

CHAPTER 2 LAND USE

1. HARVARD TRENDS

Harvard is located on the outer edge of Boston's northwest suburbs, bounded by the Towns of Shirley, Ayer, Littleton, Boxborough, Stow, Bolton, and Lancaster. With 26.4 square miles (sq. mi.) of land and about 6,500¹ residents, Harvard is a sparsely populated, low-density town with broadly distributed development of homes, farmsteads, orchards, and forested land. In 2014, Residential Harvard – that is, Harvard excluding Devens – looks very similar to the Town as it was when the Planning Board updated the Master Plan in 2002. And in 2002, even though Harvard had absorbed a considerable amount of housing growth in the 1990s, it still looked a lot like the Harvard of 1988: the year of the Town's second Master Plan.



The view from Fruitlands to the Bristol-Myers-Squibb compound at Devens (Photo by Joseph Hutchinson)

Despite the modest amount of physical change that has occurred in Harvard over the past twenty-five years, the Town is a different place. Like so many small towns, Harvard has been transformed by everything from traffic to technology. The demographic pendulum swing that packed the public schools with children over a decade ago has introduced an era of declining enrollments, which may have reversed once again. But Harvard, like most towns, is turning gray. There also seems to be more debate in Harvard today, exemplified by recent disputes over the scope and cost of Town Hall renovations and whether Harvard should have a grocery store on Ayer Road.

Harvard is different for other reasons, too. In 2002, the redevelopment of the former Fort Devens was already well underway. However, high-end companies like Bristol-Myers/Squibb were not on the horizon, and no one could have foreseen the arrival of the Commonwealth's first major film production studio. Both the amount and types of development that have occurred at Devens since 2002 have changed the land use pattern of Harvard as a whole, and the changes are dramatic. While the Army is gone, physical and institutional barriers continue to isolate Devens from its historic roots.

2. TOWN FORM

In urban and suburban settings, *land use* focuses primarily on the balance of residential, commercial, industrial, institutional, and recreational uses and open space. It is often concerned with differentiating various types, functions, and scale of uses, all of which help to define and nurture unique neighborhoods, main streets, and districts in a built-up environment. In Harvard, forests account for about 70 percent of the land cover, and wetlands and brush another 7 percent. Today, housing development covers about 7 percent of Harvard's total area, and agriculture only

¹ According to the 2010 US Census, 1,457 people live in Devens, Block Group 6.

5 percent.² The conversion of land from fields, orchards, and forests to residential use, though a relatively small percentage of the Town, has had the most dramatic effect on land in Harvard for the past fifty years – not including the postwar buildup at Fort Devens and redevelopment of the base since 1995.

3. LAND USE PATTERNS

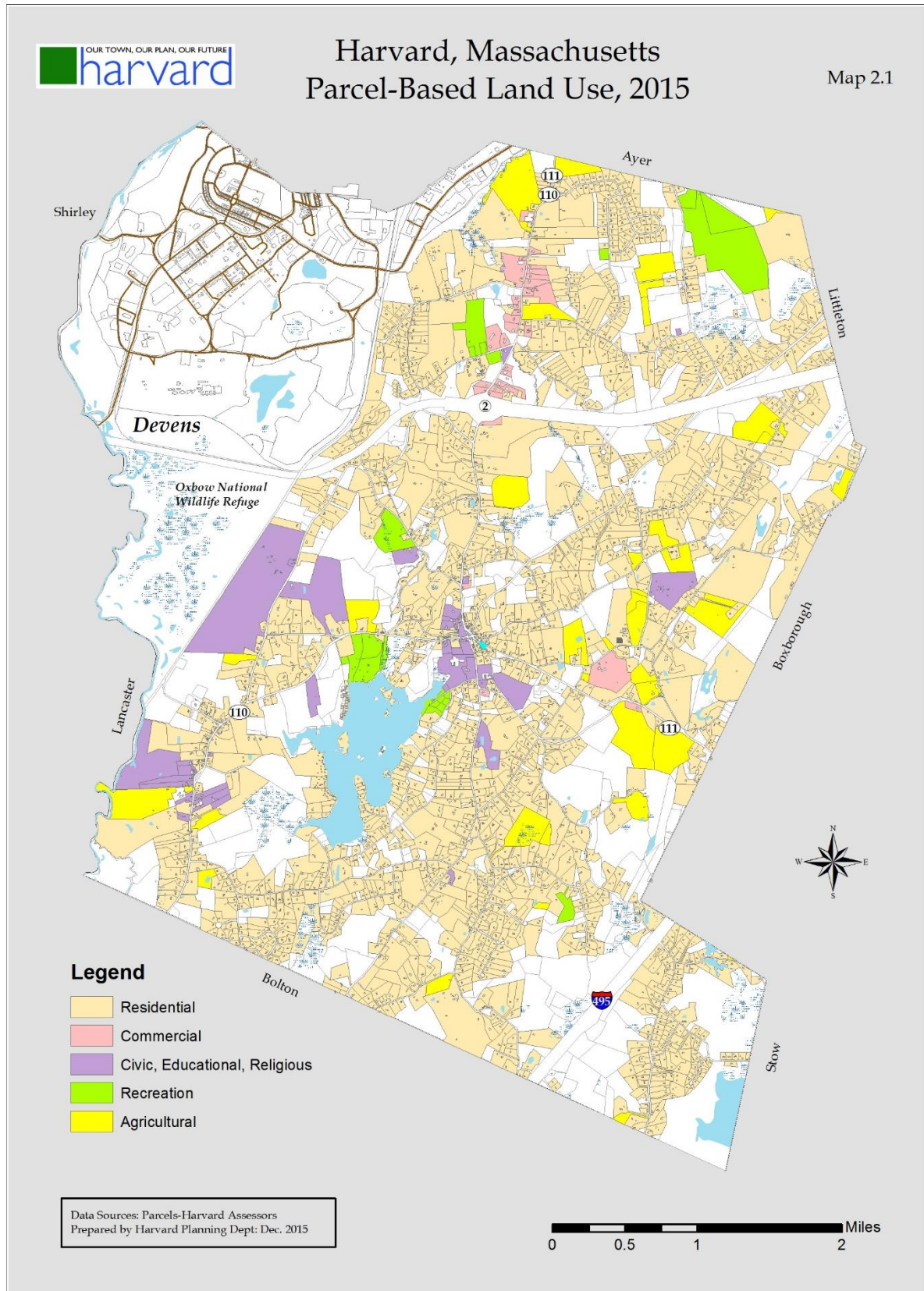
Harvard's distinctive character is defined by its remaining farms and some noteworthy natural and man-made features. The Town Center, Still River Village, Fruitlands, and the historic Shaker Village in North Harvard stand out because they differ so much from the low-density residential development found throughout the Town (Map 2.1). Harvard's central crossroads, the Town Center, began as early as the seventeenth century with a traditional New England common. Today, it is home to most of Harvard's municipal facilities, a limited mix of residential and institutional uses, and a handful of small businesses. Since the Town Center has evolved as a more compact setting than the rest of town, it is a relatively walkable space, though it does present some hazards to pedestrians due to the amount of activity that converges there at busy times of day.

Harvard's land use patterns remain dominated by fields, orchards, forests, and wetlands, but over time housing and to a lesser extent, commercial and institutional structures have been built on once-vacant land.³ Single-family homes on large lots are the predominant type of housing found in Harvard. Where other housing types exist, they tend to occur in the villages that developed organically, prior to the adoption of zoning, and mixed-income housing developments approved under Chapter 40B. Harvard has impressive and treasured view sheds with expansive open space, forested hills, wetlands, and scattered homes. However, the number of homes that dot the landscape increases every decade and in all corners of town. Efforts to protect open space through conservation restrictions and land acquisitions have helped to preserve quite a bit of land in Harvard, owing to the efforts of Harvard's Conservation Commission, the Harvard Conservation Trust, and others. Still, many parcels in town, including large farms, could still be developed.

Apart from a few Chapter 40B permits for mixed-income housing and one mixed-use development on Ayer Road, land development in Harvard remains dominated by detached single-family homes on spacious lots. This echoes Harvard's zoning, which establishes a clear preference for large-lot residential development over other uses. Harvard's 1.5-acre minimum lot size is a result of lack of public water and sewer systems through much of the Town. Tight, rocky soils impede percolation, and mandated separation between on-site wells and septic systems dictate large lots. The Commercial (C) District on Ayer Road is narrow and haphazardly developed, and the Town Center's very small business district is not designed or intended to promote much commercial activity. The absence of a variety of businesses in Harvard is attributable to zoning restrictions, lack of construction-ready land (sites with utilities, infrastructure, and drainage), low population density, and better development options in other nearby towns.

² These figures are based on 2005 MassGIS aerial analysis, and differ from Parcel Assessment data. Land cover depicts a birds-eye view of what exists on the ground, while parcel data tabulates ownership information by land use codes for entire lots.

³ Based on land coverage figures from MassGIS Land Use, 2005.



The Impact of Roads

Roads built in and near Harvard have been the greatest catalyst of development and land use change since the Town was founded, and especially since the mid-twentieth century. The existing frame of roadways began with the original paths that connected Harvard Center with all surrounding towns. Farmsteads lined the first roads, including Still River Road, Littleton County Road, and Bolton Road, leaving large swathes of hinterland in between. Only after the Second World War did new roads, cul-de-sacs and subdivision crescents appear, encroaching on agricultural and forested lands.

In the early 1950s, the Leominster-Concord section of Route 2 was built in its current alignment, providing Harvard with much faster and direct access to Boston. It also created a bypass for traffic from points west of town.⁴ The location of Route 2 in the northern part of Harvard resulted from opposition to the highway running near the Town Center on an alignment following Route 111. The highway was built in a right-of-way purchased by the state across largely vacant land. Although built as a limited access route with no at-grade intersections, four existing roads traversed it by bridge – Ayer Road, Poor Farm Road, Littleton Road, and Old Littleton Road – and one by underpass, Depot Road. Three other roads were cut off, including present-day Green Hill Road between Littleton Road and Old Littleton Road, Lancaster County Road between Old Shirley Road and Blanchard Road, and Old Shirley Road between Prospect Hill Road and Devens.⁵ These last two roads, together with the Boston and Maine Railroad and the perimeter established around Devens, closed off means of circulation to the northwest quadrant of town.

The interstate highway system brought I-495 close to Harvard in 1961 when the first section opened between Littleton (Route 2) and Westford (Route 225). In 1964, the Littleton-Westborough section opened, crossing Harvard's southeastern corner just east of the Harvard/Boxborough town line.⁶ The interstate provided an alternative to State Route 110, which passes through Harvard's Town Center and serves as the main roadway connection between the Merrimack Valley and Central Massachusetts. Stow Road continues to pass below the highway in its original path, allowing for access to the neighboring towns of Boxborough, Stow, and Bolton.

The interstate was designed both to relieve traffic from country roads and “create” traffic by providing suburban and rural towns with access to Boston and other regional employment centers such as Lowell and Worcester. Towns along the “relocated Route 110” were now ripe for growth. Not surprisingly, Harvard grew dramatically following the completion of I-495. Still, the lack of a direct connection with I-495 effectively prevented the emergence of a new commercial development zone. Unlike nearby communities such as Littleton, Acton, Marlborough, or Westford, Harvard chose not to make major zoning changes to attract nonresidential growth near I-495 or, for that matter, Route 2. Meanwhile, the Army built hundreds of units of housing for military families at Fort Devens as the Vietnam War accelerated.

⁴ “Massachusetts Route 2 History,” MIT.

⁵ The original road names changed after rerouting. Blanchard road was the extension of “(old) Shirley Road”, Present-day Old Shirley Road south of the former intersection with Lancaster County Road was itself “Lancaster County Road”.

⁶ http://www.bostonroads.com/roads/I-495_MA/

Agriculture and Open Space

One of Harvard's signature land use features is the enduring presence of farms, open space, and institutional properties. Agriculture is so prominent in Harvard that even the small leisure farms have an indelible impact on the Town's appearance, but the large commercial operations such as Westward Orchards (273 acres) Doe Orchards (63 acres) and Carlson Orchards (123 acres) make a significant contribution both to Harvard's economy and the texture of its open space. The large farms remain a distinctive feature, but Harvard has non-agricultural properties that stand out, too. In addition to the Fruitlands Museum (208 acres), Harvard's largest privately owned institution, there are significant institutional properties in Still River Village: the Saint Benedict Abbey (56 acres) and the adjacent Saint Benedict Center (33 acres). Harvard also has some large recreational areas, such as the Shaker Hills Golf Course (115 acres).

Harvard is a "Right-to-Farm" community. Town Meeting adopted a right-to-farm general bylaw as Chapter 123 of the Town Code in order to establish special protections to farmers and as a way to recognize the importance of farming to the character of the community. Farmers may engage in agriculture in all of its various forms with minimal interference from neighbors as long as they conform to generally accepted agricultural practices.

Town Center

The Town Center is the hub of Harvard's roadway network and the civic, social, and cultural heart of the Town. Children attend school in the Town Center, and it is here that celebrations occur, visitors explore, and local decisions are debated and made. In 2007, the Harvard Public Library moved from 7 Fairbank Street, now the temporary home of municipal offices, to a renovated and expanded facility at the old Bromfield School on Pond Street. While many Massachusetts communities have gradually redistributed and dispersed their public buildings and schools, Harvard stands out for its considerable investment in facilities and infrastructure in the Town Center. Harvard does have other historic villages, including Still River and Shaker Village, but the Town Center's living history is unique.

Most activity in the Town Center happens in its civic structures and spaces: Town Hall, the schools, library, Hildreth House (Harvard's Senior Center and Council on Aging office), the Common, and Bare Hill Pond. Hundreds of residents and visitors use these facilities on a daily basis. In addition, the General Store attracts a wide range of customers year-round from Harvard and beyond, with seasonal and weekend peaks. Three churches are also located in Town Center, two of which book-end the Common. Together, these places contribute to the Town Center's vibrancy. They are also connected to residents' concerns about traffic circulation and pedestrian safety, and expanded commercial activity. There are seventeen businesses currently operating in the Town Center, including the General Store, personal services, and professional offices.

In 2004, Harvard hired the Bluestone Planning Group (BPG) to produce a Public Realm Plan and Wastewater Study based on the recommendation of the 2002 Master Plan. The Town Center Action Plan (TCAP) produced a comprehensive set of recommendations, some of which the Town has implemented. Notably, the Town Center sewer district was completed in 2012. Prior to the expansion, only the schools and Town Library were connected to the wastewater treatment facility. All other properties used septic systems, many of which are old and failing. The new sewer district encompasses most of the Town Center's civic and institutional buildings, churches, businesses, and many of the residences. The treatment system has a capacity of 23,000 gallons per

day, which is large enough to accept flows from properties in the district. Having been in operation for several years, it appears that there is an excess capacity of about 2-3,000 gallons per day. The Town Center would be an appropriate location for new housing given the compact land use pattern, infrastructure and services that exist. Excess land adjacent to the Hildreth House, for example, would be suitable for a small senior housing project if connected to the Town's water and sewer systems.

Residential Development

Harvard's restrictive frontage regulations and provisions for backland and hammerhead lots have contributed to an interesting land use pattern. "Basic Lots" with 1.5 acres and 180 feet of frontage, which Harvard allows by right, have been carved along the roadside from larger agricultural parcels across town. Hammerhead lots are placed behind them, requiring only fifty feet of frontage but much larger lots (generally 4.5 acres). An additional lot type, backland lots, can be located further back from the street, and also require at least 50 feet of frontage and 4.5 acres. Both hammerhead and backland lots require a special permit. This system of land development has prevented the creation of subdivision roads and cul-de-sacs while allowing greater and deeper development of properties. Hundreds of highly irregular-shaped lots now exist in Harvard. The large lot areas and "unusable" long necks gobble up land that might otherwise be developed or preserved as public open space. The end result is a dispersed residential pattern with a great deal of open space remaining in private hands that cannot be developed.

Over the past ten years, Harvard has added 69 single-family homes, 77 condominiums, and 42 senior apartments to its total housing supply.⁷ The fact that multi-family condominiums and rental units surpassed the production of single-family homes is not indicative of a long-term trend, for many towns that experienced a shift in demand toward multi-unit dwellings and smaller housing units a decade ago and have since witnessed a reversion to single-family home development. Most multi-family housing in Harvard has developed via the comprehensive permit process, which is why the new condominiums and apartments include low- or moderate-income units. They provide an additional public benefit as well: on average, Harvard's multi-family units occupy just 0.38 acres per unit, compared with the 3.7 acres per unit for single-family homes. Nevertheless, it is worth noting that two-thirds of Harvard's affordable housing units (built with comprehensive permits) are located off Ayer Road north of Route 2, largely but not entirely in areas the Town has zoned for commercial uses.

Residential Harvard's housing stock would become more diverse by resuming jurisdiction of Devens due to Devens' existing residential developments. This issue is discussed in more detail under the Population & Housing Element. Development of various residential "build-out" scenarios that achieve desired or target levels of housing proportions for housing types such as affordable housing and senior housing could be helpful in planning for Harvard's future growth under various disposition outcomes. In lieu of resuming jurisdiction of Devens, Harvard could also consider overlay zones or special development districts to help allow for housing stock diversity in the future.

⁷ Massachusetts Department of Revenue, Division of Local Services (DLS), Municipal Data Bank, "Parcels by Use Class," and Department of Housing and Community Development (DHCD), Chapter 40B Subsidized Housing Inventory.

Table 2.1 shows the change in residential land use between 2002 and 2012 based upon Assessors land use codes. Overall, Harvard grew slowly as the amount of land in residential use increased by 123.5 acres. The largest amount of growth occurred in condominiums; no condominiums existed in 2002, but by 2012 144 acres were in this category. The market responded to a demand for alternatives to detached single family homes, and developments such as Harvard Green and Harvard Common utilized the comprehensive permit process to gain entry into the Town. Condominium growth out-paced single family home constructions, which gained 67.3 acres during this 10-year stretch.

Table 2.1 - Change in Residential Land Use in Acres

Use Type	In 2002	In 2012	Change
Detached Single Family	4,898.7	4,965.0	67.3
Multi-Family	128.2	102.8	-25.4
Apartments	3.2	6.7	3.5
Condominiums	N/R	114.0	114.0
Multiple Residence	213.5	190.6	-22.9
Mixed Residential-Commercial	27.3	14.3	-13.0
Total	5,269.9	5,393.4	123.5
Sources: Harvard Master Plan (2002), 2.7; Assessor's Parcel Database, 2012, MassGIS; and RKG Associates, Inc.			

Commercial and Industrial Development

Harvard has very little commercial development. The only noticeable commercial presence can be found in the Commercial (C) District, which extends along Ayer Road about 1.4 miles between Route 2 and the intersection of Ayer Road and Myrick Lane. Except for a development of multi-use buildings at 188 Ayer Road, created under a special permit provision that Harvard instituted in 2004, businesses here are mostly in sprawled, single-unit structures on large paved lots interrupted by residential and agricultural uses and open space. This physical arrangement and low-density build-out makes the C District an auto-oriented area. (See also Chapter 5.)

Resuming jurisdiction of Devens would dramatically change the existing and potential commercial and industrial components of the Town of Harvard. If availability for additional commercial and/or industrial development is deemed necessary for economic growth within Harvard and Devens jurisdiction is not resumed, Harvard will likely need to investigate changes to its current zoning structure. Changes that should be investigated include, at least, rezoning portions of existing Residential/Agricultural lands to commercial and/or industrial use, and possibly making adjustments to permitted uses and requirements within the existing zones to allow additional business growth. Overlay zones or special development districts could also be considered to help facilitate such changes.

Vacant Land

Although Harvard has a considerable amount of protected open space, there is still quite a bit of land that could be developed. According to the Assessor's parcel database, Harvard has approximately 2,600 acres of land in private hands assessed as open space in forestry (Chapter 61), agriculture (Chapter 61A), or recreation (Chapter 61B) and another 1,000 acres (rounded) of vacant, relatively unconstrained land. The latter includes "surplus" land in existing residential parcels, i.e., large tracts of land with a dwelling and enough extra land to create more house lots.

Table 2.2 - Vacant Potentially Developable Land

Category	Acres	Parcels
Excess Land (1)	681.8	42
Accessory Land (2)	48.6	16
Vacant Developable	305.9	74
Chapter 61, 61A, 61B (3)	2,593.5	146
Total	3,629.8	278
Source: Harvard Assessor's Parcel Database, FY13, MassGIS. Numbers may not total due to rounding. Notes: 1. Excess land is land in large parcels with an existing residence; for purposes of this table, the estimate includes properties with 10 or more acres. 2. Accessory land is a vacant land parcel under common ownership with an abutting residence. 3. Chapter 61, 61A, and 61B excludes land known to be protected by a Conservation Restriction or an Agricultural Preservation Restriction.		

Appendix 1 contains a Development Suitability Analysis, which provides an indication of not only the amount of land available for development, but also of its suitability for development. A series of maps display vacant land and natural resources that if developed, could have consequences on the environment. Map A-3 shows a total of 1,471 acres that are not currently developed, are not protected from development, do not have environmental constraints, and are potentially developable based on size and access. Much of this land is in one of the Chapter 61 programs noted above; these lands are not protected from development, and it is common practice for landowners to remove their land from the program, pay back-taxes, and carve the tract up for new development. The Town has a right-of-first-refusal to purchase the land, and has done so on occasion, but will not be able to preserve most of this land.

4. ZONING IN HARVARD

Zoning plays a crucial role in carrying out any city or town plan. On one hand, Harvard's zoning is quite traditional; it divides the Town into separate use districts, i.e., areas limited to a specific

type of land use. On the other hand, it is untraditional in terms of its structure, organization, and terminology. While some recommendations from the 2002 Master Plan have been implemented, most have not. In general, Harvard's zoning policies seem to focus more on preservation than providing for change.

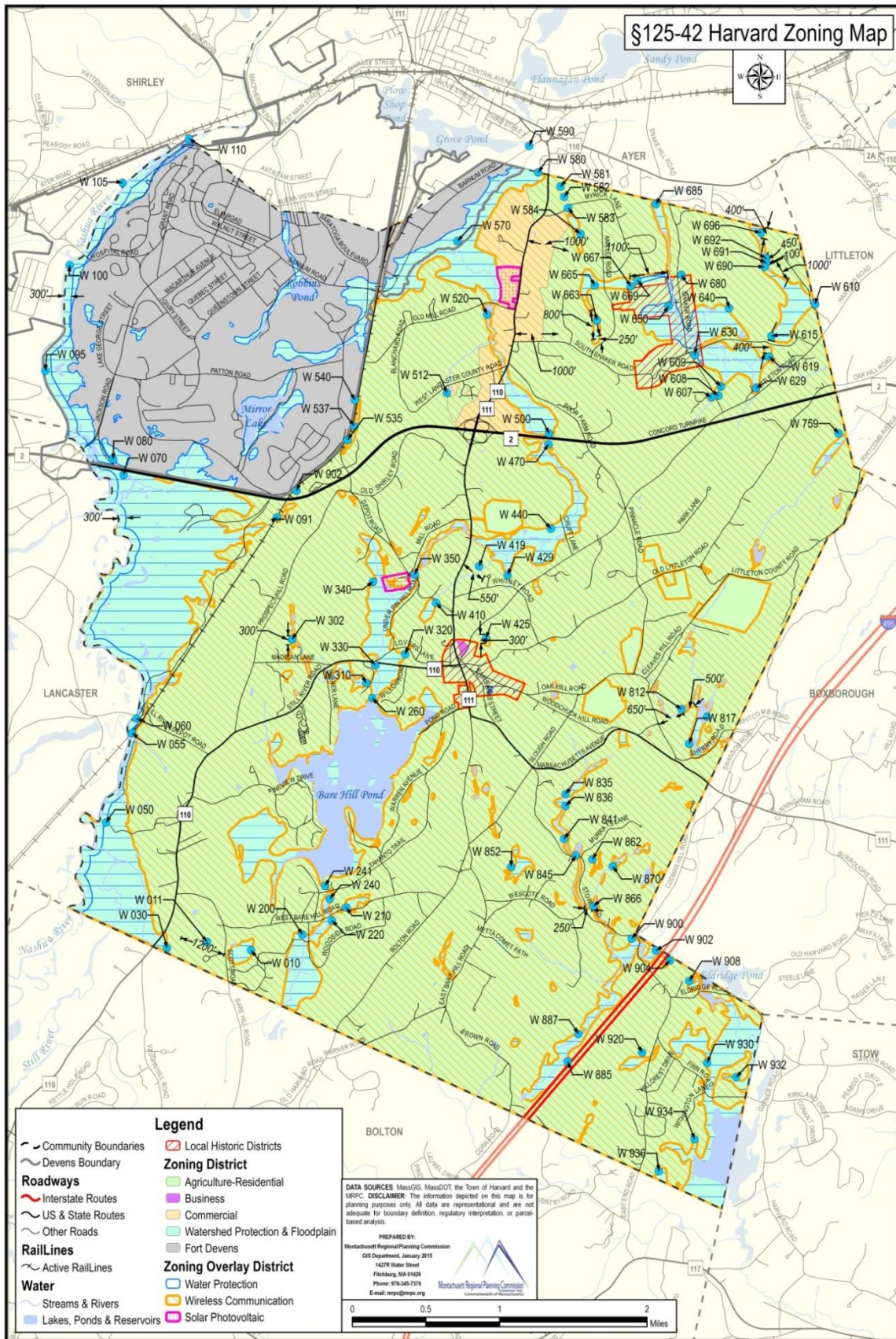
Use Districts

Town Meeting adopted Harvard's first zoning bylaw in 1951 with one district defined for the entire town, which was a common practice in rural areas. Separate use districts followed in 1965, including Agricultural/Residential (AR), Business (B), Commercial (C), and Industrial (I). Like many environmentally conscious towns, Harvard established a Watershed Protection (W) District in 1968, a few years before the state passed the Wetlands Protection Act (WPA). In 1972, the Town adopted commercial use regulations and abolished the industrial zone. A noteworthy feature of Harvard's zoning is that in 1970 the Town established regulations for a Multiple Residence (MR) District, but no land has ever been placed in the district and it remains unused. The only practical ways to develop multi-family housing in Harvard are with a Chapter 40B comprehensive permit and in a mixed use development approved with an Ayer Road Village Special Permit. Map 2.2 shows the existing zoning districts in Harvard today (2015).

Table 2.3 - Zoning Districts by Area

District	Acres	Percent
Agricultural Residential	11,753	81.7%
Business	3	.02%
Commercial	346	2.4%
Watershed Protection and Floodplain	2,275	15.8%
Acres subject to Harvard Zoning	14,378	100%
Acres in Harvard subject to Devens Reuse Plan	2,600	
Source: Town of Harvard, GIS zoning map		

Resuming jurisdiction of Devens would cause a considerable change in the zoning composition of a combined Harvard and Devens, greatly increasing the percentage of land available to commercial uses. Notably, this would occur without directly affecting any zoning within Residential Harvard. A combined Harvard and Devens (zoned per the 1994 Reuse Plan) would be zoned approximately 70.4% residential, 18.4 % open space (including Harvard's W district and Devens Open Space District), and 11.2% non-residential (including Harvard's B and C districts and everything in Devens not zoned open space or residential). These percentage shifts would occur without reducing any current residential zoning or adjusting the current C-District boundaries. This would create a much more balanced residential-commercial-industrial zoning mix that would be more in-line with many other towns in the region.



For both commercial/industrial development and housing stock considerations, the existing Devens zoning and permitting scheme, if adopted post-disposition, would continue to allow for expedited permitting while also affording Harvard greater local representation.

Overlay Districts

Harvard has three overlay districts, or districts that lie on top of all or portions of the traditional use districts. Overlays impose different procedures, opportunities, or requirements on the underlying land. The overlays in Harvard include the Watershed Protection and Flood Hazard (WFH) District (a subset of the W district), the Large Scale Ground Mounted Solar Photovoltaic Facilities Overlay District, and the Wireless Communication Tower Overlay District (WCTOD). The boundaries of overlay districts are often defined by natural features such as waterways or floodplains, but sometimes the boundaries correspond to the geography of villages or neighborhoods. The Zoning Map displays the locations of these overlay districts.

Harvard's 2002 Master Plan recommended the creation of several other overlay districts: the Community Commercial District (a C district overlay), the Residential Compatibility Overlay (RCO) District, the Town Center Overlay District, an overlay to encourage historic preservation in Still River Village, a Bare Hill Pond Watershed District, and a plan to establish Agricultural and Historic Landscape districts.⁸ These overlays have not been created, but in some cases the intent has been addressed, at least in part. For example, the purpose of the RCO was to promote conservation cluster developments, and Harvard has tried to accomplish this by creating a special permit cluster provision in the AR district. Similarly, the Ayer Road Village Special Permit in the C district touches on some of the ideas behind the Community Commercial District. The Town Center Action Plan, which grew out of the 2002 Master Plan, also promoted special zoning for the Town Center when it recommended a Mixed Use Commercial Overlay District to allow appropriate uses by special permit, such as restaurants, small food markets, bookstores, and apartments above retail stores. The concept remains valid today and would legitimize businesses, such as the General Store, which are nonconforming today.

Use Regulations

Harvard allows the following land uses by right or by special permit, depending on the district.

- **Residential Uses.** These uses include a limited range of building types: by-right, single-family homes only, and by special permit, accessory apartments (in a residence or an accessory structure) and cluster developments (that may include multiple-unit structures of up to six attached units each). Detached single-family dwellings are allowed in all three districts (AR, B and C), though restricted in the C District to parcels that existed in 1972. Cluster developments are permitted in the AR and B districts only. Since 2004, multi-family buildings have been allowed as part of an Ayer Road Village Special Permit, a provision that requires a special permit and applies only to property in the Commercial District that has frontage on Ayer Road.
- **Institutional Uses.** Harvard allows conservancy and passive recreation uses such as parks, conservation land, water supply areas, and open space in all districts. Churches, schools, most municipal uses, cemeteries, and museums are permitted by right and are subject to limited site plan review. Public service corporations, charitable institutions, and some

⁸ Harvard Master Plan (2002), Executive Summary, 22

municipal purposes require a special permit.

- **Agriculture.** Like most towns, Harvard regulates farming by acres in agricultural use. State law exempts commercial agriculture on five or more acres of land, including an accessory farm stand, and Harvard's zoning mimics the statute. Agriculture on smaller tracts (less than five acres), known as "home agriculture," has to comply with modest performance standards. Examples of home agriculture include renting out horse stalls, selling home-grown produce, and "you-pick" harvesting of crops.
- **Mixed Uses.** Harvard's zoning does not specifically allow mixed-use buildings (e.g. first floor commercial space and upper-story residential space) except through an Ayer Road Village Special Permit, which is available under limited circumstances in the C district. Still, most farm properties have mixed uses, such as a farmer's residence and commercial agriculture, and home occupations are conducted throughout the Town.
- **Commercial Uses.** Harvard divides land uses into use groupings, e.g., residential or agricultural uses, but nonresidential uses are classified as small, medium, or large "scale," instead of the more commonly used categories such as retail, hospitality and food services, offices and banks, and so forth. The "scale" categories seem to embrace assumptions about the impact of various uses on surrounding areas because with few exceptions, "scale" is actually determined by the setbacks, building height, and bulk regulations that apply to the type of lot involved. In general, though, permitted uses in the B district include single-family dwellings and business uses such as a professional office, bank, antique shop, hardware or clothing store, florist, or artist's studio. The C district can accommodate the same types of nonresidential uses (subject to a retail floor area cap of 15,000 sq. ft.), as well as medical offices, personal service establishments, sales and service of lawn and garden equipment, or a bed and breakfast, and some additional uses by special permit such as publishing, commercial entertainment, landscaping contractors, kennels, light manufacturing, research laboratory, or mortuary.

Density and Design

Harvard has adopted an unusual approach to regulating the amount of development that can occur across town. With minor exceptions, the same lot area, frontage, and intensity of use regulations apply globally to the AR, B, C, and W districts. In addition to minimum lot area requirements and maximum floor area ratio (FAR), Harvard regulates lot coverage, shape, and dimensions, e.g., frontage, minimum lot width, along with front, side and rear setbacks, building height, and driveway access. The Ayer Road Village Special Permit, conservation cluster bylaw, and comprehensive permits enable more creative or sensitive site designs because they provide for waivers from these requirements.

- **Intensity of Development.** Standards such as maximum FAR, maximum lot coverage, and minimum lot area per dwelling unit are typical for a dense urban or suburban environment, but not necessarily the best method to control development in a rural setting. Harvard limits the amount of development on a lot by imposing a maximum FAR of 0.10 or 8,000 sq. ft. of floor space, whichever is larger. FAR controls the amount of built floor space (including all levels) that can be built based on the area of the lot. In order to construct a 10,000 sq. ft. commercial building in Harvard, a developer would need a lot with at least 100,000 sq. ft. of land ($100,000 \times 0.10 \text{ FAR} = 10,000$).

- **Average Lot Size.** In Harvard today, the average residential lot size is 3.76 acres per dwelling unit.⁹ The average residential FAR is 0.06, and for 10 percent of all residential structures, the FAR exceeds 0.10, with an average structure size of 5,488 sq. ft. Moreover, as a direct reflection of zoning, 227 lots (9 percent of all residential properties) are sized exactly at the regulatory minimum of 1.5 acres.¹⁰ Together with setback regulations, this leads to a controlled, repetitive built form across the landscape.
- **Building Height.** The maximum building height for all buildings (except churches) is less than 35 feet and three stories. Since lot sizes are large and it is possible to achieve the maximum building area within one or two stories, height is not needed to achieve density. In areas where more intensive development could occur, such as the C District and perhaps the Town Center, the regulation of building height to protect town character is crucial.
- **Commercial District Regulations.** The same minimum lot size, height, and frontage requirements and maximum FAR apply in the AR, B and C Districts, yet the intent of development in the nonresidential zones, particularly the C District, is very different from the residential and agricultural character of the land. Ayer Road in the C District is also subject to an even more restrictive building setback that governs development on “arterial streets” (which includes Ayer Road north of Rt. 2).¹¹ Instead of the standard setback of 75 feet, buildings here must be setback at least 125 feet from the center line of Ayer Road. In addition, the open space required on commercial lots in Harvard is very high (50 percent of the lot plus 25 percent of any lot area over three acres). Together, these rules contribute to the spread-out, “formless” appearance of Ayer Road.
- **Open Space and Housing.** Harvard’s Open Space and Conservation–Planned Residential Development (OSC-PRD) special permit was intended to minimize residential land coverage and protect open space. It provides building area bonuses and relaxed dimensional requirements on parcels of at least 4.5 acres. Using the Town’s basic lot standard as a guide, the OSC-PRD provides a series of incentives for increased density, up to 25 percent additional units overall, in exchange for large, contiguous areas of open space, small (not more than two bedrooms) housing units, senior housing, or low- or moderate-income units. Though adopted ten years ago, OSC-PRD has produced just one development in Harvard. Local officials say the hoped-for benefits of shorter roads and less site disturbance do not compensate for Harvard’s high site construction costs.

Nonconforming Uses and Structures

Harvard has many nonconforming lots and structures, and some nonconforming uses as well. The presence of “grandfathered” structures is not at all surprising because Harvard’s older developed areas all pre-date the adoption of zoning in 1951. Most dimensional nonconformities involve older lots that were grandfathered when new zoning took effect. Over 20 percent of lots in Harvard are smaller than today’s minimum requirement of 1.5 acres, and most of them have structures that pre-date 1951. They are usually found in older, established areas such as the Town

⁹ Town of Harvard Assessor Database, 2012

¹⁰ Ibid. Number of lots includes parcels that are 1.5 acres (+/- 1%).

¹¹ Town of Harvard Zoning Bylaws, Article V, § 125-30 E(4)

Center, Still River Village, Hillcrest Road/Withington Lane, and the summer camp enclaves around Bare Hill Pond.

5. PLANNING, ZONING, AND PERMITTING CAPACITY

Two town boards share responsibility for reviewing and acting upon land development proposals. The elected five-member Planning Board has statutory authority for reviewing and approving subdivision plans, making recommendations to Town Meeting for proposed changes to the Zoning Bylaw, and preparing the Master Plan. As in many towns, the Planning Board in Harvard also has authority to issue special (discretionary) permits, e.g., for drive-through facility for a bank or pharmacy, a golf course, a wireless communications tower, or commercial uses in the C District. The Board of Appeals, an appointed body, handles some special permits, too, notably for changes to non-conforming uses or structures. By state law, the Board of Appeals also has responsibility for Chapter 40B comprehensive permits, appeals, and variances.

The 2002 Master Plan recommended that Harvard hire a town planner in order to support the work of the Planning Board and Board of Appeals and to help the Town deal with increasingly complex issues at Devens. In 2013, Town Meeting agreed to fund a part-time contractual town planner position. Harvard also has a part-time land use administrator who doubles as conservation agent for the Conservation Commission. In general, Harvard has very few paid employees, so the Town government depends heavily on volunteers.