[LU]

Land Use



Land Use

Land use refers to how land is used and organized within a community, including the arrangement of residential, commercial, industrial, agricultural, and other human activities. Land use patterns are the results of centuries of human interactions with the natural setting of a community. Examining land uses will help inform a fundamental understanding of a community's history and determine its needs to provide public facilities and infrastructure, transportation network, mix of housing available to residents, and to protect its environmental and cultural resources. The Land Use Element of the Master Plan functions as an overarching component that encompasses all other elements to some degree as it provides guidance on how land resources should be strategically used to address issues identified and facilitate decision-making during implementation of the Plan.

Key Findings

- The community would like to preserve and enhance Northborough's small town feel and community character.
- Northborough's overall land use pattern is primarily defined by its residential uses, particularly its single-family residential properties, as well as its abundance of open space and recreation areas.
- Northborough has seen large decreases in its undeveloped lands since 1985, particularly with respect
 to cropland, pasture, and nursery land uses. Protect the Town's open space and agricultural uses from
 further reduction.
- Areas of industrial land uses have been trending upwards, while commercial land uses have declined between 1985 and 2005; however, the assessors' data shows an increase in commercial land use since 2005.
- The Downtown area has continued to suffer with respect to its ability to attract businesses, residents, and visitors since the Town's last Master Plan. This area demonstrates an inconsistent urban design and is perceived as automobile-centric with limited walkability and connectivity.
- Redevelopment opportunities exist for vacant sites such as the Westborough State Hospital within Northborough.

 The Major Commercial Development Overlay District, developed to accommodate the Northborough Crossing Development, could be updated and expanded to provide additional economic development opportunities in the area around the Southwest Cutoff and Route 9.

Baseline Conditions Analysis

Historical Land Use

A suburb of approximately 18.5 sq. mi. (11,840 acres), the Town of Northborough sits less than 15 road miles to the east of the City of Worcester in eastern Worcester County. It is surrounded by the Towns of Berlin to the north, Westborough to the south, Southborough and Marlborough to the east, and Boylston and Shrewsbury to the west. Up until the midtwentieth century, Northborough was largely undeveloped and had a predominantly rural character. Since that time, evolving economic conditions along with the development of Interstates 90, 495, and 290, U.S. Route 20, and State Route 9 have transformed the Town's character to that of a bedroom community with relatively dense residential development in and around the Downtown area and suburban-style residential development distributed amongst the Town's remaining developable lands. Despite this transformation, Northborough has largely managed to retain the "feel" of a small town.

In the years 1985, 1999, and 2005, the Massachusetts Office of Geographic Information Systems (MassGIS) compiled statewide land cover data developed from digital orthoimagery (i.e., geometrically corrected aerial photographs). These datasets allow for a comparison of land cover² over time, which provides the basis for an assessment of impact of human-induced activities on community character and ecological resources.

In 1985, 70.2 percent of Northborough consisted of undeveloped land that was primarily comprised of forested lands, non-forested wetlands, croplands, open lands, and pastures. By 2005, this value declined to 65.7 percent, which represents the conversion of over 500 acres of land to developed uses. Agriculture, which has historically served as a pillar of the Town's economy and its cultural identity, notably declined from 7.0 percent of total area in 1985 to 5.7 percent in 1999 and 4.7 percent in 2005, a total loss of nearly 300 acres of cropland, pasture, and nursery land uses. Orchards, a staple of the community's identity as exemplified by the annual Northborough Applefest, evaded this trend and increased its total productive area by approximately 23 acres between 1985 and 2005.

Multi-family residential increased from 14.6 acres in 1985 to 179.8 acres in 2005, an increase of 1,133.5 percent. Meanwhile, low density residential grew by 31.8 percent, and medium density residential and high density residential declined by 25.3 percent and 0.5 percent, respectively. Industrial lands increased by 63.3 percent during this period, while commercial land uses declined by 14.6 percent. **Table 2-1**, **Figure 2-1**, and

¹ At the time of this writing, land cover data more recent than 2005 were not available from the Massachusetts Bureau of Geographic Information (MassGIS).

² Land cover differs from land use in that it refers to the surface cover on the ground (e.g., vegetation, urban infrastructure, water, etc.), whereas land use refers to the function of the land (e.g., recreation, wildlife habitat or agriculture). The two terms, though related, are not interchangeable and thus should not be directly compared.

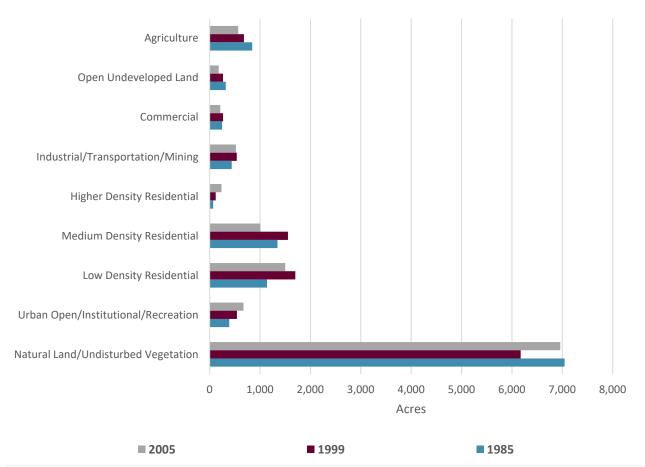
Figures 2-2 through **2-4** (located at the end of this chapter) present and illustrate land cover in the Town of Northborough in 1985, 1999, and 2005.

Table 2-1 Land Cover Changes in Northborough: 1985-1999, 1999-2005, and 1985-2005

	1985-1999 Change	1999-2005 Change	1985-2005 Change
Agriculture	-19.4%	-16.8%	-32.9%
Open Undeveloped Land	-17.6%	-32.4%	-44.3%
Commercial	8.1%	-20.9%	-14.6%
Industrial/Transportation/Mining/Waste Disposal	22.9%	-3.0%	19.2%
Multi-family residential	76.9%	597.1%	1,133.5%
High Density Residential (Housing on <1/4 acre lots)	70.8%	-41.8%	-0.5%
Medium Density Residential (Housing on 1/4 – 1/2 acre lots)	15.4%	-35.3%	-25.3%
Low Density Residential (Housing on >1/2 acre lots)	49.3%	-11.7%	31.8%
Urban Open/Institutional/Recreation	39.2%	24.0%	72.5%
Natural Land/Undisturbed Vegetation	-12.4%	12.7%	-1.2%

Source - MassGIS

Figure 2-1 Land Cover in the Town of Northborough: 1985, 1999, and 2005



Source: MassGIS

Existing Land Use

Using Property Type Classification Codes ³ embedded within the Town's Property Assessment Data from 2017, current land uses and related patterns were documented and evaluated. The distribution of these land uses is presented in **Table 2-2** and **Figure 2-5** (located at the end of this chapter). Residential development is the primary land use, comprising 43.1 percent of the Town's total area. Single family residential is the dominant residential development type. The average size of a single-family residential lot is 1.1 acres. Residential land use per capita is 0.35 acres.

Other than its residential land uses, Northborough is defined by its robust inventory of recreational properties, which encompass over 2,200 acres. These lands include Townowned parks and fields (e.g., Assabet Park, Ellsworth McAfee Park, Howard Street Park), the Juniper Hills and Indian Meadows golf courses, natural lands such as Chapter 61 lands⁴ and properties held by the Department of Fish and Game (i.e., Mt. Pisgah Wildlife Management Area [WMA] and Wayne F. MacCallum WMA), and open undeveloped lands (e.g., the former Westborough State Hospital).

Commercial land uses are largely focused along the Route 20 corridor. An exception to this trend is retail developments at the southwest corner of the Town that include Northborough Crossing, which is home to several medical offices and "big box" stores such as Kohl's, BJ's Wholesale Club, and Dick's Sporting Goods, as well as Wegmans Food Markets. This area is also home to the New England Baseball Complex, a well-known facility that primarily hosts youth baseball tournaments and clinics.

Industrial land uses are predominantly concentrated in the eastern part of Town. These include warehousing and trucking operations south of Route 20 (e.g., FedEx freight and A. Duie Pyle along Bartlett Street and FedEx SmartPost off Beeman Road). They also include the I-290 Industrial Park that can be accessed from Whitney Street, which is home to operations such as Trelleborg Sealing Solutions and Aspen Aerogels, as well as a records storage facility operated by Iron Mountain along Bearfoot Road.

Agricultural uses comprise only 3.6 percent of the Town's total area; however, this land use has been and continues to be a significant contributor to the Town's cultural identity. Agricultural uses are primarily concentrated to the west, north of I-290 and are exemplified by the Tougas Family Farm and Davidian Brothers Farm.

Table 2-2 Land Use in Northborough, 2017

Land Use	Total Acreage	Percent of Total
Agricultural	434.6	3.6
Residential	5,168.2	43.1
Single Family Residential	4,408.7	36.8

³ Property Type Classification Code, shown as "LUCODE" in assessors' records, is a three-digit code used by the Board of Assessors in determining the proper classification of properties according to their uses. Since the consolidated assessors' data layer is parcel based, this approach is only appropriate in understanding the land use patterns of a community, rather than interpreting the actual land use or land cover units that can vary within individual parcels or across multiple parcels.

⁴ Chapter 61 for forestlands is a Massachusetts tax program that gives preferential tax treatment to landowners who maintain their property as open space for timber production.

Table 2-2 Land Use in Northborough, 2017 (Continued)

Land Use	Total Acreage	Percent of Total	
Commercial	572.8	4.8	
Industrial	480.3	4.0	
Recreational/Institutional/Urban Open	2,216.7	18.5	
Natural/Undisturbed Vegetation	381.0	3.2	
Open Undeveloped	1,889.0	15.7	
Transportation	853.0	7.1	

Source - Town of Northborough Assessors, 2017

Downtown

Northborough's Downtown area, herein defined as the Town's Downtown Business (DB) district and adjacent areas (see **Figure 2-6** at the end of this chapter), is bisected by Route 20 (or Main Street). This area has a mix of establishments centered in Town that support commercial activity and community gathering and is defined by commercial structures of generally one to two stories. These structures predominantly house dining establishments, retail services (e.g., convenience stores and hair salons), banks, professional offices (e.g., medical offices), and motor vehicle services (e.g., gas stations and repair shops). The Northborough Free Library and Trinity Church of Northborough currently serve as the area's primary community gathering spaces. The Town Common, which includes the Civil War Memorial and a newly installed Gulf War/Global War on Terrorism Memorial along with community green space, is near completion Fall of 2019.

A mix of housing including multi-family and single family is integrated amongst the above-mentioned uses, though such developments primarily surround Downtown instead of existing within it. The residential uses that surround Downtown are primarily older neighborhoods that are denser than the newer subdivisions with large lots that have developed in the rest of Town since the late-20th century. Pedestrian access to Downtown from the surrounding neighborhoods is impeded by an inconsistent and fragmented sidewalk network (e.g., along Hudson, Church, and South Streets) and lack of safety accommodations for pedestrians and bicyclists.

The Downtown has experienced an economic decline over the past several decades, with many businesses succumbing to closure and their storefronts to vacancy. This includes long-term establishments such as Shattuck Pharmacy, which called Downtown its home for nearly 120 years. The existing make-up of commercial, cultural, institutional, and entertainment uses in the Downtown lacks a combination of everyday destinations and the drawing power to attract residents and visitors and keep them lingering for prolonged periods of time. As a result, there has been a long-standing sentiment among residents that Downtown needs a resurgence. This is exemplified by the previous Master Plan (1997), which over two decades ago noted that one of the Town's weak competitive points include the Downtown's appearance.

Many buildings in the Downtown have large and varying front and side setbacks, creating a disjointed and ill-defined street and building alignment. Further, parking lots are often found along the front and sides of buildings without compensating the pedestrian

experience (e.g., landscaping with height, street furniture, planters, art installations, etc.). Such setbacks and parking layouts, along with a fragmented sidewalk network along Main Street and West Main Street, inhibit walkability and connectivity and contribute to the perception that Downtown is automobile-centric. This is worsened by the highly trafficked Route 20, which is a state-owned highway maintained by the Massachusetts Department of Transportation (MassDOT).

To address some of these concerns, as well as to generally strengthen the character of Downtown, Northborough's Zoning Bylaw includes provisions for a design review process that is administered by the Design Review Committee. In business districts such as the DB district, the Design Guidelines (2012) apply to new construction and exterior alterations and expansions of commercial, municipal, institutional, and multi-family structures, and cover aspects such as building placement and orientation, setbacks, open space, pedestrian accommodations, and parking among other design concerns. The Design Guidelines, for example, recommend minimum and maximum front setbacks and side setbacks, require sidewalks where none currently exist, and promote a strong street edge by encouraging parking to be placed to the rear or side of a building. The Design Review Committee reviews proposed projects as part of the site plan approval process and provides its recommendations; however, such recommendations are not enforceable.

Vacant Lands and Build-Out Analysis

Based on property classification codes found within the Town Assessor's data, 17.3 percent (2,079.6 acres) of the Town's total area is classified as some form of vacant. This includes 325.4 acres of potentially developable⁵ residential land (181.4 acres are undevelopable for a variety of reasons including topographic limitations); 67.1 acres of commercial land (8.3 acres are undevelopable); and 305.3 acres of industrial land (14.0 acres are undevelopable) (see **Table 2-3**). The remaining 1,178.1 acres are government-owned or otherwise conserved lands.

Table 2-3 Vacant Lands in Northborough, 2017

Vacancy Status	Total Acreage	Percent of Total	
Potentially Developable Residential Land	325.4	2.7%	
Undevelopable Residential Land	181.4	1.5%	
Total Residential	506.9	4.2%	
Potentially Developable Commercial Land	67.1	0.6%	
Undevelopable Commercial Land	8.3	0.1%	
Total Commercial	75.3	0.6%	
Potentially Developable Industrial Land	305.3	2.5%	
Undevelopable Industrial Land	14.0	0.1%	
Total Industrial	319.3	2.7%	
Total	901.5	7.5%	

Source - Town of Northborough Assessors, 2017

⁵ Potentially developable parcels include vacant properties that are currently in a residential zone, accessory to commercial or industrial properties, or not specifically included in another property type classification code other than commercial.

Given existing zoning districts and their associated regulations – assuming no special permits issued, the potential maximum build-out of the abovementioned potentially developable vacant lands (all privately-owned) is estimated to result in approximately 150 new residential units, along with approximately 416,000 sq. ft. of new commercial uses and 3,560,000 sq. ft. of new industrial uses.⁶

The Town identified several non-vacant parcels to supplement the above analysis. These included the Juniper Hill and Indian Meadows Golf Courses, four parcels near the Southwest Cutoff under Chapter 61 (Forestry),⁷ and the parcels that comprise the Kimball Sand Site. Development or redevelopment of these parcels under the restrictions of their existing base zoning districts would increase the number of new residential units identified above to approximately 530 (an addition of 380 units) and the area of new industrial uses to 4,260,000 sq. ft. (an addition of 700,000 sq. ft.); the estimate for new commercial areas would remain unchanged. Altogether, assuming an average household size of 2.48, which is that of the state as a whole based on the 2013-2017 American Community Survey 5-Year Estimates, this build-out scenario could increase the Town's population by 1,314 persons.

Not included in the above analysis are properties owned by the Town of Northborough or other government entities for which there is build-out potential dependent on unknown factors (e.g., type of development, estimated rate of preservation, etc.). For example, the former Westborough State Hospital, which straddles the border between Northborough and Westborough, contains nearly 300 acres that lie within the Town's municipal boundaries. The Town of Westborough purchased the portion of this property within its boundary in 2014, and after studying redevelopment opportunities, construction is now underway for a multi-use development anchored by a 55-plus residential community.

Long-term Development Patterns

Zoning

Long-term development patterns within the Town of Northborough are guided by its Zoning Bylaw, subdivision regulations, and other local development policies such as the above-mentioned Design Guidelines. The Town's Zoning Bylaw, published in accordance with the provisions of M.G.L. c. 40A, has undergone numerous amendments since it was first adopted in 1955; a substantial re-write was performed 2009. The Zoning Bylaw defines the following base and overlay zoning districts.

<u>Residential</u>

Northborough has six different residential zones that comprise 79.9 percent of the Town. These zones are discussed below.

Single-Family Residential: Northborough has three residential zoning districts dedicated to encouraging the preservation and development of single-family housing. These include

⁶ Exclusions incorporated into the build-out analysis include wetlands with a 100 ft. buffer, areas with a 1 percent annual chance of flooding, and protected open space (any level of protection). For the purposes of this analysis, lands with slopes 15 percent or greater were also excluded; however, development yield on these lands may be greater based on more detailed site assessments.

Note that all four parcels near the Southwest Cutoff included in the build-out analysis are within the Residential-Open Space Planning Overlay District. For the purposes of the build-out analysis, the density and dimensional regulations of the base district (RB) were referenced, as such regulations in the overlay district are subject to Planning Board review and town meeting approval.

Residential A (RA), Residential B (RB), and Residential C (RC). Combined, these districts encompass most of residential zoning districts and the total area of the Town. Among these districts, RC is the largest by percent of total acreage (34.9 percent), followed by RB (21.8 percent) and RA (20.2 percent). Among residential uses, these districts allow only single-family (detached) dwelling units by right, though two-family dwelling units are allowed by special permit in RC. The Zoning Bylaw was recently approved to be amended at Town Meeting (April 23, 2018) to require design review of two-family dwelling units in accordance with related design guidelines to be adopted by the Design Review Committee; this amendment also applies to such developments in GR, MSR, and DN described below. Institutional uses, business uses, and mixed uses are not allowed without a special permit from the Zoning Board of Appeals (ZBA), though certain extensive uses including agricultural activities on less than 5 acres of land; nonexempt farm stands; forestry; and passive recreation, open space or conservation are allowed.

Minimum lot areas vary between the single-family residential districts. RA has the greatest minimum lot area at 80,000 sq. feet (ft.), while minimum lot areas for RB and RC are 40,000 sq. ft. and 20,000 sq. ft., respectively. Residential density decreases the further you get from the Downtown area. Accordingly, RC is the closest to Downtown, followed to the north and west by RB, and then RA at the northwest corner of the Town. The RA, RB, and RC residential districts all have minimum yard setbacks of 30 ft. (front), 15 ft. (side), and 25 ft. (rear).

General Residential (GR): The GR zoning district encompasses 2.5 percent of the Town's total area and is generally located south and north of the Downtown area and Route 20. Single-family detached dwelling units are the only residential use allowed by right in this district; two-family dwelling units are allowed by special permit from the Planning Board. Institutional, business, and mixed uses are not allowed without a special permit from the ZBA. Agricultural activities on less than 5 acres of land; nonexempt farm stands; and passive recreation, open space or conservation are allowed. The minimum lot area allowed in GR is 15,000 sq. ft., while maximum lot coverage is 30 percent. This district has minimum yard setbacks of 30 ft. (front), 15 ft. (side), and 25 ft. (rear).

Main Street Residential (MSR): The MSR district is contained within 20.3 acres to the east of the DB district (see description below) along Main Street. Like GR, single-family detached dwelling units are the only residential use allowed by right in this district; two-family dwelling units are allowed by special permit from the Planning Board. Institutional, business, and mixed uses are not allowed without a special permit from the ZBA. Agricultural activities on less than 5 acres of land; nonexempt farm stands; and passive recreation, open space or conservation are allowed. The minimum lot area in MSR is 15,000 sq. ft., while maximum lot coverage is set at 30 percent. This district has minimum yard setbacks of 30 ft. (front), 15 ft. (side), and 25 ft. (rear).

The main differences between MSR and GR are that assisted living residences, nursing homes, and continuing care retirement communities are not allowed in MSR, even by special permit. In fact, such uses are not allowed by right in any residential district.

Downtown Neighborhood (DN): The DN zoning district encompasses 36.1 acres to the northeast of Downtown. Unlike the other residential districts, this district allows for single family attached and multi-family dwelling units in addition to single family detached dwelling units; two-family dwelling units are allowed by special permit from the Planning

Board. Further, cultural uses, various mixed uses except for farm businesses and continuing care retirement communities, and business uses including art galleries and professional or business offices are allowed. Like MSR and GR, allowed extensive uses in DN include agricultural activities on less than 5 acres of land; nonexempt farm stands; and passive recreation, open space, or conservation. The DN district is the highest density residential zoning district; its minimum lot area is 10,000 sq. ft. The maximum lot coverage in the DN district is 30 percent and the minimum open space required is 20 percent. This district has minimum yard setbacks of 15 ft. (front), 20 ft. (side), and 20 ft. (rear).

Commercial

Northborough has five different commercial zones that collectively comprise just 4.8 percent of the Town. These zones are discussed below.

Downtown Business (DB): The DB zoning district encompasses 70.3 acres. Residential uses are not allowed without a special permit from the Zoning Board of Appeals. Allowed institutional uses include cultural uses and non-profit club or membership organizations. Allowed mixed uses include limited mixed-use buildings, artist live/work units, custom workshops, and vertical mixed-use developments. Business uses are allowed with a few exceptions (e.g., drive-through retail⁸ and vehicle sales and service shops). Industrial uses are not allowed.

The minimum allowable lot area in the DB zoning district is 4,000 sq. ft.; the minimum open space requirement is 15 percent. This district does not have side or rear setbacks, but does have a minimum front setback of 6 ft. The maximum height level for buildings in this district is 45 ft. with no restrictions on the number of stories.

Business West (BW): The BW zoning district is the largest commercial district, comprising 141.4 acres and 1.2 percent of the Town's total area. This district is located to the west of the DB district traversing West Main Street from approximately Crestwood Drive to Crawford Street. Residential uses are not allowed without a special permit from the Zoning Board of Appeals. Like the DB and BE districts, allowed institutional uses include cultural uses and non-profit club or membership organizations. Allowed mixed uses mimic those of the BE district except that horizontal mixed-use developments and continuing care retirement communities are allowed with special permit from the Zoning Board of Appeals; artist live/work units are allowed by special permit in both districts. Business uses are allowed by right or with special permit from the Zoning Board of Appeals with a few exceptions (e.g., vehicle sales and service shops and adult uses). Industrial uses are not allowed.

Business East (BE): The BE zoning district encompasses 106.4 acres and is located to the east of the MSR district traversing Main Street up until approximately Hemlock Drive. Residential uses are not allowed with exception to congregate residences and assisted living facilities, which require a special permit from the Zoning Board of Appeals. Like DB, allowed institutional uses include cultural uses and non-profit club or membership organizations. Allowed mixed uses are restricted to limited mixed-use buildings, custom workshops, vertical mixed-use developments, and farm businesses. Business uses are

⁸ Drive-through retail: A retail store in which merchandise may be purchased at a drive-up service window.

allowed with a few exceptions (e.g., hotel, motel or conference centers and vehicle sales and service shops). Industrial uses are not allowed.

The minimum allowable lot area in the BE zoning district is 20,000 sq. ft.; the minimum open space requirement is 20 percent. This district has minimum yard setbacks of 15 ft. (front), 20 ft. (side), and 25 ft. (rear). The maximum height level for buildings in this district is 45 ft. distributed among no more than three stories.

The minimum allowable lot area in the BW zoning district is 20,000 sq. ft.; the minimum open space requirement is 20 percent. This district has minimum yard setbacks of 15 ft. (front), 20 ft. (side), and 25 ft. (rear). Like the BE district, the maximum height level for buildings in the BW district is 45 ft. distributed among no more than three stories.

Business South (BS): The BS zoning district comprises 122.4 acres at the Town's southwestern corner. Residential uses are not allowed. Non-profit club or membership organizations is the only allowed institutional use, while no mixed uses are allowed without special permit from the Zoning Board of Appeals. Business uses are limited in comparison with the other commercial zoning districts; only retail stores, sandwich and pizza shops, catering services, professional or business offices, and medical or dental offices are allowed by right. Industrial uses are not allowed without special permit from the Zoning Board of Appeals.

The minimum allowable lot area in the BS zoning district is 40,000 sq. ft.; the minimum open space requirement is 25 percent. This district has minimum yard setbacks of 40 ft. (front), 25 ft. (side), and 25 ft. (rear). Like the BE and BW districts, the maximum height level for buildings in the BS district is 45 ft. distributed among no more than three stories.

Highway Business (HB): The HB zoning district comprises 131.3 acres at the Town's southwestern corner and is bisected by Route 9. Residential uses are not allowed. Medical clinic or ambulatory surgery centers is the only allowed institutional use. Mixed uses are not allowed, though custom workshops are allowed with a special permit from the Zoning Board of Appeals. The HB district is the most inclusive of business uses compared to the other commercial zoning districts; only postal service, nonexempt educational uses, kennels, funeral homes, and commercial storage facilities are not allowed by right or with a special permit. Industrial uses are not allowed.

The minimum allowable lot area in the HB zoning district is 40,000 sq. ft.; the minimum open space requirement is 25 percent. This district has minimum yard setbacks of 50 ft. (front), 25 ft. (side), and 25 ft. (rear).

Industrial

Northborough has only one industrial zoning district, which is distributed amongst four areas that encompass over 1,800 acres and comprise 15.4 percent of the Town's total area. The four industrial areas are located at the Town's southwest and southeast corners, as well as on either side of I-290 near the Marlborough border. In these areas, residential uses are not allowed. Medical clinic or ambulatory surgery centers are allowed, but other institutional uses are either not allowed or require a special permit. Like HB, mixed uses in the I district are not allowed by-right, though custom workshops require a special permit from the Planning Board. Business uses are excluded with exception to wholesale trade;

grain lumber, construction or garden supply sales; professional or business offices; and medical or dental offices. All industrial uses, including transportation and distribution uses are allowed in the I district; however, natural resource extraction, fuel storage, and heliports require a special permit from the Planning Board.

The minimum allowable lot area in the I zoning district is 60,000 sq. ft. The maximum lot coverage is 50 percent, while the minimum open space requirement is 25 percent. This district has minimum yard setbacks of 40 ft. (front), 20 ft. (side), and 25 ft. (rear). The maximum height level for buildings in this district is 60 ft. with no restrictions on the number of stories.

Overlay Districts

In addition to the base districts above, the Town of Northborough has four overlay districts. These include the Groundwater Overlay Protection District (GPOD), Floodplain Overlay District (FOD), Major Commercial Development Overlay District (MCDOD), and Residential-Open Space Planning Overlay District (ROPOD). The GPOD was designed to protect and preserve water supply resources in the Town, along with associated natural resources, and is in the vicinity of specified aquifer protection areas. The intent of the FOD, which is an overlay district to all other districts, is multi-pronged:

- 1. preserve and maintain the groundwater table;
- 2. protect human health and safety from floodwater hazards;
- 3. protect and preserve wildlife habitat; and
- **4.** protect against unsustainable development in consideration of the costs associated with areas subject to floods.

The MCDOD was largely designed to accommodate large commercial developments in areas suitable for such development but zoned primarily for industrial uses. This MCDOD is an overlay district to land within the I district near the Southwest Connector, an area containing the Northborough Crossing development. The ROPOD, located in the RB district near the Southwest Connector, intends to balance open space and residential development by providing for a range of residential uses in exchange for land protections. Developments within this district are proposed as Planned Residential Development Districts (PRDDs), which require a concept plan for Planning Board review prior to a public hearing and vote at Town Meeting. The concept plan must include an analysis of environmental impacts of development within the PRDD, including impacts on wetlands, surface water and groundwater resources, wildlife habitat, air quality, and scenic views, as well as the minimum amount of open space to be conveyed for permanent protection.

Land Use Goals

- Prioritize the preservation of valuable natural resources and open spaces, while still accommodating the social and economic needs of the community.
- Enhance Downtown by promoting a pleasing and welcoming appearance

 one that promotes a sense of place enabling it to become the community's proud central gathering area for residents and visitors alike.
- Ensure Northborough's future land uses support its Vision and established community character.
- Continue to support and manage commercial development outside of the Downtown, particularly along Route 20 (Southwest Cutoff) and Route 9, considering adjacent land use compatibility and the Town's preservation priorities.

Land Use Recommendations

Goal 1: Prioritize the preservation of valuable natural resources and open spaces, while still accommodating the social and economic needs of the community.

- **LU1-1** Conduct a Cost of Community Services Study to prove the economic value of open space and natural lands.
- Build off the 495/MetroWest Development Compact Plan to inventory local priority development areas (PDAs) and priority preservation areas (PPAs) to guide future development activities in Town, as necessary.
- **LU1-3** Review the existing Zoning Bylaw and conservation commission regulations for needed revisions to strengthen the protection of natural resources.
- LU1-4 Identify flood hazards (e.g., stormwater inundation, riverine flooding) and develop updates to land use planning tools such as zoning and subdivision regulations to better define objectives in these areas. Conserve, through purchase or restriction, properties that would expand and improve flood control/hazard mitigation.
- Where feasible, seek actions that contribute to the quality and diversity of wildlife habitat, such as preventing habitat fragmentation and preserving wildlife corridors when large tracts of land are developed, as well as the protection of water quality.
- **LU1-6** Develop a stormwater management bylaw to require stormwater management and erosion control permitting.
- LU1-7 Monitor stormwater maintenance plans created for the operations and maintenance phase of real estate developments.

Goal 2: Enhance Downtown by promoting a pleasing and welcoming appearance – one that promotes a sense of place - enabling it to become the community's proud central gathering area for residents and visitors alike.

- Conduct a design study of the Downtown to help focus ideas and develop a clear vision for the area.
- Conduct a visual preference survey with the community to determine what kinds of developments it prefers in Downtown and review the Town's Zoning Bylaw for opportunities to accommodate these preferred development types.
- Review the Town's Zoning Bylaw for opportunities to consider mixed-uses in Downtown that can promote and support walkability.
- LU2-4 Investigate the merits of density bonuses and/or density transfer credits that could promote reasonably higher densities in the Downtown in exchange for public benefits.
- Develop a program to promote the planting and sustained growth of street trees, landscaping, and other green infrastructure in Downtown in concert with the development and fostering of partnerships, including with the Northborough Garden Club. As part of the program, undertake a tree inventory along the major corridors in Town.
- **LU2-6** Explore opportunities to create walking paths/routes along brooks/river and connecting historic properties to enhance the beauty of historic Downtown.
- Take advantage of the Department of Housing and Community Development's Massachusetts Downtown Initiative that provides services and technical assistance to communities on revitalizing their downtowns.
- **LU2-8** Evaluate how Community Preservation Act funding and other funding sources can be used to support Downtown enhancement.

Goal 3: Ensure Northborough's future land uses support its Vision and established community character.

- Perform periodic review of existing design guidelines to ensure a balance between the existing community character with new development and redevelopment, as well as consistency with the findings of the visual preference survey.
- **LU3-2** Build greater awareness of Chapter 61 programs that provide tax breaks to owners of forest, agricultural, and recreational land, and grow local participation in the program.
- **LU3-3** Perform periodic review of the Town-wide guidelines for commercial and industrial development.
- **LU3-4** Consider developing regulations for hazardous waste facilities to protect the Town.

Goal 4: Continue to support and manage commercial development outside of the Downtown, particularly along Route 20 (Southwest Cutoff) and Route 9, considering adjacent land use compatibility and the Town's preservation priorities.

- **LU4-1** Coordinate land use planning with regional transportation investments.
- Consider updating and expanding the existing Major Commercial Overlay District for Route 20 (Southwest Cutoff) and Route 9.
- Consider increasing water/sewer capacity, particularly along Route 20 (Southwest Cutoff) and Route 9, to enhance development potential.

Figure 2-2 Land Cover, 1985

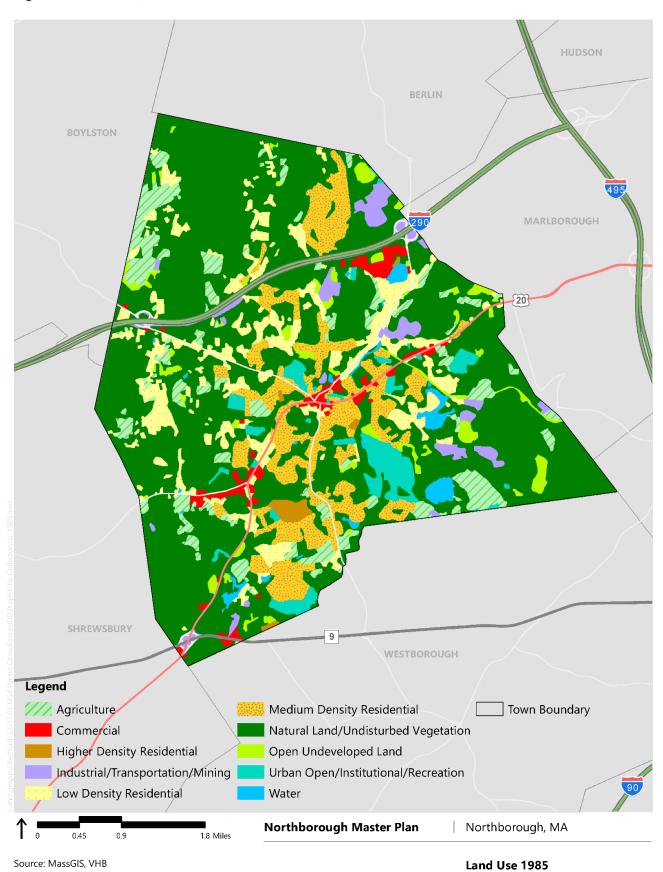


Figure 2-3 Land Cover, 1999

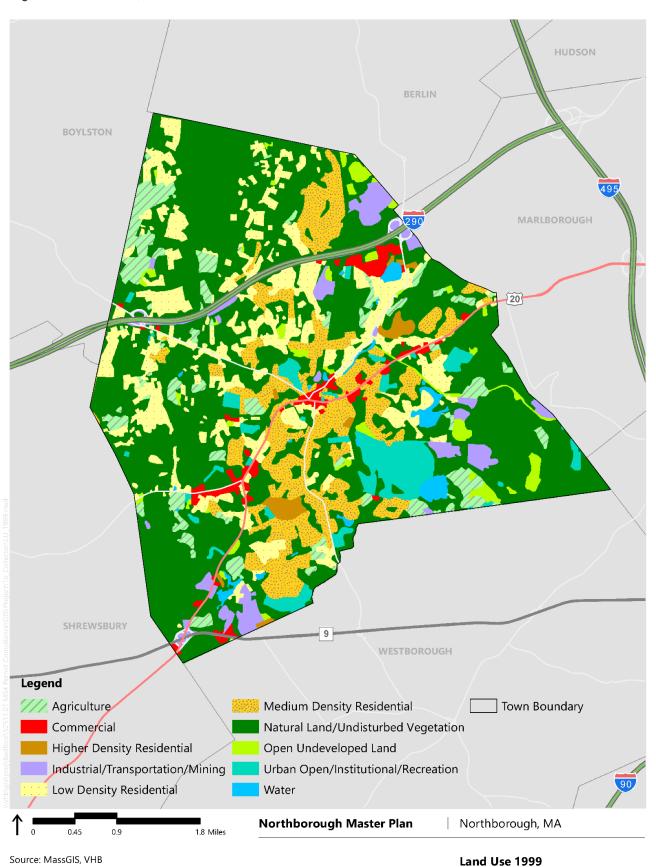


Figure 2-4 Land Cover, 2005

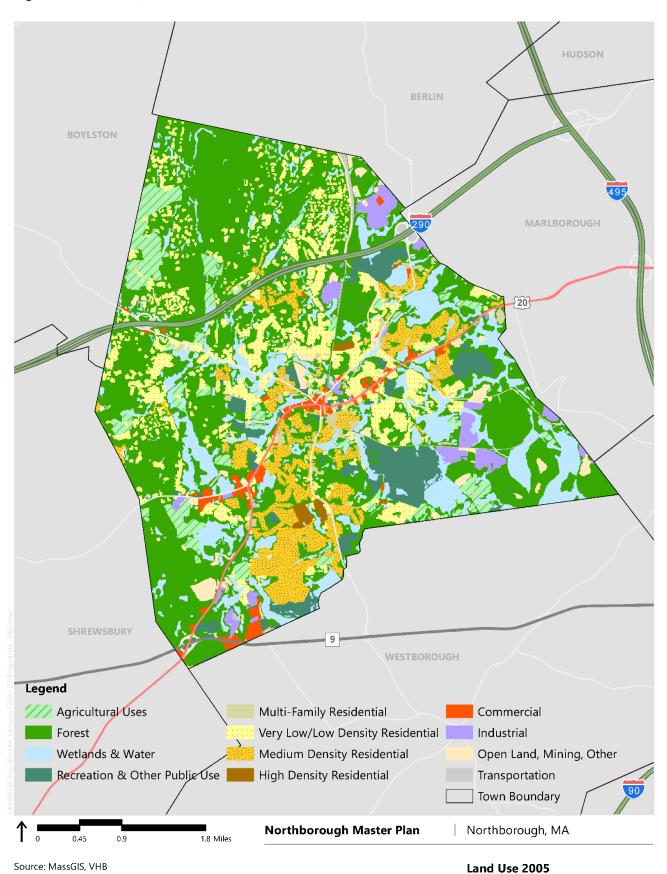


Figure 2-5 Land Use, 2017

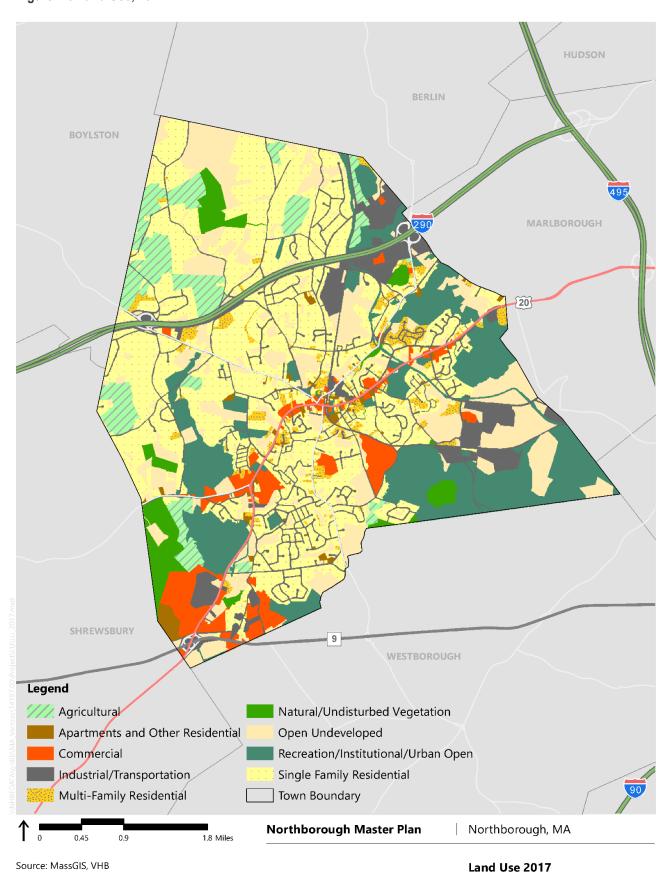


Figure 2-6 Zoning Districts

