
Project Dale House	361 Water Street	South Hanover
Union Cemetary	Webster Street	North Hanover
Luddams Ford Bridge over Indian Head River	West Elm Street	Curtis Crossing
Sylvanus Whiting House	88 Whiting Street	Hanover
Justus Whiting House	111 Whiting Street	Hanover
Whiting Street School	142 Whiting Street	Hanover
Ezra Whiting House	183 Whiting Street	Hanover
William Whiting House	184 Whiting Street	Hanover
Joshua Mann House	335 Whiting Street	Hanover
David Cushing House	385 Whiting Street	Hanover
Wing House	64 Winter Street	Winslows Crossing